Draft

June 2021

Environmental Impact Report 6th Cycle 2021-2029 Housing Element Update

SCH No. 2020100575

Prepared for:
Community Development Department
1685 Main Street
Santa Monica, California 90401

Prepared by:
Wood Environment & Infrastructure Solutions, Inc.
104 West Anapamu Street, Suite 204A
Santa Barbara, California 93101

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6th Cycle 2021-2029
Housing Element Update

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State Clearinghouse No. 2020100575

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Executive Summary

This Draft Environmental Impact Report (EIR) has been prepared to evaluate the potential environmental impacts of the City of Santa Monica's (City's) proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update) in compliance with the California Environmental Quality Act (CEQA). State law has requires that all local governments (i.e., counties and cities) adopt a general plan, which is a key tool that addresses a variety of subject areas and expresses the community's development goals related to the jurisdiction's future land uses. The Housing Element is one of seven State-mandated general plan elements. California Government Code Section 65583 details the content and process by which a Housing Element is prepared. Among other requirements, Housing Elements must identify, analyze, and make adequate provision for the existing and projected housing needs of all economic segments of the community. California Government Code Sections 65580-65589.8 requires that communities prepare and update the Housing Element every 8 years.

With the previous 8-year cycle Housing Element (2013-2021) coming to an end, the City must now plan for the next 8-year cycle. The proposed Housing Element Update would serve as the City's housing plan for 2021-2029, setting clear goals, policies, and programs to meet State requirements by providing for the housing needs of all segments of the population while affirmatively furthering fair housing and preventing the displacement of existing residents.

Housing needs are determined by the State Department of Housing and Community Development (HCD), which decides what the numerical housing targets should be for each regional council of governments (e.g., Southern California Association of Governments [SCAG]). Each regional council of governments across the State then further allocates the regional housing number (known as the Regional Housing Needs Allocation, or RHNA) to every city and county within its jurisdiction. The RHNA is a targeted housing number; cities and counties are not obligated to build this number of dwelling units, but rather they must plan for them and show that under current land use and development standards, there is capacity to accommodate for this number of new dwelling units.

For the proposed 6th Cycle 2021-2029 Housing Element Update, the SCAG has determined that the City's RHNA is 8,895 dwelling units, more than 5 times than the 5th Cycle 2013-2021 RHNA. The significant increase in the City's RHNA is indicative of the severity of the current housing crisis within the State and in Southern California. Therefore, a major focus of the proposed Housing Element Update is addressing the provisions of accommodating future housing growth and identifying specific sites suitable for residential development in compliance with State housing law.

The proposed Housing Element Update includes goals, policies, and implementation actions for the 6th Cycle 2021-2029 RHNA to make adequate provision for the existing and projected housing needs of all segments of the community. The proposed Housing Element Update continues to support the City's core values of supporting housing production, particularly affordable housing, but includes departures from the 2013-2021 Housing Element particularly with respect to where housing is incentivized in the City. While the Santa Monica General Plan Land Use and Circulation Element (LUCE) established a strategy to encourage housing production around major transportation systems, it does not account for the new

State mandate to affirmatively further fair housing. Key LUCE policies to develop complete neighborhoods in mixed-use areas within easy access to transit opportunities and daily services remain, but the proposed Housing Element Update is driven largely through an equity and inclusion lens. As such, the proposed Housing Element Update includes new goals, policies, and programs to create housing opportunities in areas of the City that have not accomodated or permitted housing.

Project Objectives

CEQA Guidelines Section 15124(b) requires a statement of a project's objectives and CEQA Guidelines Section 15124(b) requires that the statement of objectives includes the underlying purpose of the project. The goals for the proposed 6th Cycle 2021-2029 Housing Element Update were developed based on public input and in recognition of the City's core community values. The proposed Housing Element Update is built around the following key principles:

- Meet the State-mandated 6th Cycle RHNA for the City.
- Increase housing production for all, with an emphasis on affordable housing.
- Promote greater housing stability for existing residents at risk of displacement.
- Locate housing close to daily services and amenities like transportation, jobs, parks, and schools in addition to places around the City that have historically not accommodated housing.
- Facilitate equitable housing access to all neighborhoods by expanding access to housing opportunities and overcoming patterns of segregation by planning for housing in areas that have historically excluded diverse housing opportunities.

Project Overview

The proposed Housing Element Update would establish the City's housing vision for housing production and supply over the next 8 years. This proposed Housing Element Update provides a comprehensive plan for protecting existing housing in the City and ensuring that the City has the ability to meet its RHNA of 8,895 dwelling units, more than 5 times the number of units planned for in the prior 5th Cycle Housing Element.

To plan for this unprecedented level of housing growth, the Housing Element Update proposes a number of policies and programs that would enable the production of housing of varying affordability levels and protect existing housing and residents. The programs that help achieve the seven goals of the proposed Housing Element Update are listed in Table 2-3 of the EIR. Individual components of the Housing Element Update including

Proposed Amendments to Development Standards Governing Height and FAR

The proposed Housing Element Update would amend the existing development standards to support the housing projects that comport with the City's minimum inclusionary housing requirements and incentivize housing development relative to commercial uses. In general, the proposed development standards would be amended to allow an increase in height of one to two stories and new floor area ratios (FARs) that would be higher than the current Tier 2 FARs for housing projects. This effectively negates the need

for Tier 2 for housing and therefore, it is proposed that Tier 2 be eliminated for residential developments. For non-residential development projects, the existing development standards under the current tier system would remain unchanged.

Equitable Housing Access

State Housing Law (Assembly Bill [AB] 686) requires that the proposed Housing Element Update include policies and programs that Affirmatively Further Fair Housing. While the LUCE established a strategy to encourage housing production around major transportation systems, it does not account for the new Affirmatively Further Fair Housing mandate. Key LUCE policies to develop complete neighborhoods in mixed-use areas within easy access to transit opportunities and daily services remain but proposed new and policies and development standards in the proposed Housing Element Update is driven largely through an equity and inclusion lens. In order to increase housing opportunities throughout the City and break down the patterns of segregation that have resulted from decades of discriminatory housing practices, the proposed Housing Element Update would the following programs:

Revision to the Affordable Housing Production Program

In July 1998, the City Council enacted an Affordable Housing Production Program, requiring developers of market-rate apartment and condominium projects to contribute to affordable housing production and thereby help the City meet its affordable housing need. To simplify the program and provide flexibility for the location of off-site inclusionary units, revisions to the Affordable Housing Production Program are proposed.

Affordable Housing Zoning Overlay for 100 Percent Moderate Income Projects

To incentivize 100 percent moderate income projects to be developed, the City is proposing an Affordable Housing Overlay that would apply to target areas of the City – specifically, around the Metro E (Expo) Light Rail Transit (LRT) stations.

City-owned Sites

The City owns a variety of property in various zones, including the parcels surrounding the Downtown Santa Monica Station, parking lots on Main Street and along Wilshire Boulevard, the Bergamot Arts Center, Parking Structure #3, and the site at 4th Street & Arizona Avenue. City-owned sites have the potential to contribute significantly to the production of affordable housing. The proposed Housing Element would commit City-owned sites for the production of 100 percent affordable housing.

Parking Lots of Religious Sites and Parking Lots in Residential Zones

Assembly Bill (AB) 1851 was passed in 2020 to remove an important barrier to housing construction on lands owned by a religious institution. The law states that a jurisdiction cannot deny a housing project proposed by a religious institution on the sole basis that it will remove parking. A number of religious congregations with large surface parking lots are located throughout the City. These lots could play an

important part in providing affordable housing; however, many of the sites are located in R2/OP2 zoning districts which severely limits the housing potential of these sites.

In addition, there are over 100 parcels within residentially zoned (R1/R2/R3/R4) areas that are developed with surface parking lots serving adjacent street-fronting commercial uses. Some of these parcels have an "A" Off-Street Parking Overlay (known as A-lots). These parcels are intended to support the parking needs of commercial corridors and neighborhood commercial areas, and to serve as a buffer between commercial and residential uses. These parcels have been identified for high housing potential. The proposed Housing Element proposes to incentivize the development of these sites for housing, including removing the existing density caps for these parcels.

Incentives for Accessory Dwelling Units

An Accessory Dwelling Unit (ADU; also known as a "granny flat") is a secondary dwelling unit with independent living facilities, usually on the same grounds as another residential unit(s). ADUs play an important role in the production of housing, particularly within single-unit residential zoning districts where historically only one unit is permitted. In recognition of this, the State over the past 4 years has started to enact laws to help spur the production of housing through the development of ADUs. Since implementation of these new State laws, the City has seen an increase in ADU production and interest each year. ADUs are seen as one approach for cities and counties to meet unmet housing demand. HCD has indicated that local governments may report ADUs as progress towards its RHNA pursuant to California Government Code Section 65400 based on the actual or anticipated affordability and removing commercial parking replacement restrictions.

While Santa Monica has taken steps beyond what is required by State law to incentivize the production of ADUs, the Housing Element Update proposes an "ADU Accelerator" program that is anticipated to include pre-approved plans and review of fees and process for ADUs. Additionally, the program proposes to increase the number of ADUs allowed on a R1 parcel. Currently the maximum amount of units by right an R1 parcel can contain is three – one single-unit dwelling, one detached ADU, and one Junior Accessory Dwelling Unit (JADU) (which is required to be incorporated into the footprint of the single-unit dwelling). The proposed Housing Element Update includes an ADU incentive program that would allow a property owner the ability to construct an additional ADU if the unit is restricted to only be permanent rental housing. This incentive program would help achieve the Housing Element goal of affirmatively furthering fair housing by providing housing opportunities that are more affordable than home ownership units within the R1 zone district, an area of the City that has largely been unaffordable to many. Based on past production of ADU's in the City as well a new state law that have recently incentivized new ADUs, the proposed Housing Element Update anticipates that up to 600 new ADUs could be constructed over the planning horizon for the 6th Cycle RHNA.

Housing Stability

The City operates many housing programs intended to preserve housing stock and provide assistance to existing tenants including acquisition/rehabilitation, financial assistance, and supportive services. The proposed Housing Element Update would continue to operate existing programs to protect existing

housing and residents from displacement, and to strengthen these programs when additional funding sources become available.

Environmental Impact Analysis

This EIR examines potential short- and long-term impacts of the proposed Housing Element Update for the City of Santa Monica. These impacts were determined through a rigorous process mandated by CEQA in which existing conditions are compared and contrasted with conditions that would exist with the implementation of the proposed Housing Element Update. For each environmental issue area, thresholds for determining impact significance are identified based on the CEQA Guidelines and City-adopted thresholds, along with descriptions of the methodologies used for conducting the impact analysis. For some resource areas such as air quality, noise, and transportation and circulation, the analyses of impacts are more quantitative in nature and involve the comparison of effects against a numerical threshold. For other topics, such as land use and planning, the analyses of impacts are inherently more qualitative, involving on the consideration of a variety of factors such as adopted City policies.

The EIR impact discussions classify impact significance levels as:

- **Significant and Unavoidable** – a significant impact to the environment that remains significant even after mitigation measures are applied;
- **Less Than Significant with Mitigation** – a significant impact that can be avoided or reduced to a less than significant level with mitigation;
- **Less Than Significant** – a potential impact that would not meet or exceed the identified thresholds of significance for the resource area; and
- **No Impact/Beneficial Impact** – no impact would occur for the topic area or a beneficial effect would result.

Determinations of significance levels in the EIR are made based on impact significance criteria and applicable CEQA Guidelines for each environmental issue area.

Notice of Preparation/Scoping

As a first step in complying with the procedural requirements of CEQA, the City conducted a public scoping process consistent with CEQA Guidelines Section 15083. The public was provided with an opportunity to comment on the scope of the EIR through a Notice of Preparation (NOP) released on October 30, 2020. The NOP was distributed to Federal, State, and local agencies, neighborhood groups (see Appendix A). The CEQA Guidelines require circulation of an NOP for a minimum 30-day review period; however, in consideration of the coronavirus (COVID-19) pandemic, the City circulated the NOP a period of 60 days, ending on December 31, 2020. The Notice of Preparation (NOP) also announced a virtual public scoping meeting for the EIR during the NOP comment period on December 10, 2020. During this meeting City staff described the proposed Housing Element Update and the environmental review process, and received public comment on the scope and content of the EIR. The scoping process assisted the City in determining if any aspect of the proposed Housing Element Update may cause a

significant effect on the environment and, based on that determination, to narrow the focus of the subsequent environmental analysis.

As with the NOP, the Notice of Availability (NOA) for the Draft EIR was distributed to Federal, State, local agencies, and neighborhood groups. The CEQA Guidelines require a minimum 45-day review period for public review of the Draft EIR, which began on July 1, 2021 and ended on August 16, 2021.

The Draft EIR is available for review online at the City's Community Development Department website at: https://www.santamonica.gov/housing-element-update.

Summary of Project Impacts

The significance of each impact resulting from implementation of the proposed Housing Element Update has been determined based on impact significance criteria and applicable CEQA Guidelines for each environmental issue area. Table ES-1 presents a summary of the impacts, mitigation measures, and residual impacts from implementation of the proposed Housing Element Update. In summary, the proposed Housing Element Update would result in potentially significant and unavoidable impacts related to air quality; cultural resources; noise; public services; and transportation.

The EIR also includes five alternatives, including a No Project Alternative, in compliance with CEQA. These alternatives include:

- Alternative 1 – No Project Alternative
- Alternative 2 – Transit-Oriented Housing Development on Fewer Sites Alternative
- Alternative 3 – Quantified Objective Alternative

Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives shall identify an environmentally superior alternative among the alternatives evaluated in the EIR. In general, the environmentally superior alternative as defined by CEQA should minimize adverse impacts to the project site and its surrounding environment.

For a broad policy document such as the proposed Housing Element Update, there may not be a clear Environmentally Superior Alternative. An alternative may reduce environmental impacts to certain resource areas and increase impacts to other resource areas as compared to the proposed project, while another alternative may reduce different environmental impacts. Although CEQA does not provide specific guidance in this matter, where an alternative is anticipated to result in reduced impacts for a majority of resource areas and/or substantially reduced impacts in especially critical resource areas, this can support a finding that the alternative is environmentally superior. In such instances, the EIR may disclose the differences between the alternatives and identify how each alternative may be superior. The Lead Agency retains the authority to identify the Environmentally Superior Alternative based on the

evidence in the EIR, agency and public input, Lead Agency standards and policies, and the Lead Agency's independent decision-making.

In evaluating alternatives under CEQA, different weights may be assigned to the relative importance of specific environmental impacts. In comparing the alternatives to the proposed Housing Element Update, "more weight" was given to air quality, cultural resources, noise, public services, utilities and transportation effects than to other resource area impacts, primarily considering the importance of these issue areas to have the most significant and irreversible impacts. However, in addition to these resource areas, additional importance was placed on how and to what extent each of the alternatives accomplish the goals and objectives of the proposed Housing Element Update. The project objective to "meet the State-mandated 6th Cycle RHNA for the City," was given particular importance because not doing so could have potentially serious consequences for the City, including limited access to State funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its general plan is at risk of being deemed inadequate, and therefore invalid. If a jurisdiction is sued over an inadequate general plan, the court may impose requirements for land use decisions until the jurisdiction brings its general plan – including its Housing Element – into compliance with State Housing Law.

Table ES-1 Project Impacts, Mitigation Measures, and Residual Impacts

Impacts	Mitigation Measures	Residual Impacts
Section 3.3, *Air Quality*		
AQ-1 The proposed 6th Cycle 2021-2029 Housing Element Update would require each individual residential development to be consistent with existing City policies and regulations aimed at reducing criteria pollutant emissions, which are consistent with the pollution control strategies in the South Coast Air Quality Management District's (SCAQMD's) 2016 Air Quality Management Plan (AQMP). Implementation of the proposed Housing Element Update would also be consistent with growth projections used by the Southern California Association of Governments (SCAG) in the forthcoming 2022 AQMP. Therefore, implementation of the proposed Housing Element Update would not conflict with or obstruct implementation of the applicable air quality plan, and impacts be *less than significant*.	No Mitigation Required	Less Than Significant
AQ-2 Construction of new residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in construction emissions that could potentially exceed the air quality thresholds recommended by the South Coast Air Quality Management District (SCAQMD). Emissions for individual residential developments would be reduced through mitigation measures; however, when taken together, emissions associated residential development planned for under the proposed Housing Element Update through the planning horizon of 2030 would likely substantialy exceed	MM AQ-1 Criteria Pollutant Emissions Reduction Measures. New residential development planned for under the proposed 6th Cycle 2021-2020 Housing Element Update shall be required to comply with the following conditions during construction: 1. Diesel-powered equipment shall be retrofitted with after-treatment products (e.g., engine catalysts and diesel particulate filters). The engine catalysts shall achieve a minimum reduction of 15 percent for nitrogen oxides (NO_x). The diesel particulate filters shall meet U.S. Environmental	Significant and Unavoidable

Impacts	Mitigation Measures	Residual Impacts
thresholds. Therefore, this impact is conservatively concluded to be *significant and unavoidable*.	Protection Agency (USEPA) Tier 3 standards, consistent with California Air Resources Board (CARB) approved Truck and Bus Regulation requirements in affect at the time the contract is approved. Contract specifications shall be included in construction documents, which shall be reviewed by the City prior to issuance of a grading permit. 2. All heavy-duty diesel-powered equipment operating and refueling shall use low-NOx diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of CARB diesel) in the South Coast Air Basin. (This does not apply to diesel-powered trucks traveling to and from the construction site.) Contract specifications shall be included in project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. 3. All heavy-duty diesel-powered equipment operations shall utilize a phased-in emission control technology in advance of a regulatory requirement such that 30 percent of the fleet shall meet USEPA Tier 4 engine standards for particulate matter control (or equivalent) starting in 2021 and for the duration of construction, consistent with CARB approved Truck and Bus Regulation requirements in affect at the time the contract is approved. 4. Construction equipment engines shall be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract	

Impacts	Mitigation Measures	Residual Impacts
	specifications shall be included in project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. 5. Construction operations shall rely on the electricity infrastructure surrounding the construction site if available rather than electrical generators powered by internal combustion engines. Contract specifications shall be included in project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. 6. Fugitive dust shall implement dust control measures during each phase of project development to reduce the amount of particulate matter entrained in the ambient air. These measures shall include, but not be limited to, the following: a) Application of soil stabilizers to inactive construction areas; b) Quick replacement of ground cover in disturbed areas; c) Watering of exposed surfaces three times daily; d) Watering of all unpaved haul roads three times daily; e) Covering all stock piles with tarp; f) Reduction of vehicle speed on unpaved roads;	

Impacts	Mitigation Measures	Residual Impacts
	g) Post signs onsite limiting traffic to 15 miles per hour (mph) or less; h) Sweep streets adjacent to the project site at the end of the day if visible soil material is carried over to adjacent roads; i) Cover or have water applied to the exposed surface of all trucks hauling dirt, sand, soil, or other loose materials prior to leaving the site to prevent dust from impacting the surrounding areas; and j) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads to wash off trucks and any equipment leaving the site each trip. 7. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes. Diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds shall be turned off when not in use for more than 5 minutes. 8. Architectural coating (paint and primer) products shall have a volatile organic compound (VOC) rating of 125 grams per liter (g/L) or less. Contract specifications	

Impacts	Mitigation Measures	Residual Impacts
	shall be included in the proposed project construction documents, which shall be approved by the City. 9. Building materials that do not require painting shall be used during construction to the extent feasible. Contract specifications shall be included in the project construction documents, which shall be approved by the City. Pre-painted construction materials should be used to the extent feasible.	
AQ-3 The proposed 6th Cycle 2021-2029 Housing Element Update plans for residential development that may exceed the project-specific air quality standards recommended by the South Coast Air Quality Management District (SCAQMD). Proposed growth would integrate with and contribute to a sustainable and multi-modal City intended to minimize vehicle trips and reduce operational emissions, particularly given increased affordable housing, which may reduce inbound commuter trips. However, when taken together, the total combined operational emissions from energy use and vehicle trips from residential development planned for under the proposed Housing Element Update would exceed SCAQMD recommended thresholds, resulting in a potentially *significant and unavoidable* impact.	Full implementation of the City's policies and regulations (e.g., Green Building Code, Zero Net Energy Ordinance, and Solar Ordinance requirements) for new and existing development to reduce criteria pollutant emissions generated within the City.	Significant and Unavoidable
AQ-4 Construction of new residential development under the proposed 6th Cycle 2021-2029 Housing Element Update may	No Mitigation Required	Significant and Unavoidable

Impacts	Mitigation Measures	Residual Impacts
expose sensitive receptors to substantial pollutant concentrations in excess of the established localized significance thresholds (LSTs) during construction. This is a potentially significant impact. Because no feasible mitigation is available to reduce this impact to a less than significant level, this impact would be considered *significant and unavoidable*.		
AQ-5 Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update could locate new dwelling units within 500 feet of Interstate (I-) 10, potentially exposing sensitive land uses to substantial pollutant concentrations. However, this impact would be reduced to *less than significant with the implementation of mitigation*.	MM AQ-2 Interior Air Quality Protection. Applicants of new residential development projects in the City that propose siting sensitive land uses within the following zones shall be required to include design features necessary to reduce exposure to diesel particulate matter (DPM) as a part of the early project design process: <u>Distance from I-10</u> • 1,300 feet from I-10 centerline (Pico Boulevard to Cloverfield Boulevard) • 1,000 feet from I-10 centerline (Cloverfield Boulevard to SR-1) • 600 feet from I-10 centerline (SR-1 [South] to Ocean Avenue) <u>Distance from SR-1</u> • 250 feet from SR-1 centerline New residential development within these zones shall be required to incorporate project design measures, which as an example	Less than Significant with Mitigation

Impacts	Mitigation Measures	Residual Impacts
	could include any one or more of the following: • Installation of heating, ventilation, and air conditioning (HVAC) infrastructure within the building to circulate and purify outdoor air sources sufficiently to reduce diesel particulate matter and vehicle emissions. HVAC control systems shall include an air filtration system, such as the Lennox PureAir system, with particulate filters that have a minimum efficiency reporting value (MERV) of 12 to 15 (depending on the specific distance of the parcel from I-10 or SR-1) for enhanced particulate removal efficiency capable of removing a significant portion of the sub-1.0 micrometer sized particles expected from diesel combustion as indicated by the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. • Avoidance of operable windows on the side of the building facing I-10 or SR-1. • Incorporation of dual-pane windows on all windows to make the building exterior as “airtight” as possible to minimize air infiltration. The exterior pressure envelope of the units should be sealed to achieve a tested air leakage rate of no more than 3.0 unit volumes per hour using the blower door ACH50 leak test, or equivalent.	

Impacts	Mitigation Measures	Residual Impacts
	• Location of any vents and roof penetrations or other air intakes facing away from I-10 or SR-1 wherever possible. Doorways and entryways should also be located away from I-10 or SR-1 to the extent feasible. • Though not required, location of outdoor areas away from I-10 or SR-1 (e.g., behind thick vegetation screens or within the interior courtyard portions of the development). Applicants shall be responsible for the preparation of a brief technical memorandum that describes the effectiveness of the selected measures – within the context of the Health Risk Assessment (HRA) prepared for the proposed Housing Element Update – in reducing DPM emissions below SCAQMD thresholds cancer risk of 10 cancer cases per million (1.0×10^{-5}). The City shall codify this requirement such that review of the applicant-prepared, site-specific analysis by City staff would be required as a part of the entitlement and ministerial design review process. The proposed HVAC systems and other design measures shall also be reviewed and approved by the City prior to occupancy of new residential developments within the zones identified above.	
AQ-6 New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in vehicle trips that would generate carbon monoxide (CO) emissions. However, Federal and State CO standards would not be exceeded with	No Mitigation Required	Less than Significant

Impacts	Mitigation Measures	Residual Impacts
implementation of the proposed Project and this impact would be *less than significant*.		
AQ-7 Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would not result in other emissions including odors that would affect a substantial number of people. Therefore, this impact would be *less than significant.*	No Mitigation Required	Less than Significant
Section 3.4, *Cultural Resources*		
CR-1 As the proposed 6th Cycle 2021-2029 Housing Element Update does not include individual proposals for residential development projects, detailed information (e.g., project size, type, location) regarding potential effects on specific historic resources are unknown. However, it is conceivable that the demolition or substantial modification of a historic resource could occur as a result of some residential development projects, resulting in the potential for a substantial adverse change in the significance of an historical resource as defined in California Environmental Quality Act (CEQA) Guidelines Section 15064.5. Therefore, even with existing State and local regulations and policies in place to protect historic resources, impacts would remain *significant and unavoidable.*	MM CR-1a Incentives for Housing Projects. To encourage the preservation, rehabilitation, restoration, and/or adaptive reuse of existing buildings, the City shall consider adoption of an Adaptive Reuse Ordinance that could provide incentives to project applicants, including but not limited to an expedited approval process, reduced parking requirements, fee reductions, and other benefits. MM CR-1b Historic American Building Survey (HABS) Documentation. Prior to the demolition or alteration of an identified historic resource on the Historic Resources Inventory (HRI) that cannot comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties, historical resources shall be documented to the standards of the HABS Document Level II. MM NOI-1 would also apply.	Significant and Unavoidable
CR-2 Ground disturbing activities associated with residential development projects planned for under the proposed 6th Cycle 2021-2029 Housing Element Update could potentially uncover and disturb previously unknown	MM CR-2a Archaeological Data Recovery. For residential development projects that inadvertently discover buried prehistoric or historic-period archaeological resources (either by the construction contractor or by the Native American	Less Than Significant with Mitigation

Impacts	Mitigation Measures	Residual Impacts
prehistoric or historic archaeological deposits during earthwork activities that may cause a substantial adverse change in the significance of an archaeological resource. If improperly handled, such resources could be adversely impacted. Impacts would be reduced to *less than significant with mitigation incorporated*.	monitor) the City shall apply a program that combines resource identification, significance evaluation, and mitigation efforts into a single combined effort. This approach would combine the discovery of deposits (Phase 1), determination of significance and assessment of the project's impacts on those resources (Phase 2), and implementation of any necessary mitigation (Phase 3) into a single consolidated investigation. This approach must be driven by a Treatment Plan that sets forth explicit criteria for evaluating the significance of resources discovered during construction and identifies appropriate data recovery methods and procedures to mitigate project effects on significant resources. The Treatment Plan shall be prepared prior to issuance of building permits by a Registered Professional Archaeologist (RPA) who is familiar with urban historical resources, and at a minimum shall include: • A review of historic maps, photographs, and other pertinent documents to predict the locations of former buildings, structures, and other historical features and sensitive locations within and adjacent to the specific development area; • A context for evaluating resources that may be encountered during construction; • A research design outlining important prehistoric and historic-period themes and research questions relevant to	

Impacts	Mitigation Measures	Residual Impacts
	the known or anticipated sites in the study area; • Specific and well-defined criteria for evaluating the significance of discovered remains; and Data requirements and the appropriate field and laboratory methods and procedures to be used to treat the effects of the project on significant resources. The Treatment Plan shall also provide for a final technical report on all cultural resource studies and for curation of artifacts and other recovered remains at a qualified curation facility, to be funded by the developer. To ensure compliance with State and City preservation laws, this plan shall be reviewed and approved by the Historic Landmarks Commission and the City of Santa Monica Planning Division prior to issuance of building permits. MM CR-2b Inadvertent Discoveries: In the event of any inadvertently discovered prehistoric or historic-period archaeological resources during construction, the developer shall immediately cease all work within 50 feet of the discovery. The proponent shall immediately notify the City of Santa Monica Planning Division and shall retain a Registered Professional Archaeologist (RPA) to evaluate the significance of the discovery prior to resuming any activities that could impact the site. If the archaeologist determines that the find may qualify for listing in the California Register of Historic Resources (California Register), the site shall be avoided or a data recovery plan shall be developed pursuant to MM CR-2a. Any required testing or data recovery shall be directed by an	

Impacts	Mitigation Measures	Residual Impacts
	RPA prior to construction being resumed in the affected area. Work shall not resume until authorization is received from the City. MM TCR-1 would also apply.	
CR-3 Ground disturbing activities associated with residential development projects planned for under the proposed 6th Cycle 2021-2029 Housing Element Update could potentially uncover buried Native American human remains. In the unlikely event of this occurrence, construction activities would immediately cease in the vicinity of the discovery and remains would be handled in accordance with existing State regulations. Therefore, impacts would be *less than significant*.	No Mitigation Required	Less Than Significant
Section 3.5, *Energy*		
EN-1 Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would increase energy demand, but would not result in wasteful, inefficient, and unnecessary consumption of energy resources during construction or operation of individual residential developments. Compliance with State and local regulations – including the 2020 Energy Reach Code, and Green Building Standards Code – would reduce this impact to *less than significant*.	No Mitigation Required	Less Than Significant
EN-2 The proposed 6th Cycle 2021-2029 Housing Element Update would conform with the policies of the Southern California	No Mitigation Required	Less Than Significant

Impacts	Mitigation Measures	Residual Impacts
Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) as well as the City's 2020 Energy Reach Code, and Green Building Standards Code; therefore, this impact would be *less than significant*.		
Section 3.6, *Land Use and Planning*		
LU-1 Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update and associated new residential development would not physically divide an established community. This would be a *less than significant* impact.	No Mitigation Required	Less Than Significant
LU-2 To comply with State Housing Law, implementation of the proposed Housing Element Update would require amendments to the City's Land Use and Circulation Element (LUCE), Downtown Community Plan (DCP), Bergamot Area Plan, and the Zoning Ordinance. With these amendments, the proposed Housing Element Update would not conflict with applicable land use plans, policy, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, this impact would be *less than significant*.	No Mitigation Required	Less Than Significant
Section 3.7, *Greenhouse Gases and Climate Change*		
GHG-1 Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would generate increases in greenhouse gas (GHG) emissions through the planning horizon of 2030. However, the proposed Housing Element Update would be consistent with all applicable plans, policies or regulations of an agency adopted for the	No Mitigation Required	Less Than Significant

Impacts	Mitigation Measures	Residual Impacts
purpose of reducing the emissions of GHGs. Therefore, this impact would be *less than significant*.		
Section 3.8, *Noise*		
NOI-1 Construction activities associated with the residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in a temporary increase in noise levels in the vicinity of individual project sites or clusters of such sites. However, each individual residential development project would comply with the requirements of the City's Noise Ordinance. Given that each individual residential development project would comply with City regulations and requirements – including the preparation of a Construction Noise Management Plan, as necessary – construction noise impacts would be *less than significant.*	No Mitigation Required	Less Than Significant
NOI-2 Residential development as planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would incrementally increase vehicle trips and associated operational noise levels in the City, particularly vehicle noise along boulevards. New residential development would also result in new permanent sources of noise from deliveries, trash hauling, parking noise, and mechanical equipment. However, the operation of new residential developments would not result in a substantial permanent increase in ambient noise levels in the City, and impacts would be *less than significant.*	No Mitigation Required	Less Than Significant
NOI-3 Construction of new residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update	MM NOI-1 Measures to Reduce Ground-borne Vibration. To reduce the potential for construction-related vibration effects to structures,	Significant and Unavoidable

Impacts	Mitigation Measures	Residual Impacts
would potentially expose adjacent persons or structures to temporary, excessive ground-borne vibration levels that would exceed thresholds. Impacts on sensitive receptors from construction vibration would be potentially *significant and unavoidable*.	prior to the issuance of a building permit, the project applicant shall perform an inventory of the structural condition of any structures that are listed in the Historic Resources Inventory (HRI) or that are more than 40 years of age and located within 350 feet of the construction site. Based on a survey of the building's structural condition, a vibration specialist will determine the appropriate Caltrans vibration structural damage potential criteria, and for each piece of equipment, assess a standoff distance from the building. The construction contractor(s) shall restrict the use of vibration-generating equipment, within the minimum applicable standoff distances to not exceed the building's applicable structural damage criteria. If the vibration-generating construction equipment is required to be used within these minimum applicable distances, the construction contractor(s) shall implement one of the following measures: Restrict the use of large bulldozers and other similarly large vibration- generating equipment, so that the vibration-generating portion of the equipment (i.e., the motor, engine, power plant, or similar) remains at the minimum standoff distances unless it can be demonstrated to the satisfaction of the City based on in-situ measurements (prior to initiation of full-scale construction activities) that vibration levels can be kept below the applicable structural damage potential criteria, as determined by the vibration specialist, through any combination of revised setbacks, alternative equipment and methods, alternative sequencing of activities, or other vibration-reducing techniques. Install and maintain at least one continuously operational automated vibrational monitor on the side of the building facing the construction activity and capable of being programmed with two	

Impacts	Mitigation Measures	Residual Impacts
	predetermined vibratory velocities levels: a first-level alarm equivalent to 0.05 in/sec peak particle velocity (PPV) less than the appropriate Caltrans vibration structural damage potential criteria and a regulatory alarm level equivalent to the Caltrans vibration structural damage potential criteria. The monitoring system must produce real-time specific alarms (via text message and/or e-mail to on-site personnel) when velocities exceed either of the predetermined levels. In the event of a first-level alarm, feasible steps to reduce vibratory levels shall be undertaken, including but not limited to halting/staggering concurrent activities and utilizing lower-vibratory techniques. In the event of an exceedance of the regulatory level, work in the vicinity of the affected building shall be halted and the building visually inspected for damage. Results of the inspection must be logged. In the event damage occurs, such damage shall be repaired. Such repairs shall be conducted in consultation with a qualified preservation consultant and, if warranted, in a manner that meets The Secretary of the Interior's Professional Qualification Standards.	
NOI-4 New residential development planned for under the proposed 6th 2021-2029 Cycle Housing Element Update would potentially be located within 2 miles of the Santa Monica Municipal Airport (SMO). However, the proposed Housing Element Update would not make changes to existing zoning for properties located within the Los Angeles County Airport Land Use Plan (ALUP) boundaries or properties located within the SMO Community Noise Equivalent Level (CNEL) noise contours. Further, the eventual closure of SMO in 2028 would ensure that people residing or working in the vicinity of the airport are not exposed to	No Mitigation Required	Less Than Significant

Impacts	Mitigation Measures	Residual Impacts
excessive noise levels. Therefore, this impact is *less than significant.*		
Section 3.9, *Population, Housing, and Employment*		
POP-1 The proposed 6th Cycle 2021-2029 Housing Element Update plans for, but does not directly propose the construction of new residential development. The proposed Housing Element Update would provide the goals, policies, and programs to guide new residential over the next 8 years. Planning for the increase in housing is necessary to accommodate for unmet housing demand and to comply with the State-mandated 6th Cycle Regional Housing Needs Allocation (RHNA) of 8,895 dwelling units. The proposed Housing Element Update would not induce substantial growth, but rather would accommodate already projected growth in the region. Therefore, this impact would be *less than significant*.	No Mitigation Required	Less Than Significant
POP-2 Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update would increase the number of dwelling units within the City and would not displace substantial numbers of existing housing or people. Therefore, this impact is *less than significant*.	No Mitigation Required	Less Than Significant
Section 3.10, *Public Services*		
PS-1 Increases in the City's residential population anticipated to occur under the proposed 6th Cycle 2021-2029 Housing Element Update would increase the demand for fire protection services and would generate the need for new or physically altered fire protection facilities, the construction of which may have	No Feasible Mitigation	Significant and Unavoidable

Impacts	Mitigation Measures	Residual Impacts
result in significant environmental impacts. Planning for such a facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of Santa Monica Fire Department (SMFD) facilities and staff. This impact would be potentially *significant and unavoidable.*		
PS-2 New residential development as planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in an increase in resident population, which would increase the demand for police protection services. Such population increases would not result in the exceedance of City service standards or the need for new or physically altered police facilities. This impact would be *less than significant.*	No Mitigation Required	Less Than Significant
PS-3 New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in expected increases in student enrollment, which would increase the demand on existing school facilities. Notwithstanding Senate Bill (SB) 50, the payment of developer fees to the Santa Monica-Malibu Union School District (SMMUSD) and the previously allocated bond funding measures for facilities improvements would not ensure a reduction in impacts. Therefore, the impacts could be potentially *significant and unavoidable*.	No Feasible Mitigation	Significant and Unavoidable
PS-4 The increase in residential population anticipated to occur under the proposed 6th Cycle 2021-2029 Housing Element Update would the increase demand for libraries;	No Mitigation Required	Less Than Significant

Impacts	Mitigation Measures	Residual Impacts
however, due to the growing use of electronic resources this impact would be *less than significant*.		
PS-5 Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update is anticipated to increase the use of existing neighborhood and regional parks, which could cause the acceleration of substantial physical deterioration of these facilities. Although the City would continue to maintain existing parks and develop new parks consistent with the vision of the Santa Monica General Plan Land Use and Circulation Element (LUCE) and other City goals, implementation of the proposed Housing Element Update would require the construction or expansion of recreational facilities that might have potentially significant adverse physical effect on the environment. Therefore, impacts would be *significant and unavoidable*.	MM PS-1 Parks and Recreation Master Plan (PRMP) Update. The City shall resume the update of the PRMP, as soon as funding permits. The PRMP shall incorporate policies that support the development of new parks in park poor areas in an effort to achieve the Urban Land Institute and the National recreation and Park Association goal of ever resident being located within a 10-minute walk of a park or beach. MM PS-2 Parks and Recreation Development Impact Fee Update. The City shall ensure adequate financing for funding of parks and recreation improvements through and update to the parks and recreation development impact fee. The fees shall be used to fund parks and recreation capital facilities, including land acquisition, parks improvements, and facilities in an effort to achieve the Urban Land Institute and the National recreation and Park Association goal of ever resident being located within a 10-minute walk of a park or beach.	Less Than Significant
3.11, *Utilities*		
UT-1 New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would require or result in the construction of new water facilities (e.g., laterals) and potentially replacement/expansion of existing water facilities (e.g., water mains). The construction or replacement/expansion of these facilities could potentially result in significant environmental effects such disturbance of buried cultural resources and short-term temporary impacts related to criteria	MM UT-1 Financing Program. In addition to required improvements to the water delivery system for individual projects under the Housing Element Update, as needed, the City shall ensure adequate financing for funding of infrastructure improvements to serve the City either through the City's Capital Improvement Program (CIP) or alternatively through a Public Infrastructure Financing Program, including preparation of an Assembly Bill (AB) 1600 fee justification study. If pursued, the Public Infrastructure Financing	Less Than Significant with Mitigation

Impacts	Mitigation Measures	Residual Impacts
air pollutant emissions, noise, and disruption of the local transportation network; however, these impacts would be reduced to *less than significant with mitigation*.	Program shall be completed within 2 years of adoption of the proposed Housing Element Update. All new residential development under the proposed Housing Element Update shall be conditioned to be subject to payment of its fair share of any impact fees identified under this program. The program shall determine the costs of and establish a funding program for the following capital improvements to upgrade water delivery as needed to serve the demands of new land uses anticipated to occur under the proposed Housing Element Update. The Public Financing Plan shall: a. Identify the cost of improvements to or replacement of undersized lines within the City. b. Clearly apportion existing and projected demand on these facilities and costs between existing users, the City, and proposed future development. c. Identify potential funding mechanisms for water line construction, including the equitable sharing of costs between new development, the City, and existing users, including development impact fees, grants, assessments, etc. d. Identify development impact fees for all residential development to ensure that development pays its	

Impacts	Mitigation Measures	Residual Impacts
	fair share of public infrastructure costs. e. Include a regular fee update schedule, consistent with the City's CIP. f. Require the first update of the Public Financing Plan within 5 years following adoption of the proposed Housing Element Update. MM AQ-1, MM CUL-1a and -1b, MM NOI-1, and MM TCR-1 would also apply.	
UT-2 The City's existing and projected water supply would be adequate to meet the increased water demand from the proposed 6th Cycle 2021-2029 Housing Element Update and the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. However, the increase in residential development planned for by the proposed Housing Element Update would create substantial increases in water demand which would delay or inhibit the City's ability to achieve water self-sufficiency by 2023, a key City policy goal, which could create inconsistencies with City policy, a potentially *significant impact*.	No Feasible Mitigation	Significant and Unavoidable
UT-3 New residential development as planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would require or result in the construction of new wastewater facilities or expansion of existing facilities. The construction or replacement/expansion of these	MM UT-2 Public Infrastructure Financing Program. In addition to required improvements to the domestic water supply system for projects, as needed under the proposed Housing Element Update, the City shall ensure adequate financing for funding of wastewater infrastructure	Less Than Significant with Mitigation

Impacts	Mitigation Measures	Residual Impacts
facilities could potentially result in significant environmental effects such disturbance of buried cultural resources and short-term temporary impacts related to criteria air pollutant emissions, noise, and disruption of the local transportation network; however, these impacts would be reduced to *less than significant with mitigation*.	improvements to serve the City either through the City's Capital Improvement Program (CIP) or alternatively through a Public Infrastructure Financing Program. All new development under the Housing Element Update shall be conditioned to be subject to payment of its fair share for any impact fees identified under this program. The program shall determine the costs of and establish a funding program for the capital improvements to upgrade wastewater collection as needed to serve the demands of new land uses anticipated to occur under the proposed Housing Element Update. MM AQ-1, MM CUL-2a and -2b, MM NOI-1, and MM TCR-1 would also apply.	
UT-5 Buildout under the proposed 6th Cycle 2021-2029 Housing Element Update would not result in the generation of solid waste that would exceed the existing capacity of existing landfills serving the City. Therefore, impacts would be *less than significant*.	No Mitigation Required	Less Than Significant
UT-6 The proposed 6th Cycle 2021-2029 Housing Element Update would not result in generation of additional waste, with the potential to conflict with Federal, State, and local statutes and regulations related to solid waste. Due to existing City programs, there is *no impact*.	No Mitigation Required	No Impact
Section 3.12, *Transportation and Circulation*		
T-1 The proposed 6th Cycle 2021-2029 Housing Element Update would not cause significant environmental impacts due to conflicts with any State legislation, regional transportation plans, or City transportation plans, policies, or regulations. Therefore,	No Mitigation Required	Less Than Significant

Impacts	Mitigation Measures	Residual Impacts
impacts associated with the proposed Housing Element Update would be *less than significant*.		
T-2 The proposed 6th Cycle 2021-2029 Housing Element Update would not exceed the City's Vehicle Miles Traveled (VMT) Threshold 1: VMT per capita, which requires a project to generate VMT below the existing City-wide average VMT per capita for that particular land use. However, the proposed Housing Element Update would exceed the City's VMT Threshold 2: Total VMT, which requires a project's total VMT to be at least 16.8 percent below existing City Business as Usual (BAU) VMT per capita. Therefore, impacts would be *significant and unavoidable*.	MM T-1 Residential Transportation Demand Management (TDM) Program. The City shall conduct a future study of programmatic TDM activities to reduce residential automobile trips, such as promoting: (1) resident travel support and incentives to reduce vehicle-based trips; (2) the expansion of carsharing businesses/activities in the City; (3) the expansion of micromobility services in City; (4) autonomous and/or low-emission goods delivery (e.g., e-bicycles and other land-based delivery modes) and other programs and services. Collaborate with private sector partners and the Transportation Management Organization to improve and expand use of these services. MM T-2 City-wide Transportation Impact Fee (TIF) Update. The City shall prepare an update to the TIF to change the basic metric from trips to vehicle miles traveled (VMT). The nexus study conducted when the City's TIF was adopted in 2013 reflects the costs associated with specified transportation improvements and the amount of new vehicle trips that can be attributed to projected land use changes. Using VMT as the metric to relate the trip fee to land uses would better align with the City's current analytical framework for analyzing transportation impacts. TIF revenues are used to construct infrastructure that support transit, bicycle, pedestrian and active transportation trips for all purposes. MM T-3 Connections to Purple Line. The City shall investigate the potential for improving bus transit connections through higher frequency service and route adjustments between Santa	Significant and Unavoidable

Impacts	Mitigation Measures	Residual Impacts
	Monica and the planned stations on the Metro Purple Line (D Line) at the West Los Angeles Veterans Affairs Campus station or from the Westwood station. Construction on this section of the subway extension began in 2019 and operation is planned to begin in 2027. Investigate the potential for creating a protected bicycle facility to complement high frequency transit service to the Metro Purple Line (D Line).	
T-3 Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Impacts related to hazards due to design features would be *less than significant.*	No Mitigation Required	Less Than Significant
T-4 Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update would not result in inadequate emergency access to individual sites within the City; therefore, impacts would be *less than significant*.	No Mitigation Required	Less Than Significant
Section 3.13, *Tribal Cultural Resources*		
TCR-1 Tribal cultural resources, as defined in Public Resources Code Section 21074, may be inadvertently uncovered during ground disturbing activities associated with residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update. Damage or destruction of such tribal cultural resources would be a potentially significant impact. However, with the implementation of Native American monitoring, impacts would be reduced to *less than significant with mitigation*.	MM TCR-1 Tribal Consultation for Residential and Mixed-Use Developments. For new residential and mixed-use developments requiring grading/excavation greater than 5 feet below ground surface (bgs), prior to demolition, the project developer or project construction contractor shall consult with the Gabrieleño Band of Mission Indians – Kizh Nation regarding the cultural sensitivity of the project site and the potential for tribal cultural resources to occur on-site. If required by the Tribe, the project developer shall retain a Native American monitor to be present during	Less Than Significant with Mitigation

Impacts	Mitigation Measures	Residual Impacts
	project construction excavations such as clearing/grubbing, grading, trenching, or any other excavation activities. The appropriate Native American monitor shall be identified using the most recent contact list provided by the Native American Heritage Commission (NAHC). The frequency of monitoring shall consider the rate of excavation and grading activities, proximity to known cultural resources, the materials being excavated (e.g., younger alluvium versus older alluvium), and the depth of excavation, and if found, the abundance and type of prehistoric resources encountered. If, during initial ground disturbance, the Native American monitor determines that the ground disturbing activities have little or no potential to impact tribal resources, and/or the Native American monitor determines that ground disturbances would occur within previously disturbed and nonnative soils, full-time field observation shall be reduced to part-time inspections or ceased entirely. This decision will be made in consultation with the Native American monitor and the City. This mitigation measure shall not apply to projects located within the City's former claypit/landfill areas.	

Table ES-2 Comparison of Significant Impacts by Alternative

Significant and Unavoidable Impacts	Alternative 1 No Project	Alternative 2 Transit-Oriented Housing Development on Fewer Sites	Alternative 3 Quantified Objective
Air Quality	Slightly reduced, though significant and unavoidable impacts would remain as described in the LUCE Program EIR and DCP Program EIR	Similar, though more concentrated within the 0.5-mile radius of the Metro E (Expo) LRT stations	Slightly reduced, though significant and unavoidable impacts would remain as a result of the increase in construction and operational emissions relative to existing conditions
Cultural Resources	Similar	Similar, though potentially increased impacts related to the alterations in historic character within the immediate within the 0.5-mile radius of the Metro E (Expo) LRT stations	Similar
Noise	Similar	Similar, though more concentrated within the 0.5-mile radius of the Metro E (Expo) LRT stations	Similar
Public Services	Reduced, though significant and unavoidable impacts remain for fire protection services given that current response times do not meet National Fire Protection Association (NFPA) response time goals	Similar	Slightly reduced, though significant and unavoidable impacts would remain for fire protection services, public schools, and parks and recreation given the increase in housing production relative to existing conditions
Utilities	Reduced, given that the demand for domestic water and wastewater collection would not increase above that projected by the LUCE Program EIR and DCP Program EIR	Slightly greater, given that the demand for domestic water and in particular wastewater collection services would be concentrated in three distinct areas of the City	Slightly reduced, though significant and unavoidable impacts would remain domestic water and wastewater collection services given the increase in housing production relative to existing conditions

Significant and Unavoidable Impacts	Alternative 1 No Project	Alternative 2 Transit-Oriented Housing Development on Fewer Sites	Alternative 3 Quantified Objective
Transportation	Slightly greater, given that the No Project Alternative would not reduce business as usual (BAU) vehicle miles traveled (VMT) to the same extent as the proposed Housing Element Update	Slightly reduced, given the closer proximity to public transit facilities and other multi-modal connections	Slightly greater, given that this alternative would generate a higher combined total VMT for residents and employees than what would occur under the proposed Housing Element Update
Project Objectives Met	None, importantly this alternative would not meet the City's obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.	Many, but this alternative would not affirmatively further fair housing to the same extent as the proposed Housing Element Update	Many, but this alternative would not meet the City's obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.

In strictly comparing reductions in the severity of physical environmental impacts it has been determined that the implementation of Alternative 2 would be the environmentally superior alternative. With respect to meeting the basic project objectives, the Quantified Objective Alternative would generally establish and implement similar policies, development standards, and programs as the proposed Housing Element Update. Additionally, implementation of Quantified Objective Alternative would meet many of the principles and goals of the proposed Housing Element Update; however, the number of dwelling units planned for through the 2030 planning horizon would not meet the City's 6th Cycle Regional Housing Needs Allocation. As previously described, if HCD determines that the City's reduced numerical housing target fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.

6th Cycle 2021-2029
Housing Element Update
Draft Environmental Impact Report

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List of Acronyms and Abbreviations

°C	degrees Celsius
°F	degrees Fahrenheit
AADT	Annual Average Daily Traffic
AB	Assembly Bill
ACS	American Communities Survey
ADT	Average Daily Traffic
AEP	Association of Environmental Professionals
AF	acre-feet
AFH	Assessment of Fair Housing
AFY	acre-feet per year
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUP	Airport Land Use Plan
AMI	Area Median Income
APS	Alternative Planning Strategy
AQMP	Air Quality Management Plan
ASHRAE	American Society of Heating and Air-Conditioning Engineers
ATCM	Airborne Toxic Control Measures
AVR	Average Vehicle Ridership
AWTF	Advanced Water Treatment Facility
BAU	Business as Usual
bgs	below ground surface
BMP	best management practice
BPD	Beach Parking District
BSCD	Bayside Commercial District
BTU	British thermal unit
CAA	Clean Air Act
CAAP	Climate Action and Adaptation Plan
CAAQS	California Ambient Air Quality Standards
Cal OES	California Office of Emergency Services
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Cal-OSHA	California Division of Occupational Safety and Health
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CC	Civic Center
CCA	Community Choice Aggregation
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCE	Community Choice Energy
CCSD	Community and Cultural Services Department
CCSP	Civic Center Specific Plan

CDPH	California Department of Public Health
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERT	Community Emergency Response Team
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CH_4	methane
CIP	Capital Improvement Program
CIS	Coastal Interceptor Sewer
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPA	Clean Power Alliance
CPUC	California Public Utilities Commission
CREST	Childcare, Recreation, Enrichment, and Sports Together
CTC	California Transportation Commission
CUPA	Certified Unified Protection Agency
cy	cubic yard
dB	decibel
dBA	A-weighted decibel
DCP	Downtown Community Plan
DDW	Los Angeles Division of Drinking Water
DoD	Department of Defense
DOI	Department of the Interior
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
EIR	Environmental Impact Report
EMD	City of Los Angeles Environmental Monitoring Division
EMFAC	EMission FACtors
EMS	Emergency Medical Services
EO	Executive Order
ERF	Effective Response Force
EV	electric vehicle
eVAP	Electric Vehicle Action Plan
FAA	Federal Aviation Administration
FAR	Floor Area Ratio
FEHA	Fair Employment and Housing Act
FHA	Fair Housing Act
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FICUN	Federal Interagency Committee on Urban Noise
FIP	Facility Improvement Projects
FRA	Federal Railroad Administration
FRU	Fast Response Unit
FTA	Federal Transit Administration
FY	Fiscal Year
g/L	grams per liter

gal/hp/hr	gallons per horsepower per hour
GCF	Green Climate Fund
GHG	greenhouse gas
gpcd	gallons per capita per day
GPM	gallons per minute
GSP	Groundwater Sustainability Plan
Gt	gigatons
GWh	gigawatt hours
GWP	Global Warming Potential
HABS/HAER	Historic American Buildings Survey or Historic American Engineering Record
HARP	Hotspots Analysis Reporting Program
HCD	California Department of Housing and Community Development
HI	hazard index
HOV	high-occupancy vehicle
HQTA	high quality transit area
HRG	Historic Resources Group
HRI	Historic Resources Inventory
HUD	Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
HWRP	Hyperion Water Reclamation Plant
Hz	hertz
I-	Interstate
ICLEI	International Council for Local Environmental Initiatives
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
IS	Initial Study
ISO	Insurance Service Office
IWRP	Integrated Water Resources Plan
JPA	Joint Powers Authority
kBTU	kilo British thermal unit
kWh	kilowatt hours
LACOE	Los Angeles County Office of Education
LADPW	Los Angeles Department of Public Works
LASAN	City of Los Angeles Bureau of Sanitation
LAX	Los Angeles International Airport
LCFS	Low Carbon Fuel Standard
LCP	Local Coastal Program
L_{dn}	day-night average noise level
LEED	Leadership in Energy and Environmental Design
LEHD	Longitudinal Employer-Household Dynamics
LEPC	Local Emergency Planning Committee
L_{eq}	equivalent continuous noise level
L_{max}	maximum instantaneous noise level
LMI	Low and Moderate Income
L_{min}	minimum instantaneous noise level
LMSD	Light Manufacturing and Studio District
LNG/CNG	liquefied and compressed natural gas

LOS	Level of Service
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LST	Localized Significance Threshold
LUCE	Land Use and Circulation Element
LUP	Land Use Plan
MAPS	Moss Avenue Pump Station
MERV	minimum efficiency reporting value
Metro	Los Angeles County Metropolitan Transportation Authority
MG	million gallons
MGD	million gallons per day
MICR	maximum individual cancer risk
MLD	Most Likely Descendant
MMAA	Master Mutual Aid Agreement
MMT	millions of metric tons
MND	Mitigated Negative Declaration
MOU	Memorandum of Understanding
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MT	metric tons
MW	Megawatts
MWD	Metropolitan Water District of Southern California
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NASA	National Aeronautics and Space Administration
NCDC	National Climatic Data Center
ND	Negative Declaration
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOMA	North of Montana
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NPS	National Park Service
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	California Governor's Office of Planning and Research
PA	public address
Pb	Lead
PCH	Pacific Coast Highway
PDWF	Peak Dry Weather Flow
PeMS	Performance Measurement System

PM_{10}	suspended particulate matter
$PM_{2.5}$	fine particulate matter
ppb	parts per billion
PPC	Public Protection Classification
pph	person per household
ppm	parts per million
PPV	peak particle velocity
PRMP	Parks and Recreation Master Plan
PSI	pounds per square inch
PV	photovoltaic
RHNA	Regional Housing Needs Allocation
RNG	renewable natural gas
ROG	reactive organic gas
RPA	Registered Professional Archaeologist
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SAIFI	System Average Interruption Frequency Duration Index
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
sf	square foot
SGMA	Sustainable Groundwater Management Act
SHBC	State Historical Building Code
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLF	Sacred Lands File
SMBGSA	Santa Monica Basin Groundwater Sustainability Agency
SMFD	Santa Monica Fire Department
SMGB	Santa Monica Groundwater Basin
SMMC	Santa Monica Municipal Code
SMMUSD	Santa Monica-Malibu Unified School District
SMO	Santa Monica Municipal Airport
SMPD	City of Santa Monica Police Department
SMPL	Santa Monica Public Library
SMURRF	Santa Monica Urban Runoff Recycling Facility
SO_2	sulfur dioxide
SO_4^{2-}	sulfate
SoCal Edison	Southern California Edison
SoCalGas	Southern California Gas Company
SR-	State Route
SRA	source receptor area
SRRE	Source Reduction and Recycling Element
SSI	Suitable Sites Inventory
SSSMP	Sanitary Sewer System Master Plan

STIP	State Transportation Improvement Program
SUD	Special Use District
SWIP	Sustainable Water Infrastructure Project
SWMP	Sustainable Water Master Plan
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	traffic analysis zone
TDFM	Transportation Demand Forecast Model
TDM	transportation demand management
TIF	Transportation Impact Fee
TPSS	traction power substations
U.S. DOT	U.S. Department of Transportation
UCLA	University of California, Los Angeles
UFMP	Urban Forest Master Plan
UNFCCC	United Nations Framework Convention on Climate Change
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
V/C	volume-to-capacity ratio
VMT	vehicle miles traveled
VOC	Volatile Organic Compound
WBMWD	West Basin Municipal Water District
WCOG	Westside Council of Governments
WCU	Water Conservation Unit
WPA	Works Progress Administration
WSA	water supply assessment
WSCP	Water Shortage Contingency Plan
WSO	Westside Special Olympics
WTP	Water Treatment Plant
WUA	Water Use Allowance
WWFP	Wastewater Facilities Plan
ZNE	Zero Net Energy
$\mu g/m^3$	microgram per cubic meter

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1.0 Introduction

In accordance with the California Environmental Quality Act, this Environmental Impact Report evaluates the potential environmental impacts of the proposed 6th Cycle 2021-2029 Housing Element Update for the City of Santa Monica. The proposed Housing Element Update, which is required in accordance with State Housing Law, serves as the guiding long-range plan to meet the 6th Cycle Regional Housing Needs Allocation while affirmatively furthering fair housing. The proposed Housing Element Update updates the previously adopted Santa Monica General Plan Land Use and Circulation Element by encouraging the production through an equity lens. Additionally, the proposed Housing Element Update reaffirms the City's commitment to affordable housing, tenant protection, housing and services for special needs groups, and homeless services through new and revised goals, policies, and programs.

This Draft Environmental Impact Report (EIR) has been prepared for the City of Santa Monica's (City's) proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update) in compliance with the California Environmental Quality Act (CEQA). CEQA requires State and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The CEQA Guidelines are located within the California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387, while the CEQA statute is codified as Public Resources Code Section 21000-21189.57. This EIR evaluates the potentially significant, adverse, and beneficial environmental impacts resulting from the proposed Housing Element Update.

1.1 Housing Element Update Process

Since 1969, State law has required that all local governments (i.e., counties and cities) adopt a general plan for their physical development to meet the needs of everyone in the community. A general plan is a key tool that addresses a variety of subject areas and expresses the community's development goals related to the jurisdiction's future land uses.

The Housing Element is one of seven State-mandated general plan elements. California Government Code Section 65583 details the content and process by which a Housing Element is prepared. Among other requirements, Housing Elements must identify, analyze, and make adequate provision for the existing and projected housing needs of all economic segments of the community. California Government Code Sections 65580-65589.8 requires that communities prepare and update the Housing Element every 8 years.

The components of the Housing Element are largely dictated by the State, with local governments required to implement these provisions, and typically must include:

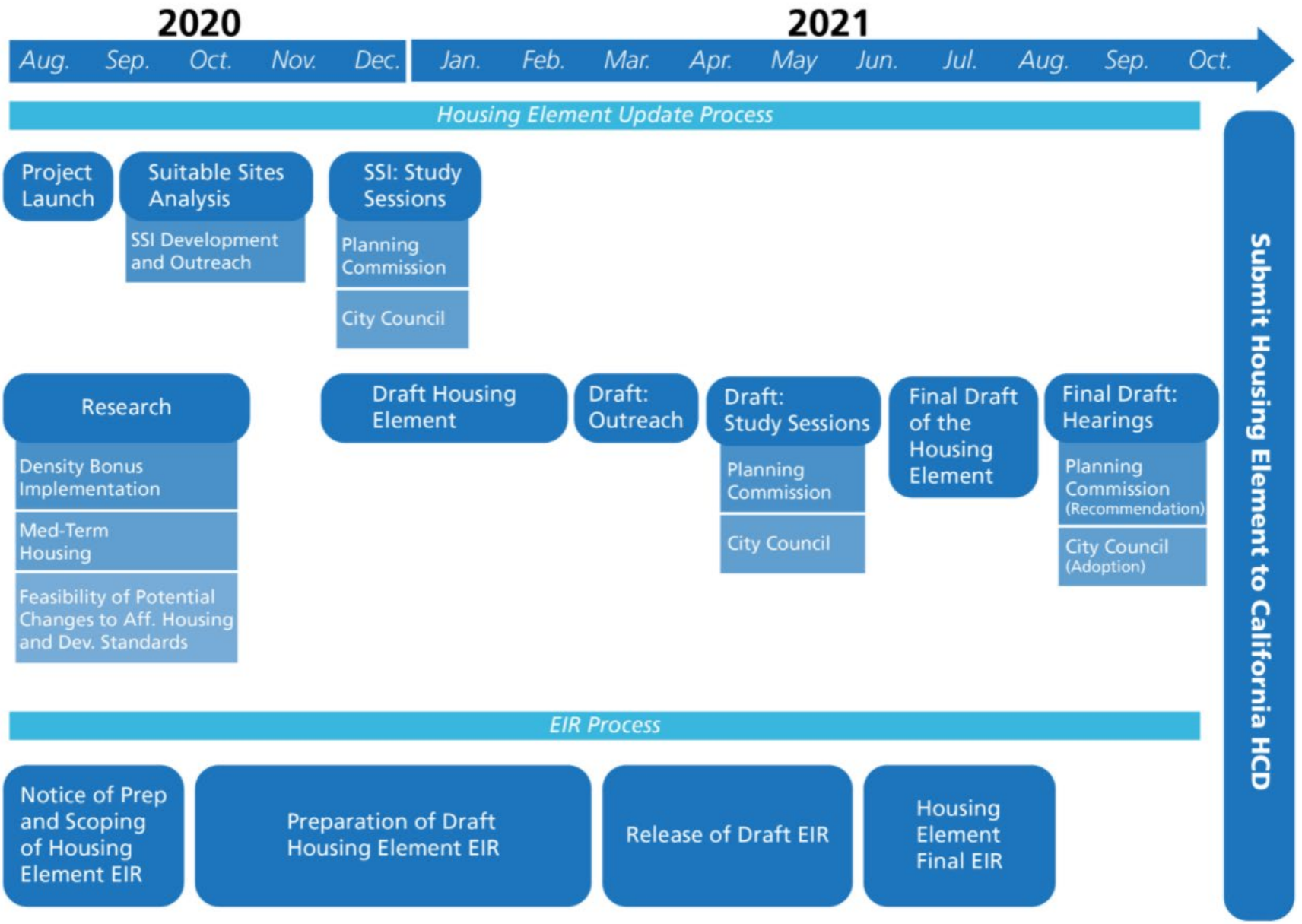
- A detailed analysis of the City's existing and projected housing needs, including any special housing needs, supported by demographic, economic, and housing characteristics.
- A comprehensive analysis of the actual and potential constraints to producing and preserving housing.
- Assessment of fair housing issues, including actions to affirmatively further fair housing.

- A progress review of the City's prior goals, policies, and programs from the last Housing Element cycle.
- An identification of goals, objectives, and policies to meet housing needs, in addition to a full list of programs that will implement the vision of the plan.
- A list of adequately zoned sites (i.e., Suitable Sites Inventory [SSI], which is described further below) that could accommodate new housing, demonstrating the City's ability to meet the quantified housing number established in the Regional Housing Needs Allocation (RHNA). Identification of a site's capacity does not guarantee that construction will occur on that site. If there are insufficient sites and capacity to meet the RHNA, then the Housing Element is required to identify a rezoning program to create the required capacity.

With the previous 8-year cycle Housing Element (2013-2021) coming to an end, the City must now plan for the next 8-year cycle. The proposed Housing Element Update would serve as the City's housing plan for 2021-2029, setting clear goals, policies, and programs to meet State requirements by providing for the housing needs of all segments of the population while affirmatively furthering fair housing and preventing the displacement of existing residents. As required by State law, the proposed Housing Element Update must be certified by the Santa Monica City Council no later than October 15, 2021, or the City of Santa Monica could lose eligibility for significant sources of State funding and lose local control.

The public process for developing the proposed Housing Element Update began in September 2020, with public outreach beginning in October 2020. This public outreach processed has included numerous community webinars and online surveys, technical working groups, meetings with the affordable housing development community, and public hearings with various Boards and Commissions and the City Council.

Due to the coronavirus (COVID-19) pandemic and the resulting safer at home orders, the public outreach process for the proposed Housing Element Update was adapted to accommodate virtual participation. Staff held online roundtable discussions, workshops, questionnaires, and study sessions (see Section 2.0, *Project Description*). Additional refinements to the proposed Housing Element Update have been incorporated based on community dialogue and detailed analyses prepared by City staff, leading to the release of the *Draft Housing Element Update* on May 24, 2021. The *Draft Housing Element Update* is available for review online at: https://www.santamonica.gov/housing-element-update. The *Draft Housing Element Update* was submitted to the State Department of Housing and Community Development (HCD) on July 1, 2021 for review – the Final EIR will address the potential environmental effects of HCD revisions, as necessary.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Oct.
Housing Element Update Process
Project Launch
Suitable Sites Analysis
SSI Development and Outreach
SSI: Study Sessions
Planning Commission
City Council
Research
Density Bonus Implementation
Med-Term Housing
Feasibility of Potential Changes to Aff. Housing and Dev. Standards
Draft Housing Element
Draft: Outreach
Draft: Study Sessions
Planning Commission
City Council
Final Draft of the Housing Element
Final Draft: Hearings
Planning Commission (Recommendation)
City Council (Adoption)
Submit Housing Element to California HCD
EIR Process
Notice of Prep and Scoping of Housing Element EIR
Preparation of Draft Housing Element EIR
Release of Draft EIR
Housing Element Final EIR

1.2 Proposed Housing Element Update

The Housing Element serves as the City's guide for addressing the housing needs of all segments of the City's population. Housing needs are determined by HCD, which decides what the numerical housing targets should be for each regional council of governments (e.g., Southern California Association of Governments [SCAG]). Each regional council of governments across the State then further allocates the regional housing number (known as the Regional Housing Needs Allocation, or RHNA) to every city and county within its jurisdiction. As previously described, the RHNA is a targeted housing number; cities and counties are not obligated to build this number of dwelling units, but rather they must plan for them and show that under current land use and development standards, there is capacity to accommodate for this number of new dwelling units.

For the proposed 6th Cycle 2021-2029 Housing Element Update, the SCAG has determined that the City's RHNA is 8,895 dwelling units, more than 5 times than the 5th Cycle 2013-2021 RHNA. The significant increase in the City's RHNA is indicative of the severity of the current housing crisis within the State and in Southern California. Therefore, a major focus of the proposed Housing Element Update is addressing the provisions of accommodating future housing growth and identifying specific sites suitable for residential development in compliance with State housing law.

The proposed Housing Element Update includes goals, policies, and implementation actions for the 6th Cycle 2021-2029 RHNA to make adequate provision for the existing and projected housing needs of all segments of the community. The proposed Housing Element Update continues to support the City's core values of supporting housing production, particularly affordable housing, but includes departures from the 2013-2021 Housing Element particularly with respect to where housing is incentivized in the City. While the Santa Monica General Plan Land Use and Circulation Element (LUCE) established a strategy to encourage housing production around major transportation systems, it does not account for the new State mandate to affirmatively further fair housing. Key LUCE policies to develop complete neighborhoods in mixed-use areas within easy access to transit opportunities and daily services remain, but the proposed Housing Element Update is driven largely through an equity and inclusion lens. As such, the proposed Housing Element Update includes new goals, policies, and programs to create housing opportunities in areas of the City that have not accomodated or permitted housing.

It is noted that future amendments to the General Plan, SMMC Article 9 (Planning and Zoning Code), and Local Coastal Program may be required to implement programs identified on the list of potential Housing Element Update action programs, and ancillary amendments to other planning documents may also be necessary for clarification and consistency purposes. However, in accordance with CEQA Guidelines Section 15168 (Program EIR), all later activities in the proposed Housing Element Update would be examined in the light of this EIR to determine whether an additional environmental document must be prepared.

1.3 EIR Purpose and Legal Authority

This Program EIR was prepared in accordance with the CEQA Guidelines, published by the California Natural Resources Agency, and the City of Santa Monica's procedures for implementing CEQA. Adoption of the proposed Housing Element Update is considered a project under CEQA and is therefore, subject to CEQA compliance.

Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Section 15367 and Sections 15050-15053, the City of Santa Monica is the Lead Agency under whose authority this EIR has been prepared. This EIR is intended to serve as an informational document to inform public agencies, decision-makers, and the general public regarding the significant environmental impacts that would potentially result from implementation of the proposed Housing Element Update. Under the provisions of CEQA, "*the purpose of the environmental impact report is to identify the significant effects of a project on the environment, to identify alternatives to the project, and to indicate the manner in which significant effects can be mitigated or avoided*" (Public Resources Code Section 21002.1[a]). In a practical sense, this EIR functions as a tool for fact-finding, allowing the public and the City an opportunity to collectively review and evaluate baseline existing conditions and the proposed Housing Element Update's potential to result in environmental impacts through a full disclosure process. Additionally, this EIR provides the primary source of environmental information for the City to consider when exercising any permitting or approval authority directly related to the proposed Housing Element Update.

The CEQA review process was established to enable public agencies to evaluate a project in terms of its environmental consequences, to examine and implement mitigation measures for eliminating or reducing any potentially adverse impacts, and to consider alternatives to the project. While CEQA Guidelines Section 15021(a) and Section 15091 requires that major consideration be given to reducing or avoiding environmental damage where feasible, the Lead Agency and other responsible public agencies may balance adverse environmental effects against other public objectives, taking into account economic, legal, social, and technological factors.

1.4 Program EIR

This EIR can be characterized as a Program EIR prepared pursuant to CEQA Guidelines Section 15168. The CEQA Guidelines states that a Program EIR may be prepared on a series of actions that constitute one large project and are related geographically. A Program EIR provides the City with the opportunity to consider broad policy alternatives and mitigation programs to address cumulative impacts. This document is intended to act as an analytical superstructure for subsequent analysis associated with individual implementation actions consistent with the proposed Housing Element Update. In preparing the Program EIR that provides a more exhaustive consideration of cumulative effects, the City can consider broad policies and program-wide mitigation measures as well as focus the scope of environmental review of individual projects. CEQA Guidelines Section 15182 states that no EIR shall be necessary for a residential project undertaken pursuant to and in conformity to a specific plan for which an EIR has been prepared.

This Program EIR does not focus on any specific projects that may be implemented pursuant to the proposed Housing Element Update. The City recognizes that this document does not include the level of detail necessary to qualify as a Project EIR, and anticipates that future related discretionary projects may require more detailed environmental review pursuant to CEQA at the time that they are proposed. In accordance with CEQA Guidelines Section 15168, subsequent activities that involve individual projects proposed in the City pursuant to the proposed Housing Element Update would be evaluated in accordance with this Program EIR to determine whether the proposed project is in conformance with the proposed Housing Element Update and whether additional environmental analysis at the project-level is needed. If it is determined that a subsequent activity is within the scope of the Program EIR and no new effects could occur or no new mitigation measures would be required, additional environmental documents may not be required if the Program EIR adequately addresses impacts of the subsequent activity (CEQA Guidelines Section 15168[c]). When a Program EIR is relied upon for a subsequent activity, the Lead Agency must incorporate applicable mitigation measures and alternatives developed in the Program EIR into the subsequent activities (CEQA Guidelines Section 15168[c][3]). If a subsequent discretionary project exceeds the scope of the proposed Housing Element Update (e.g., building height, floor area ratio, etc.) analyzed in this Program EIR and would have effects that are not identified in the Program EIR, additional project-level environmental review will be required prior to approval of the future project, as applicable.

This Program EIR describes the existing environmental conditions and regulatory setting of the City, analyzes potential environmental impacts that could potentially result from implementation of the proposed Housing Element Update through the planning horizon of 2030, and identifies mitigation measures where feasible and necessary to avoid or reduce potentially significant impacts associated with the proposed Housing Element Update.

1.5 Agencies and Roles

The EIR process for the proposed Housing Element Update involves the following agencies, as specified in the CEQA Guidelines:

Lead Agency	The City of Santa Monica is the Lead Agency as it is the agency with principal responsibility for approving or carrying out a project (CEQA Guidelines Section 15367).
Responsible Agencies	Additional agencies with approval authority over aspects of the project, including the California Coastal Commission (CCC) (CEQA Guidelines Section 15381).
Trustee Agencies	State agencies with general management authority over specified resources of the State when the resources may occur within a project area. There are no trustee agencies for the proposed Housing Element Update.
Other Interested Agencies	Additional agencies that may be interested in the proposed Housing Element Update and its environmental impacts, although they would have no authority over the project approval and adoption. For the proposed Housing Element Update, interested agencies may include the SCAG, State Water Resources Control Board (SWRCB), Los Angeles Regional Water Quality Control Board (RWQCB), California Department of Toxic Substances Control (DTCS), the Native American Heritage Commission (NAHC), California Department of Transportation (Caltrans), and Los Angeles County Metropolitan Transportation Authority (Metro).

1.6 Environmental Review Process

As a first step in complying with the procedural requirements of CEQA, the City conducted a public scoping process consistent with CEQA Guidelines Section 15083. The public was provided with an opportunity to comment on the scope of the EIR through a Notice of Preparation (NOP) released on October 30, 2020. The NOP was distributed to Federal, State, and local agencies, neighborhood groups (see Appendix A). The CEQA Guidelines require circulation of an NOP for a minimum 30-day review period; however, in consideration of the coronavirus (COVID-19) pandemic, the City circulated the NOP a period of 60 days, ending on December 31, 2020. The NOP also announced a virtual public scoping meeting for the EIR during the NOP comment period on December 10, 2020. During this meeting City staff described the proposed Housing Element Update and the environmental review process, and received public comment on the scope and content of the EIR. The scoping process assisted the City in determining if any aspect of the proposed Housing Element Update may cause a significant effect on the environment and, based on that determination, to narrow the focus of the subsequent environmental analysis. Comments received during the NOP comment period were considered during EIR preparation and are included in Appendix A.

As with the NOP, the Notice of Availability (NOA) for the Draft EIR was distributed to Federal, State, local agencies, and neighborhood groups. The CEQA Guidelines require a minimum 45-day review period for public review of the Draft EIR, which began on July 1, 2021 and ended on August 16, 2021.

The Draft EIR is available for review online at the City's Community Development Department website at: https://www.santamonica.gov/housing-element-update.

1.7 Scope of the EIR

As a first step in determining the scope of the EIR, the City prepared an Initial Study (IS) to determine which aspects of the proposed Housing Element Update may cause a significant effect on the environment (see Appendix A). This EIR assesses these environmental issue areas and addresses raised in public comments received in response to the NOP and at public workshops/hearings. The NOP and comment letters received during the NOP review period are included in Appendix A. This scoping phase determined that the EIR for the proposed Housing Element Update should analyze the potential environmental issue areas, which are analyzed in detail in Section 3.0 *Environmental Impact Analysis and Mitigation* of this EIR:

- Air Quality
- Cultural Resources
- Energy
- Land Use and Planning
- Greenhouse Gas Emissions and Climate Change
- Noise
- Population, Housing, and Employment
- Public Services
- Utilities
- Transportation
- Tribal Cultural Resources

This EIR addresses the issues referenced above and identifies potential environmental impacts, including direct, indirect, and cumulative effects, associated with the proposed Housing Element Update, in

accordance with the provisions set forth in the CEQA Guidelines. In addition, the EIR recommends feasible mitigation measures, where necessary, that would reduce or eliminate adverse environmental effects. In accordance with CEQA Guidelines Section 15128 (Effects Not Found to Be Significant), environmental impacts related to Agriculture and Forestry Resources, Biological Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, and Wildfire were not considered significant and therefore, were not fully discussed in the EIR (see Section 4.0, *Other CEQA Considerations* of this EIR).

Consistent with CEQA Guidelines Section 15126.6(d), this EIR includes the assessment of a reasonable range of alternatives to the proposed Housing Element Update that could feasibly attain the project objectives while avoiding or substantially lessening any of the significant effects of the proposed Housing Element Update (see Section 5.0, *Alternatives*).

1.8 Areas of Known Public Controversy

CEQA requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by the agency as well as the public (CEQA Guidelines Section 15123). Based on Planning Commission and City Council hearings, the NOP scoping meeting, and public workshops on the proposed Housing Element Update as well as public letters received on the NOP (see Appendix A), the following environmental issues are known to be of concern and may be controversial. Each issue is further discussed in this EIR.

- Vehicle miles traveled (VMT) and associated greenhouse gas (GHG) emissions;
- Transit, bicycle, and pedestrian facilities;
- Timeline of the buildout;
- The effect of the coronavirus (COVID-19) pandemic;
- Utilities, including water supply and infrastructure and energy demand;
- Air quality;
- Noise;
- Public services demand, including emergency response, schools, and parks and recreational facilities;
- Population, housing, and employment, including the homeless population and jobs-housing balance; and
- Biological resources.

1.9 Organization of the EIR

This EIR is organized into the following eight sections:

- **Section 1.0, *Introduction***, provides a background and brief description of the proposed Housing Element Update, explains the environmental review process, and introduces the EIR.
- **Section 2.0, *Project Description***, provides a description of the proposed Housing Element Update.

- **Section 3.0, *Environmental Impact Analysis and Mitigation***, provides the existing environmental conditions and regulatory framework, analyzes the potential environmental impacts of the proposed Housing Element Update and its contribution to cumulative impacts, and recommends feasible mitigation measures.
- **Section 4.0, *Other CEQA Considerations***, identifies insignificant issues areas, as well as significant and irreversible, potential growth-inducing, and significant and unavoidable effects.
- **Section 5.0, *Alternatives***, describes alternatives to the proposed Housing Element Update, and identifies the Environmentally Superior Alternative.
- **Section 6.0, *List of Preparers***, identifies the persons and/or organizations that have contributed to the preparation of the EIR.
- **Section 7.0, *References,*** provides documents and interviews used as a basis of information for preparing the EIR.
- ***Appendices*** to the EIR include the NOP, responses to the NOP, and supporting technical studies used as a basis of information and analyses in preparation of the EIR.

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2.0 Project Description

California is in the midst of a housing crisis due to the both the severe shortage and rising cost of housing. This situation is threatening livability within the State and contributing to increasing homelessness. In response to the housing crisis, the California Department of Housing and Community Development is requiring Southern California – including six counties and 191 cities – to plan for the ability to accommodate a total of 1,341,827 new dwelling units over the next 8-year period from October 15, 2021 to October 15, 2029 (i.e., 6th Cycle Regional Housing Needs Allocation).

It has been determined by the Southern California Association of Governments (SCAG) metropolitan planning organization that the City of Santa Monica must plan for 8,895 of these new dwelling units, 69 percent of which must be at affordable income levels. As required by State law, the City must demonstrate through the proposed 6th Cycle 2021-2029 Housing Element Update that the City's policies, zoning, and development standards are in alignment to accommodate the Regional Housing Needs Allocation.

2.1 Introduction and Overview

The City of Santa Monica (City) is proposing the 6th Cycle 2021-2029 Housing Element Update (Housing Element Update). As described in further detail below, the Housing Element is the City's strategic plan for: (1) providing new housing opportunities to meet the housing targets established by the Regional Housing Needs Allocation (RHNA) issued by the Southern California Association of Governments (SCAG); and (2) and for preserving housing for existing residents. The City's Housing Element provides the policy framework to promote production of necessary housing while preserving the existing housing stock and preventing tenant displacement.

California Housing Costs

- *State-wide, it is estimated that more than 1.8 million new dwelling units are needed by 2025 to keep up with housing demand.*
- *In Los Angeles County, 509,404 low income renter households do not have access to an affordable home.*

2.1.1 Background

Regional Housing Needs Allocation

Every 8 years, the State requires all city and county governments to prepare plans that adequately meet the housing needs of the community. Housing needs are determined by the California Department of Housing and Community Development (HCD), the State agency that is responsible for determining the numerical housing targets for each regional council of governments, including SCAG. Each council of government across the State then further allocates the numerical housing targets to each county and city within its jurisdiction (known as the Regional Housing Needs Allocation or RHNA).

The SCAG serves as the regional council of governments for Southern California and is responsible for dividing the RHNA amongst the six counties and 191 cities, including Santa Monica. This year, the

allocation for Southern California is significantly larger than it has been in past years, in recognition that: (1) the State's housing crisis has reached critical levels; and (2) more aggressive action is needed to make up for years of unmet housing demand. The allocation is based on both the "projected need" (i.e., dwelling units needed to accommodate new residents) and "existing need" (i.e., dwelling units needed to alleviate challenges like overcrowding and homelessness). As discussed further below, the allocation also takes affordability into account by identifying the percentage of units that are needed at each income level (i.e., very low, low, and moderate). As part of the RHNA process each regional council of governments – including the SCAG – is required develop a final RHNA methodology, which is used to determine the RHNA for each jurisdiction as a share of the regional determination. On March 4, 2020, the SCAG approved a methodology for the planning period of October 15, 2021 through October 15, 2029 that utilized a three-step process:

General Plan Elements

Under State law, all general plans must contain at least the following seven elements:

- *Land Use*
- *Circulation*
- *Housing*
- *Conservation*
- *Open Space*
- *Noise*
- *Safety*

A general plan may also include optional elements that address other issues of importance to the local community. The Santa Monica General Plan contains all seven of these elements plus a Historic Preservation Element.

1. Determine the jurisdiction's regional projected household growth based on local input;
2. Determine future vacancy need based on a jurisdiction's existing composition of owner and renter households and apply a vacancy rate on projected household growth; and
3. Determine a jurisdiction's net replacement need based on replacement need survey results.

The RHNA for all jurisdictions within the SCAG region was adopted by the SCAG on March 4, 2021.

2.1.2 General Plan

As previously described, a general plan is mandated by State law (California Government Code Section 65300), and serves as the blueprint for how particular counties and cities will develop over time. The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, including both public and private land uses. Zoning ordinances, specific plans, development projects, capital improvements, and development agreements are required to conform to the general plan. In addition, preparing, adopting, implementing, and maintaining the general plan serves to identify the community's land use, circulation, environmental, economic, and social goals and policies as they relate to future growth and development. A general plan consists of individual sections (known as elements), that address a specific area of concern, but collectively, they comprehensively make up an integrated planning approach for the jurisdiction. State law requires that general plans include seven elements: land use, transportation, conservation, noise, open space, safety, and housing. Counties and cities may choose to have additional elements as part of their general plan.

Housing Element

Since 1969, California has required that all local governments (i.e., counties and cities) adequately plan to meet the housing needs of everyone in the community. As previously described, one of the required elements of a general plan is the Housing Element. State law requires that communities prepare and update the Housing Element every 8 years. State Housing Law acknowledges that, in order for the private market to adequately address the housing needs and demand of Californians, local governments must adopt plans and regulatory systems that provide opportunities for (and do not unduly constrain), housing development. As a result, housing policy in California rests largely upon the effective implementation of local general plans and, in particular, local housing elements.

The Housing Element serves as the plan for addressing the housing needs of the City's existing and future residents. The City's 5th Cycle 2013-2021 Housing Element established a plan of action for the City to meet its RHNA of 1,674 dwelling units between 2013-2021. The 5th Cycle Housing Element was built upon the adopted Santa Monica General Plan Land Use and Circulation Element (LUCE) and reaffirmed the City's continuing commitment to affordable housing, tenant protection, high quality neighborhoods, housing and services for special needs groups, homeless services, sustainable development, and fair housing. Based on a review of building permits for completed and under construction units, the City met its numerical housing target under the 5th Cycle Housing Element.

For the proposed 6th Cycle 2021-2029 Housing Element Update, SCAG has determined that the City's RHNA is 8,895 dwelling units, more than 5 times than the last cycle, with 69 percent of these units required to be affordable to households earning less than 120 percent of the City's Area Median Income (AMI). The significant increase in the City's RHNA housing number is indicative of the severity of the current housing crisis, as many other jurisdictions, particularly along the coast, have also received substantial increases in their RHNA. As part of the Housing Element Update, the City must demonstrate to the State that it has the policies and regulations in place to meet its numerical housing target and that there is adequately zoned land for housing within its jurisdictional boundaries.

Table 2-1 City of Santa Monica 6th Cycle 2021-2029 RHNA

Income Category	RHNA
Extremely Low (0-30% AMI)	-
Very Low (31-50% AMI)	2,794
Low (51-80% AMI)	1,672
Moderate (81-120% AMI)	1,702
Above Moderate (>120% AMI)	2,727
Total	**8,895**

Note: Median household income refers to the income level earned by a given household where half of the households in the geographic area of interest earn more and half earn less. The median household income is calculated by rank ordering all households by ascending income and then identifying the income of the most middle household

Pursuant to State requirements, the Housing Element must include the following components:

- A detailed analysis of the City's existing and projected housing needs, including any special housing needs, supported by demographic, economic, and housing characteristics.
- A comprehensive analysis of the actual and potential constraints to producing and preserving housing.

- Assessment of fair housing issues, including actions to affirmatively further fair housing.
- A progress review of the City's prior goals, policies, and programs from the last Housing Element cycle.
- An identification of goals, objectives, and policies to meet housing needs, in addition to a full list of programs that will implement the vision of the plan.
- A list of adequately zoned sites (i.e., Suitable Sites Inventory [SSI], which is described further below) that could accommodate new housing, demonstrating the City's ability to meet the quantified housing number established in the Regional Housing Needs Allocation (RHNA). Identification of a site's capacity does not guarantee that construction will occur on that site. If there are insufficient sites and capacity to meet the RHNA, then the Housing Element is required to identify a rezoning program to create the required capacity.
- A detailed analysis of the City's existing and projected housing needs, including any special housing needs, supported by demographic, economic, and housing characteristics.
- A comprehensive analysis of the actual and potential constraints to producing and preserving housing.
- Assessment of fair housing issues, including actions to affirmatively further fair housing.
- A progress review of the City's prior goals, policies, and programs from the 5th Cycle 2013-2021 Housing Element.
- An identification of goals, objectives, and policies to meet housing needs, in addition to a full list of programs that will implement the vision of the plan.
- A list of adequately zoned sites (i.e., Suitable Sites Inventory, as described further below) that could accommodate new housing, demonstrating the City's ability to meet the numerical housing target established in the RHNA. Identification of a site's capacity does not guarantee that construction will occur on that site. If there are insufficient sites and capacity to meet the RHNA, then the Housing Element is required to identify a rezoning program to create the required capacity.

The proposed 6th Cycle 2021-2029 Housing Element Update must be certified by HCD no later than October 15, 2021, or the City could incur penalties/fees, lose eligibility for significant sources of funding currently provided by the State, and risk the loss of local control.

Relationship of the Housing Element to the Land Use and Circulation Element

The LUCE was originally adopted in July 2010, and last amended in 2020. The LUCE provides guidance for the development of new land uses and the circulation system in the City through 2030. The LUCE established overarching policies and standards for new development based on land use designation for every property in the City. These policies and standards were further refined in the City's Zoning Ordinance Update in 2015 and by the adoption of various area and specific plans, including the Bergamot Area Plan and the Downtown Community Plan (DCP). The certified Program Environmental Impact Report (EIR) for the LUCE (State Clearinghouse [SCH] No. 2009041117) had originally anticipated the addition of 4,955 dwelling units in the City by 2030, but that forecast was increased by 2,326 dwelling units after adoption of the DCP in 2017.[1]

[1] Downtown Community Plan (DCP) Program Environmental Impact Report (EIR), State Clearinghouse (SCH) No. 2013091056.

With the 6th Cycle RHNA of 8,895 dwelling units between 2021-2029, residential development as planned for under the proposed Housing Element Update would exceed the City's growth forecasts in the LUCE (as amended) and the DCP. As required by State law, elements of the general plan issues should form an integrated, internally consistent plan, and inconsistencies cannot be remedied by a statement giving one element precedence over the others (California Government Code Section 65300.5; *Sierra Club v. Board of Supervisors of Kern County [1981] 126 Cal.App.3d 698*). As such, adoption of the proposed Housing Element Update would also require that amendments to the LUCE be considered in order to be internally consistent (see Section 3.6, *Land Use and Planning*).

If the HCD determines that a Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its general plan is at risk of being deemed inadequate, and therefore invalid. If a jurisdiction is sued over an inadequate general plan, the court may impose requirements for land use decisions until the jurisdiction brings its general plan – including its Housing Element – into compliance with State Housing Law.

2.2 Existing City Setting and Characteristics

The City is located in western Los Angeles County along the coast of the Pacific Ocean and is surrounded on three sides by the City of Los Angeles, including the westside communities of Brentwood, Mar Vista, Pacific Palisades, Venice and West Los Angeles. The City comprises approximately 5,280 acres (approximately 8.25 square miles).

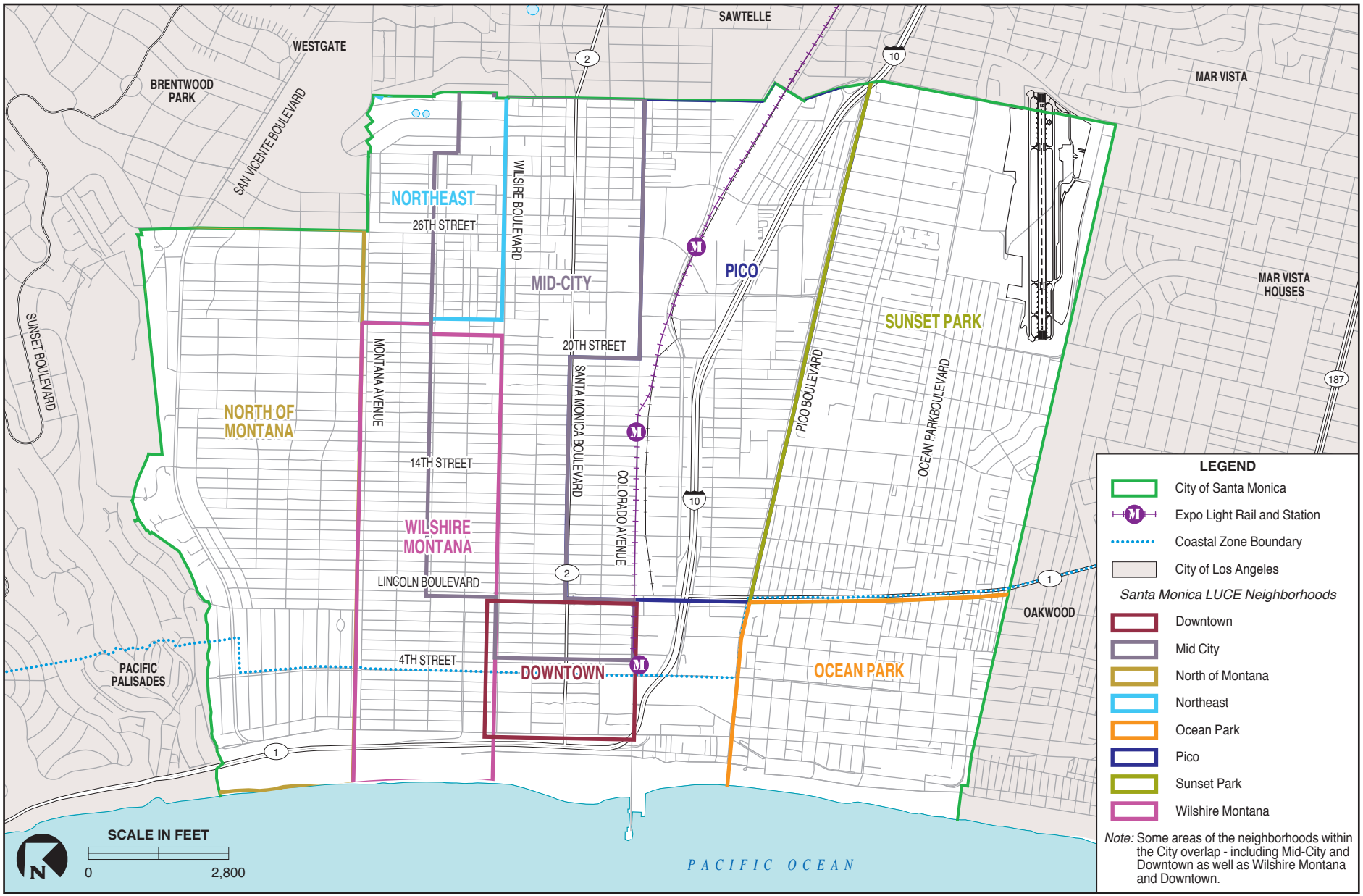
- **North** (North of Montana, Wilshire Montana, and Northeast Neighborhoods) – The northern-most area of the City generally consists of lower density, one- to two-story single-family housing on large parcels along tree-lined streets. This area is known as the North of Montana (NOMA) neighborhood and is mostly zoned for single-family or low density housing with the parcels along Ocean Avenue developed with medium density housing. Montana Avenue is the primary commercial corridor in this area, and is characterized by low-scale one to two story neighborhood serving retail/restaurant uses. To the south of Montana Avenue and north of Wilshire Boulevard between Ocean Avenue and 21st Street is the Wilshire Montana (Wilmont) neighborhood. This area is developed with multi-family apartment buildings with scattered single-family homes. The northeast portion of the City includes the Northeast Neighborhood which is characterized by mostly single-family homes with a small mix of multi-family buildings. Wilshire Boulevard serves as the southern boundary of the Wilmont and Northeast Neighborhoods and has a mixed use character of primarily commercial uses such as office, retail, restaurant, and hotel.
- **East** (Mid-City and Pico Neighborhoods) – The eastern area of the City includes the Mid-City Neighborhood, which is bounded by Washington Avenue to the north, Centinela Avenue to the east, Colorado Avenue (adjacent to the industrial areas) and Santa Monica Boulevard to the south and 5th Street to the west. The Mid-City neighborhood includes primarily low to mid rise multi-family housing and a range of commercial services along Santa Monica Boulevard and Broadway. In particular, this area includes the City's two prominent hospitals, University of California, Los Angeles (UCLA) Hospital and Providence Saint John's Health Center Campus along with supporting health-care and medical uses. A significant portion of Santa Monica Boulevard is also lined with automobile dealerships, resulting in its moniker as "auto row." Further to the south is the Pico Neighborhood which is characterized by a diverse mix of low- to medium-rise multi-family with interspersed single-family residential uses, commercial, and light industrial uses. Commercial uses include the low-scale retail/restaurant uses concentrated along Pico

Boulevard, the office uses and light industrial uses within the Bergamot Plan Area, and the light industrial uses near Olympic Boulevard.

- **South** (Ocean Park Neighborhood and Sunset Park Neighborhoods) – In the southern area of the City are the Ocean Park and Sunset Park neighborhoods. Sunset Park neighborhood comprises the southeast portion of the City and is one of the largest residential neighborhoods in Santa Monica, bound by Pico Boulevard to the north, the eastern City limits, the southern City limits, and Lincoln Boulevard to the west. The Sunset Park neighborhood includes the Santa Monica Airport (slated to close December 31, 2028) on the southeast edge of the City as well as the adjacent office campus south of Ocean Park Boulevard that includes a number of large plate office buildings surrounded by swaths of surface parking. To the southwest of the City is the Ocean Park neighborhood bounded by Pico Boulevard to the north, Lincoln Boulevard to the east, the southern City limit to the south and the Pacific Ocean on the west. The Ocean Park neighborhood consists of low to mid rise multi-family housing with interspersed single-family units. The main commercial area is Main Street, a neighborhood street that is home to many retail outlets, restaurants and neighborhood-serving businesses.
- **West** (Downtown, Civic Center and Ocean Front Districts) – The western edge of the City include the Downtown District, that been considered the heart of the City, a popular regional and local destination. The Downtown District is comprised of a diverse mix of uses including retail, restaurant, hotel, entertainment, office, and residential. The Downtown is home to a world class retail district encompassing the Third Street Promenade (Promenade) and Santa Monica Place shopping center, with a mix of restaurants, shops, movie theaters, hotels, and entertainment uses that contribute to the high activity level throughout the day and into the evening hours. Adjacent to the south of the Downtown is the Civic Center district which includes the Los Angeles County Courthouse, Santa Monica City Hall, Tongva Park, Ken Genser Square, Santa Monica Civic Center, Santa Monica High School, RAND, and the Village Mixed-Use Project. West of the Downtown are Palisades Park, the Santa Monica Pier, the beach, and single and multi-family residential uses.

2.3 Existing Regulatory Setting

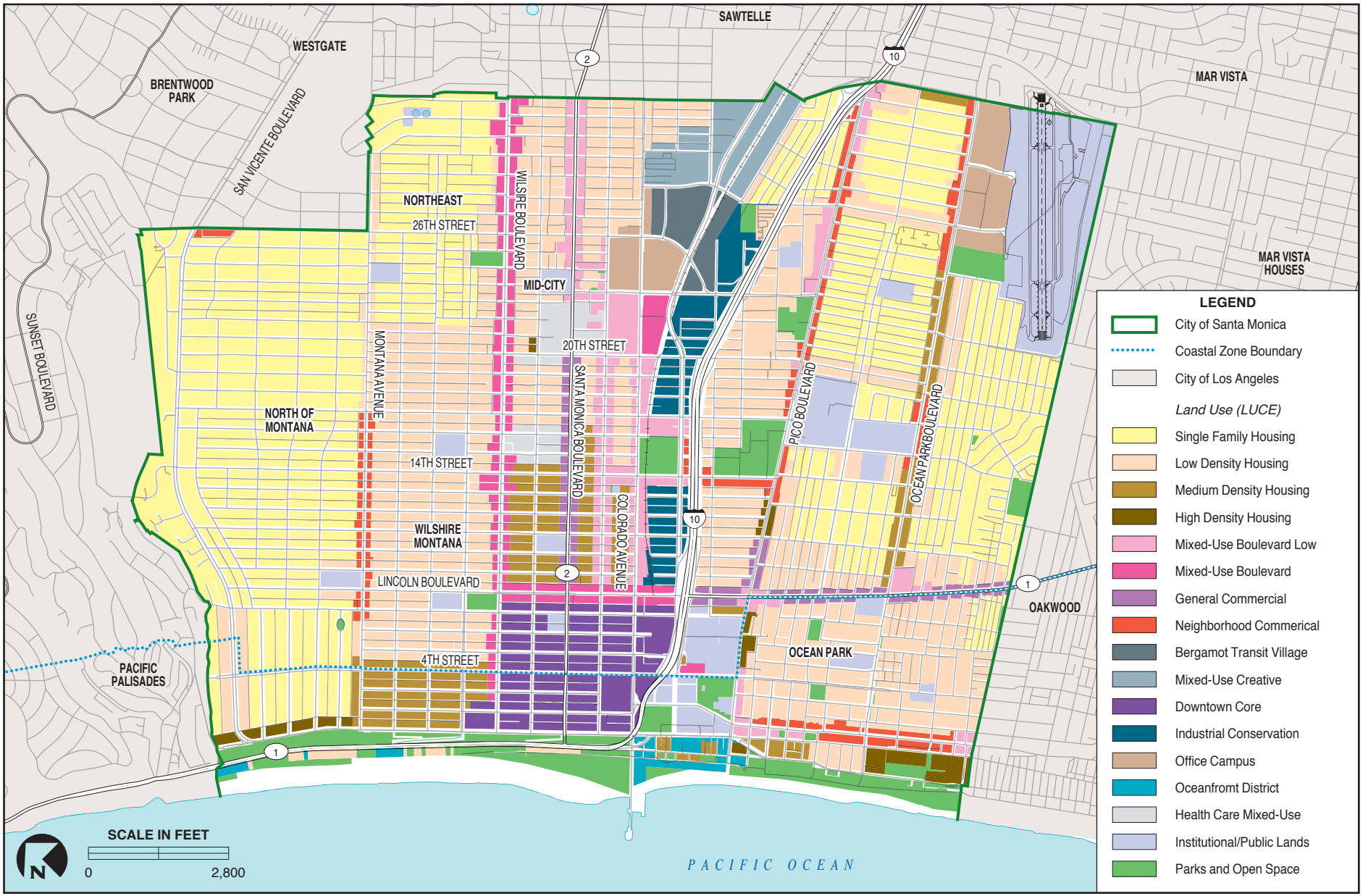
For land use planning purposes, the City is divided into 17 land use designations under the LUCE, with development in the Downtown and Bergamot Area of the City governed by adopted specific/area plans and 21 zone district classifications governed by the Zoning Ordinance. The proposed Housing Element Update would propose modifications that would primarily affect the areas that are described below:



wood.

Santa Monica Neighborhoods

FIGURE 2-1



wood.

City of Santa Monica
Land Use Areas

FIGURE 2-2

2.3.1 Downtown Community Plan

The DCP encompasses approximately 236 acres (0.37 square miles) in the west-central core of the City adjacent to the Civic Center, Beachfront District, and multi-family residential neighborhoods to the north and east. The Downtown is bounded approximately by the north side of Wilshire Boulevard on the north; the east side of Lincoln Boulevard on the east; Interstate (I-) 10 (Santa Monica Freeway) on the south; and Ocean Avenue/Palisades Park on the west. The DCP establishes six land use districts: Lincoln Transition (LT), Ocean Transition (OT), Wilshire Transition (WT), Neighborhood Village (NV), Bayside Conservation (BC), and Transit Adjacent (TA). Each district has its own set of development standards for building height, Floor Area Ratio (FAR),[2] and other requirements. The Downtown has accommodated the majority of new residential development within the City over the last decade.

- *Lincoln Transition District*: This district includes the properties located on both sides of Lincoln Boulevard. Currently, Lincoln Boulevard is auto-oriented and generally disconnected from the Downtown. In recent years, a number of mixed-use projects (i.e., ground-floor commercial and residential above) have been approved or are under construction along Lincoln Boulevard.
- *Neighborhood Village District*: This district extends from 7th Court to 4th Court between Wilshire Boulevard to Santa Monica Boulevard and then from 7th Court to 6th Street between Santa Monica Boulevard and Broadway. This district is an established neighborhood in the Downtown that consists mostly of residential, small floor plate office, civic, religious, and neighborhood serving retail and restaurant uses.
- *Transit Adjacent District*: The Transit Adjacent district includes the properties within an approximately 2.5-block radius from the Downtown Santa Monica Station for the Metro E (Expo) Light Rail Transit (LRT) line (located at 4th Street & Colorado Avenue). This district encompasses a number of different character areas of the Downtown, ranging from the core Downtown uses that include mid-rise hotels and office buildings, through transitional mixed use areas that include lower scale retail and light industrial uses, to the primary residential areas on the eastern edge. It also includes the Big Blue Bus yards and freeway adjacent sites.

- *Bayside Conservation District*: This district includes the properties from 4th Court to the east side of 2nd Street and the south side of Wilshire Boulevard to the north side of Broadway. The Bayside

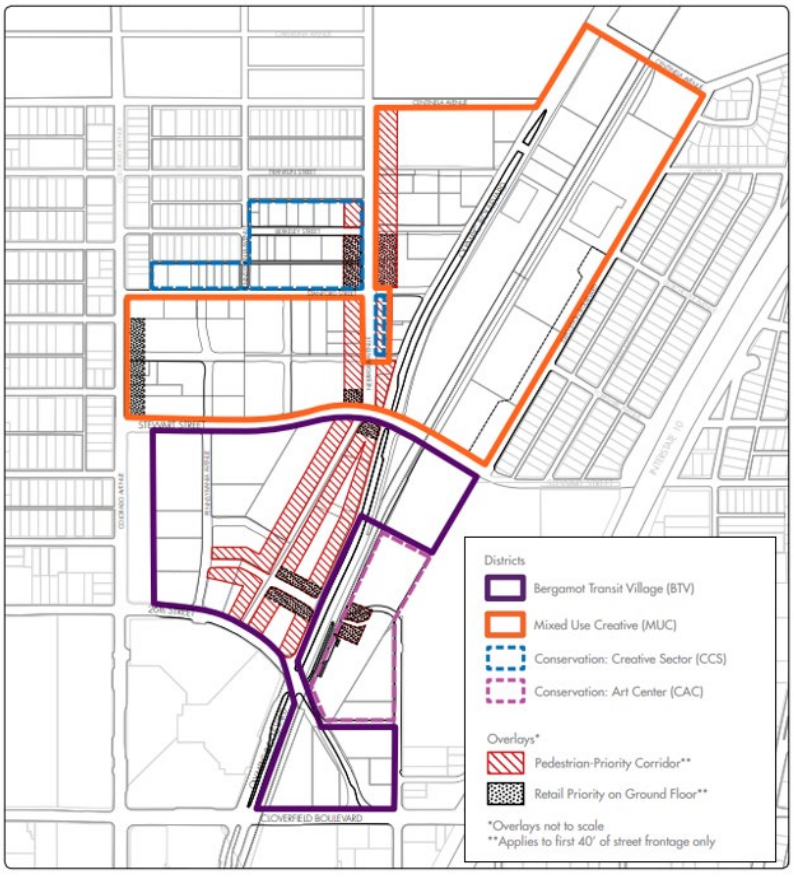
[2] Floor Area Ratio (FAR) is defined as the measurement of a building's floor area in relation to the size of the lot/parcel that the building is located on.

Conservation district is considered the economic heart of the City, with a broad mix of building types, office space, entertainment, retail, restaurants, cafes, salons and exercise studios.

- *Wilshire Transition District*: This district consists of properties on the north side of Wilshire Boulevard between the east side of 2nd Street and west side of 7th Street. Wilshire Boulevard is a major transportation corridor, providing regional access between the City and West Los Angeles and communities further east. Vehicle traffic volumes drop off sharply west of 4th Street on Wilshire as it terminates at Ocean Avenue.
- *Ocean Transition District*: This district extends from the west side of 2nd Street to Ocean Avenue from California Avenue to Colorado Avenue. This district provides panoramic ocean views and is home to the historic Palisades Park as well as hotels and office buildings that range in height from 45 feet to 300 feet.

2.3.2 Bergamot Area Plan

The Bergamot Area is located in the eastern portion of the City, focused around the Bergamot Station for the Metro E (Expo) LRT line. The Begamot Area generally encompasses the properties bounded by Centinela Avenue, Franklin Street, and Stanford Street to the east; Colorado Avenue to the north; 26th Street and Cloverfield Boulevard to the west; and Michigan Avenue/Exposition Boulevard to the south. The Bergamot Area is divided into two distinct areas: the Bergamot Transit Village (BTV) in the western portion and the Mixed-Use Creative (MUC) District in the eastern portion, with Steward Street dividing the two areas. The LUCE established the outer parameters of new development in the Bergamot Area Plan; however, the adopted Bergamot Area Plan lowered the Tier 2 development standards for the Bergamot Transit Village and Mixed-Use Creative Districts.[3]



- *Bergamot Transit Village District*: The vision of the Bergamot Transit Village district is a vibrant concentration of retail and services, multi-family housing and creative employment and community gathering spaces, especially in proximity to transit. Since adoption of the Bergamot Area Plan, only a few residential development projects have been approved in this zoning

[3] As described further in Section 3.6, *Land Use and Planning*, Tier 1 provides a base level for building heights and FARs. The LUCE requires that applicants of Tier 2 and Tier 3 projects (i.e., projects that request taller building heights or greater FARs) provide community benefits.

district and no new dwelling units have been constructed to date. This has been attributed in part to the Development Agreement requirements in this district, which have proved difficult for developers to achieve in the context of the current development environment.

- *Mixed-Use Creative District:* The Mixed-Use Creative District emphasizes the continuation of the area's diverse creative and cultural offerings. This Zoning District contains primarily a mix of one-story to two-story creative offices, the Bergamot Station and the Bergamot Art Center. Within the Mixed-Use Creative District, the Bergamot Area Plan encourages the retention of existing uses along with the balance of new creative arts jobs, housing affordable to the workforce and supportive local-serving retail and services. Similar to the Bergamot Transit Village District, since adoption of the Bergamot Area Plan, only a few residential development projects have been approved in this zoning district and only one residential development project has been completed to date.

2.3.3 Zoning Ordinance

- *Mixed-Use Boulevard Low*: The Mixed Use Boulevard Low (MUBL) zoning district includes portions of Colorado Avenue, Broadway, and Lincoln Boulevard, and Santa Monica Boulevard as shown in Figure 2-2. The portion of Broadway designated as Mixed-Use Boulevard Low features a mix of commercial building types and uses, including a row of single-story media/entertainment-related offices on the south side and a combination of parking lots and the Colorado Center along Santa Monica Boulevard, this zoning district includes a mix of auto-related business, medical offices and a smattering of retail outlets and restaurants serving a primarily auto-based clientele.
- *Mixed-Use Boulevard*: The Mixed-Use Boulevard zoning district includes most of Wilshire Boulevard and the portion of Lincoln Boulevard north of the I-10 (Santa Monica Freeway). This zoning district currently includes primarily one to two story commercial retail, restaurant, neighborhood-serving, and auto-oriented uses such as auto repair shops.
- *General Commercial*: The General Commercial (GC) zoning district includes portions of Colorado Avenue, Santa Monica Boulevard, and Broadway. This zoning district is characterized currently by a broad range of commercial uses that provide necessary daily services such as auto sales and auto repair, convenience retail, hotels, hardware stores, and small restaurants.

Properties along Santa Monica Boulevard between 9th Court and 20th Street are zoned General Commercial. This area, which generally known as "auto row," contains a number of automobile dealerships and service centers, many of which include large surface lots for automobile inventory.

Properties along Lincoln Boulevard south of the I-10 to the southern boundary of the City and along Pico Boulevard between Lincoln Court and the east side of 11th Street are zoned General Commercial. Along these boulevards are a diverse mix of generally older, one-story commercial uses that range from restaurants, retail/personal services, small office, hotel/motel, gas station and auto repair/service uses. Given the location along a major transit corridor and in proximity to a number of retail and services, many of these commercial properties have the potential to turn over and be redeveloped into housing.

- *Neighborhood Commercial*: The Neighborhood Commercial (NC) zoning district currently includes one to two story neighborhood stores that provide daily goods and services. Ground-floor uses include active, local-serving retail and service commercial uses such as small restaurants, laundromats, dry cleaners, beauty/barber shops, and clothing and grocery stores. Uses above the ground-floor include commercial, office and some residential uses. This zoning district covers the Main Street and Montana Avenue areas.

Main Street runs north-south in the southern City limits, where it borders the Los Angeles community of Venice, and Pico Boulevard, where the Civic Center District begins. Main Street is the main commercial street for the Ocean Park neighborhood and is two blocks from the Beach. Main Street contains several prominent historic resources including the Ocean Park Branch Library, the Parkhurst Building, the first Roy Jones House, the Merle Norman Building and the Horizons West Surf Shop. This street contains primarily one-story buildings occupied with neighborhood serving retail and restaurant uses.

The Montana Avenue commercial area lies between 6th Court and 17th Street and is enveloped by the NOMA neighborhood to the north, and primarily multi-family residential development to the south. Montana Avenue is home to hundreds of merchants and is the neighborhood's local commercial street with one and two story buildings occupied with local-serving retail, restaurants/cafes, personal services, and salons.

- *Industrial Conservation*: The Industrial Conservation zoning district is located in two non-contiguous areas within Santa Monica's current industrial lands, separated by the Memorial Park Activity Center Overlay. The western area is bounded on the north by the former railroad right-of-way, on the east by Euclid Court, on the south by I-10 (Santa Monica Freeway) and on the west by Lincoln Court. The eastern area is bounded on the north by the former railroad right-of-way and by Michigan Avenue, on the east by Stewart Street, on the south by I-10 and on the west by 17th Street. This zoning district contains a variety of industrial, light industrial, creative office, and school uses including the City Yards, Crossroads Campus, and the 19th Street Arts Center.

Between 17th Street and Cloverfield Boulevard, new private schools (most notably the Crossroads Campus) art centers, a food bank, a synagogue and other non-industrial uses have developed in the last 20 years amidst the older light industrial uses and the Southern California Edison (SoCal Edison) electrical substation. Continuing east from Cloverfield, the area has a distinctly different character and is dominated by the City Yards, a combination of one- and two-story maintenance, and material and vehicle storage buildings. Other uses include waste disposal and recycling collection, and transfer facilities. The area to the west of 17th is characterized by small-scale industrial and commercial uses, including small manufacturing uses and businesses providing materials and supplies for the building industry.

- *Office Campus*: The Office Campus zoning district applies to the Colorado Center, Water Garden, and Lionsgate properties located along Colorado Avenue between Cloverfield Boulevard and Stewart Street as well as the Santa Monica Business Park, north of the airport. The Santa Monica Business Park is an approximately 52-acre site constructed in the mid-1980s in a low-density suburban office park style with one- to four-story buildings surrounded by surface parking. Under the City's current Zoning Ordinance, multi-unit dwellings are not permitted in the Office Campus and Industrial Conservation zones.

2.4 Housing Overview

2.4.1 State Housing Crisis

Since the 1970s, the State has struggled to keep pace with rising housing demand. The housing crisis has reached a critical point, as the severe shortage of housing continues to drive housing costs and homelessness to record levels (Legislative Analyst's Office 2020). A number of factors have contributed

to the State housing crisis, including the slow rate at which coastal cities and counties have been constructing housing in the past few decades.

In the last 10 years, California has averaged less than 80,000 new dwelling units per year (HCD 2018). However, this has not always been the case; from 1954-1989, California averaged more than 200,000 new dwelling units annually, with multi-family housing accounting for more of the housing production. The production of new dwelling units increased somewhat during the housing boom of the mid 2000s, and then dropped, coinciding with the economic downturn sometimes referred to as the "Great Recession." Despite booming economic growth in the State in the past decade since the Great Recession, the pace of new residential development, particularly in the coastal areas, has failed to meet the demands of Californians.

City of Santa Monica

The City had its simple beginnings in 1875 as an aspiring commercial port. During World War II however, the City saw the growth of a large residential community spurred on by the establishment of Douglas Aircraft (see Section 3.4, *Cultural Resources*). With its seaside location and mild, pleasant temperatures year round, the City has become one of the most highly desirable places to live.

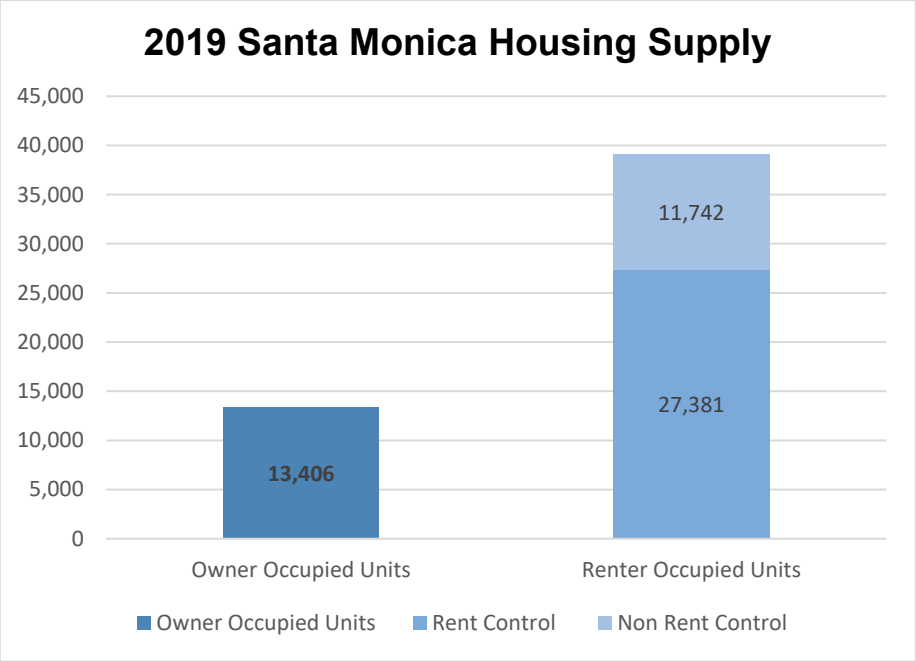
The City's housing supply range from single-family homes to multi-story apartment buildings.

Housing Stock

The City's housing stock consisting of 52,529 total dwelling units is comprised primarily of multi-family rental units.[4] The highest concentration of renter-occupied housing is located Downtown and east of Lincoln Boulevard along the Pico Boulevard Corridor and the highest concentration of owner-occupied housing is located north of Montana Avenue and the eastern portion of the City north of Wilshire Boulevard, as well as certain census tracts in Sunset Park.

Renters in Santa Monica need to earn $61.33 per hour, more than 4 times the minimum wage in the City to afford the average monthly asking median rent of $3,200 for a two-bedroom apartment.

[4] 2019 American Community Survey (ACS) 5-year estimates.



The majority (i.e., approximately 75 percent) of the City's housing stock was built before 1980, indicating the slow down of housing construction since that time period. Many of these older units are subject to the City's Rent Control Law, which controls most residential rental buildings constructed prior to April 10, 1979. Rent controlled units are subject to maximum annual rent increases authorized by the Rent Control Board, and as such, are valuable assets to the City's housing market. These rent control units account for slightly more than one-half of all housing in the City and just over two-thirds of multi-family housing. The number of rent controlled units have decreased over time as a result of temporary use exemptions (e.g., owner-occupancy exemptions on properties of three-or-fewer-units), units granted removal permits, or units being withdrawn from the rental housing market pursuant to the Ellis Act. In 2019, the number of Rent Controlled units in the City was 27,381 (City of Santa Monica 2019).

With the City's housing stock comprised primarily of multi-family rental units, housing opportunities for larger families (i.e., units with 3 bedrooms or more) are limited. Approximately 79 percent of the City's housing units have 2 bedrooms or less.[5]

Cost of Housing

While it is widely recognized that housing costs in California are among the highest in the nation, the City of Santa Monica ranks as one of the most expensive places to live. In 2019, while the national median price for a single-family home was $274,500, the median single-family home price in the City was priced at $3,966,251. And although condominiums (condos) offer a better path to home ownership for prospective buyers, condo prices are also similarly inflated in the City. According to the National Association of Realtors data, in 2019 the median condo price in the City was $915,000 as compared to the national median price of $254,600 and the State-wide median price of $477,000. Based on this median condo price, a family would need a household income of $171,560 (i.e., 35 percent more than the existing median household income) to afford a condo in Santa Monica.[6] With the high costs of housing and the low supply of ownership units, home ownership is out of reach for much of the population. This is

[5] 2019 ACS 5-year estimates.
[6] Assumes that no more than 30 percent of monthly household income is spent on housing expenses.

represented in the fact that ownership rates in the City are amongst the lowest (28 percent) in comparison to other major cities.

Not surprisingly, the rental market in the City also sees some of the highest prices in the nation. In the last 20 years, the City has seen an exponential increase in market rate rents. In 1999, a two-bedroom rental unit in the City had a median price of $1,400. This number has since grown to a median price of $3,200 in 2019, which is signifiacntly greater than the national median rent of $1,192 and Los Angeles County median rent of $2,235. The cost of housing not only places the greatest financial burdens on people in the lowest income brackets, but it is also squeezing the middle class as well.

The on-set of the coronavirus (COVID-19) pandemic in March 2020 has had temporary disruptive effects on the housing market. Since the pandemic, rental prices in the City have dropped substantially – one study found an approximate 13.8 percent decrease in rent prices; however, it is unknown at this time whether this drop in rent is a temporary phenomenon or if the rental market will stabilize back to pre-pandemic levels following recovery. Further, even with this decrease in market rents, housing cost still makes up a large proportion of household spending in the City. However, the pandemic has increased home sales price as teleworkers have sought to live in larger units. Prior to the pandemic, the median cost of a condo in the City was approximately $900,000 but since the pandemic, the cost has increased to approximately $1.1 million. Whatever the long-term effects of the pandemic will be, housing will continue to be an important priority for the City and the State. A diverse and affordable housing stock will be critical for rebuilding the economy, providing safe shelter for residents re-entering the workforce, and curbing the increase in homelessness.

2.4.2 The Negative Effects of the Housing Shortage

Housing Cost as a Share of Monthly Income

Housing costs are a major factor in the wellbeing of a household. If housing costs are too high, families and households will spend more of their income on housing, leaving less money available for other non-housing basic necessities including food, transportation, childcare, and other necessary purchases. The general rule is that no more than 30 percent of gross monthly income should be spent on housing. Households that spend more than this percentage are considered to be “housing cost burdened.”

The State has the highest number of “housing cost burdened” households in the nation (Joint Center for Housing Studies of Harvard University 2019). Even before the coronavirus (COVID-19) pandemic, more than half of California renter households were housing cost-burdened, paying more than 30 percent of their total income in rent, and more than 1 in 4 renter households were severely cost-burdened, paying more than 50 percent of their income in rent (California Budget and Policy Center 2021). Housing costs also vary substantially throughout the State, with the highest costs in coastal urban areas and the lowest costs in inland rural areas. Within the City of Santa Monica, more than 43 percent of the City's rental households are housing cost burdened.[7]

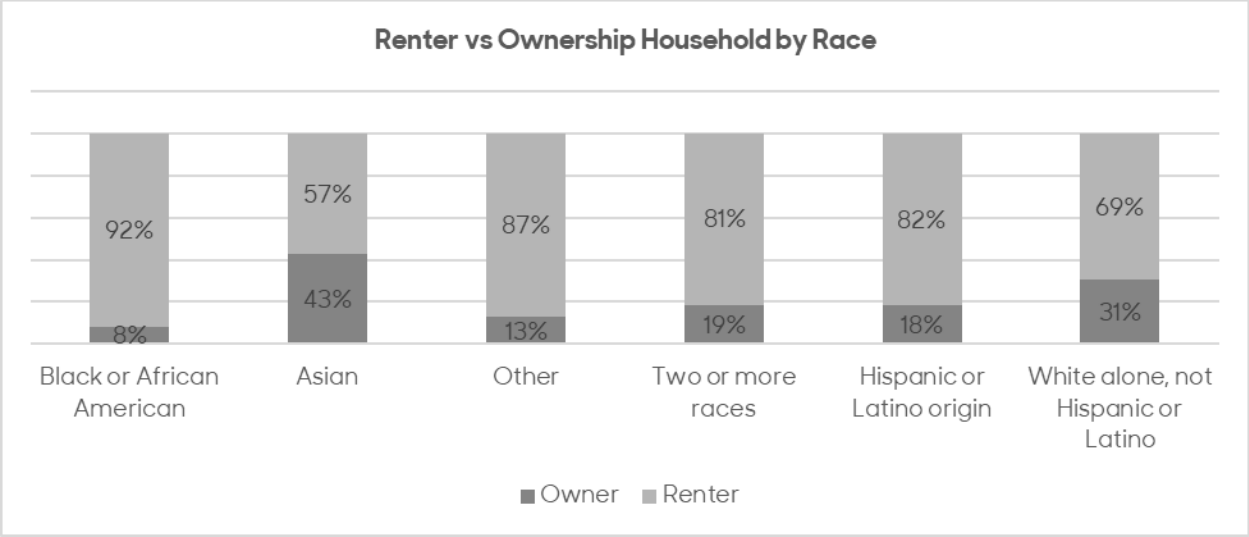
[7] 2019 ACS 5-Year Estimates.

Although housing affordability is a problem for much of the population across the State and within the City, lower income households are disproportionately more affected by high housing costs. More than 42 percent of all households in the City are cost burdened. Having less money available for non-housing costs often means that low income households will have less savings in the bank, putting them at risk for poverty or preventing them from rising out of it.[8]

Racial Disparities

The housing crisis have also worsened racial disparities in the State. Among all Californians living in households paying more than 30 percent of income toward housing costs in 2017, more than two-thirds were people of color, and about 45 percent were Latinx (California Budget and Policy Center 2017). Black Californians see a larger cut of their paychecks going to housing costs than any of the State's other major demographic groups. In California, nearly 6 in 10 Black individuals in renter households (58 percent) and more than half of Latinx renters (52 percent) were housing cost-burdened compared to 44 percent of white renters and 42 percent of Asian renters.

The racial disparity is also apparent at the City level. A review of the City's household median incomes by demographic group indicates that Black and Latinx households have the lowest household incomes, According to the U.S. Census and ACS, the City's median household income was $96,570 in 2019, which is higher than the Los Angeles County median of $68,044. When looking at race of householders, income levels in 2019 varied considerably, with the lowest median income being earned by Black householders ($42,703). Due to low wages as well as a number of other factors, Black and Latinx people are less likely to own in the City. Only 8 percent of the City's total Black households and 18 percent of total Latinx households own, as compared to 31 percent for White households and 43 percent for Asian households.



[8] Typically, poverty is calculated by the Official Poverty Measure, which defines a family as poor if their pretax cash income is less than a poverty threshold that is standard across the nation.

Homelessness

Despite having a successful economy prior to the coronavirus (COVID-19) pandemic, the State has seen a steady rise in homelessness in the past decade. While mental health issues, addiction, trauma, criminal justice history, and poverty all are contributing factors to homelessness, the cost of housing is the most important reason why someone can become homeless (CalMatters 2019). Driven by a lack of adequate supportive housing options and affordable housing, homelessness has become one of the most visible indication of the State's housing crisis. In Los Angeles County and the City, it is a common sight to see people living on the streets, in shelters, or in their cars.

Up until 2020, City staff and volunteers had conducted annual point-in-time counts to approximate the number of homeless individuals sleeping outside within the City borers, along with a count of shelter use that same night. The last recent count took place on the night of January 22, 2020 with more than 350 volunteers covering the City. A total of 907 individuals were counted on the streets, in cars and encampments, and in shelters and institutions within the City. Due to public health guidelines related to the coronavirus (COVID-19) pandemic, the 2021 count was canceled by the Los Angeles Homeless Services Authority. While the last count in 2020 showed positive results including an 8-percent decrease in Santa Monica compared to a 13-percent increase County-wide, the coronavirus (COVID-19) pandemic has exacerbated Los Angeles County's twin crises of housing and homelessness, and stymied interventions due to things like limited shelter capacity and an overburdened court system.

Table 2-2 Homelessness in the City of Santa Monica, Westside Region, and Los Angeles County

	City of Santa Monica	Service Planning Area 5 Westside	Los Angeles County
2015	738	4,276	41,174
2016	728	4,659	43,854
2017	921	5,411	52,442
2018	957	4,401	49955
2019	985	5,262	56,257
2020	907	6,009	66,436

Source: Los Angeles Homeless Services Authority 2021.

Longer Commutes

In an ideal world, workers can choose to live close to their place of employment in a neighborhood that offers abundant retail, services, open space, and good schools. However, in reality, many cannot afford to live close to their work since most of their jobs are located in metropolitan areas where housing costs tend to trend higher.

For the City of Santa Monica in particular, the gap between the number of jobs and supply of affordable housing is acute. Prior to the coronavirus (COVID-19) pandemic, the City's employment numbers were at approximately 91,000.[9] However, only 9 percent of these employees live within the City.[10] The average

[9] Data from the State Employment Development Department, 2019 Quarter 3
[10] Census Longitudinal Employer-Household Dynamics (LEHD) Survey Data

commute time for employees in the Los Angeles region in 2018 was 31 minutes.[11] In addition to the environmental costs associated with long commute times (e.g., increased criteria air pollutant and greenhouse gas [GHG] emissions), there are economic and livability costs as many workers are spending more of their time driving to work and less time at home with their families. Long commutes can also often hinder an employer's efforts in attracting skilled workers.

2.5 Proposed 6th 2021-2029 Cycle Housing Element

The proposed Housing Element Update represents the most ambitious housing plan undertaken by the City to date. The proposed Housing Element Update serves as the guiding document for how the City will address its housing needs during these unprecedented and challenging times.

2.5.1 Project Objectives

The goals for the proposed 6th Cycle 2021-2029 Housing Element Update were developed based on public input and in recognition of the City's core community values. The proposed Housing Element Update is built around the following key principles:

Despite the recent surge in new residential construction in the Downtown, the demand for housing remains high relative to supply.

- Meet the State-mandated 6th Cycle RHNA for the City.
- Increase housing production for all, with an emphasis on affordable housing.
- Promote greater housing stability for existing residents at risk of displacement.
- Locate housing close to daily services and amenities like transportation, jobs, parks, and schools in addition to places around the City that have historically not accommodated housing.
- Facilitate equitable housing access to all neighborhoods by expanding access to housing opportunities and overcoming patterns of segregation by planning for housing in areas that have historically excluded diverse housing opportunities.

From these key objectives, the proposed Housing Element establishes seven goals to address housing issues in the City:

- *Goal 1 Overall Housing Production*: Production of new housing that is sustainable, innovative, safe and resilient; is appropriate with the surrounding neighborhood; offers opportunities for active and healthy living, including walking and biking; and increases equitable housing opportunities.
- *Goal 2 Affordable Housing Production*: Affordable housing production that is suitable for all income categories, including for the community's workforce and most vulnerable communities.

[11] 2018 ACS estimates

- *Goal 3 Preserve Existing Housing*: Preservation of the existing supply of housing and prevent displacement of existing tenants.
- *Goal 4 Equitable Housing Access*: A community that provides equitable housing access to all neighborhoods.
- *Goal 5 Address Homelessness*: Housing for persons experiencing homelessness.
- *Goal 6 Housing Assistance*: Provision of housing assistance and supportive programs and services to extremely low-, very low-, low-, and moderate-income households and households with special needs, families, seniors, and the homeless.
- *Goal 7 Anti-Discrimination in Housing*: Eliminate housing discrimination on the basis of race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, age, marital status, national origin, ancestry, familial status, income level, source of income, disability, veteran or military status, genetic information, or other such characteristics.

2.5.2 Proposed Components

The proposed Housing Element Update would establish the City's housing vision for housing production and supply over the next 8 years. This proposed Housing Element Update provides a comprehensive plan for protecting existing housing in the City and ensuring that the City has the ability to meet its RHNA of 8,895 dwelling units, more than 5 times the number of units planned for in the prior 5th Cycle Housing Element.

A key objective of the Housing Element is to ensure the preservation of the City's existing housing stock, particularly rent controlled units.

To plan for this unprecedented level of housing growth, the Housing Element Update proposes a number of policies and programs that would enable the production of housing of varying affordability levels and protect existing housing and residents. The programs that help achieve the seven goals of the proposed Housing Element Update are listed in Table 2-3.

Table 2-3 Programs included in the Proposed 6th Cycle Housing Element Update

Program No.	Program Title
1.A	Streamlined Approvals For Housing Projects
1.B	Streamline The Architectural Review Process For Housing Projects
1.C	Incentivize Housing Development On Surface Parking Lots in Residential Zones That Are Associated With Existing Commercial Uses
1.D	Explore Reducing or Eliminating Minimum Parking Requirements for Certain Housing Projects.
1.E	Revise The Design And Development Standards In The Bergamot Area Plan (BAP) For Easier Understanding And To Support Housing Production
1.F	Revise The Downtown Community Plan Development Standards To Support AHPP
1.G	Promote The Use Of Accessory Dwelling Units Through An ADU Accelerator Program .
1.H	Adaptive Reuse Of Existing Commercial Buildings For Residential Use
1.I	Ensure That Local Regulations Support Innovations In Construction Technology To The Extent Technically Feasible
2.A	Establish A City-wide Affordable Housing Overlay
2.B	Right Of First Offer Ordinance For Nonprofit Affordable Housing Providers
2.C	Update The City's Affordable Housing Production Program
2.D	Update Density Bonus Ordinance to Ensure Consistency With State Law And Integration Into The City's Land Use System
2.E	Commit To The Production Of Affordable Housing On City-Owned/Publicly-Owned Land
2.F	New Affordable Housing Finance Programs To Enable Continued Provision Of Technical And Financial Assistance For Housing Production
2.G	Facilitate The Development And Maintenance Of Special Needs Housing
2.H	Maintain Proposition I Monitoring.
3.A	Restrict The Removal Of Existing Rental Units For Site Redevelopment And Require That Protected Units Are Replaced
3.B	Develop Programs To Address State And Federal Legislative Mandates
3.C	Facilitate The Conservation Of Restricted And Non-Restricted At-Risk Housing.
3.D	Maintain An Acquisition And Rehabilitation Program
3.E	Maintain A Low Income Residential Repair Program
3.F	Maintain Code Enforcement Response To Housing-Related Violations
3.G	Maintain A Mandatory Seismic Retrofit Program
3.H	Information And Outreach For Property Owners Regarding Rehabilitation And
4.A	Zoning Ordinance Amendment To Permit Multiple-Unit Housing In All Zones
4.B	Revise Development Standards To Incentivize Housing Projects Over Commercial Development
4.C	Facilitate The Development Of Housing On Surface Parking Lots Owned By Religious Congregations
4.D	Rezone Selected Portions Of R1-Zone Neighborhoods To Increase Density
5.A	Reduce The Number Of Homeless Individuals Living On The Streets Of Santa Monica Through The Provision Of A Range Of Housing Options, With An Emphasis On Affordable, Permanent, Supportive Housing
5.B	Low Barrier Navigation Centers As By-Right Use
6.A	Maintain Rental Housing Voucher Programs And Expand To Assist All Persons With Disabilities
6.B	Seek Funding Sources To Support Rental Assistance For Vulnerable Individuals And Households At-Risk Of Displacement
6.C	Maintain And Expand The Preserving Our Diversity (Pod) Program
6.D	Information And Outreach Coordination For Tenants And Landlords On Housing Programs And Resources
6.E	Maintain A Community Development Grant Program
6.F	Provide Tenant Relocation Assistance
6.G	Maintain A Temporary Relocation Program.
6.H	Maintain Reasonable Accommodations To Ensure Equal Opportunity For Housing
7.A	Maintain Fair Housing Programs.
7.B	Provide Tenant/Landlord Mediation And Legal Services.
7.C	Right To Counsel Program
7.D	Maintain A Tenant Eviction Protection Program.

Proposed Amendments to Development Standards Governing Height and FAR

The proposed Housing Element Update would amend the existing development standards to support the housing projects that comport with the City's minimum inclusionary housing requirements and incentivize housing development relative to commercial uses. Table 2-4 provides the proposed amended building heights and FARs for each zone. In general, the proposed development standards would be amended to allow an increase in height of one to two stories and new FARs that would be higher than the current Tier 2 FARs for housing projects. This effectively negates the need for Tier 2 for housing and therefore, it is proposed that Tier 2 be eliminated for residential developments. For non-residential development projects, the existing development standards under the current tier system would remain unchanged.

Table 2-4 Proposed Tier 1 Development Standards

Zone	Proposed Tier 1 (housing projects)		
	On-Site Affordable Housing	Off-Site Affordable Housing	Max Stories
	FAR	FAR	
MUBL	2.25	2.25	4
MUB	2.75	2.75	4
GC (SMB)	2.75	2.75	4
GC (Pico)	2.75	2.50	4
GC (Lincoln)	2.25	2.25	4
NC	2.75	2.50	4
NC (Main)	2.75	2.75	5
NC (Ocean Park)	2.75	2.50	4
NC (Montana)	2.00	2.25	3
HMU	2.75	2.75	4
LT (East)	2.75	2.50	4
LT (West)	2.75	2.50	4
NV	2.75	2.50	4
BC (Promenade)	2.75	2.50	4
BC (2nd Street /4th Street)	2.75	2.50	4
TA	2.75	2.50	4
OT	2.75	2.50	4
WT	2.75	2.50	4
BTV	2.50	2.25	4
CAC	2.50	2.25	4
MUC	2.50	2.25	4
OC	2.75	2.50	4
IC	2.75	2.75	5

Equitable Housing Access

> *Affirmatively furthering fair housing means "taking meaningful actions in addition to combating discrimination that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protective characteristics."*

State Housing Law (Assembly Bill [AB] 686) requires that the proposed Housing Element Update include policies and programs that Affirmatively Further Fair Housing. While the LUCE established a strategy to encourage housing production around major transportation systems, it does not account for the new Affirmatively Further Fair Housing mandate. Key LUCE policies to develop complete neighborhoods in mixed-use areas within easy access to transit opportunities and daily services remain but proposed new and policies and development standards in the proposed Housing Element Update is driven largely through an equity and inclusion lens. In order to increase housing opportunities throughout the City and break down the patterns of segregation that have resulted from decades of discriminatory housing practices, the proposed Housing Element Update would the following programs:

- *Program 4.A:* Allow Multi-Unit Dwellings as a permitted use in all zones where housing is currently prohibited – this would add multi-unit housing as a permitted use in zones where it is currently prohibited (e.g., Office Campus, Industrial Conservation, etc.).
- *Program 4.B:* Incentivize housing in non-residential zones that have not previously accommodated housing (Neighborhood Commercial zones like Montana Avenue) – this involves increasing FARs to make housing feasible and more competitive relative to commercial development.
- *Program 4.C:* To support the production of affordable housing on surface parking lots owned by religious congregations, standards will be adopted to allow some market-rate units to support the affordable housing.
- *Program 4.D*: The City shall explore options to address historically exclusionary single unit dwelling zones through future land use decisions.

Revision to the Affordable Housing Production Program

In July 1998, the City Council enacted an Affordable Housing Production Program, requiring developers of market-rate apartment and condominium projects to contribute to affordable housing production and thereby help the City meet its affordable housing need. To simplify the program and provide flexibility for the location of off-site inclusionary units, revisions to the Affordable Housing Production Program are proposed:

Eliminate the "Menu" and Replace with Minimum Percentages of Inclusionary

Currently, the City's Affordable Housing Production Program allows market-rate developers to select from a "menu" of options for the production of affordable housing. The Affordable Housing Production Program formerly allowed market-rate housing projects to include only 5 percent of their units as affordable to 30 percent AMI households. This had the effect of producing affordable units at the extremely low-income level at the cost of production of other income levels with particular shortages happening at the 80 percent to 120 percent AMI income levels. Therefore, the proposed Housing Element Update includes

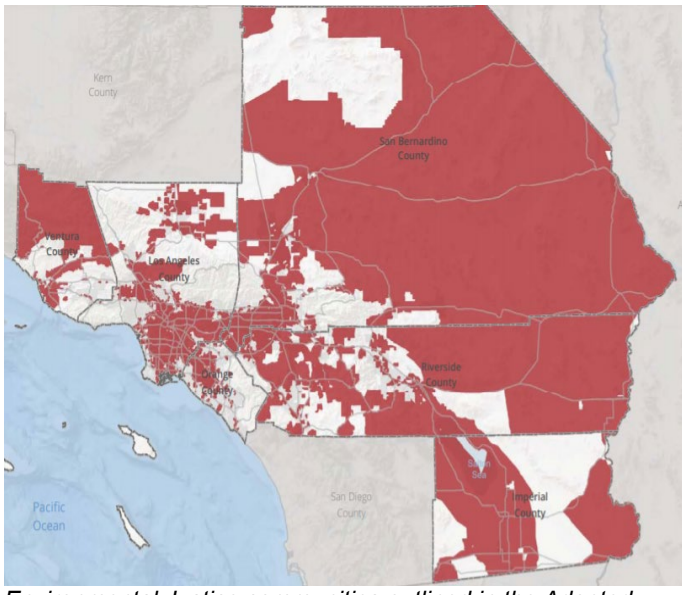
a proposal to eliminate the current "menu" option of affordability requirements from the Affordable Housing Production Program and instead establish a base affordability percentage of 15 percent evenly across all income levels.

Table 2-5 Proposed Revisions to AHPP

Option	Tier 1		Tier 2/3	
	Current	**Proposed**	**Current**	**Proposed**
1	5% of the total units of the project for 30% income households at affordable rent (Extremely Low Income - ELI); or	Minimum 15% of the total units of the project across all income levels.	7.5% of the total units of the project for 30% income households at affordable rent;	Not Applicable due to proposed elimination of Tier 2 and 3.
2	10% of the total units of the project for 50% income households at affordable rent (Very Low Income – VLI); or		15% of the total units of the project for 50% income households at affordable rent; or	
3	20% of the total units of the project for 80% income households at affordable rent (Low Income – LI); or		30% of the total units of the project for 80% income households at affordable rent;	
4	100% of the total units of a project for moderate income households at affordable rent.		Not Applicable.	

Flexibility in Off-Site Option Location

The Affordable Housing Production Program currently allows developers to fulfill their affordable obligation by providing units off-site. However, the units are required to be located within a 0.25-mile radius of the market-rate project. The off-site requirements vary somewhat for Tier 2 projects. Within the DCP area, Tier 2 housing developers have the flexibility to locate the off-site housing anywhere within the Downtown. In addition, the off-site housing project must be owned or operated in whole or in part by a non-profit housing provider.



Environmental Justice communities outlined in the Adopted Final Connect SoCal Technical Report are shown in red. While there are limited environmental justice communities in the City, the majority of Environmental Justice communities are located along the major freeways (e.g., I-405) in the eastern, inland portions of the planning region.

To support increased affordable housing production, the proposed Housing Element Update would create additional flexibility to the Affordable Housing Production Program to make the off-site affordable housing option a more viable alternative to on-site affordable units. The proposal would allow

projects to locate off-site affordable housing to be located anywhere in the City but not within an Environmental Justice area as defined by SCAG or a historically redlined area.

Affordable Housing Zoning Overlay for 100 Percent Moderate Income Projects

To incentivize 100 percent moderate income projects to be developed, the City is proposing an Affordable Housing Overlay that would apply to targeted areas of the City – specifically, around the Metro E (Expo) LRT stations. The overlay would allow 100 percent affordable housing projects to be developed with:

- Unlimited FAR and height in all zones;
- Minimum of 4 stories guaranteed in all residential zones; and
- No minimum parking requirements.

With the proposed overlay, 100 percent affordable moderate income housing projects would be able to have greater density and height than market-rate housing making it more competitive to build. To address historic patterns of segregation and past discriminatory practices, the overlay would exclude Environmental Justice areas and historically redlined areas of the City.

City-owned Sites

The City owns a variety of property in various zones, including the parcels surrounding the Downtown Santa Monica Station, parking lots on Main Street and along Wilshire Boulevard, the Bergamot Arts Center, Parking Structure #3, and the site at 4th Street & Arizona Avenue. City-owned sites have the potential to contribute significantly to the production of affordable housing. The proposed Housing Element would commit City-owned sites for the production of 100 percent affordable housing with the following program:

- *Program 2.E:* The City shall commit City-owned sites for the production of 100% affordable housing with consideration to community serving uses. The City shall explore means of maximizing development potential on City-owned sites, including amending the LUCE, Bergamot Area Plan, Downtown Community Plan, and/or Zoning Ordinance to guide development through a public process, including engagement of community stakeholders, to maximize the production of affordable housing to support a healthy and sustainable environment.

Parking Lots of Religious Sites and Parking Lots in Residential Zones

AB 1851 was passed in 2020 to remove an important barrier to housing construction on lands owned by a religious institution. The law states that a jurisdiction cannot deny a housing project proposed by a religious institution on the sole basis that it will remove parking. A number of religious congregations with large surface parking lots are located throughout the City. These lots could play an important part in providing affordable housing; however, many of the sites are located in R2/OP2 zoning districts which severely limits the housing potential of these sites.

In addition, there are over 100 parcels within residentially zoned (R1/R2/R3/R4) areas that are developed with surface parking lots serving adjacent street-fronting commercial uses. Some of these parcels have an “A” Off-Street Parking Overlay (known as A-lots). These parcels are intended to support the parking

needs of commercial corridors and neighborhood commercial areas, and to serve as a buffer between commercial and residential uses. These parcels have been identified for high housing potential. The proposed Housing Element proposes to incentivize the development of these sites for housing, including removing the existing density caps for these parcels.

Incentives for Accessory Dwelling Units

An Accessory Dwelling Unit (ADU; also known as a "granny flat") is a secondary dwelling unit with independent living facilities, usually on the same grounds as another residential unit(s). ADUs play an important role in the production of housing, particularly within single-unit residential zoning districts where historically only one unit is permitted. In recognition of this, the State over the past 4 years has started to enact laws to help spur the production of housing through the development of ADUs. Since implementation of these new State laws, the City has seen an increase in ADU production and interest each year. ADUs are seen as one approach for cities and counties to meet unmet housing demand. HCD has indicated that local governments may report ADUs as progress towards its RHNA pursuant to California Government Code Section 65400 based on the actual or anticipated affordability and removing commercial parking replacement restrictions.

While the City has taken steps beyond what is required by State law to incentivize the production of ADUs, the Housing Element Update proposes an "ADU Accelerator" program that is anticipated to include pre-approved plans and review of fees and process for ADUs. Additionally, the program proposes to increase the number of ADUs allowed on a R1 parcel. Currently the maximum amount of units by right an R1 parcel can contain is three – one single-unit dwelling, one detached ADU, and one Junior Accessory Dwelling Unit (JADU) (which is required to be incorporated into the footprint of the single-unit dwelling). The proposed Housing Element Update includes an ADU incentive program that would allow a property owner the ability to construct an additional ADU if the unit is restricted to only be permanent rental housing. This incentive program would help achieve the Housing Element goal of affirmatively furthering fair housing by providing housing opportunities that are more affordable than home ownership units within the R1 zone district, an area of the City that has largely been unaffordable to many. Based on past production of ADU's in the City as well a new state law that have recently incentivized new ADUs, the proposed Housing Element Update anticipates that up to 600 new ADUs could be constructed over the planning horizon for the 6th Cycle RHNA.

Housing Stability

The City operates many housing programs intended to preserve housing stock and provide assistance to existing tenants including acquisition/rehabilitation, financial assistance, and supportive services. The proposed Housing Element Update would continue to operate existing programs to protect existing housing and residents from displacement, and to strengthen these programs when additional funding sources become available. The programs addressing the protection of housing and displacement of existing residents include:

- *Program 3.A.* Restrict The Removal Of Existing Rental Units For Site Redevelopment And Require That Protected Units Are Replaced

- *Program 3.B.* Develop Programs To Address State And Federal Legislative Mandates
- *Program 3.C.* Facilitate The Conservation Of Restricted And Non-Restricted At-Risk Housing.
- *Program 3.D.* Maintain An Acquisition And Rehabilitation Program
- *Program 3.E.* Maintain A Low Income Residential Repair Program
- *Program 3.F.* Maintain Code Enforcement Response To Housing-Related Violations
- *Program 3.G.* Maintain A Mandatory Seismic Retrofit Program
- *Program 3.H.* Information And Outreach For Property Owners Regarding Rehabilitation And Maintenance Of Housing Units

Program 3.A is a new program under the proposed Housing Element Update and would enact a local version of Senate Bill (SB) 330 tenant protections since that State law sunsets in 2025. Under SB 330, the City is prohibited from approving a housing project that will demolish existing residential units and would not replace, at a minimum, the same number of residential units. Program 3.A would allow the No Net Loss protections to continue with the City's local ordinance and become permanent, preventing the net loss of units from the redevelopment of existing multi-unit residential properties.

2.5.3 Suitable Sites Inventory

California Government Code Section 65583(a)(3) requires local governments as part of the Housing Element to prepare an inventory of land suitable for residential development, including vacant sites and sites having the potential for redevelopment, and an analysis of the relationship of zoning and public facilities and services to these sites. This inventory of land suitable for residential development, otherwise known as the SSI, is used to demonstrate that there is sufficient land at appropriate densities and development standards to accommodate the RHNA at the income levels specified within the planning period. Pursuant to California Government Code Section 65583.2(c), the SSI must include a calculation of the realistic residential development capacity of the sites. To ensure that sufficient capacity exists in the housing element to accommodate the RHNA throughout the planning period, HCD recommends that a jurisdiction create a buffer in the housing element inventory of at least 15 to 30 percent more capacity than required, especially for capacity to accommodate the lower income portion of the RHNA.

The City's SSI for the 6th Cycle Housing Element Update includes approximately 312 commercially zoned sites and 22 residentially zoned sites. These sites have been identified as having the highest potential to accommodate housing and it includes approved housing projects, pending housing projects, City-owned sites, parking lots of religious institutions and parking lots within the residential zones. With the proposed programs and new Tier 1 FARs identified in the proposed Housing Element, the sites identified for the SSI combined with anticipated ADU production have the capacity to accommodate at least 11,025 dwelling units providing a 24 percent buffer above the City's RHNA of 8,895 units. The buffer accounts for the likelihood that not all identified SSI sites may be necessarily developed by a property owner for housing.

The SSI is intended as a planning tool to demonstrate that the City has sufficient adequately zoned land to accommodate the RHNA – it is not a prediction or guarantee of future development. Inclusion of a site

on the SSI does not obligate or commit a property owner to develop the site for housing. For this EIR, the SSI is used as an approximation of where impacts associated with residential development could occur.

Table 2-6 SSI Sites

	Total Capacity	Capacity for Affordable Units				
	# Units	# Affordable Units	ELI 30% AMI	VLI 50% AMI	LI 80% AMI	Moderate 120% AMI
Category 1 Approved[1]	1,503	416	104	104	104	104
Category 1 Pending[1]	680	165	42	42	42	42
Category 4 City Sites[2]	1,884	1,884	471	471	471	471
Category 11 Religious Sites	257	129	32	32	32	32
Category 12 Parking Lots	94	47	12	12	12	12
All Remaining Categories	6,007	6,007	1,502	1,502	1,502	1,502
ADUs[3]	600	396	90	12	258	36
Total	**11,025**	**9,044**	**2,253**	**2,175**	**2,421**	**2,199**
RHNA Targets	8,895	6,168	1,397	1,397	1,672	1,702
Buffer	+2,130	2,876	856	778	749	497
	24%					

Notes:
[1] A 10 percent discount factor was applied to the current number of approved and pending projects to allow for the possibility that some projects may never proceed to construction.
[2] Assumes a density factor of 150 units/acres.
[3] Estimate of ADU production based on production trends in the City for the past three years of 80 ADUs/year.

2.6 Project Growth assumptions for EIR

Even though the City's 6th Cycle RHNA is 8,895 dwelling units, the SSI includes a buffer and identifies capacity for up to 11,025 dwelling units as required by Housing Element law. Therefore, while the City is required to plan for and achieve the RHNA of 8,895 dwelling units, the EIR conservatively analyzes up to 11,025 dwelling units. Further, new housing projects as planned for by the proposed Housing Element would potentially include ground-floor commercial uses (particularly in zoning districts, where such uses are/would be required).[12] Based on the existing requirements, it is estimated that up to 405,246 square feet (sf) of net new ground-floor commercial uses could be developed under the proposed Housing Element Update. However, this number represents a conservative maximum since the City (as part of the implementation efforts associated with the proposed Housing Element Update) could implement changes in the Zoning Ordinance to modify and/or reduce ground floor commercial space requirements.

2.7 Intended Use of This EIR

As described in Section 1.3, *EIR Purpose and Legal Authority*, in compliance with CEQA, this Program EIR has been prepared to analyze potential environmental impacts that may result from implementation of the proposed Housing Element. This Program EIR also identifies feasible mitigation measures and/or

[12] This EIR applies California Government Code Section 65589.5(h)(2) definition of a "housing development project" which means a use consisting of residential units only, mixed use developments consisting of residential and non-residential uses with at least two-thirds of the square footage designated for residential use, or transitional or supportive housing.

alternatives that would minimize or eliminate the potential significant impacts associated with the proposed Housing Element. Lead agencies, such as the City, are charged with the duty to substantially lessen or avoid significant environmental effects where feasible (CEQA Guidelines Sections 15002[a][3] and 15021[a][2]). Where a Lead Agency identifies unavoidable adverse environmental effects of a proposed project, CEQA Guidelines Section 15093 authorizes the agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable adverse environmental effects when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits outweigh the unavoidable adverse environmental effects, these effects may be deemed acceptable by the agency as substantiated in a statement of overriding considerations.

This Program EIR will serve as an informational document for the City, acting as Lead Agency, when considering adoption of the proposed Housing Element. This Program EIR serves as a fact-finding tool, allowing residents, property owners, agency staff, and decision-makers an opportunity to collectively review and evaluate the potentially significant environmental impacts of the proposed Housing Element and the ways in which those impacts could be reduced to less than significant levels, either through the imposition of mitigation measures or adoption of all, or portions, of recommended alternatives. This Program EIR is intended to provide decision-makers and the public with information that enables informed consideration of the potential environmental consequences of the proposed Housing Element Update. As a Program EIR, this CEQA-compliant document is intended to provide a City-wide assessment of the impacts of the proposed Housing Element Update. Future housing projects in the City would need to be reviewed on a case by case basis in the context of this Program EIR to determine if additional environmental documentation is required.

2.8 Required Actions and Approvals

The City is the Lead Agency for the proposed Housing Element Update, consistent with CEQA Guidelines Section 15065(b). As such, this Program EIR will be used by the City to both evaluate the potential environmental impacts that could result from implementation of the proposed Housing Element Update, and develop conditions of approval and adopt mitigation measures which would address those impacts. The City Council will consider adoption of the Housing Element concurrently with certification of the Final EIR. Pursuant to CEQA Guidelines Section 15093, the decision-makers must "*balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable*." If the City, as Lead Agency, approves the proposed DCP, a statement of overriding considerations must be written, which shall state the specific reasons to support its action based on the Final EIR and/or other information in the record.

In addition to the required CEQA actions (EIR certification, Statement of Overriding Considerations, and Findings as necessary), the following supplemental regulatory and/or legislative actions are required:

- Amendments to the LUCE (City Council with recommendation from Planning Commission)

- Amendments to the DCP (City Council with recommendation from Planning Commission)
- Amendments to the Bergamot Area Plan (City Council with recommendation from Planning Commission)
- Amendments to the Zoning Ordinance (City Council with recommendation from Planning Commission)
- Consideration of private development entitlement requests (tentative subdivision maps, design review, and use permits) and other requests for infrastructure improvements consistent with the proposed Housing Element Update.

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3.0 Environmental Impact Analysis and Mitigation Measures

3.1 Introduction

This section of the Environmental Impact Report (EIR) analyzes the potential environmental impacts that could result under the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update). The proposed Housing Element Update guides the development of new housing within the City of Santa Monica (City), establishing goals, policies, and programs for meeting housing needs and protecting existing housing for the next 8 years. As described in Section 1.0, *Introduction*, no specific projects are currently proposed as part of the proposed Housing Element Update. Therefore, the potential environmental impacts of the Housing Element Update are addressed programmatically. The discussion of each environmental issue area is subdivided into the following subsections: *Environmental Setting*, *Regulatory Framework*, *Impact Assessment and Methodology*, *Project Impacts and Mitigation Measures*, and *Cumulative Impacts*.

3.1.1 Impact Assessment Guidelines and Impact Classification

The California Environmental Quality Act (CEQA) requires an EIR analysis to "*identify and focus on the significant environmental effects of a proposed project*" (CEQA Guidelines Section 15126.2[a] and Public Resources Code Section 21000[a]). The emphasis of the EIR should be placed on the potential "physical" adverse effects of a proposed project. CEQA Guidelines Section 15360 define "environment" as the physical conditions that exist within the area that would be affected by a proposed project including, but not limited to, land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The CEQA Guidelines further define the area involved as the area in which significant effects would occur either directly or indirectly as a result of the project. The "environment" includes both natural and man-made conditions.

CEQA Guidelines Section 15382 clarifies the definition of "significant effect on the environment" as a substantial, or potential substantial, adverse change in any of the *physical* conditions within the area affected by the project. An economic or social change by itself shall not be considered a significant effect on the environment. However, that economic or social change that may have a *physical* impact (e.g., urban decay) should be considered in an EIR (*Bakersfield Citizens for Local Control v. City of Bakersfield [2004] 124 Cal.App.4th 1184*). The proposed Housing Element Update does not propose any policies or programs that could result in big box or large regional-serving commercial uses leading to urban decay. Therefore, economic effects are not analyzed in this EIR pursuant to CEQA.

For each environmental issue area, thresholds for determining impact significance are identified based on the CEQA Guidelines and City-adopted thresholds, along with descriptions of the methodologies used for conducting the impact analysis. For some resource areas such as air quality, noise, and transportation and circulation, the analyses of impacts are more quantitative in nature and involve the comparison of effects against a numerical threshold. For other topics, such as land use and planning, the analyses of impacts are inherently more qualitative, involving on the consideration of a variety of factors such as adopted City policies.

The EIR impact discussions classify impact significance levels as:

- **Significant and Unavoidable** – a significant impact to the environment that remains significant even after mitigation measures are applied;
- **Less Than Significant with Mitigation** – a significant impact that can be avoided or reduced to a less than significant level with mitigation;
- **Less Than Significant** – a potential impact that would not meet or exceed the identified thresholds of significance for the resource area; and
- **No Impact/Beneficial Impact** – no impact would occur for the topic area or a beneficial effect would result.

3.1.2 Mitigation Measures and Monitoring

Pursuant to CEQA Guidelines Section 15126.4, where potentially significant environmental impacts have been identified in the EIR, feasible mitigation measures that could avoid or minimize the severity of those impacts are also identified. The mitigation measures are identified as part of the analysis of each impact topic in Sections 3.3 through 3.13 of this EIR.

Feasible means *"capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors"* (CEQA Guidelines 15364). A Lead Agency must impose mitigation measures unless findings can be made that the mitigation measures are found to be infeasible or within the jurisdiction of another agency (*City of Marina v. Board of Trustees of the California State University [2006] 39 Cal.4th 341*). Mitigation measures must be fully enforceable and may involve various means of implementation, such as:

- Measures incorporated directly into the adopted Housing Element Update as new or revised policies or development standards, or in implementing ordinances.
- Measures implemented in multi-year City operational programs, such as a capital improvements program or development impact fee program.
- Measures incorporated as standard departmental conditions of approval for individual development projects.

CEQA requires that implementation of adopted mitigation measures or any revisions made to the proposed Housing Element Update by the Lead Agency to mitigate or avoid significant environmental effects be monitored for compliance. Accordingly, CEQA Guidelines Section 15097 require that a public agency adopt a Mitigation Monitoring or Reporting Program (MMRP) for those adopted mitigation measures and project revisions. With respect to approval of a program-level document, CEQA provides that "*—[w]here the project at issue is the adoption of a …specific plan…the monitoring plan shall apply to policies and any other portion of the plan that is a mitigation measure or adopted alternative.*" That is, the monitoring plan may consist of policies included in plan-level documents (CEQA Guidelines Section 15097[b]). The MMRP will be provided as Section 11.0, *Mitigation Monitoring and Reporting Program* following public review and preparation of the Final EIR.

3.2 Cumulative Impacts Analyses

CEQA Guidelines Section 15130(a) states that an EIR shall "*discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable*." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by CEQA Guidelines Section 15130). CEQA Guidelines Section 15355 defines cumulative impacts as *"two or more individual effects that, when considered together, are considerable, or which compound or increase other environmental impacts."* CEQA Guidelines Section 15355 further states that the individual effects can be various changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects. The CEQA Guidelines allow for the use of two different methods to determine cumulative impacts:

- **List Method** – A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency (CEQA Guidelines Section 15130).
- **General Plan Projection Method** – A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact (CEQA Guidelines Section 15130).

As described in Section 1.1, *Housing Element Update Process*, the Housing Element is one of seven State-mandated general plan elements. The Housing Element that addresses housing needs and related issues throughout the whole of the City. The planning period for the proposed Housing Element Update covers the 6th Cycle 2021-2029 Regional Housing Needs Allocation (RHNA). As such, this EIR analyzes cumulative effects using the General Plan Projection Method for all environmental topic issues through the planning horizon year of 2030. The General Plan Projection Method utilized in this EIR provides updated projections of City-wide cumulative land use changes that are anticipated to occur in the City through 2030 as a result of the proposed Housing Element Update in conjunction with the City's other long-range planning documents including the Santa Monica General Plan Land Use and Circulation Element (LUCE).

CEQA Guidelines Section 15130(b)(2) further state that the EIR should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used. The geographic scope for the analysis of cumulative impacts in this EIR varies by each environmental impact topic (e.g., jurisdiction, air basin, watershed, service area). For most of the impact topics analyzed in this EIR, the geographic scope was determined to be limited to the City. However, regional issues regarding the supply of water and treatment of wastewater also take into account regional projections, such as those provided by the Southern California Association of Governments (SCAG) in the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal). The cumulative analyses for air quality, greenhouse gas (GHG) emissions, and energy also include the full extent of the City and beyond. The cumulative analyses for each environmental issue, including a discussion regarding the identification of relevant cumulative projects are provided in their applicable sections in Section 3.0, *Environmental Impact Analysis and Mitigation Measures*.

Table 3.2-1 Geographic Context for Cumulative Analysis

Environmental Resource Area	Geographic Context for Cumulative Analysis
Air Quality	South Coast Air Basin
Cultural Resources	City of Santa Monica
Energy	Electricity – Clean Power Alliance (CPA) and Southern California Edison service areas Natural Gas – Southern California Gas Company service area
Land Use and Planning	City of Santa Monica, County of Los Angeles, and SCAG Planning Area
Greenhouse Gas Emissions and Climate Change	Global
Noise	City of Santa Monica, County of Los Angeles
Population, Housing, and Employment	City of Santa Monica, County of Los Angeles, and SCAG Planning Area
Public Services (e.g., Fire, Police, Parks, Schools, Libraries)	City of Santa Monica
Utilities	Water – City of Santa Monica, Santa Monica Groundwater Basin, and Metropolitan Water District of Southern California (MWD) Wastewater – City of Santa Monica and Hyperion Treatment Plant Service Area Solid Waste – Los Angeles County
Transportation	City of Santa Monica, County of Los Angeles, SCAG Planning Area
Tribal Cultural Resources	City of Santa Monica

3.0 Environmental Impact Analysis and Mitigation

3.3 Air Quality

The South Coast Air Basin is currently designated as a Federal and State-level nonattainment area for several criteria pollutants. Implementation (i.e., buildout) under the proposed 6th Cycle 2021-2029 Housing Element Update would generate additional criteria pollutant emissions and to a lesser extent Toxic Air Contaminants in the South Coast Air Basin as a result of construction and operation of residential development. However, the proposed Housing Element Update as well as the City's existing regulatory and policy framework promotes sustainable land use patterns and aims to improve mobility and accessibility. These strategies would help reduce criteria pollutants emissions associated with the proposed Housing Element Update.

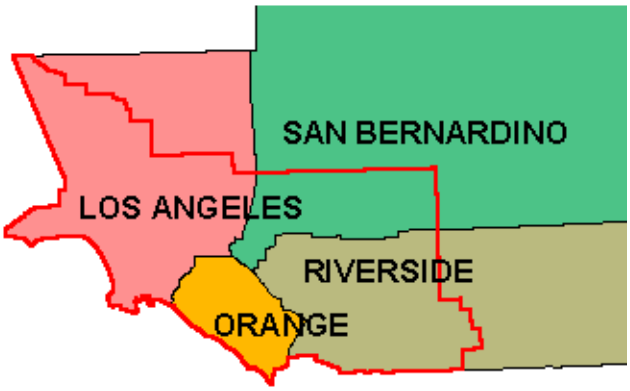
This section of the Environmental Impact Report (EIR) describes the existing air quality conditions within the region and evaluates the potential impacts of the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update) on air quality within the City of Santa Monica (City) and the South Coast Air Basin (Basin). This evaluation addresses both short-term construction and long-term operational criteria pollutant emissions generated by potential new residential development planned for under the proposed Housing Element Update.[1] An analysis of greenhouse gas (GHG) emissions and associated impacts related to global climate change is included in Section 3.7, *Greenhouse Gas Emissions and Climate Change*.

3.3.1 Environmental Setting

3.3.1.1 Location and Climate

The City is located within the western coastal portion of Los Angeles County, which is within the South Coast Air Basin. The Basin is bounded by the Pacific Ocean to the west and the San Gabriel, San Fernando, and San Jacinto Mountains to the north and east that trap air and its pollutants in the valleys below, making the Basin an area of high air pollution potential. The air quality within the Basin is influenced by a wide range of emissions sources, such as dense population centers, heavy vehicle traffic, industrial land use, and

South Coast Air Basin



The South Coast Air Basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties.

[1] Common air pollutants with known health impacts were first regulated as "criteria pollutants" by the Clean Air Act which established health-based National Ambient Air Quality Standards (NAAQS). The six criteria pollutants are carbon monoxide (CO), ground-level ozone (O_3), lead (Pb), nitrogen dioxide (NO_2), particulate matter, and sulfur dioxide (SO_2).

weather (including inversion layers, which are discussed in further detail below). Air quality within the Basin is monitored and regulated by the South Coast Air Quality Management District (SCAQMD).

The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The City is in the western coastal portion of the Basin, which has moderate variability in temperatures, with average monthly highs from 62 to 71 degrees Fahrenheit (°F) and lows from 51 to 63 °F. The annual average rainfall in the City is 12.7 inches, with the majority occurring between December and March (National Climatic Data Center [NCDC] 2010). The average monthly wind speeds in the City generally range from 5 miles per hour (mph) to 9 mph, with the highest wind speeds occurring along the coast and during the months of April and May (Windfinder 2021a, 2021b). Winds in the City generally blow in a southwest direction year-round, and tend to decrease in average speed moving inland. For example, the monthly average speed at the Santa Monica Pier ranges from 6 to 9 mph, whereas the monthly average speed at the Santa Monica Municipal Airport (SMO) has slightly lower wind speeds ranging from 5 to 8 mph (Windfinder 2021a, 2021b).

Given its proximity to the Pacific Ocean, the City is predominantly exposed to a marine microclimate and recurring fog banks. This coastal climate prevails except during Santa Ana wind conditions. The Santa Ana winds are strong, extremely dry offshore winds that characteristically sweep across Southern California and northern Baja California during late fall into winter season and are notorious for causing hot, dry weather due to compressional heating of the lower atmosphere. On average, Santa Ana wind conditions occur five to ten times a year, with each event lasting up to a few days.

The Basin frequently experiences weather conditions that trap air pollutants within the Basin. First, the Basin experiences persistent temperature inversions formed by warmer air in the upper layer and cooler air in the lower layer. Temperature inversions limit the vertical dispersion of air contaminants, holding them relatively near the ground. These inversions break when the sun heats the lower layer, allowing the two layers to mix and the previously trapped air to leave the Basin. Second, the Basin experiences periods of stagnant wind conditions, which also limit the movement of air pollutants. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. Conversely, on days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest.

3.3.1.2 Air Pollutants

Air pollution emissions within the Basin are generated from several stationary, mobile, and natural sources – from large power plants and manufacturing facilities to residential water heaters and consumer products. Stationary sources can be divided into two major subcategories: (1) point sources; and (2) area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and produce many small emissions in a region. Examples of area sources include residential and commercial water heaters, landscaping (e.g., lawnmowers), agricultural operations, landfills, and consumer products such as barbecue lighter fluid, hair spray, etc. Mobile sources are transportation related emissions, including vehicles, aircraft, trains, and heavy construction equipment. Mobile source emissions account for most of the air pollutant emissions within the Basin.

The Federal and State governments have identified criteria pollutants and a host of air toxics that have substantial adverse effects on human health and the environment in concentrations, and established air quality standards to control those concentrations through the Federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). The criteria pollutants for which Federal and State standards have been promulgated and which are most relevant to air quality planning and regulation in the Basin include ozone (O_3), carbon monoxide (CO), suspended particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). In addition, there are additional toxic air contaminants (TACs) which are of concern in the Basin. These pollutants are described in Table 3.3-1 (also refer to Section 3.3.2, *Regulatory Setting* for Federal and State standards):

3.3.1.3 Odors

Odors are not regulated under the CAA or the CCAA (see Section 3.3.2, *Regulatory Setting*); however, they are considered nuisances under the California Environmental Quality Act (CEQA). Odors can potentially affect human health in several ways. Odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Additionally, VOCs can cause odors that stimulate (e.g., by compromising the immune system). Unpleasant odors can also trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress. Common sources of odors and nuisance emissions include wastewater treatment plants, landfills, composting facilities, petroleum refineries, and chemical manufacturing facilities.

3.3.1.4 Regional Air Quality

Under the CAA, Federal air quality standards, known as the National Ambient Air Quality Standards (NAAQS), were established for the six criteria air pollutants described previously. Similarly, the CCAA establishes State air quality standards, known as the California Ambient Air Quality Standards (CAAQS), which are more stringent than the NAAQS. NAAQS and CAAQS for the six criteria pollutants are shown in Table 3.3-2. Measurements of ambient concentrations of criteria pollutants are used by the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) to assess and classify the air quality of each air basin, county, or in some cases a specific developed area. The classification is determined by comparing monitoring data with the NAAQS and CAAQS. If a criteria pollutant concentration in an area is lower than the air quality standards, the area is classified as being in "attainment." If the pollutant exceeds the air quality standards, the area is in marginal, moderate, serious, severe, or extreme "nonattainment," depending on the magnitude of the exceedance. If there are not enough data available to determine whether the air quality standard is exceeded, the area is designated "unclassified."

As shown in Table 3.3-2, at the Federal level, the Basin is designated as a nonattainment area for O_3, Pb, and $PM_{2.5}$ (USEPA 2020). The Basin is in attainment of Federal standards for SO_2 and NO_2, a subcategory of NO_x (USEPA 2020). At the State level, the Basin, including the Los Angeles County portion of the Basin, is designated as a nonattainment area for O_3, $PM_{2.5}$, and PM_{10} (CARB 2019a, 2019c, 2019b).

Table 3.3-1 Air Pollutants of Concern within the South Coast Air Basin

Air Pollutant	Source	Health/Environmental Effects
Ozone (O_3)	O_3 is a gas that is produced by a photochemical reaction triggered by sunlight between nitrogen oxides (NO_x) and reactive organic gases (ROGs), also referred to as volatile organic compounds (VOCs). High concentrations of ozone are most likely during the summer months.	O_3 has direct health effects on humans, particularly to the lungs and eyes. Potential health effects include shortness of breath, aggravated lung diseases such as asthma, and chronic obstructive pulmonary disease. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas, harming the growth of sensitive vegetation.
Carbon Monoxide (CO)	CO is a colorless, odorless gas produced by the incomplete combustion of fuels and is generated by industrial plants, vehicle exhaust, etc. CO concentrations tend to be the highest near congested transportation corridors and intersections, especially during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels.	At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (i.e., oxygen deficiency) as seen at high altitudes.
Particulate Matter (PM)	"Particulate matter," is a complex mixture of extremely small particles and liquid droplets. The size of particles is measured in micrometers.	A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the U.S. and various areas around the world. People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the U.S. and can change nutrient balance in waters and soils when settled.
Respirable Particulate Matter (PM_{10})	"Inhalable coarse particles," such as those found near roadways and dusty industries, are larger than 2.5 micrometers and smaller than 10 micrometers in diameter.	
Fine Particulate Matter ($PM_{2.5}$)	"Fine particles," such as those found in smoke and haze, are 2.5 micrometers in diameter and smaller and are primarily derived from combustion sources including mobile sources and stationary sources such as internal combustion engines.	
Nitrogen Dioxide (NO_2)	NO_2 is a reddish-brown toxic gas with a characteristic sharp odor and a prominent pollutant resulting from NO_x emitted primarily by motor vehicles, making it a strong indicator of vehicle emissions. NO_2 forms quickly from emissions from cars, trucks and buses, power plants, and off-road equipment.	Long-term exposure to NO_x has the potential for increase in acute respiratory illness in humans. NOx contributes to O_3 formation and can have adverse effects on both terrestrial and aquatic ecosystems.
Sulfur Dioxide (SO_2)	SO_2 belongs to the sulfur oxides family of gases. SO_2 is a colorless, extremely irritating gas or liquid. The largest sources of SO_2 are fossil fuel combustion at power plants and other industrial facilities. Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore, and the burning of high sulfur containing fuels by locomotives, large ships, and non-road equipment.	The major health concerns associated with exposure to high concentrations of SO_2 include respiratory illness and cardiovascular disease. SO_2 is a precursor to sulfates, which are associated with acidification of lakes and streams, accelerated corrosion of buildings and monuments, reduced visibility, and adverse wildlife health effects.
Sulfates (SO_4^{2-})	In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere.	Health effects of sulfate exposure at levels above the standard include a decrease in lung function, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility; due to fact that they are usually acidic, can harm ecosystems and damage materials and property.
Lead (Pb)	Lead occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne Pb in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles; therefore, most Pb emissions are associated with aircraft and some racing and off-road vehicles. Substantial Pb emissions also occur in the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased levels of lead are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Lead released into the air and water sources does not biodegrade and can cause lead poisoning in water organisms and disturb soil functions.

Table 3.3-1 Air Pollutants of Concern within the South Coast Air Basin (Continued)

Air Pollutant	Source	Health/Environmental Effects
Toxic Air Contaminants (TACs)	A TAC is defined by the California Health and Safety Code Section 39655 as an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. TACs are a diverse group of air pollutants including both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, etc.	Potential TACs risks are primarily related to particulate matter from diesel-fueled engines, which at sufficient concentrations and exposure durations can cause human health effects (e.g., cancer, poisoning, etc.). When deposited onto soil or water, TACs can affect ecological systems and indirectly affect human health.

Table 3.3-2 2019 Los Angeles County-South Coast Air Basin Attainment Status for Criteria Pollutants

	Averaging Period	California Standard	Federal Standard	Criteria Pollutant Attainment Level Summary		# of Monitoring Sites
				California	Federal	
Ozone (O_3)	1-hour	0.09 ppm	-	Nonattainment	Extreme Nonattainment	29
	8-hour	0.07 ppm	0.07 ppm	Nonattainment	Extreme Nonattainment	
Respirable Particulate Matter (PM_{10}) (1987)	24-hour	50 µg/m^3	150 µg/m^3	Nonattainment	Attainment as Serious Maintenance Area	25
	Annual	20 µg/m^3	-			
Fine Particulate Matter ($PM_{2.5}$) (2006)	24-hour	-	35 µg/m^3	Nonattainment	Serious Nonattainment	26
	Annual	12 µg/m^3	12 µg/m^3			
Lead (Pb) (2008)	3-month rolling average	-	0.15 µg/m^3	-	Nonattainment	13
	30-day rolling average	1.5 µg/m^3	-	Attainment	-	
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm	Attainment	Attainment as Serious Maintenance Area	25
	8-hour	9 ppm	9 ppm			
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm	0.10 ppm	Attainment	Attainment	27
	Annual	0.03 ppm	0.053 ppm	-	-	
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm	0.075 ppm	Attainment	Attainment	6
	24-hour	0.04 ppm	0.14 ppm			

Notes:
ppm = parts per million; µg/m^3 = microgram per cubic meter
The Federal attainment status was updated by the USEPA in 2020. The most recent State attainment status available from CARB are from 2017.
Sources: USEPA 2020; CARB 2016, 2020b; SCAQMD 2020.

3.3.1.5 Local Air Quality

Ambient Air Quality

To monitor the various concentrations of air pollutants throughout the Basin, the SCAQMD operates 37 permanent monitoring stations and four single-pollutant source impact Pb air monitoring sites in the

Basin and a portion of the Salton Sea Air Basin in Coachella Valley (i.e., Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties). The SCAQMD has divided the region into 38 source receptor areas (SRAs). The City is located within SRA 2, which covers the northwest coastal area of Los Angeles County. Ambient air pollutant concentrations within SRA 2 are monitored at the North Los Angeles County Coastal Air Quality Monitoring Station at West Los Angeles Veterans Affairs Medical Center (Air Quality Station 060370113), which is approximately 3 miles east of the City. Of the criteria pollutants discussed previously, only ambient concentrations of O_3, CO, and NO_2 at the North Los Angeles County Coastal Air Quality Monitoring Station. Because this station does not monitor SO_2, PM_{10}, $PM_{2.5}$, or Pb, data from the Southwest Coastal Los Angeles County Monitoring Station (SRA 3) was used for SO_2, PM_{10}, and Pb, and data from the Central Los Angeles Monitoring Station (SRA 1) was used for $PM_{2.5}$.[2]

Table 3.3-3 combines the NAAQS and CAAQS for relevant air pollutants and provides a summary of ambient air quality measured within SRA 2, SRA 1, and SRA 3 through the period of 2015 to 2019. Since 2015, exceedances have occurred for the State 1-hour standards for O_3, the Federal and State 8-hour O_3 standard, the State 24-hour PM_{10} standard, and the Federal 24-hr $PM_{2.5}$ standard. The Federal and State standards for CO, NO_2, and SO_2, and the Federal standard for PM_{10}, were not exceeded from 2015 through 2019 (SCAQMD 2020).

In addition to criteria pollutants, the SCAQMD periodically assesses levels of TACs in the Basin as part of its general responsibility pursuant to the California Health and Safety Code Section 41700 to control emissions of air contaminants and prevent endangerment to public health. A TAC is defined by California Health and Safety Code Section 39655 as an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. Any substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the CAA (42 U.S. Code [USC] Section 7412[b]) is a TAC.

TACs are a diverse group of air pollutants including both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the criteria pollutants previously discussed in that air quality standards have not been established for TACs, largely because there are hundreds of air toxics and their effects on health tend to be local rather than regional. CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for several compounds that pose high risks and show potential for effective control as a part of the TAC Control Program. Specific measures are identified in the Airborne Toxic Control Measures (ATCM) for several source categories that are codified in the California Code of Regulations (CARB 2020).

[2] A map of the South Coast Air Quality Management District (SCAQMD) Air Monitoring Areas is available here: http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf.

Table 3.3-3 Ambient Air Quality Standards for Criteria Pollutants in the Basin

Pollutant/Standard	Number of Days Threshold Was Exceeded & Maximum Levels During Violations				
	2015	2016	2017	2018	2019
Ozone					
State 1-Hour > 0.09 ppm	2 days	0 days	1 day	0 days	0 days
State 8-Hour > 0.07 ppm	3 days	2 days	3 days	2 days	0 days
Federal 8-Hour > 0.07 ppm	2 days	2 days	3 days	2 days	0 days
Max. 1-Hour Conc. (ppm)	0.102 ppm	0.085 ppm	0.099 ppm	0.094 ppm	0.079 ppm
Max. 8-Hour Conc. (ppm)	0.072 ppm	0.073 ppm	0.077 ppm	0.073 ppm	0.067 ppm
Carbon Monoxide (CO)					
State 8-Hour > 9.0 ppm	0 days	0 days	0 days	0 days	0 days
Federal 8-Hour > 9.0 ppm	0 days	0 days	0 days	0 days	0 days
Max. 1-Hour Conc. (ppm)	1.6 ppm	2.2 ppm	2.0 ppm	1.6 ppm	1.9 ppm
Max. 8-Hour Conc. (ppm)	1.4 ppm	1.1 ppm	1.2 ppm	1.3 ppm	1.2 ppm
Suspended Particulates (PM_{10})					
State 24-Hour > 50 $\mu g/m^3$	0 days	0 days	0 days	0 days	13 days
Federal 24-Hour > 150 $\mu g/m^3$	0 days	0 days	0 days	0 days	0 days
Max. 24-Hour Conc. ($\mu g/m^3$)	42 $\mu g/m^3$	43 $\mu g/m^3$	46 $\mu g/m^3$	45 $\mu g/m^3$	62 $\mu g/m^3$
Annual Average ($\mu g/m^3$)	21.2 $\mu g/m^3$	21.6 $\mu g/m^3$	20.2 $\mu g/m^3$	17.6 $\mu g/m^3$	19.7 $\mu g/m^3$
Fine Particulates ($PM_{2.5}$)					
Federal 24-Hour > 35 $\mu g/m^3$	8 days	2 days	6 days	6 days	1 day
Max. 24-Hour Conc. ($\mu g/m^3$)	56.4 $\mu g/m^3$	44.3 $\mu g/m^3$	54.9 $\mu g/m^3$	61.4 $\mu g/m^3$	43.5 $\mu g/m^3$
Annual Average ($\mu g/m^3$)	12.4 $\mu g/m^3$	11.8 $\mu g/m^3$	12.1 $\mu g/m^3$	12.9 $\mu g/m^3$	10.9 $\mu g/m^3$
Nitrogen Dioxide (NO_2)					
State 1-Hour > 0.18 ppm	0 days	0 days	0 days	0 days	0 days
Federal 1-Hour > 0.10 ppm	0 day	0 day	0 day	0 days	0 days
Max. 1-Hour Conc. (ppm)	0.068 ppm	0.055 ppm	0.056 ppm	0.065 ppm	0.049 ppm
Sulfur Dioxide (SO_2)					
State 1-Hour > 0.25 ppm	0 days	0 days	0 days	0 days	0 days
State 24-Hour > 0.14 ppm	0 days	0 days	0 days	0 days	0 days
State 24-Hour > 0.04 ppm	0 days	0 days	0 days	0 days	0 days
Max. 24-Hour Conc. (ppm)	0.002 ppm	0.002 ppm	0.002 ppm	0.002 ppm	0.001 ppm
Max 1-Hour Conc. (ppm)	0.015 ppm	0.010 ppm	0.010 ppm	0.012 ppm	0.004 ppm

Notes:
(1) Ambient concentrations were measured at the Northwest Coastal Los Angeles County Air Quality Monitoring Station (SRA 2) for O_3, CO, and NO_2, at the Southwest Coastal Los Angeles County Air Quality Monitoring Station (SRA 3) for PM_{10} and SO_2, and at the Central Los Angeles County Air Quality Monitoring Station (SRA 1) for $PM_{2.5}$.
(2) The State standard for the annual average for $PM_{2.5}$ is 12 $\mu g/m^3$ and for PM_{10} is 20 $\mu g/m^3$. The Federal standard for the annual average of $PM_{2.5}$ is 15 $\mu g/m^3$ and there is no Federal standard for annual average for PM_{10}.
(3) ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; N/A = data not available/sufficient to determine the value.
Source: CARB 2016, 2020b, 2020c; SCAQMD 2020.

Toxic Air Contaminants

TACs can cause chronic and acute adverse effects on human health. These health impacts include increased risk of cancer due to continual inhalation of TACs. Most of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (i.e., diesel particulate matter [DPM]). Based on the Multiple Air Toxics Exposure Study (MATES IV) conducted by SCAQMD in July 2012 and July 2013, DPM is attributable to

approximately 68 percent of all airborne carcinogenic risk. According to CARB, DPM exposure may lead to the following adverse health effects: (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease (CARB 2008, 2021). Approximately 22 percent is due to other TACs associated with mobile sources – including benzene, butadiene, and formaldehyde – and approximately 10 percent of the risk is attributed to stationary sources (including industries and other certain businesses, such as dry cleaners and chrome plating operations). The study also found lower ambient concentrations of most of the measured air toxics compared to the levels measured in the previous study conducted during 2004 and 2006.

As part of the MATES IV, the SCAQMD prepared maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). Although it is highly unlikely an individual would remain in an area for such a duration, the assumptions used in the MATES IV study are health protective estimates and use conservative parameters which can result in an overestimation of a cancer risk. The background potential cancer risk per million people using the update the Office of Environmental Health Hazard Assessment (OEHHA) methodology is estimated at 837.62 per million (compared to an overall Basin-wide risk of 1,023 per million) (SCAQMD 2015)

CARB indicates that one of the highest public health priorities is the reduction of DPM generated by vehicles on California's freeways and highways, as it is one of the primary TACs with the most direct and common implications for respiratory health problems. Per CARB criteria, heavily traveled roadways where annual average daily trips (AADT) exceed 100,000 can be sources of particulate emissions, particularly from diesel-fueled engines such as those associated with heavy haul trucks and other heavy construction equipment. Other potential sources of TACs within the City are associated with specific types of facilities, such as gas stations, dry cleaners, and auto body repair shops, and are the focus of local control efforts.

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) makes specific recommendations with respect to considering existing sensitive uses when siting new TAC-emitting facilities or with respect to TAC-emitting sources when siting sensitive receptors. CARB recommends the following buffer distances be observed when locating these types of TAC emitters or sensitive land uses:

- Freeways or major roadways – 500 feet
- Dry cleaners – 500 feet
- Auto body repair services – 500 feet
- Gasoline dispensing stations with an annual throughput of less than 3.6 million gallons – 50 feet; gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet
- Gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet

Interstate (I-) 10 (Santa Monica Freeway), State Route (SR-) 1 (Pacific Coast Highway), and SR-2 (Santa Monica Boulevard) run through the City and carry relatively high volumes of vehicle traffic. I-10 is the only freeway within the City that generates high traffic levels that exceed 100,000 AADT. As of 2019, AADT along I-10 are approximately 194,000 AADT at Centinela Avenue/Pico Boulevard at the City's eastern

boundary decreasing to 150,000 AADT at the junction with SR-1, and falling off substantial down to less than 40,000 AADT to the west along the coastal portions of this highway D [Caltrans] 2019). SR-1 does not carry more than 100,000 AADT; however, vehicle traffic reach as high as 79,000 AADT at the California Incline. I-405 runs through the vicinity of the City and generates high traffic levels that exceed 100,000 AADT, with approximately 331,000 AADT at the I-10 junction. However, I-405 is located approximately 1 mile east of the City's eastern boundary (Caltrans 2019). Other roadways within or in the immediate vicinity of the City boundaries do not carry sufficient volumes of traffic to be considered as potential TAC generators.

Carbon Monoxide Hot Spots

Passenger vehicles and trucks are the primary source of pollutants in the vicinity of the City. Traffic-congested streets and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed Federal and/or State standards for CO are termed "CO hotspots." CO hotspots occur largely from vehicle emissions from idling engines. The Federal 1-hour air quality standard for CO is 35 parts per million (ppm) and the State 1-hour standard is 20 ppm. The 8-hour Federal and State air quality standard for CO is 9.0 ppm. Section 9.l4 of the SCAQMD's CEQA Air Quality Handbook (1993) identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots.

In the past, the SCAQMD recommended that a CO hotspot analysis should be conducted for intersections where the proposed project would have a significant traffic-related congestion impact causing the Level of Service (LOS) to change to E or F or when a project increases the volume-to-capacity ratio (V/C) increases by 2 percent and the LOS is D or worse. It should be noted that these recommendations were formulated several years ago when the Basin was a nonattainment area for Federal and State CO standards. As shown in Table 3.3-3, CO levels in the City are now substantially below the Federal and State standards. Maximum CO levels in recent years are 2.2 ppm (maximum 1-hour concentration) and 1.4 ppm (maximum 8-hour concentration) compared to the CAAQS of 20 ppm (maximum 1-hour concentration) and 9.0 ppm (maximum 8-hour concentration). As such, the Basin is currently designated as an attainment area for both the NAAQS and CAAQS (refer to Table 3.3-2).

3.3.1.6 Sensitive Receptors

Sensitive receptors are populations that are more susceptible to the effects of air pollution than the population at large. According to CARB, sensitive receptors include children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. While the air quality standards are designed to protect public health, and are generally regarded as conservative for healthy adults, there is greater concern to protect adults who are ill or have long-term respiratory problems, and children whose lungs are not fully developed and are more likely engage in cardiovascular activity in outdoor settings, such as school yards and playgrounds. SCAQMD's CEQA Air Quality Handbook identifies the following as locations that may contain a high concentration of sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, and parks with active recreational uses, childcare centers, and athletic facilities.

The City, which is a built-out urban community, contains a number of these various land use types. The majority (greater than 65 percent) of the City is zoned for residential uses, but also supports school and hospital uses. The remaining 35 percent is zoned for commercial and industrial uses, which are located primarily along major corridors (such as Olympic Boulevard, Pico Boulevard, Ocean Park Boulevard, Lincoln Boulevard, Wilshire Boulevard, and Santa Monica Boulevard). See Section 3.6, *Land Use and Planning* for a more detailed discussion of land uses within the City.

3.3.1.7 Land Use Planning and Air Quality

Land use patterns and the density of development affect the amount of air pollutants that are generated by communities. Land uses that are segregated throughout a community increase the number and length of motor vehicle trips and associated air pollutant emissions since there are relatively few opportunities to walk, ride bicycles, and use public transportation between such uses as homes and work/shopping. Compact communities often mix residential uses with, or very near, commercial, business, and employment uses, thereby reducing people's dependence on vehicle use or reducing the length of necessary vehicle trips. Smaller, higher density uses also produce less air emissions on a per unit basis from the use of natural gas for space and water heating. The City is a built-out urbanized, mixed-use community, which was developed by the mid-1960s. Since that time new land uses have resulted principally from the redevelopment of older, underutilized properties. In recent years, the City has also experienced significant residential development in its commercial zones.

3.3.2 Regulatory Setting

Air quality within the Basin is addressed through the efforts of various Federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality within the Basin are discussed below.

3.3.2.1 Federal Policies and Regulations

Clean Air Act

The CAA was passed in 1963 and amended in 1990 and was the first comprehensive Federal law to regulate air emissions from stationary and mobile sources. Among other things, the law authorizes the USEPA to establish and enforce NAAQS for pollutants considered harmful to publish health and the environment, including the six criteria pollutants: CO, Pb, NO_2, O_3, $PM_{2.5}$ and PM_{10}, and SO_2. The NAAQS help to ensure basic health and environmental protection from air pollution. The NAAQS currently in effect for each pollutant are shown in Table 3.3-2. The CAA also gives USEPA the authority to limit emissions of air pollutants coming from sources like chemical plants, utilities, and steel mills.

U.S. Environmental Protection Agency

Pursuant to the CAA, the USEPA must designate areas as meeting (i.e., attainment) or not meeting (i.e., nonattainment) the Federal standards (NAAQS) for the six criteria pollutants. As part of its enforcement

responsibilities, the USEPA requires each State with Federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means the attain the Federal standards. The SIP must integrate Federal, State, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. These plans are developed by State and local air quality management agencies (e.g., CARB, SCAQMD, etc.) and submitted to the USEPA for approval.

Additionally, the USEPA regulates emission sources that are under the exclusive authority of the Federal government (e.g., aircraft, ships, and certain trains, etc.), maintains jurisdiction over emissions sources outside State waters (i.e., outer continental shelf), and establishes various emissions standards for vehicles sold in states other than California.

The USEPA has adopted multiple tiers of emission standards to reduce emissions from non-road diesel engines by integrating engine and fuel controls as a system to gain the greatest emission reductions. The first Federal standards (Tier 1) for new non-road (or off-road) diesel engines were adopted in 1994 for engines over 50 horsepower, to be phased-in from 1996 to 2000. On August 27, 1998, the USEPA introduced Tier 1 standards for equipment under 37 kilowatts (50 horsepower) and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. Tier 1 through 3 standards were met through advanced engine design, with no or only limited use of exhaust gas after-treatment (oxidation catalysts). Tier 3 standards for nitrogen oxides and hydrocarbons are similar in stringency to the 2004 standards for highway engines; however, Tier 3 standards for particulate matter were never adopted. On May 11, 2004, the USEPA signed the final rule introducing Tier 4 emission standards, which were phased-in between 2008 and 2015. Tier 4 standards require that emissions of particulate matter and NO_x be further reduced by about 90 percent. Such emission reductions are achieved using control technologies, including advanced exhaust gas after-treatment, similar to those required by the 2007 to 2010 standards for highway engines.

3.3.2.2 State Policies and Regulations

California Clean Air Act

The California Clean Air Act was enacted in 1988 (California Health & Safety Code Section 39000 et seq.). California also has ambient air quality standards (i.e., CAAQS), which predate USEPA's formation in 1970 and the original NAAQS. In 1959, California enacted legislation requiring the California Department of Public Health (CDPH) to establish air quality standards and necessary controls for motor vehicle emissions. The CCAA requires all areas of the State to achieve and maintain the CAAQS by the earliest practicable date. California law continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS. The CAAQS includes more stringent standards than the NAAQS.

California Air Resources Board

CARB – a division of the California Environmental Protection Agency (CalEPA) – is responsible for the coordination and administration of both Federal and State air pollution control programs within California.

In this capacity, CARB conducts research, sets CAAQS, compiles emission inventories, develops recommended air pollution control measures, provides oversight of local air quality programs, and prepares the SIP for submission to the USEPA. CARB also establishes emissions standards for vehicles, consumer products, and various types of commercial equipment sold in California. It also sets fuel component specifications to further reduce vehicle emissions.

In April 2005, CARB issued a guidance document on air quality and land use, Air Quality and Land Use Handbook: A Community Health Perspective, which serves as a general guide for considering impacts to sensitive receptors from facilities that emit TACs. The recommendations provided in the handbook are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TACs. The handbook recommends siting criteria for "sensitive land uses" near specific sources of air pollution. Specifically, CARB siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of freeways and high-traffic roads (i.e., roads within urbanized areas carrying more than 100,000 vehicles per day); (2) avoid siting sensitive receptors within 1,000 feet of a distribution center; and (3) avoid siting sensitive receptors within 300 feet of a dry cleaning facility that uses perchloroethylene. According to CARB, the additional non-cancerous health risk attributable to proximity to high-volume roadways was seen within 1,000 feet and was strongest within 300 feet. Particulate pollution levels are reduced by approximately 70 percent at a distance of 500 feet from freeways. However, these recommendations are advisory, and should not be interpreted as defined "buffer zones." Rather, land use agencies are given discretion to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

California Air Toxics "Hot Spots" Information and Assessment Act

The Air Toxic "Hot Spots" Information and Assessment Act identifies TAC hot spots where emissions from specific stationary source facilities may expose individuals to an elevated risk of adverse health effects. It requires that a business or other establishment identified as a significant source of toxic emissions provide the affected population with information about health risks posed by the emissions. Health Risk Assessments (HRAs) would identify the hazard or hazardous material, assess the amount, duration, and pattern of exposure to the hazard or hazardous material, assess the amount it would take to cause negative health effects, and characterize the risk to general population and sensitive receptors from the hazard or hazardous material. The OEHHA provides A Guide to Health Risk Assessment and The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (2015) to aid California projects' compliance with the Air Toxic "Hot Spots" Information and Assessment Act.

CARB Off-Road Mobile Sources Emission Reduction Programs

The CCAA mandates that CARB achieve the maximum degree of emission reductions from all off-road mobile sources to attain the CAAQS. Off-road mobile sources include heavy construction equipment. Tier 1, Tier 2, and Tier 3 standards for large compression-ignition engines used in off-road mobile sources went into effect in California for most engine classes in 1996, 2001, and 2006, respectively. Tier 4 or Tier 4 Interim (4i) standards apply to all off-road diesel engines model year 2012 or newer. In

addition, equipment can be retrofitted to achieve lower emissions using retrofit technologies verified by CARB. The engine standards and ongoing rulemaking jointly address the products of diesel combustion, including emissions and toxic diesel particulate matter. The California Emission Standards for Off-Road Compression-Ignition Engines are as specified in California Code of Regulations, Title 13, Division 3, Chapter 9, Article 4, Section 2423.

3.3.2.3 Regional Policies and Regulations

South Coast Air Quality Management District

The SCAQMD is the regional agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and cooperates actively with all Federal and State government agencies. SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and effectuates ongoing regional air quality improvements through a combination educational and penalty programs, including fines or sanctions when necessary. SCAQMD is directly responsible for reducing emissions from point sources, area sources, and mobile sources.

Air Quality Management Plan

The SCAQMD maintains and periodically updates an Air Quality Management Plan (AQMP) for the Basin. The most recent of these is the 2016 AQMP, which was adopted by the Governing Board of SCAQMD on March 3, 2017. The 2016 AQMP was prepared to comply with the CAA and CCAA, to accommodate growth, to reduce air pollutant levels in the Basin, to meet Federal and State air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy.

The 2016 AQMP identifies the control measures that will be implemented over a 20-year horizon to reduce major sources of pollutants. The 2016 AQMP includes attainment demonstrations for the 2008 8-hour O_3 standard, the 2012 annual $PM_{2.5}$ standard, the 2006 24-hour $PM_{2.5}$ standard, the 1997 8-hour O_3 standard and the 1979 1-hour O_3 standard within the planning horizon (SCAQMD 2017).

The future air quality levels projected in the 2016 AQMP are based on several assumptions. For example, the SCAQMD assumes that general new development within the Basin will occur in accordance with population growth and transportation projections identified by SCAG in the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which was adopted on April 7, 2016. The 2016 AQMP also assumes that general development projects will include strategies (i.e., mitigation measures) to reduce emissions generated during construction and operation in accordance with SCAQMD and local jurisdiction regulations which are designed to address air quality impacts and pollution control measures. The 2016 AQMP identified the control measures that would be implemented to reduce major sources of pollutants. These planning efforts have substantially decreased the population's exposure to unhealthful levels of pollutants, even while substantial population growth has occurred within the Basin.

On October 1, 2015, the USEPA strengthened the NAAQS for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion (ppb). The Basin is classified as an "extreme" nonattainment area and the Coachella Valley is classified as a "severe-15" nonattainment area for the 2015 Ozone NAAQS. As such, the SCAQMD is currently preparing the 2022 AQMP to address the requirements for meeting this standard. The 2022 AQMP will represent a comprehensive analysis of emissions, meteorology, regional air quality modeling, regional growth projections, and the impact of existing and proposed control measures.

SCAQMD Rule Book

The SCAQMD has adopted the SCAQMD Rule Book (originally adopted in 1976), which establishes a set of rules and regulations that address air pollution sources. Some SCAQMD rules are administrative in nature, but many relate to a specific type of operation or source of pollution. Because knowledge about air pollution is constantly growing, these rules and regulations are in a dynamic state, constantly changing. Each regulation is broken down into several rules, each of which deals with a specific topic. SCAQMD rules that may apply to the Project include:

- Rule 402 *Nuisance* – This rule prohibits discharge from any source whatsoever such quantities of 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* – The purpose of this rule is to reduce the amount of particulate matter (e.g., PM_{10}) entrained in the ambient air as a result of anthropogenic (i.e., man-made) fugitive dust sources, such as grading and excavation, by requiring actions to prevent, reduce or mitigate fugitive dust emissions.
- Rule 445 *Wood Burning Devices* – This rule prohibits any person from permanently installing a wood-burning device (e.g., fire place or wood burning heater) into any new development.
- Rule 1113 *Architectural Coatings* – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories. For example, exterior paints and finishes are limited to a VOC emissions rate of 50 grams per liter (g/L).
- Rule 1146.2 *Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters* – This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO_x emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.
- Rule 1186 *PM_{10} Emissions from Paved and Unpaved Roads* – This rule applies to owners and owners of paved and unpaved roads. The rule is intended to reduce PM_{10} emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads.
- Rule 1401 *New Source Review of Toxic Air Contaminants* – This rule specifies limits for maximum individual cancer risk (MICR) cancer burden, and non-cancer acute and chronic hazard index (HI) from new sources which emit TACs.

CEQA Air Quality Handbook (1993)

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with plans and new development projects within its jurisdiction. In 1993, the SCAQMD prepared the CEQA Air Quality Handbook (1993) to assist local government agencies and consultants in preparing environmental compliance documents pursuant to CEQA. The SCAQMD is in the process of developing its Air Quality Analysis Guidance Handbook (Guidance Handbook) to replace the CEQA Air Quality Handbook. The CEQA Air Quality Handbook and the forthcoming Guidance Handbook describe the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental compliance documents pursuant to CEQA. The Guidance Handbook provides the recommended thresholds of significance to determine if a project will have a significant adverse environmental impact. Other important subjects covered in the CEQA Air Quality Handbook and the forthcoming Guidance Handbook include methodologies for estimating project emissions and mitigation measures that can be implemented to avoid or reduce air quality impacts. Although the Governing Board of the SCAQMD has adopted the CEQA Air Quality Handbook, and is in the process of developing the Guidance Handbook, the SCAQMD does not, nor intends to, supersede a local jurisdiction's CEQA procedures.

While the Guidance Handbook is being developed, supplemental information has been adopted by the SCAQMD. These include revisions to the air quality significance thresholds and a procedure referred to as "localized significance thresholds," which has been added as a significance threshold under the Final Localized Significance Threshold (LST) Methodology (2003). LSTs represent the maximum emissions from a development project that would not cause or contribute to an exceedance of the most stringent applicable Federal or State air quality standard, based on the ambient concentrations of that pollutant for each source receptor area. The Final LST Methodology provides thresholds of significance for NO_x, CO, PM_{10}, and $PM_{2.5}$ to evaluate localized air quality impacts at sensitive receptors near a development project. The Final LST Methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. Further, LSTs are applicable at the project-specific level and are not applicable to regional projects such as General Plans or other long-range planning documents.

In addition, the SCAQMD has recommended that lead agencies not use the screening tables in the Chapter 6 of the CEQA Air Quality Handbook because the tables were derived using an obsolete version of CARB's mobile source emission factor inventory and are also based on outdated trip generation rates from a prior edition of the Institute of Transportation Engineer's Trip Generation Handbook. The SCAQMD has also recommended that lead agencies not use the on-road mobile source emission factors in Table A9-5-J1 through A9-5-L as they are obsolete, and instead recommends using on-road mobile source emission factors approved by CARB. The outdated and obsolete information were not used in this analysis. The applicable portions of the CEQA Air Quality Handbook, the Guidance Handbook, and other revised methodologies were used in preparing the air quality analysis in this section.

Southern California Association of Governments

SCAG, founded in 1965, is a Joint Powers Authority (JPA) under State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under Federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. SCAG is the MPO for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties, representing 191 cities and more than 19 million residents. SCAG undertakes a variety of regional planning and policy initiatives to encourage a more sustainable Southern California. Although SCAG is not an air quality management agency, it addresses regional issues relating to transportation, the economy, community development, and the environment resources and constraints. As part of regional planning, SCAG is responsible for developing transportation, land use, and energy conservation measures that affect air quality. The City is one of many jurisdictions comprising the SCAG.

SCAG has adopted strategies and plans to implement Senate Bill (SB) 375, California's Sustainable Communities and Climate Protection Act. On September 3, 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS (Connect SoCal). Connect SoCal is supported by a combination of transportation and land use strategies that help the region achieve State GHG emission reduction goals and Federal CAA requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and utilize resources more efficiently. See Section 3.7, *Greenhouse Gas Emissions and Climate Change* and Section 3.12, *Transportation* for a discussion of Connect SoCal and GHG emissions and regional transportation.

3.3.2.4 Local Policies and Regulations

The City has the authority to reduce air pollution through land use planning, policy, and regulation consistent with Federal, State, and regional standards. Specifically, the City is responsible for the assessment and mitigation of air emissions generated by development permitted within the City. In accordance with the requirements of CEQA, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces mitigation measure implementation. The City has also adopted standard construction mitigation measure requirements for all development and monitors compliance with these standards. Further, the City is responsible for the implementation of traffic reduction and Transportation Demand Management (TDM) measures set forth in the AQMP (SCAQMD 2017), such as advanced ramp metering, and expansion and integration of the traffic signal synchronization network to alleviate timing bottlenecks.

Santa Monica General Plan Land Use and Circulation Element

The Santa Monica General Plan Land Use and Circulation Element (LUCE) provides a set of goals, policies, and standards to guide land use and transportation decisions in the City through 2030. The LUCE includes the following applicable policies for air quality management and emissions:

Goal LU2: *Integrate Land Use and Transportation for GHG Reduction.* Integrate land use and transportation, carefully focusing new development on transit-rich boulevards and in the districts, to create sustainable active pedestrian-friendly centers that decrease reliance on the automobile, increase walking, bicycling and transit use and improving community quality of life.

Policy LU2.5	*Vehicle Trip Reduction.* Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalk, bicycle and roadway improvements, expand transit service, manage parking, and strengthen TDM programs that support accessibility by transit, bicycle and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjust bus and shuttle services to ensure success of the transit system.

Goal S5: Improve the environmental performance of buildings.

Policy S5.8	Encourage installation of electrical outlets in loading zones and on the exterior of new buildings to reduce emissions from gas-powered landscape maintenance and operating refrigeration for delivery trucks.

Goal T25: Design parking to meet applicable urban design goals and minimize negative impacts on pedestrians, bicyclists, and transit users.

Policy T25.7	Encourage installation of electrical outlets in loading zones, including signage, to reduce vehicle idling associated with operating refrigeration for delivery trucks.

Santa Monica General Plan Conservation Element

The Santa Monica General Plan Conservation Element sets forth goals, objectives, policies, and programs to ensure proper management and conservation of the City's natural resources, including air resources, including the following:

Goal: An atmosphere free of pollution.

Objectives:	1. Eliminate all detrimental sources of air pollution. 2. Encourage lowest feasible emission from stationary and moving sources. 3. Cooperate with and support Federal, State, and regional efforts to reduce smog and pollution. 4. Reduce the total volume of vehicular traffic.
Policy 28	The City shall seek to obtain energy, where feasible, from non-polluting sources and suppliers.
Policy 29	The City shall plan for a more effective public transit system as an alternative means of transportation.
Policy 30	The City shall encourage the use of vapor recovery technology using successful programs of other cities as guidelines.
Program 24	The City shall actively urge legal controls for cleaner engines through state and federal agencies.
Program 25	The City shall increase planting of vegetation known to be effective in pollutant absorption.

Sustainable City Plan

The City's Sustainable City Plan provides goals and strategies for the City to follow to enhance the City's sustainability, inclusive of reducing GHG emissions. It includes nine goal areas, four of which address the amount of air quality emissions associated with City development: Resource Conservation, Environmental and Public Health, Transportation, and Open Space/Land Use. Two of these, Transportation and Open Space/Land Use, address the overall arrangement of development in the City. These topics are addressed further in the discussion of LUCE policies below and in Section 3.7, *Greenhouse Gas Emissions and Climate Change*. Development in the City in accordance with LUCE policies creates a land use pattern that reduces vehicle miles traveled (VMT), thus indirectly reducing energy consumption and the generation of greenhouse gases and criteria pollutant emissions. The Sustainable City Plan goals pertaining to Resource Conservation and Environment and Public Health more directly address air quality emissions. The Resource Conservation goals directly addresses such topics as use of renewable energy and reductions in air, soil, and water pollutants. The Resource Conservation Goals also set GHG emissions reduction targets for the City to address climate change impacts.

Other City of Santa Monica Programs

Local jurisdictions, such as the City, have the shared responsibility to help develop and implement some of the control measures of the AQMP. Transportation-related strategies for congestion management, low emission vehicle infrastructure, and transit accessibility and non-transportation-related strategies for energy conservation can be encouraged by policies of local governments. The City has several existing programs that it uses to improve health and sustainability of the community through improved regional air quality and reduced GHG emissions (see Section 3.7, *Greenhouse Gas Emissions and Climate Change*). These programs/regulations include:

- **Urban Forest Master Plan (UFMP) –** The revised 2017 UFMP includes a 5-year Street Tree Planting Priority Plan to increase and expand the urban forest canopy. The planting of trees would increase carbon sequestration and improve air quality. Trees remove gaseous pollutants and particulate matter from the air by absorbing them with normal air components through their leaf surface.
- **Electric Vehicle Action Plan (EVAP) –** The EVAP was adopted in 2017 and seeks to expand the public charging infrastructure in the City to 300 chargers by 2020. By providing additional infrastructure, the EVAP aims to increase the percentage of electric vehicles on the road from 2 percent to 15 percent by 2025. The plan forecasts that replacing 13 percent (approximately 9,000) of the fossil-fuel powered vehicles with electric vehicles (EVs) will save an estimated 26,000 metric tons of CO_2.
- **Clean Big Blue Bus Fleet –** Big Blue Bus **operates** a fleet of nearly 200 vehicles transporting more than 61,000 passengers daily (see Section 3.12, *Transportation*). The entire fleet operates on alternative fuels, including renewable natural gas (RNG) a form of liquefied and compressed natural gas (LNG/CNG), which helps to cut emissions by up to 90 percent.
- **Clean City Fleet (excluding Big Blue Bus and Fire Department Vehicles) –** The City is a member of "Clean Cities," a program sponsored by the U.S. Department of Energy which promotes the use of alternative fuel vehicles. The City's Fleet Management Division is one of the

most innovative and progressive programs in the nation. Approximately, 60 percent of the City-wide vehicle fleet and over 70 percent of non-emergency vehicles are fueled alternatively.

- **Renewable Energy Supplier –** As described in Section 3.5, *Energy*, the City purchases its electricity from Clean Power Alliance (CPA), a JPA made up of public agencies across Los Angeles and Ventura counties working together to bring clean, renewable power to Southern California. Since February 2019 for residential customers (and in May 2019 for commercial customers), CPA purchases clean power for electricity and Southern California Edison (SoCal Edison) delivers it. With the CPA, electricity customers in the City are automatically defaulted to have 100 percent renewable energy serving their electricity needs. Alternatively, customers can opt to have their electricity power consisting of a traditional power mix.
- **Ban on Gasoline Powered Leaf Blowers** – Santa Monica Municipal Code (SMMC) Section 4.08.270 bans the operation of gasoline powered leaf blowers within the City limits.

3.3.3 Impact Assessment Methodology

3.3.3.1 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts on air quality. Specifically, the CEQA Guidelines state that a proposed project may have a significant adverse air quality impact if:

a) The project would conflict with or obstruct implementation of the applicable air quality plan;
b) The project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal and State ambient air quality standard;
c) The project would expose sensitive receptors to substantial pollutant concentrations; and/or
d) The project would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

In determining whether an effect is significant, CEQA Guidelines Section 15064.7 states that a Lead Agency may consider thresholds of significance previously adopted or recommended by other public agencies, provided that the decision to use such thresholds is supported by substantial evidence. Further, with regard to air quality, CEQA Guidelines Section 15064.7 and Appendix G read:

> *"Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make … determinations."*

In a CEQA guidance document released by SCAQMD in February 2018, the SCAQMD further states that:

> *"'Air districts' thresholds provide a clear quantitative benchmark to determine the significance of project and project alternative air quality impacts. They also help identify the magnitude of the impacts, facilitate the identification of feasible mitigation measures, and evaluate the level of impacts before and after mitigation measures. Since one of the basic purposes of CEQA is to inform government decision makers and the public about the potential significant environmental effects of any proposed activities (CEQA Guidelines Section 15002[a][1]), use of air district thresholds is a best practice for CEQA impact determinations."*

The SCAQMD, the air pollution control agency in the Basin, has developed specific regional and local significance thresholds for air quality, and recommends that projects in the Basin be evaluated in terms of these thresholds. The City uses these SCAQMD thresholds to assess whether the potential effects of air pollutant emissions are significant. The following thresholds are currently recommended by the SCAQMD and have been used to determine the significance of air quality impacts associated with the proposed Housing Element Update.

Conflict with Applicable Air Quality Plan

The threshold used for determining whether the proposed Housing Element Update would conflict with or obstruct an applicable air quality plan is qualitative and is based on whether the project is consistent with the assumed growth, applicable control measures and air emission reduction policies in the AQMP. Therefore, the proposed Housing Element Update would have a significant impact if it would:

- Conflict with or obstruct implementation of the AQMP or any other adopted regional and local plans adopted for reducing air quality impacts.

Cumulatively Considerable Net Increase in Criteria Pollutants

Construction Emissions Thresholds

The SCAQMD's thresholds recommend that projects with construction-related emissions that exceed any of the following regional (i.e., mass daily) emissions should be considered potentially significant (see Table 3.3-4).

Table 3.3-4 SCAQMD Construction Significance Thresholds

Air Pollutant	Construction Threshold
NO_x	100 lbs/day
VOC	75 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SO_x	150 lbs/day
CO	550 lbs/day
Pb	3 lbs/day

Operational Emissions Thresholds

The SCAQMD's thresholds recommend that projects with operational emissions that exceed any of the following regional (i.e., mass daily) emissions should be considered potentially significant (see Table 3.3-5).

Table 3.3-5 SCAQMD Operation Significance Thresholds

Air Pollutant	Operation Threshold
NO_x	55 lbs/day
VOC	55 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SO_x	150 lbs/day
CO	550 lbs/day
Pb	3 lbs/day

However, it should be noted that SCAQMD significance thresholds for criteria pollutants do not distinguish between project-level EIRs (e.g., for an individual development) and program-level EIRs (e.g., for a long-range plan). The proposed Housing Element Update is a land use plan that addresses the development of residential uses throughout the City on a programmatic level. Therefore, the application of the SCAQMD thresholds for individual project-level impacts to a City-wide land use plan within a program-level EIR is highly conservative.

Localized Significance Thresholds

LSTs were developed for construction phases in response to the SCAQMD Governing Board's Environmental Justice Enhancement Initiative (I-4). LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, project size, and distance to the sensitive receptor, etc. LSTs apply to emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$ emissions during construction and operation at the discretion of the Lead Agency.

The Final LST Methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds. If receptors are within 25 meters (or 82 feet) of the site, the methodology document says that the threshold for the 25-meter distance should be used. If an individual project occurring under the proposed Housing Element Update would result in exceedance of the screening criteria LSTs for the applicable pollutants, this would constitute a significant impact. However, as discussed further below, the precise location, size, and mix of uses within future individual developments is currently unknown, so the impact analysis under this threshold is highly programmatic in nature. Screening-level analysis of LSTs is only recommended for construction activities at project sites that are 5 acres or less. The SCAQMD recommends that operational activities and construction for any project over 5 acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. A small number of individual construction projects allowed under the proposed Housing Element Update may cover areas greater than 5 acres. In the event that future residential developments planned for under the proposed Housing Element Update cover areas greater than 5 acres, dispersion modeling would be required for CO, NO_x, PM_{10}, and $PM_{2.5}$ emissions during construction and operational activities. NO_x to NO_2 conversion would be accounted for during the modeling to determine the maximum NO_2 concentrations at the nearest sensitive receptors. Dispersion modeling can be conducted by public

agencies to determine whether or not an individual project may generate significant adverse localized air quality impacts.

Impacts to Sensitive Receptors

Toxic Air Contaminants

CARB indicates that one of the highest public health priorities is the reduction of DPM generated by vehicles on California's freeways and highways, as it is one of the primary TACs with the most direct and common implications for respiratory health problems. Per CARB criteria, heavily traveled roadways where AADT exceed 100,000 vehicles can be sources of particulate emissions from diesel-fueled engines. Other potential sources of TACs within the City are associated with specific types of facilities, such as gas stations, dry cleaners, and auto body repair shops, and are the focus of local control efforts. CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) makes specific recommendations with respect to considering existing sensitive uses when siting new TAC-emitting facilities or with respect to TAC-emitting sources when siting sensitive receptors. CARB recommends the following buffer distances be observed when locating these types of TAC emitters or sensitive land uses:

- Freeways or major roadways – 500 feet
- Dry cleaners – 500 feet
- Auto body repair services – 500 feet
- Gasoline dispensing stations with an annual throughput of less than 3.6 million gallons – 50 feet; gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet
- Gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet

As described in Section 3.3.1, *Environmental Setting*, vehicles traveling along I-10 are a source of concern for emitting DPM within the City, as it generates approximately 194,000 AADT at Centinela Avenue/Pico Boulevard decreasing to 150,000 AADT at the SR-1 junction (Caltrans 2019).

The SCAQMD recommends that site-specific HRAs be performed to document potential cancer and non-cancer health risk, either when siting sensitive land uses within the above buffer zone or when a project could generate TACs that may impact surrounding sensitive receptors (e.g., residences). Based on the methodology established by the OEHHA, the SCAQMD established the following thresholding for maximum individual cancer risk (MICR)[3] and non-cancer acute and chronic hazard index (HI)[4] to assess a project's construction-related health impacts on sensitive receptors:

- MICR – cancer risk of less than 10 in one million ($<10 \times 10^{-6}$); and
- HI – highest chronic health index of less than 1

[3] MICR is the maximum estimated risk of contracting cancer when continually exposed for a lifetime (70 years) to a given concentration of a substance. This does not necessarily mean anyone will contract cancer as a result of the project.
[4] The potential non-cancer health impacts resulting from a 1-hour exposure to toxic substances. An acute (i.e., generally developing suddenly and lasting a short time) hazard index is calculated by dividing the 1-hour concentration of a toxic pollutant by the acute reference exposure level for that pollutant. A chronic (i.e., conditions develop slowly and may worsen over an extended period of time) hazard index is calculated by dividing the annual average concentration of a toxic pollutant by the chronic reference exposure level for that pollutant.

Operational emissions from diesel-fueled trucks and other vehicles along I-10 and SR-1 could cause TAC exposure for surrounding sensitive receptors, as further described below in *Methodology*; therefore, an HRA has been prepared to assess health risks associated with the potential future dwelling units that could be located within this area under the proposed Housing Element Update in the vicinity of I-10 and SR-1.

CO Hotspots

With respect to the formation of CO hotspots, a project's localized air quality impact is considered significant if CO emissions create a hotspot where either the California 1-hour standard of 20 ppm or the Federal and State 8-hour standard of 9.0 ppm is exceeded. In general, this only occurs at severely congested intersections (i.e., LOS E or worse).

The SCAQMD conducted CO modeling for the attainment demonstration in the Federal Attainment Plan for Carbon Monoxide (CO Plan for the 2003 AQMP). The SCAQMD modeled the four most congested intersections in the Basin, including: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day (SCAQMD 2003a). This intersection is located near the on- and off-ramps to I-405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (maximum 1-hour concentration) and 3.2 (maximum 8-hour concentration) at Wilshire Boulevard and Veteran Avenue, exclusive of ambient background CO concentrations, which is well below the Federal and State CO standards. This indicates that intersections operating with less than 100,000 vehicles per day would not create a CO hot spot.

Based on the Transportation Study prepared by Fehr & Peers for the proposed Housing Element Update, none of the intersections in the 2019 baseline exceeded or even approached 80,000 vehicle trips per day (see Section 3.12, *Transportation* and Appendix G).

Other Emissions

With respect to other emissions such as those leading to odors, the threshold is qualitative. An impact associated with the proposed Project would be considered significant:

- If it created other adverse emissions affecting a substantial number of people.

3.3.3.2 Methodology

Conflict with Applicable Air Quality Plan

Federal and State ambient air quality standards are designed to prevent the harmful effects of air pollutant emissions. These standards are continually updated based on evolving research, including research which relates air quality impacts with health effects. At the regional level, plans such as the

AQMP and SCAG's 2020-2045 RTP/SCS (Connect SoCal) work to ensure that the Basin reaches and maintains attainment with these Federal and State standards. Locally, EIRs evaluate a plan or project's consistency with applicable policies identified in the AQMP and Connect SoCal intended to protect human health.

SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Basin is in nonattainment of the NAAQS (e.g., O_3 and $PM_{2.5}$). The assessment of consistency with the AQMP focuses on the potential for future housing development facilitated by the proposed Housing Element Update (e.g., construction and operation of individual residential development projects) to create or contribute to air quality violations and possibly delay air quality standards attainment. The 2003 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving attainment with the NAAQS and CAAQS. These strategies are developed, in part, based on regional growth projections prepared by SCAG. Further, the SCAQMD significance thresholds are health-protective and also serve to achieve attainment with the NAAQS and CAAQS within the Basin. Thus, projects, uses, and activities that are consistent with the assumed growth projections and control strategies assumed in the development of the AQMP would not conflict with or obstruct implementation of the AQMP, even if they exceed the SCAQMD's numeric thresholds for criteria pollutants.

Cumulatively Considerable Net Increase in Criteria Pollutants

CEQA Guidelines Section 15130 requires that an EIR discuss cumulative impacts of a project when the project's incremental effects are cumulatively considerable. A "cumulative impact" is an impact that is created as a result of the combination of the proposed project together with other projects causing related impacts. "Cumulatively considerable" means that the incremental effects of the individual project are significant when viewed in connection with the effects of past projects, current projects, and probable future projects, which in this case includes both growth within the City and the Greater Los Angeles Area.

The SCAQMD guidance on addressing cumulative impacts for air quality is as follows: *"As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR…Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant"* (SCAQMD 2003b). This policy is appropriate when addressing air quality impacts because project-specific criteria pollutant emissions are already evaluated in the SCAQMD's AQMP on a cumulative basis in the context of emissions occurring Basin-wide.

This analysis focuses on the air quality impacts that could occur from air pollutant emissions associated with the implementation of the proposed Housing Element Update and other regional growth and development, throughout the Greater Los Angeles Area, including impacts from regional traffic growth projections. Consistent with SCAQMD guidance, this analysis evaluates the contribution of the proposed Housing Element Update to cumulative air quality impacts by comparing the estimated construction and operational emissions against the SCAQMD's thresholds of significance defined above, as described further below. Construction and operational emissions that would be generated under the implementation

(i.e., buildout) of the proposed Housing Element Update were estimated using California Emissions Estimator Model (CalEEMod) Version 2016.3.2 developed for SCAQMD. Calculation details are provided in the CalEEMod worksheet results in Appendix B.

Construction Air Quality Impacts

Construction emissions were estimated using CalEEMod, which assesses emissions from each phase of construction, including demolition, excavation and site preparation, building construction, and architectural coating. CalEEMod was used to quantify emissions from construction equipment exhaust, construction vehicles, fugitive dust, and architectural coatings. Heavy construction equipment could include diesel-powered graders, excavators, dump trucks, cranes, and bulldozers. As a result, construction activities would temporarily increase diesel emissions from equipment and vehicle exhaust and would generate particulate matter in the form of fugitive dust.

Depending on the timing of entitlements and permit processing, construction activities for individual residential development projects in the City could begin shortly after adoption of the proposed Housing Element Update through the planning horizon of 2030, and could occur up to 6 days a week as permitted by the SMMC. Construction emissions would occur during each phase of construction, including demolition, grading/excavation, and building construction. CalEEMod calculates the peak day construction emissions by calculating emissions from overlapping construction activities. Peak daily construction emissions represent the potential worst-case maximum daily emissions of a construction day, and do not represent the emissions that would typically occur during every day of construction associated with the individual development projects under the proposed Housing Element Update. The estimated maximum daily construction emissions are then compared to the SCAQMD daily significance thresholds to identify any exceedances of thresholds, which could result in a significant impact. However, the specific construction details (e.g., scheduling/phasing, equipment, building construction size, grading) for future projects in the City is unknown at this time and would vary annually. Therefore, it is difficult to quantify the construction-related emissions that may potentially occur. For example, construction activities for some individual residential development projects may involve excavation of soil that would generate emissions while others may not. As CalEEMod only generates emissions for a single development project, this analysis utilized a range of different scenarios in order to estimate the range of construction emissions that could occur from future development and combined these scenarios in order to estimate the total emissions.

Construction timing for such projects is also unknown, and the potential exists for multiple construction projects to overlap or occur concurrently, increasing construction-related emissions during such episodes. Since CalEEMod incorporates the reductions in vehicle and construction equipment emissions over time, this analysis also assumes a worst case scenario of construction activities in 2022. (Construction emissions in later years would most likely produce lower emissions levels in CalEEMod.)

Emissions from construction are dependent on the type of development and the size of the individual residential developments. Many small developments, for example, could generate more total emissions than a single development of the same total number of dwelling units due to the need for more grading and the lack of economies of scale. Given the variety of potential projects and build out scenarios that

may occur for the implementation of the proposed Housing Element Update, maximum daily and annual construction impacts are presented as a range of potential emissions. In order to analyze the range of developments that might occur in the future and the corresponding range of criteria pollutant emissions that may be generated during construction, the Air Quality and GHG Study included a review of historical development and size of development projects in the City over the last 10 years (see Table 3.3-6 and Appendix B).

Table 3.3-6 City of Santa Monica Historical Development Data

Average number of dwelling units per residential development	25 dwelling units
Maximum number of dwelling units for a single residential development	397 dwelling units
Average size of dwelling units (sf)	732 sf
Average number of parking spaces per dwelling unit	1.37 spaces per dwelling unit
Average ground floor commercial space for a residential development project (sf per dwelling unit)	0.318 sf of commercial area per dwelling unit

Notes: sf = square foot

Table 3.3-7 Future (2030) Land Use and Population Assumptions

Category	Adjusted Baseline (2020)	Future (2030) No Project	Future (2030) With Project	Percent Change from Future (2030) No Project
Population	92,357	101,583	116,245	14%
Employment	90,992	95,409	92,760	-3%
Total Dwelling Units	52,589	57,552	64,883	13%
Total Commercial Space[1]	31,457,321	32,880,837	31,874,889	-3%

Notes: [1]Total commercial space includes office, retail, restaurant, hotel, hospital, etc.

To assess the range of potential construction emissions, the following three potential buildout scenarios were developed for the analysis based on the historical development data in Table 3.3-6 and the buildout assumptions for the proposed Housing Element Update shown in Table 3.3-7 (refer to Section 2.0, *Project Description*):

- Average Development Size Scenario;
- Maximum Development Size Scenario; and
- Continuous Development Scenario.

Average Development Size Scenario and Maximum Development Size Scenario: The average development size scenario assumes the average sized development as per the historical sized developments over the last 10 years that have occurred in the City (refer to Table 3.3-6). The maximum development size scenario assumes the largest development (by number of dwelling units) that has occurred in the City over the last 10 years. The analysis assumes that 14 average sized developments projects (i.e., 25 dwelling units per development) along with 3 maximum development sized projects (i.e., 397 dwelling units per development) are developed per year through the planning horizon of 2030 for a total of approximately 11,000 dwelling units. This mix (referred to herein as the individual project mix) includes some low-rise condominiums and some high-rise apartments, each requiring different construction efforts.

Continuous Development Scenario: The continuous development scenario assumes the development of 1,221 dwelling units and approximately 40,525 sf of potential ground-floor commercial space per year through 2030.

This approach allows for an estimate of the range of construction emissions that could occur under the proposed Housing Element Update (see Table 3.3-8 for a summary of the development scenarios used for the construction analysis). Note that CalEEMod addresses the total number of dwelling units built as well as the rate of demolition anticipated under the proposed Housing Element Update; therefore, the scenarios utilize the net increase in residential and commercial development. The analysis assumes that these construction emissions occur in the 2022. As previously described, CalEEMod incorporates reductions in construction equipment emissions over time, the assumption of the 2022 would produce the most conservative of construction emission estimates.

Table 3.3-8 Air Quality Analysis Build Out Scenarios for Construction

Development Component	Construction Emissions		
	Average Development	**Maximum Development**	**Continuous Development**
Number of Residential Dwelling Units	25 dwelling units	397 dwelling units	1,391 dwelling units
Residential Type	Condo – low rise	Apartment – high rise	Apartment – high rise
Residential Area (sf)	18,300 sf	289,140 sf	1,018,212 sf
Commercial Type	General Office	General Office	General Office
Commercial Area (sf)	5,819 sf	91,947 sf	323,887 sf
Number of Parking Spaces	35 spaces	542 spaces	1,906 spaces
Demolished Area (sf)	4,646 sf	73,413 sf	285,587 sf
Landscape, Hardscapes, Construction Requirements	CalEEMod defaults based on sf	CalEEMod defaults based on sf	CalEEMod defaults based on sf
Construction Schedule	CalEEMod Default	CalEEMod Default	CalEEMod Default Adjusted for 8-year Schedule
Number of Developments per Year	14	3	1

Notes: Assumes historical average of 732 sf per dwelling unit, commercial space at 0.318 sf per dwelling unit, and 1.37 parking spaces per dwelling unit (refer to Table 3.3-6).
The Demolished Area includes both dwelling units and commercial area demolished for implementation of the proposed Housing Element Update.

The precise location, size, and mix of uses within future individual developments is currently unknown, so the impact analysis under this threshold is highly programmatic in nature. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, prevailing weather conditions. While more intensive construction-related emissions may occur on some days (e.g., during extended periods of overlapping excavation or heavy grading), other days may have relatively low emissions (e.g., during periods of interior finishing work). Compliance with several existing State and local regulations, such as SCAQMD rules would substantially limit the generation of construction emissions related to individual development projects under the proposed Housing Element Update, including those from construction vehicles, excavation, building construction, and architectural coatings. A summary of these regulations and their objectives is provided below.

- As required by the USEPA beginning in 2000, and CARB beginning in 2006, and as specified in the California Code of Regulations Title 13, Division 3, Chapter 9, Article 4, Section 2423(b)(1), all off-road diesel engines are required to meet at a minimum the Tier 3 Emission Standards for Off-

Road Compression-Ignition Engines (with proper diesel particulate controls). Construction activities within the City under the proposed Housing Element Update could further mitigate DPM emissions with the use of Tier 4 construction equipment only, which can reduce DPM emissions from combustion by 85 to 95 percent. For example, Tier 4 engines with horsepower ratings between 175 and 750 generate 90 percent less exhaust emissions, including particulate matter, than Tier 2 or 3 engines. Tier 4 vehicles operate with significantly less emissions than Tier 1, Tier 2, or Tier 3 as regulated by the USEPA.

- During periods of construction, haul trucks, concrete trucks, and other heavy duty trucks would be prohibited from idling pursuant to California Idling Regulations as defined by CARB, which prohibits heavy-duty diesel vehicles with a Gross Vehicle Weight Rating of 10,000 pounds or more from idling for longer than 5 minutes, which would result in minor, intermittent sources of air emissions.
- SCAQMD Rule 403 requires management of PM_{10} generated during construction. All heavy haul trucks would be required to be covered to contain dirt, sand, soil, or other loose materials during transport. Wheel washers would be installed where vehicles enter and exit the construction site onto paved roads and/or wash-off trucks would be required for any equipment leaving the site each trip to prevent tracking of construction dust/dirt off-site. Individual residential development projects planned for under the proposed Housing Element Update would be required to control dust during construction, including application of water two times daily, or by application of non-toxic soil stabilizers to all unpaved parking or staging areas or unpaved road surfaces, as well as application of non-toxic soil stabilizers to all inactive construction areas.
- Individual residential development projects planned for under the proposed Housing Element would also be required to comply with SCAQMD Rule 1186, which requires certified street sweepers or roadway washing trucks if visible soil materials are carried onto adjacent streets. Compliance with these requirements would ensure that fugitive dust and NO_x emissions would be minimized during the demolition, excavation, paving, and building construction phases of the individual development projects.
- Most of the VOC emissions associated with the proposed Housing Element Update would be generated from the application of architecture coatings, including paints, stains, and other finishes that off-gas VOCs during the drying/curing process. However, in compliance with the SCAQMD Rule 1113, individual development projects under the proposed Housing Element Update are required to use “No VOC” or “Low VOC” finishes, with VOC emission ratings of up to 50 g/L. Use of No VOC or Low VOC finishes reduces VOC emissions during the architectural finishing phase of construction.

These CalEEMod construction emissions estimates assume that the construction procedures associated with the proposed Housing Element Update would comply with SCAQMD and State rules (e.g., SCAQMD Rule 403 and SCAQMD Rule 1113) with no further mitigation.

Operational Air Quality Impacts

Operational emissions are calculated separately from the construction emissions in CalEEMod because the model incorporates varying vehicle emissions and appliance emission levels over time, incorporating the operating year into the analysis, as well as requiring that construction is completed before operations (or occupancy) occurs. The analysis of operational air quality impacts is based on air quality modeling results for the potential development of up to 10,994 net new dwelling units and 405,256 sf of net new ground-floor commercial floor area under the proposed Housing Element Update by 2030. It should be noted that the air quality analysis was conducted for the net new floor areas for the proposed Housing Element Update, but also accounts for the residential and non-residential developments approved since

the issuance of the Notice of Preparation (NOP) in 2020. However, this analysis may overestimate increases in emissions as the proposed Housing Element Update has a reasonable potential to increase the proportion of those workers that current both reside and work in the City from approximately 9.4 percent of the total workforce to a higher, but unknown level, potentially decreasing mobile emissions related to commute trips. Operational emissions associated with the proposed Housing Element Update are estimated using CalEEMod for area, energy, and mobile source emissions. Operational air quality impacts are assessed by subtracting the baseline emissions from the total emissions under the proposed Housing Element Update and comparing the resulting increment (i.e., net increase or decrease in emissions) to the SCAQMD's numerical thresholds. Under CEQA, the baseline environmental setting for an EIR is established at or around the time that the NOP for the EIR is published.

Area source emissions would be generated by consumer products, architectural coating, and landscape maintenance equipment. Energy source emissions are generated by emissions resulting from electricity and natural gas consumption for space and water heating. Mobile emissions that would result from vehicle trips within the City were calculated based on the Transportation Study (see Appendix G) and other default traffic assumptions embedded in CalEEMod (see Appendix B).

As the exact configuration of new residential development planned for under the proposed Housing Element Update is not known, and a number of developments would be constructed and occupied in parallel at different times, a range of developments are addressed based on historical developments in the City. The "operating year" is conservatively assumed to be 2030 when all residential developments are completed.

Table 3.3-9 Air Quality Analysis Operational Scenarios

Development Component	Operational Emissions	
	Future (2030) No Project	Future (2030) With Project
Number of Residential Dwelling Units	57,552 dwelling units	64,883 dwelling units
Residential Type	20% Condo/townhouse 80% Apartment High Rise	20% Condo/townhouse 80% Apartment High Rise
Residential Area (sf)	3,632,916 sf	8,999,208 sf
Commercial Type	General Office	General Office
Commercial Area (sf)	1,423,516 sf	417,568 sf
Number of Parking Spaces	6,799 spaces	16,843 spaces
Demolished Area (sf)	922,399 sf	2,284,903 sf
Residential Vehicle Trip Generation rates per Service Population	35.4	31.9
Landscaping, hardscapes, construction requirements	CalEEMod defaults based on sf	CalEEMod defaults based on sf
Energy use and water	CalEEMod defaults based on sf and/or City Green Building Code	CalEEMod defaults based on sf and/or City Green Building Code

Notes: Assumes historical average of 732 sf per dwelling unit, commercial at 0.318 sf per dwelling unit, and 1.37 parking spaces per dwelling unit. The Demolished Area includes both dwelling units and commercial area demolished for implementation of the proposed Housing Element Update.

To determine if an air quality impact would occur, the incremental (i.e., net new) daily emissions from operation of the individual residential development projects planned for the proposed Housing Element Update were compared with SCAQMD's regional (i.e., mass daily) thresholds. The CalEEMod default assumptions for calculating area and energy source emissions and do not reflect any sustainability

features (e.g., water efficiency and other sustainable building standards), and therefore, represent worst-case emissions to occur over the life of the proposed Housing Element Update.

Localized Significance Thresholds for Construction

Screening-level analysis of LSTs is only recommended for construction activities at project sites that are 5 acres or less. The SCAQMD recommends that operational activities and construction for any project over 5 acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. A small number of individual construction projects allowed under the proposed Housing Element Update may cover areas greater than 5 acres. In the event that future residential developments planned for under the proposed Housing Element Update involve the disturbance of more than 5 acres, dispersion modeling would be required for CO, NO_x, PM_{10}, and $PM_{2.5}$ emissions resulting from construction and operational activities. NO_x to NO_2 conversion would be accounted for during the modeling to determine the maximum NO_2 concentrations at the nearest sensitive receptors. Dispersion modeling can be conducted by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. The Final LST Methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. Further, LSTs are applicable at the project-specific level and are not applicable to regional projects such as General Plans or other long-range planning documents, particularly as the precise location, size, and the mix of uses associated with future residential development projects are not currently known.

Health Effects from Criteria Pollutant Emissions

In December 2018, the California Supreme Court held that the EIR for the Friant Ranch Project – a 942-acre master-planned, mixed-use development with over 2,500 senior dwelling units, 250,000 square feet (sf) of commercial space, and extensive open space/recreational amenities on former agricultural land in north central Fresno County – was deficient in its informational discussion of air quality impacts as they relate to adverse human health effects.

As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (April 6, 2015, Attachment A), SCAQMD concluded that currently available regional modeling tools are not well suited to analyze relatively small changes in criteria pollutant concentrations associated with individual projects. Regional modeling tools are generally designed to be used at the Federal, State, regional, and/or local levels and are not well equipped to analyze whether and to what extent the criteria pollutant emissions of an individual project directly impact human health in a particular area. Even where a HRA can be prepared, however, the resulting maximum health risk value is only a calculation of risk – it does not necessarily mean anyone will contract cancer or non-cancer health risks as a result of the project.

For local plans or projects that exceed any identified SCAQMD air quality threshold, EIRs typically identify and disclose generalized health effects of certain air pollutants but are currently unable to establish a reliable connection between any local plan or an individual project and a particular health effect. In addition, no relevant agency has approved a quantitative method to reliably and meaningfully do so. A number of factors contribute to this uncertainty, including the regional scope of air quality monitoring and planning, technological limitations for modeling at a local plan- or project-level, and the intrinsically

complex nature of the relationship between air pollutants and health effects in conjunction with local environmental variables. Therefore, at the time, it is infeasible for this EIR to directly link a plan's or project's significant air quality impacts with a specific health effect, particularly as the precise location, size, and the mix of uses associated with future residential development projects are not currently known.

Toxic Air Contaminants

The greatest potential for TAC impacts associated with the proposed Housing Element Update would be related to diesel-fueled trucks and other vehicles along I-10. CARB recommended in 2005 to avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. State law restricts the siting of new schools within 500 feet of a freeway, urban roadways with 100,000 vehicles per day, or rural roadways with 50,000 vehicles with some exceptions. However, no such requirements apply to the siting of residences, day care centers, playgrounds, or medical facilities (CARB 2005; California Education Code Section 17213 and California Public Resources Code Section 21151.8). Given that implementation (i.e., buildout) of the Housing Element Update would potentially place new residential development within 500 feet of a freeway, a HRA for TAC emissions along I-10 and SR-1 was prepared by MRS Environmental for the proposed Housing Element Update (see Appendix C).

The HRA evaluates upper-level estimates of potential cancer health effects at different points from I-10 and SR-1 through the City. As this analysis was targeted on cancer risk for residences, the worker risks or acute or chronic risks were not evaluated. The HRA addresses the full range of vehicles that utilize I-10 and SR-1 through the City, and addresses time-of-day vehicle flows, fleet mix, truck percentages and diesel and gasoline vehicles. The area included in the analysis includes the length of I-10 and SR-1 that runs through the City plus a 1-mile buffer to the east and a 1-mile buffer to the west. The receptors analyze include residences up to 1,000 meters (approximately 3,281 feet) from the highways, within the boundaries of the City.

The HRA was conducted by: (1) calculating TAC emissions; (2) determining maximum TAC concentrations at sensitive receptors via air dispersion modeling; (3) quantifying health risks associated with those maximum concentrations; and (4) comparing those health risks to SCAQMD's thresholds of significance. The HRA was conducted in accordance with the SCAQMD dispersion modeling guidance (SCAQMD 2020) and the OEHHA Guidance (OEHHA 2015). Emissions are based on the USEPA MOVES program as well as EMFAC2017 emissions levels for reactive organic carbons and DPM. The USEPA's AERMOD dispersion model was used for dispersion modeling. CARB's Hotspots Analysis Reporting Program (HARP) Risk Assessment Standalone Tool was used to calculate a dose-response cancer risk assessment.

The HRA utilized information compiled on I-10 and SR-1 operations to estimate emissions levels along these highways, including AADT, time-of-day vehicle traffic levels, truck traffic volumes, fleet mix, vehicle speed, and fleet gas/diesel fuel use mix. Annual average traffic volumes are compiled by Caltrans annually for all highways in California. AADT compiled by Caltrans for 2019 were used, ranging from 62,000 AADT on SR-1 at the I-10 junction to 251,000 AADT at the I-405 junction in the City of Los Angeles. Vehicle traffic at different times of the day is utilized in the models in order to ensure that the

meteorological analysis coordinates with the different activity levels. Nighttime periods, for example, generally have more stable air conditions and allow for pollutants to travel greater distances at levels that can cause health effects. However, nighttime traffic levels are generally lower than daytime levels. This effect is accounted for in the HROFDY flag in the HARP and AERMOD modeling. The Caltrans Performance Measurement System (PeMS) was used to gather information on the traffic levels by time of day. The traffic data in PeMS is collected in real-time from over 39,000 individual sensors spanning the freeway system across all major metropolitan areas of the State of California. Caltrans also compiles data specifically on truck volumes along highways. Caltrans truck data indicates that trucks comprise 3.4 percent of vehicle traffic along I-10 and SR-1 in Santa Monica for the year 2018 (the most recent data available). This ratio was used to supplement the generalized fleet mix value used from CalEEMod as discussed further below.

Different vehicles have different emissions rates depending on the vehicle type. The EMFAC model estimates emissions rates for the aggregate of vehicles on roadways for a range of vehicle types, including automobiles, heavy trucks, etc. Caltrans data records total vehicle traffic flow in addition to truck flow. However, additional resolution is needed in order to accurately estimate the emissions. For this study, the CalEEMod fleet mix of vehicles is used, which is generalized for southern Los Angeles County, adjusted to account for truck vehicle levels as measured by the Caltrans PeMS database for the highways.

Emissions are a function of vehicle speeds, as well as vehicle type and fuel type. The Caltrans PeMS system allows for an assessment of vehicle speeds. Speeds along I-10 average 62.7 mph. This value was used to estimate emissions using the EMFAC model. The EMFAC model also allows for estimating VMT in the southern area of Los Angeles County by vehicle type and fuel in order to estimate the fraction of VMT by vehicle and fuel type.

The USEPA's AERMOD dispersion model is the accepted method to address the movement of air pollutants and considers various parameters, including configuration of buildings, terrain elevation, meteorological conditions (i.e., localized wind patterns), and the location of sensitive receptors in relation to the site. Buildings affect dispersion by producing downdrafts in wind fields and increasing the ground-level concentrations of pollutants for sources that are close to buildings. As there are numerous buildings located alongside the highways, and the AERMOD model does not incorporate building effects into line source ground level impact assessments, buildings were not included in the HRA analysis.

HARP is the accepted model used to calculate cancer risk and non-cancerous chronic health impacts. HARP's Risk Assessment Standalone Tool module was used in this analysis to evaluate cancer risk associated with residential receptors. HARP's default residential exposure duration for cancer risk assumes that residents live in their homes and are exposed to pollutant emissions for 30 years. The analysis modeled operation of the highways in the year 2030, which would be the year that the development is anticipated to be completed. As cancer risk is an average exposure over 30 years, this a reasonable estimate of the cancer risks that a new development would be exposed to.

Health risk calculations were performed using the OEHHA methodologies and exposure parameters, and the corresponding SCAQMD guidance documents. In March 2015, OEHHA updated the methods for

estimating cancer risks to use higher estimates of cancer potency during early life exposures and to use different assumptions for breathing rates and length of residential exposures. The Guide to Health Risk Assessment and The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (2015), incorporates advances in risk assessment with consideration of infants and children using Age Sensitivity Factors (OEHHA 2015). These updated exposure factors can result in numeric life-time health risk values to be approximately two to three times higher than those calculated under the previous OEHHA guidelines.

Diesel exhaust is the dominant type of TAC emission associated with operational trips related to development under the proposed Housing Element Update, and diesel emissions would be emitted in closest proximity to receptors. The primary TAC of concern associated with combustion of diesel fuel is DPM. OEHHA guidance indicates that PM_{10} be used as a surrogate for the TAC DPM when evaluating health risks associated with DPM (OEHHA 2015).

Cancer risks are defined as the number of cancer cases that are projected to be generated per million people exposed. The SCAQMD has establish thresholds for Assembly Bill (AB) 2588 analysis of 10 cancer cases per million (1.0×10^{-5}).

Detailed methodologies and assumptions utilized in the HRA are described further in Appendix C.

CO Hotspots

Localized air quality impacts and respiratory health risks could occur as a result of CO hotspots. Areas with high vehicle volumes, such as congested intersections (i.e., LOS E or worse), have the potential to create high concentrations of CO, known as CO hot spots. This analysis considers the generation of approximately 59,000 vehicle trips per day and approximately 5,900 maximum peak hour trips associated with the proposed Housing Element Update (see Section 3.12, *Transportation* and Appendix G) and the associated contribution to the most congested intersections within the City. The increase in daily and maximum peak hour trips is compared with the findings of the CO modeling for the attainment demonstration in the Federal Attainment Plan for Carbon Monoxide (CO Plan for the 2003 AQMP). As previously described, these modeling results indicate that intersections operating with less than 100,000 vehicles per day would not create a CO hot spot.

3.3.4 Project Impacts and Mitigation Measures

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

Impact Description (AQ-1)

AQ-1 **The proposed 6th Cycle 2021-2029 Housing Element Update would require each individual residential development to be consistent with existing City policies and regulations aimed at reducing criteria pollutant emissions, which are consistent with the pollution control strategies in the South Coast Air Quality Management**

District's (SCAQMD's) 2016 Air Quality Management Plan (AQMP). Implementation of the proposed Housing Element Update would also be consistent with growth projections used by the Southern California Association of Governments (SCAG) in the forthcoming 2022 AQMP. Therefore, implementation of the proposed Housing Element Update would not conflict with or obstruct implementation of the applicable air quality plan, and impacts be *less than significant*.

As described further in Impact AQ-2 and AQ-3, construction and operational emissions associated with residential development planned for under the proposed Housing Element Update are anticipated to exceed SCAQMD's project-level significance thresholds. However, the threshold used for determining whether the proposed Housing Element Update would conflict with or obstruct an applicable air quality plan is qualitative and is based on whether it would be consistent with the assumed growth, applicable control measures and air emission reduction policies as set forth in the AQMP (refer to Section 3.3.3, *Impact Assessment Methodology*).

The 2016 AQMP was prepared to bring the Basin into compliance with the national 24-hour $PM_{2.5}$ air quality standard and to reduce NO_x emissions sufficiently to meet the upcoming national 8-hour O_3 standards by 2023. In analyzing future pollutant emissions in the Basin, the 2016 AQMP relies upon growth projections in SCAG's 2016-2040 RTP/SCS. SCAG's growth projections in turn, normally rely upon cities' adopted general plan growth projections. As the regional agency responsible for such actions, SCAG compiles growth estimates received from individual jurisdictions and generates projections for the region. At such time as the SCAG projections are released, regulatory documents such as a general plan or specific plan are considered to be in compliance with SCAG projections, as the information contained in such documents has at that point been incorporated into the SCAG projections. SCAG updates the regional forecasts and projections approximately every five years. As time passes, the SCAG updates continue but communities are not always undertaking the process of updating the information that they provide to SCAG at the same time that SCAG is updating their projections. As such, while a general plan may be considered consistent with SCAG projections at one point, if SCAG updates their projections on a 4-year cycle and a jurisdiction updates their general plan on a longer cycle, the general plan will most likely not be consistent with SCAG projections at the time of general plan approval.

As discussed further in Section 3.6, *Land Use and Planning*, SCAG adopted the 2020-2045 RTP/SCS (Connect SoCal) in September 2020. Connect SoCal includes a regional growth forecast that was developed by working with local jurisdictions using the most recent land use plans, policies, and assumptions at the time. When SCAG adopted Connect SoCal, SCAG recognized that cities and counties will foreseeably update their housing elements and amend their zoning designations, as necessary, to accommodate the 6th Cycle RHNA. For many cities and counties, SCAG acknowledged that the required 6th Cycle RHNA and housing element updates may need to accommodate more housing units than reflected in the Connect SoCal's household and population growth projections for the jurisdictions.

Given the discrepancy in the AQMP and RTP/SCS growth forecasts (the latter of which forms the basis of the AQMP projections), inconsistency in population growth projections alone would not make the proposed Housing Element Update inconsistent with the AQMP. Rather, the determination of whether the

proposed Housing Element Update would conflict with the AQMP is based on its consistency with AQMP policies and standards, instead of than growth assumptions, which do not account for growth required by the State as set forth in the City's 6th Cycle RHNA. The proposed Housing Element Update would not conflict with implementation of the 2016 AQMP or the forthcoming 2022 AQMP as it would help achieve regional sustainability goals and pollutant emission reduction targets of the 2016 AQMP. As discussed further in Section 3.6, *Land Use and Planning* and Section 3.12, *Transportation* the proposed Housing Element Update would guide residential development throughout the City in a way that would support the Metro E (Expo) Light Rail Transit (LRT) line as well as other forms of public transit, bicycle facilities, and pedestrian facilities thereby reducing mobile source air pollutant and GHG emissions from vehicles. Additionally, the proposed Housing Element Update would implement and/or support many of the transportation control measures that are utilized and assumed in the AQMP's air quality forecasts (SCAQMD 2017). These measures include locating jobs and housing near transit, sustainable development, and other TDM measures (consistent with the City's TDM Ordinance, SMMC, Article 9, Chapter 9.53; see Section 3.12, *Transportation*). As described in Impact T-1, the implementation of these measures would ensure that the proposed Housing Element Update would meet the goal of no net new P.M. peak hour trips in the LUCE.

Based on the above, as the proposed Housing Element Update would be consistent with the standards and policies set forth in the AQMP. The proposed Housing Element Update would not conflict with or obstruct implementation of the AQMP, and this impact would be *less than significant*.

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Impact Description (AQ-*2*)

AQ-2 **Construction of new residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in construction emissions that could potentially exceed the air quality thresholds recommended by the South Coast Air Quality Management District (SCAQMD). Emissions for individual residential developments would be reduced through mitigation measures; however, when taken together, emissions associated residential development planned for under the proposed Housing Element Update through the planning horizon of 2030 would likely substantialy exceed thresholds. Therefore, this impact is conservatively concluded to be *significant and unavoidable*.**

Residential development planned for under the proposed Housing Element Update would require construction activities that could generate short-term construction-related air pollutant emissions. Construction activities would depend on the timing of individual projects and would vary day by day, monthly, and annually through the planning horizon of 2030. Construction activities would generally involve four stages: (1) demolition; (2) grading and excavation; (3) construction; and (4) final coating along with landscaping improvements and paving activities. Short-term increases in criteria pollutant

emissions would result from all phases of construction activities, particularly due to the disturbance of soil and operation of heavy equipment such as trucks, graders, scrapers, compressors and generators. Emissions from construction activities would include PM_{10} and exhaust emissions (NO_x, SO_x, CO, VOC, $PM_{2.5}$, and DPM, an identified TAC).

A significant impact may occur if residential development planned for under the proposed Housing Element Update would exceed regional (i.e., mass daily) thresholds for a Federal or State nonattainment pollutant. Because the Basin is currently in nonattainment for O_3 (for which VOC and NO_x are precursors) and $PM_{2.5}$ and PM_{10} under Federal and State standards, residential development planned for under the proposed Housing Element Update, when taken together, could exceed regional (i.e., mass daily) thresholds for these pollutants.

Total construction emissions associated with the proposed Housing Element Update were estimated using CalEEMod for each stage of construction, including demolition, grading/excavation, construction, paving, and architectural coating, for new residential development projects. The maximum daily emission levels for each criteria pollutant are compared to SCAQMD thresholds in Table 3.3-10 and Table 3.3-11. These CalEEMod construction emissions estimates assume that the construction procedures associated with the proposed Housing Element Update would comply with SCAQMD and State rules (e.g., SCAQMD Rule 403 and SCAQMD Rule 1113) with no further mitigation.

As described in Section 3.3.3, *Impact Assessment and Methodology*, the average development size scenario (i.e., 25 dwelling units per single development) and maximum development size scenario (i.e., 397 dwelling units per single development) were combined to analyze a mix of some low-rise condominiums and some high-rise apartments, each requiring different construction efforts. The individual project mix included a total of 14 average development size projects and 3 maximum development size projects to present maximum emissions from the development of those two scenarios at the same time for a given year. The continuous development scenario assumes the development of 1,221 dwelling units and approximately 40,525 sf of potential ground-floor commercial space per year through 2030.

The analysis of the individual project mix and continuous development scenario provides for a range of emissions depending on the type of individual residential development projects proposed within the City under the proposed Housing Element Update. However, the precise location, size, and mix of uses within future individual developments is currently unknown, so the impact analysis under this threshold is highly programmatic in nature. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, prevailing weather conditions. The construction of many smaller, individual residential development projects under the individual project mix scenario produces higher values of NO_x emissions as more construction equipment would be needed. The individual project mix scenario also generates higher values of PM_{10} and $PM_{2.5}$ emissions given that a greater area of soil disturbance would occur at several different sites; however, PM emissions under the individual project mix scenario would still be well below the SCAQMD thresholds of significance. Alternatively, construction of the single, larger continuous project scenario would conduct most of the architectural coating at the same time, thereby producing a higher peak day of VOC emissions, but a similar annual VOC emissions total. These results conservatively indicate that buildout of the proposed Housing Element Update under the individual project mix scenario would result in the greatest net

increase of CO, VOC, and NO_X as evaluated under the individual project mix. Therefore, air quality impacts related to construction emissions would be *potentially significant*.

Table 3.3-10 Individual Project Mix Construction Emissions

	CO	VOC	NO_X	SO_2	PM_{10}	$PM_{2.5}$
Emissions (lbs/day)	328.04	643.26	99.62	0.70	68.51	35.87
SCAQMD Thresholds of Significance (lbs/day)	100	550	75	150	150	55
Above Thresholds?	Yes	Yes	Yes	No	No	No

Table 3.3-11 Continuous Project Construction Emissions

	CO	VOC	NO_X	SO_2	PM_{10}	$PM_{2.5}$
Emissions (lbs/day)	79.50	1,028.45	38.48	0.28	35.85	5.50
SCAQMD Thresholds of Significance (lbs/day)	100	550	75	150	150	55
Above Thresholds?	No	Yes	No	No	No	No

Compliance with existing City requirements and SCAQMD rules, including the limiting of grading activities during high winds and application of soil stabilizers to prevent fugitive dust, would reduce air pollutant emissions from construction activities in the City. Even with application of these requirements and SCAQMD rules, there is still the potential for construction emissions from individual construction projects to exceed SCAQMD thresholds. Many of the individual projects would be small and likely not generate construction emissions that would exceed the SCAQMD's recommended thresholds of significance. A limited number of other projects could potentially generate construction emissions that exceed these thresholds. Therefore, MM AQ-1 is proposed to further reduce construction-related air emissions in the City. However, the potential reductions resulting from implementation of this mitigation measure cannot be quantified because information on construction scheduling and project size for all individual residential development projects likely to occur in the City are not available. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be reduced to below SCAQMD significance thresholds. For these reasons, construction air quality impacts are conservatively concluded to be *significant and unavoidable*.

Mitigation Measures

MM AQ-1 ***Criteria Pollutant Emissions Reduction Measures.*** *New residential development planned for under the proposed 6th Cycle 2021-2020 Housing Element Update shall be required to comply with the following conditions during construction:*

1. *Diesel-powered equipment shall be retrofitted with after-treatment products (e.g., engine catalysts and diesel particulate filters). The engine catalysts shall achieve a minimum reduction of 15 percent for nitrogen oxides (NO_x). The diesel particulate filters shall meet U.S. Environmental Protection Agency (USEPA) Tier 3 standards, consistent with California Air Resources Board (CARB) approved Truck and Bus Regulation requirements in affect at the time the contract is approved. Contract specifications shall be included in*

construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

2. *All heavy-duty diesel-powered equipment operating and refueling shall use low-NOx diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of CARB diesel) in the South Coast Air Basin. (This does not apply to diesel-powered trucks traveling to and from the construction site.) Contract specifications shall be included in project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.*
3. *All heavy-duty diesel-powered equipment operations shall utilize a phased-in emission control technology in advance of a regulatory requirement such that 30 percent of the fleet shall meet USEPA Tier 4 engine standards for particulate matter control (or equivalent) starting in 2021 and for the duration of construction, consistent with CARB approved Truck and Bus Regulation requirements in affect at the time the contract is approved.*
4. *Construction equipment engines shall be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specifications shall be included in project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.*
5. *Construction operations shall rely on the electricity infrastructure surrounding the construction site if available rather than electrical generators powered by internal combustion engines. Contract specifications shall be included in project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.*
6. *Fugitive dust shall implement dust control measures during each phase of project development to reduce the amount of particulate matter entrained in the ambient air. These measures shall include, but not be limited to, the following:*
    a) *Application of soil stabilizers to inactive construction areas;*
    b) *Quick replacement of ground cover in disturbed areas;*
    c) *Watering of exposed surfaces three times daily;*
    d) *Watering of all unpaved haul roads three times daily;*
    e) *Covering all stock piles with tarp;*
    f) *Reduction of vehicle speed on unpaved roads;*
    g) *Post signs onsite limiting traffic to 15 miles per hour (mph) or less;*
    h) *Sweep streets adjacent to the project site at the end of the day if visible soil material is carried over to adjacent roads;*
    i) *Cover or have water applied to the exposed surface of all trucks hauling dirt, sand, soil, or other loose materials prior to leaving the site to prevent dust from impacting the surrounding areas; and*
    j) *Install wheel washers where vehicles enter and exit unpaved roads onto paved roads to wash off trucks and any equipment leaving the site each trip.*

7. *Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes. Diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds shall be turned off when not in use for more than 5 minutes.*
8. *Architectural coating (paint and primer) products shall have a volatile organic compound (VOC) rating of 125 grams per liter (g/L) or less. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City.*
9. *Building materials that do not require painting shall be used during construction to the extent feasible. Contract specifications shall be included in the project construction documents, which shall be approved by the City. Pre-painted construction materials should be used to the extent feasible.*

Residual Impacts

Existing policies and MM AQ-1 would substantially reduce the impacts of construction-related emissions, but would not guarantee that impacts would be reduced to a less than significant level. Therefore, construction activities could result in a substantial net increase of multiple criteria pollutants for which the Basin is nonattainment, and the impact would be *significant and unavoidable.*

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Impact Description (AQ-3)

AQ-3 **The proposed 6th Cycle 2021-2029 Housing Element Update plans for residential development that may exceed the project-specific air quality standards recommended by the South Coast Air Quality Management District (SCAQMD). Proposed growth would integrate with and contribute to a sustainable and multi-modal City intended to minimize vehicle trips and reduce operational emissions, particularly given increased affordable housing, which may reduce inbound commuter trips. However, when taken together, the total combined operational emissions from energy use and vehicle trips from residential development planned for under the proposed Housing Element Update would exceed SCAQMD recommended thresholds, resulting in a potentially *significant and unavoidable* impact.**

As described for construction emissions in Impact AQ-2, residential development planned for under the proposed Housing Element Update would generate long-term operational emissions. Because the Basin is in nonattainment for O_3, PM_{10} and $PM_{2.5}$, the proposed Housing Element Update could result in a contribution to existing nonattainment status for these pollutants. Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities. Stationary area source

emissions would be generated by space and water heating devices, and the operation of landscape maintenance equipment. Mobile emissions would be generated by the vehicles traveling to and from potential development and destination sites within the City. However, estimated emissions also include reductions that would be achieved through locating residential a portion of the development along major transportation corridors (e.g., boulevards) and transportation centers (e.g., Metro E [Expo] LRT stations). Further, a decrease in future vehicle combustion emissions would be anticipated due to newer, more fuel efficient vehicle fleets.

The total daily operational emissions that could potentially be generated over the life of the proposed Housing Element Update were estimated using the CalEEMod Version 2016.3.2 (refer to Section 3.3.3, *Impact Assessment Methodology*). Operational emissions were estimated for two scenarios: the Future (2030) No Project Scenario and the Future (2030) With Project Scenario. The Air Quality and GHG Study prepared for the proposed Housing Element Update included the implementation of existing City regulations aimed at reducing air emissions (e.g., Green Building Code, Zero Net Energy Ordinance, and Solar Ordinance requirements) in the model for both the Future (2030) No Project Scenario and the Future (2030) With Project Scenario. The results of the CalEEMod calculations for the daily operational emissions of the proposed Housing Element Update are presented in Table 3.3-12 and Table 3.3-13 (see Appendix B for CalEEMod output sheets).

Table 3.3-12 Future (2030) No Project Operational Emissions

		CO	VOC	NO_X	SO_2	Total PM_{10}	Total $PM_{2.5}$
Tons/year	Total	180.61	31.86	51.20	0.67	67.98	18.91
lbs/day	Area	438.99	138.56	74.70	0.47	7.93	7.93
	Energy	9.22	2.05	17.80	0.11	1.42	1.42
	Mobile	822.71	55.49	301.44	4.16	451.75	122.49
	Total	1,270.92	196.11	393.94	4.74	461.10	131.84
SCAQMD Thresholds of Significance		550	55	55	150	150	55
Above threshold?		Yes	Yes	Yes	No	Yes	Yes

The Future (2030) With Project Scenario evaluates the development of up to 8,895 to 11,000 new dwelling units and potential ground-floor commercial space as planned for under the proposed Housing Element Update. Operational emissions for the Future (2030) With Project Scenario, which would involve development of a greater number of dwelling units and less commercial space through 2030 as compared to the Future (2030) No Project Scenario, are listed in Table 3.3-13.

Based on the air quality modeling results, the increase in emissions for CO, VOC, NO_x, PM_{10}, and $PM_{2.5}$ between the Future (2030) No Project Scenario and Future (2030) With Project Scenario would exceed SCAQMD regional thresholds for daily emissions. Because the proposed Housing Element Update would exceed SCAQMD thresholds for the pollutants for which the Basin is in nonattainment, the proposed Housing Element Update would result in substantial contributions of these pollutants during operation.

Table 3.3-13 Future (2030) With Project Operational Emissions

		CO	VOC	NO_X	SO_2	Total PM_{10}	Total $PM_{2.5}$
Tons/year	Total	346.50	56.51	89.35	1.15	115.46	32.38
lbs/day	Area	1,087.11	256.54	185.02	1.16	19.65	19.65
	Energy	15.54	4.13	35.39	0.23	2.86	2.86
	Mobile	1337.97	90.63	492.55	6.76	733.47	221.38
	Total	2,440.62	351.31	712.96	8.14	755.97	243.89
SCAQMD Thresholds of Significance		550	55	55	150	150	55
Above threshold?		Yes	Yes	Yes	No	Yes	Yes

However, as previously described, it should be noted that SCAQMD significance thresholds for criteria pollutants do not distinguish between land use plans/programs and individual development projects. The proposed Housing Element Update is a component of the City's General Plan that addresses residential development on a programmatic level and would involve several simultaneous developments throughout the planning horizon. Therefore, the application of the SCAQMD thresholds to a program-level EIR is highly conservative. In addition, it should be noted that this analysis may overestimate increases in emissions as the proposed Housing Element Update has a reasonable potential to increase the proportion of those workers that currently both reside and work in the City from approximately 9.4 percent of the total workforce to a higher, but unknown level, potentially decreasing mobile emissions related to commute trips. This would occur due to the provision of substantial amounts of new housing, particularly affordable housing, which would create significant new housing opportunities for workers from the City's service, retail, and hospitality sectors to both live and work in the City. Further, as described in Impact AQ-1, the proposed Housing Element Update is consistent with the 2016 AQMP's strategies to reduce regional air pollutant emissions. Specifically, the proposed Housing Element Update would guide residential development throughout the City in a way that would continue to integrate the Metro E (Expo) LRT line and Next Gen Bus Plan as well as other forms of public transit, bicycle facilities, and pedestrian facilities thereby reducing mobile source air pollutant and GHG emissions from vehicles. Additionally, the proposed Housing Element Update would implement and/or support many of the transportation control measures that are utilized and assumed in the AQMP's air quality forecasts (SCAQMD 2017). These measures include locating housing near jobs and transit, sustainable development, and other TDM measures (consistent with the City's TDM Ordinance, SMMC, Article 9, Chapter 9.53; see Section 3.12, *Transportation*). As described in Impact T-1, the implementation of these measures would ensure that the proposed Housing Element Update would reduce VMT per capita. Notwithstanding, when evaluated against SCAQMD's project-level thresholds, the combined operational emissions of potential land use changes anticipated to occur under the proposed Housing Element Update would exceed SCAQMD's project-specific thresholds. Therefore, this impact would be *significant and unavoidable*.

Mitigation Measures

As described in Section 3.3.2, *Regulatory Setting*, the City has several policies and regulations (e.g., Green Building Code, Zero Net Energy Ordinance, and Solar Ordinance requirements) for new and existing development to reduce criteria pollutant emissions generated within the City. In addition to the minimum requirements of City regulations analyzed for the Future (2030) No Project and Future (2030)

With Project Scenarios above, the Air Quality and GHG Study also estimated operational emissions for these scenarios with additional compliance-based measures that would further reduce operational emissions associated with development under the proposed Housing Element Update. Additionally, the Air Quality and GHG Study incorporated the VMT per capita data for the City as estimated in the Transportation Study for this EIR (see Appendix G), which is lower than the default VMT data included in CalEEMod, as a "mitigation" to represent the City's TDM measures that reduce VMT and associated air emissions within the City (see Table 3.3-14).

Table 3.3-14 Operational Emissions With and Without Implementation of City Pollution Control Regulations and 100 Percent Solar Energy

	CO	VOC	NO_X	SO_2	Total PM_{10}	Total $PM_{2.5}$
Maximum Compliance with City Policies and Regulations	2,362.27	329.69	539.57	7.04	741.95	207.36
Minimum Compliance with City Policies and Regulations	2,440.62	351.31	712.96	8.14	755.97	221.38
Net Increment	-78.35	-21.62	-173.39	-1.10	-14.02	14.02
Percent Change	3.3	6.5	32.1	15.6	1.9	6.8

As shown in Table 3.3-14 above, implementation of these measures would reduce operational air emissions associated with new residential development planned for under the proposed Housing Element Update by as much as 32.1 percent for NO_X.

Residual Impacts

While implementation of existing City regulations and pollution control measures would substantially reduce operational emissions associated with new residential development under the proposed Housing Element Update, projected Future (2030) With Project Scenario operational emissions would remain above SCAQMD thresholds of significance. However, it should be noted that SCAQMD does not provide separate project-level and plan-level significance thresholds, and that individual residential development projects planned for under the proposed Housing Element Update may generate operational emissions below these thresholds.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact Description (AQ-4)

AQ-4 **Construction of new residential development under the proposed 6th Cycle 2021-2029 Housing Element Update may expose sensitive receptors to substantial pollutant concentrations in excess of the established localized significance thresholds (LSTs) during construction. This is a potentially significant impact. Because no feasible mitigation is available to reduce this impact to a less than significant level, this impact would be considered *significant and unavoidable*.**

As described in Section 3.3.2, *Regulatory Setting*, LSTs represent the maximum emissions from an individual development project that would not cause or contribute to an exceedance of the most stringent applicable Federal or State air quality standard, based on the ambient concentrations of that pollutant for each source receptor area. The Final LST Methodology provides thresholds of significance for NO_X, CO, PM_{10}, and $PM_{2.5}$ to evaluate localized air quality impacts at sensitive receptors near a development project. The Final LST Methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. Further, LSTs are applicable at the project-specific level and are not applicable to regional projects such as general plans or other long-range planning documents.

Recent LST analyses conducted in the City include, but are not limited to, the following projects:

- The recently constructed 5th and Colorado Hotel Projects including two six-story buildings with two levels of subterranean parking in the Downtown. The combined size of the project is 156,000 sf. The nearest sensitive receptors to the project sites are the residential uses that surround the project sites and the senior citizen housing and care centers north and northwest of the sites. These receptors are within 25 meters of the project site.
- The recently constructed 500 Broadway Project proposes development of a 316,653-sf mixed-use building in the Downtown, including construction of an approximately 316,653-sf mixed-use building. The nearest sensitive uses to the project site include the residential complexes to the north, south, east, and west of the project site. These receptors are within 25 meters of the project site.
- The recently approved Santa Monica Post Office Productions Project at 1248 5th Street, which would adaptively reuse the building for creative office through additions and interior remodeling to expand the currently available floor area by 12,852 sf. Sensitive receptors in the project vicinity include churches, the Delphi Academy, and nearby dwelling units within mixed-use buildings. These receptors are within 25 meters of the project site.
- The recently approved Airport Park Expansion Project, which would expand the existing Airport Park by developing approximately 12 acres of new recreational amenities on non-aviation land adjacent to the existing park. The project site is located approximately 25 to 30 meters from the nearest sensitive receptors, including residences located east of the project site across South Bundy Drive.
- The recently approved Miramar Project, which involves the redevelopment of the Hotel Parcel would be 500,552 sf of redevelopment on the Hotel Parcel and 41,250 sf of affordable housing on the Second Street Parcel. The project site is located approximately 30 meters from the nearest sensitive receptors, including multi-family residential dwellings to the northeast.
- The proposed Ocean Avenue Project, which would provide 122,400 sf of full-service hotel space with up to 120 hotel guestrooms; 100 residential apartment units; 36,110 sf of restaurant and retail uses; and a 35,500-sf Cultural Use Campus (e.g., museum, gallery, event space). The nearest sensitive uses to the Project site include several residential complexes, two schools, two churches, and a heavily-used park to the north, south, east, and west of the Project site. These receptors are within 25 meters of the project site.

The air quality analysis for nearly all of these analyses – including the analyses for various large projects such as the recently approved Miramar Project and the proposed Ocean Avenue Project – demonstrated that the individual projects would not exceed the LSTs for construction. However, it was determined that the construction of the proposed 5th and Colorado Hotel Projects would exceed the LSTs for particulate matter, where construction would generate 8.3 lbs/day of $PM_{2.5}$ and 13 lbs/day PM_{10} in close proximity to

immediately adjacent residential uses (see Table 3.3-15). Therefore, depending on the size of each individual project, the amount of demolition, excavation, and grading, and the proximity of the individual project sites to sensitive receptors, individual residential developments could result in construction-related emissions of CO, NO_X, and PM_{10} that exceed the LSTs for construction. This is particularly true for multiple projects that are constructed concurrently on the same or adjacent blocks (such as the 5th and Colorado Hotel Projects), which would be likely given the amount of residential development planned for under the proposed Housing Element Update.

Table 3.3-15 5th and Colorado Hotel Projects Emissions Example – Localized Significance Thresholds and Unmitigated Construction Emissions (lbs/day)

Air Pollutant	LST Thresholds	On-Site Construction Emissions				Exceeds LST?
		Demolition	Excavation	Construction	Architectural Coating	
CO	562	22.84	17.95	15.92	1.90	**No**
NO_x	103	35.99	29.67	21.74	2.57	**No**
PM_{10}	4	4.57	6.75	1.46	0.22	**Yes**
$PM_{2.5}$	3	2.08	4.37	1.46	0.22	**Yes**

Notes:
[1] Overall construction maximum daily emissions are not the same as the sum of all phases because of scheduling the phases.
[2] Localized significance threshold for a 1-acre site in SRA 2 within 25-meter distance from sensitive receptors; http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf.

Compliance with existing City polices and regulations as well as SCAQMD rules, including the limiting of grading activities during high winds and application of soil stabilizers to prevent fugitive dust, would reduce air pollutant emissions from construction activities. MM AQ-2 is proposed to further reduce construction-related air emissions. However, the potential reductions in construction-related emissions resulting from implementation of this mitigation measure cannot be quantified because information on construction scheduling and project size for all individual residential development projects likely to occur within the City are not available. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be reduced to below LSTs for construction. For these reasons, construction air quality impacts are conservatively concluded to be *significant and unavoidable*.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact Description (AQ-5)

AQ-5 **Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update could locate new dwelling units within 500 feet of Interstate (I-) 10, potentially exposing sensitive land uses to substantial pollutant concentrations. However, this impact would be reduced to *less than significant with the implementation of mitigation*.**

The sensitive receptors described in Section 3.3.1, *Environmental Setting*, would be exposed to TAC emissions generated construction and operation of individual residential development planned for under

the proposed Housing Element Update. Because the exact size, design, timing, and construction details of future development projects in the City are unknown, construction emissions of TACs cannot be quantified and construction health risks are discussed qualitatively in this EIR. Operational cancer risks from proximity to I-10 and SR-1 have also been quantified as a part of a HRA prepared for the proposed Housing Element (refer to Section 3.3.3, *Impact Assessment Methodology*; see Appendix C).

Construction

As previously described, the exact location and construction details of individual residential development projects planned for under the proposed Housing Element Update are unknown; therefore, impacts of the proposed Housing Element Update to the sensitive receptors within the City are evaluated qualitatively. The principal drivers of health risks to nearby sensitive receptors during construction activities are construction equipment, on-site truck traffic, asphalt paving, and architectural coatings. The individual lifetime cancer risk represents the chance that an individual would contract cancer after exposure to the TACs emitted during construction associated with residential development through the planning horizon for the proposed Housing Element Update. Cancer risk is evaluated by taking into consideration the TAC concentration, receptor breathing rate, duration and frequency of exposure, age sensitivity, and the TAC potency factor developed by OEHHA. It should be noted that the maximum health risk value is only a calculation of risk – it does not necessarily mean anyone will contract cancer as a result of implementation of the proposed Housing Element Update.

TACs generated by construction activities are typically found in particulate matter (e.g., PM_{10} and $PM_{2.5}$) from the exhaust of diesel-powered engines. Operation of heavy equipment and vehicles associated with new residential development would temporarily generate TACs from exhaust of diesel particulate matter. Pollutant levels from exhaust emissions would fluctuate depending on the level and type of construction activity; however, temporary exposures associated with construction activities would not generally create a substantial risk. Impacts associated with individual construction projects would occur incrementally over time for short periods, and localized impacts would be reduced through standard measures on a project-by-project basis, thereby addressing the City-wide effect incrementally over time. Impacts from City-wide diesel construction equipment emissions to the year 2030 would represent a small percentage of total emissions in the Basin.

Operation

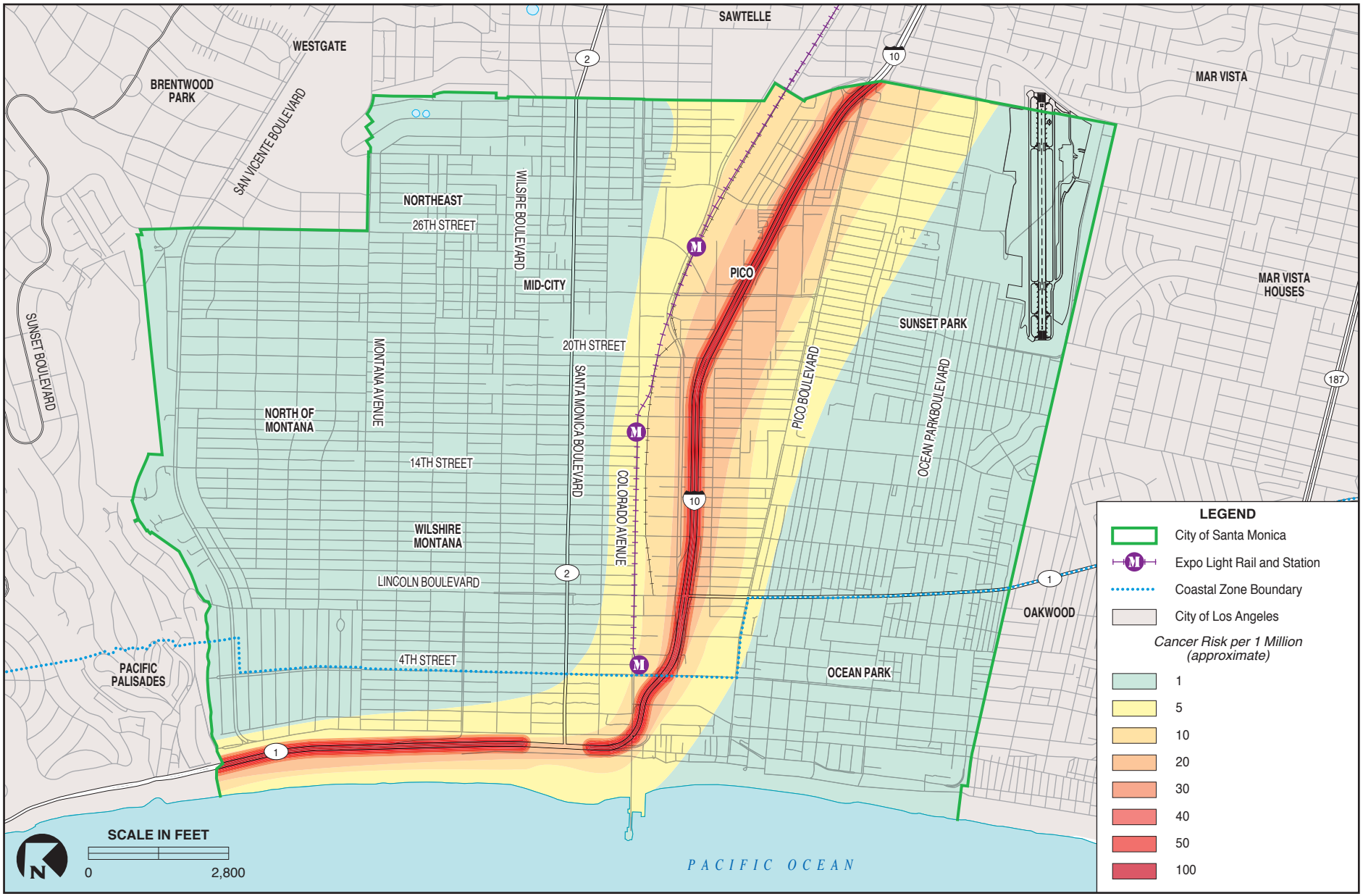
The potential for TACs to have an operational effect on sensitive receptors would occur if the proposed Housing Element Update would allow for the development of new residential development located near an existing significant source of TACs or if it would generate TACs in quantities that may have an adverse effect on sensitive receptors. As described in Section 3.3.1, *Environmental Setting*, CARB identifies high-volume freeways and roads, dry cleaners, and large gas stations as potential sources of TACs, while typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes and automotive repair facilities.

The proposed Housing Element Update plans for new residential development, which is considered to be a use that would not generate substantial amounts of TACs and would not pose a risk to sensitive

receptors in the vicinity of individual project sites. Operations would only result in minimal emissions of air toxics from maintenance or other ongoing activities, such as from the use of architectural coatings or application of cleaning solutions. The residential developments planned for under the proposed Housing Element Update would not include installation of industrial-sized paint booths or involve the extensive use of commercial or household cleaning products. Therefore, TACs or carcinogenic air pollutants are not expected to occur in any substantial amounts. This has been demonstrated in recent EIRs prepared for large mixed-use developments in the Downtown, including the recently approved Miramar Project and the proposed Ocean Avenue Project.

Typical sources of TACs that may affect future users of the proposed Project involve those same uses and activities identified above. According to CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005), it is recommended to maintain 500 feet of separation between residences and dry cleaners using perchloroethylene, 500 feet between residences and a major freeway that generates more than 100,000 AADT, and more than 50 feet from a typical gas station. The proposed Housing Element Update anticipates that new residential development could be constructed within 500 feet of I-10. Although no specific project details (e.g., proposed site plans) are available, future projects in this zone may locate sensitive uses, such as new dwelling units, outdoor open spaces, and recreational facilities (e.g., tennis courts, swimming pools, etc.) within 500 feet of I-10, which receives from 150,000 to 194,000 AADT within the City boundaries. CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) recommends avoiding siting sensitive uses within 500 feet of a high-volume freeway. However, this is not always possible, particularly where there is an elevated health risk over large geographical areas (e.g., urbanized areas of Southern California). Therefore, the siting of future residential uses within 500 feet of I-10 could result in exposure of sensitive receptors to elevated levels of TACs. Consistent with CARB recommendations, a HRA for the proposed Housing Element Update was prepared to determine the actual cancer risk at sensitive receptors near I-10 and SR-1 after an exposure of TAC emissions for 30 years (see Appendix C). The HRA considers factors such as prevailing wind direction, local topography, and climate.

Cancer risks are defined as the number of cancer cases that are projected to be generated per million people exposed. The SCAQMD has establish a significance threshold for cancer risk of 10 cancer cases per million (1.0×10^{-5}). The HRA identified cancer risk levels in exceedance of this threshold along all analyzed segments of I-10 and SR-1. The estimated peak cancer risks from the highways varies depending on the location of the highway. For example, the areas to the north along I-10 (as far as 1,300 feet), where the highest traffic flows occur, experience higher cancer risks than the areas west of SR-1 (as far as 250 feet), which generates much lower traffic volumes (see Figure 3.3-1). The HRA identified a total of 1,842 parcels (approximately 7.8 percent of parcels in the City) located in zones that would experience a cancer risk of 10 cancer cases per million or greater in 2030 from traffic volumes along I-10 and SR-1 (see Appendix C). Vehicle types that comprise the principal risk drivers for cancer are heavy duty trucks (59 percent), medium heavy duty trucks (20.3 percent), light heavy duty trucks (7.3 percent), automobiles (3.9 percent), buses (3.1 percent), motorcycles (2.3 percent), light duty trucks (1.9 percent) and other vehicles (2.2 percent).



wood.

Cancer Risk Contours along Interstate 10 and State Route 1

FIGURE 3.3-1

The unmitigated DPM emissions would exceed SCAQMD thresholds for cancer risk for sensitive residential receptors along I-10 and SR-1; therefore, health risk impacts to sensitive receptors from development activities under the proposed Housing Element Update would be *potentially significant*. However, as described further below, MM AQ-2 would reduce the exposure of sensitive receptors to TAC emissions from freeway operations for all new development under the proposed Housing Element Update. These measures could reduce exposure to DPM emission by up to 50 percent for outdoor areas and over 90 percent for indoor areas. Therefore, mitigated DPM emissions anticipated at new sensitive residential receptors within the City would not exceed SCAQMD thresholds for cancer risk, and impacts would be *less than significant with mitigation*.

Mitigation Measures

MM AQ-2 ***Interior Air Quality Protection.*** *Applicants of new residential development projects in the City that propose siting sensitive land uses within the following zones shall be required to include design features necessary to reduce exposure to diesel particulate matter (DPM) as a part of the early project design process:*

Distance from I-10

- *1,300 feet from I-10 centerline (Pico Boulevard to Cloverfield Boulevard)*
- *1,000 feet from I-10 centerline (Cloverfield Boulevard to SR-1)*
- *600 feet from I-10 centerline (SR-1 [South] to Ocean Avenue)*

Distance from SR-1

- *250 feet from SR-1 centerline*

New residential development within these zones shall be required to incorporate project design measures, which as an example could include any one or more of the following:

- *Installation of heating, ventilation, and air conditioning (HVAC) infrastructure within the building to circulate and purify outdoor air sources sufficiently to reduce diesel particulate matter and vehicle emissions. HVAC control systems shall include an air filtration system, such as the Lennox PureAir system, with particulate filters that have a minimum efficiency reporting value (MERV) of 12 to 15 (depending on the specific distance of the parcel from I-10 or SR-1) for enhanced particulate removal efficiency capable of removing a significant portion of the sub-1.0 micrometer sized particles expected from diesel combustion as indicated by the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2.*
- *Avoidance of operable windows on the side of the building facing I-10 or SR-1.*
- *Incorporation of dual-pane windows on all windows to make the building exterior as "airtight" as possible to minimize air infiltration. The exterior pressure envelope of the units should be sealed to achieve a tested air leakage rate of no more than 3.0 unit volumes per hour using the blower door ACH50 leak test, or equivalent.*
- *Location of any vents and roof penetrations or other air intakes facing away from I-10 or SR-1 wherever possible. Doorways and entryways should also be located away from I-10 or SR-1 to the extent feasible.*

- *Though not required, location of outdoor areas away from I-10 or SR-1 (e.g., behind thick vegetation screens or within the interior courtyard portions of the development).*

Applicants shall be responsible for the preparation of a brief technical memorandum that describes the effectiveness of the selected measures – within the context of the Health Risk Assessment (HRA) prepared for the proposed Housing Element Update – in reducing DPM emissions below SCAQMD thresholds cancer risk of 10 cancer cases per million (1.0×10^{-5}).

The City shall codify this requirement such that review of the applicant-prepared, site-specific analysis by City staff would be required as a part of the entitlement and ministerial design review process. The proposed HVAC systems and other design measures shall also be reviewed and approved by the City prior to occupancy of new residential developments within the zones identified above.

Residual Impacts

Impacts associated with construction-related TACs would be mitigated with implementation of MM AQ-2. These mitigation strategies are anticipated to produce substantial reductions in exposure to particulate matter from highway vehicles.

Pollutants that comprise the principal risk drivers for cancer are DPM (92.6 percent), benzene (3.8 percent), arsenic (2.8 percent) and naphthalene, chromium, ethylbenzene and dioxins (less than 0.2 percent each). Emissions from automobiles, particularly diesel trucks, have been decreasing substantially over recent years due to regulatory requirements producing substantially cleaner engines, such as CARB's Off-Road Mobile Source Emission Reduction Programs (refer to Section 3.3.2, *Regulatory Setting*). However, toxic impacts from vehicle emissions continue to be dominated by DPM. Particulate emissions from diesel combustion are comprised of a range of particle sizes, ranging from larger than 10 micrometers in size to less than 0.1 micrometers. The composition of DPM is dominated by the smaller particles, with the largest number of particles in the 0.01 to 0.1 micrometer range.

Air filter systems in buildings are associated with central HVAC systems. The air is filtered both to prevent maintenance issues in the equipment and to ensure clean air for the building occupants. Air filtration systems are classified according to a rating system called MERV which indicates the size of particles an air filter is designed to remove. Higher MERV ratings are more effective at capturing smaller particles. American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2 defines the requirements for the MERV levels. Although lower MERV rated filters are less efficient at removing particles, they permit more air to move through the filter, which can improve the operation of the HVAC system. Therefore, the air filtration system for higher MERV systems should be specifically designed to account for the greater flow restriction associated with higher particulate removal. In order to address the removal of the diesel particulates, which are primarily in the sub-1.0 micrometer range, MERV ratings of 12 (35percent particle removal) to 15 (85 percent particle removal) would be required depending on the distance of new residential development from I-10 or SR-1.

These HVAC systems and the other mitigation measures described above could reduce exposure to DPM emission by up to 50 percent for outdoor areas to over 90 percent for indoor areas. Therefore, implementation of MM AQ-2 would reduce DPM emissions below SCAQMD thresholds for cancer risk.

Impacts to sensitive receptors due to DPM emissions from diesel-fueled trucks and other vehicles along I-10 and SR-1 would be *less than significant with mitigation*.

Would the project result in other emissions (such as those leading to odors) affecting a substantial number of people?

Impact Description (AQ-6)

AQ-6 **New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in vehicle trips that would generate carbon monoxide (CO) emissions. However, Federal and State CO standards would not be exceeded with implementation of the proposed Project and this impact would be *less than significant*.**

Even with the City's existing regulatory and policy framework to minimize vehicle trips, trips would inevitably occur on the street system as a result of residential development planned for through the planning horizon of 2030 (see Section 3.12, *Transportation*). Future City traffic would contribute to increases in traffic volume at nearby intersections, resulting in additional vehicle emissions and longer vehicle idling times at City intersections. Increased congestion and vehicle idling could lead to creation of CO hot spots that may affect adjacent sensitive receptors.

The potential for the proposed Housing Element Update to cause or contribute to CO hotspots has been evaluated by comparing City intersections (both intersection geometry and traffic volumes) with prior studies conducted by the SCAQMD in support of their AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the proposed Project would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at impacted intersections would remain well below the air quality standards, and that no further CO analysis is warranted or required.

As shown in Table 3.3-3, CO levels near the City are substantially below the Federal and State standards. Maximum CO levels in recent years are 2.2 ppm (1-hour average) and 1.4 ppm (8-hour average), which are well below the CAAQS of 20 ppm (1-hour average) and 9.0 ppm (8-hour average). CO levels decreased dramatically in the Basin with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in the Basin for some time, and the Basin is currently designated as a CO attainment area for both the CAAQS and NAAQS. Thus, it is unlikely that CO levels at impacted intersections would result in an exceedance of these standards.

Additionally, SCAQMD conducted CO modeling for the attainment demonstration in the 2003 AQMP for the four worst-case intersections in the Basin, including:

- Wilshire Boulevard & Veteran Avenue;
- Sunset Boulevard & Highland Avenue;
- La Cienega Boulevard & Century Boulevard; and
- Long Beach Boulevard & Imperial Highway.

In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard & Veteran Avenue is the most congested intersection in Los Angeles County, with an AADT volume of approximately 100,000 vehicles per day. This intersection is located near the on- and off-ramps to I-405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (1-hour average) and 3.2 (8-hour average) at Wilshire Boulevard and Veteran Avenue, exclusive of ambient background CO concentrations. When added to the existing background CO concentrations, the screening values would be 7.6 ppm (1-hour average) and 5 ppm (8-hour average), which are still well below the CAAQS of 20 ppm (1-hour average) and 9.0 ppm (8-hour average).

As discussed in Section 3.12, *Transportation,* the most heavily trafficked intersection within the City that would be affected by the proposed Housing Element Update is Palisades Beach Road/California Incline, which currently experiences less than 80,000 vehicle trips per day (Fehr & Peers 2021). The residential development planned for under the proposed Housing Element Update would increase average daily trips, but none of the intersections within the City, including the Palisades Beach Road/California Incline intersection, would experience 100,000 vehicles per day evaluated at the Wilshire Boulevard and Veteran Avenue intersection in the CO Plan for the 2003 AQMP. As a result, CO concentrations are expected to be far less than those estimated in the 2003 AQMP for the most congested intersection in Los Angeles and would not create a CO hot spot or exceed the CAAQS for CO concentrations. Therefore, the proposed Project would neither directly result in or substantially contribute to a CO hotspot and impacts would be *less than significant*.

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Description (AQ-7)

AQ-7 **Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would not result in other emissions including odors that would affect a substantial number of people. Therefore, this impact would be *less than significant*.**

According to the SCAQMD's CEQA Air Quality Handbook (1993), objectionable odors are typically associated with industrial uses such as agricultural facilities (e.g., farms and dairies), refineries, wastewater treatment facilities, and landfills. The proposed Housing Element Update would enable the construction and operation of residential developments, which do not typically generate nuisance odors perceptible to sensitive receptors. Construction that would occur as a result of the proposed Housing Element Update would be both temporally and geographically intermittent. Standard construction requirements would be imposed upon project applicants to minimize odors from construction. Any odors that may be generated would be localized and temporary in nature, and would not affect a substantial number of people or result in a nuisance as defined by SCAQMD Rule 402.

Operationally, odors that would be expected from residential development planned for under the proposed Housing Element Update would typically be associated with solid waste (i.e., refuse) storage typical of urban uses. However, these odors would be consistent with that generated by existing residential and commercial uses throughout the City, and would be confined to the immediate vicinity of new residential development. Additionally, it is expected that any individual project-generated refuse would be stored in covered containers and removed regularly consistent with the City's solid waste and recycling pick-up requirements. As such, residential development planned for under the proposed Housing Element Update would not generate odors substantially perceptible by sensitive receptors and impacts associated with generation of objectionable odors would be *less than significant.*

3.3.5 Cumulative Impacts

Cumulative impacts related to air quality are related to air emissions that would be generated by regional growth within the overall South Coast Air Basin. This would include the construction and operational air quality impacts associated with the 812,060 dwelling units allocated throughout the incorporated and unincorporated areas of Los Angeles County under the 6th Cycle RHNA.

Cumulative impacts to air quality could result from growth that would be inconsistent with the AQMP. This could interfere with attainment of Federal or State ambient air quality standards within the AQMP. As noted in Impact AQ-1 above, the 2016 AQMP is based on outdated regional growth forecasts that do not account for the most recent SCAG growth forecasts in Connect SoCal. However, the upcoming 2022 AQMP will include the updated growth projections in the SCAG's Connect SoCal, including the City's 6th Cycle RHNA of 8,895 dwelling units as well as the 6th Cycle RHNA for incorporated and unincorporated areas throughout Los Angeles County. Although population forecasts are not in alignment, the proposed Housing Element Update would fully implement air pollution reduction strategies set forth in the AQMP, including locating jobs and housing near major transit, sustainable development, and other TDM measures systems to reduce vehicle daily trips and regional peak-hour traffic congestion, and implementation of the region's most aggressive TDM measures. Regional housing development in other municipalities or unincorporated areas of Los Angeles County may not incorporate reduction strategies as aggressively, however, with respect to potential conflicts with the 2016 AQMP, the implementation of proposed Housing Element Update would not represent a substantial contribution to a cumulatively considerable impact.

As discussed above, the Basin is in nonattainment for O_3, $PM_{2.5,}$ and PM_{10}. Per the SCAQMD's 2016 AQMP, the latest emissions inventory and air quality modeling analysis indicate that significant reductions above and beyond those already achieved are still needed for meeting these standards. Therefore, any substantial increases in the amount of O_3 precursors and particulate matter in the region – including the City and the Greater Los Angeles Area – would be considered to be a considerable contribution to a cumulatively substantial impact, including those attributed to construction emissions. With regard to the contribution of the proposed Housing Element Update, the SCAQMD recommends methods to determine the cumulative significance of new land use projects/programs. These methods are based on performance standards and emission reduction targets necessary to attain Federal and State air quality standards projected in the AQMP. Because the exact size, design, and timing of future residential development projects in the City and development elsewhere in the Basin are unknown, cumulative

construction emissions cannot be quantified (refer to Impact AQ-2). However, analysis in Impact AQ-2 above indicate that, for mid- to large-sized projects, project-level mitigation may be unavailable to reduce emissions to a level below the significance thresholds. Therefore, construction-related emissions associated with residential development planned for under the proposed Housing Element Update would contribute to cumulative construction-related emissions associated with similar development throughout the Basin. The contribution of future emissions from the implementation (i.e., buildout) of the proposed Housing Element Update may represent a substantial contribution to a cumulatively considerable impact.

As discussed above, based on the air quality modeling results, the proposed Housing Element Update would exceed SCAQMD thresholds for the pollutants for which the Basin is in nonattainment, and therefore potential impacts would be *significant and unavoidable*. However, it should be noted that SCAQMD significance thresholds for criteria pollutants do not distinguish between project-level EIRs and program-level EIRs. The proposed Housing Element Update is a component of the City's General Plan that addresses potential land use changes in the City on a programmatic level. Therefore, the application of the SCAQMD thresholds to a program-level EIR is highly conservative. Further, the proposed Housing Element Update is fully consistent with the AQMP's strategies to reduce regional air pollutant emissions. Nevertheless, implementation (i.e., buildout) of the proposed Housing Element Update may represent a substantial contribution to a cumulatively considerable impact resulting from development throughout the Basin.

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3.0 Environmental Impact Analysis and Mitigation

3.4 Cultural Resources

New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update could impact previously unknown buried archaeological resources or existing historic architectural resources, including historic buildings and structures. The City is a built out urban landscape with development dating back to the late 1800s that has likely disturbed native soils, reducing the potential for intact buried pre-historic archaeological resources. However, given that the City is located in an area with known historic occupation and use by the Gabrieliño/Tongva, there is at least some potential for impacts to buried archaeological resources. Additionally, the City of Santa Monica has a rich historic built environment that includes buildings, structures, and objects of historic or aesthetic importance. These historic resources amplify the sense of community for residents and visitors. New residential development projects planned for under the proposed Housing Element Update would be subject to existing City regulations and policies that protect archaeological and historic architectural resources, including the City's Landmarks and Historic District Ordinance.

This section of the Environmental Impact Report (EIR) describes existing cultural resources in the City of Santa Monica (City) including prehistoric and historic archaeological resources as well as historic architectural resources. Cultural resources are defined as archeological sites dating from either the prehistoric or historic period as well as historic-period buildings, structures, districts, and objects. Prehistoric Native American resources could include intact shell scatters or toolmaking remains as well as important sites such as villages, while subsurface historic resources may include the remains of previous historic buildings (e.g., foundations, trash dumps, etc.). Additional information regarding tribal cultural resources is provided in Section 3.13, *Tribal Cultural Resources*. This analysis assesses the potential impacts to these cultural resources that could result from the implementation (i.e., buildout) of the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update).

3.4.1 Environmental Setting

3.4.1.1 Prehistory

There is evidence for human occupation of mainland Southern California for as long as 13,000 years or possibly more. Population densities along the coast may have been low initially, judging from the small number of sites dated to this period. However, many ancient sites may have been lost, inundated, or deeply buried as a result of rising sea levels, shoreline retreat, erosion, sediment deposition, and other natural forces.

Prehistoric human occupation and cultures within coastal Southern California evolved significantly over more than 10,000 years based on changes in climate, food availability, technological innovations, and utilization and changes in population densities and cultural characteristics. Although prehistoric remains that could potentially exist in the City and the Greater Los Angeles Area could be from any of the various

past cultural epochs, they would most likely represent past occupation by the Gabrieiliño/Tongva or other Takic Native Americans.

As described further in Section 3.13, *Tribal Cultural Resources*, the Gabrieiliño/Tongva occupied territory that included the Los Angeles Basin south to parts of Orange County and north to Topanga Canyon and the southern Channel Islands. The total Gabrieiliño/Tongva territory covered more than 1,500 square miles and included the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers and the islands of Santa Catalina, San Clemente, and San Nicolas. Within this large territory were more than 50 villages with populations that ranged from approximately 50 to 150 individuals. Each community consisted of one or more lineages which controlled a specific geographic territory that included a permanent residential settlement, various hunting and gathering areas, and ritual sites. The Gabrieiliño/Tongva exhibited a complex culture, social organization, religious beliefs, and art and material production.

Due to the substantial extent of urban development within the City and the Greater Los Angeles Area, the full extent and density of Gabrieiliño/Tongva or other prehistoric culture occupation of region is difficult to accurately characterize as numerous resources have most likely been disturbed or paved over with urban development without professional documentation. However, the Gabrieiliño/Tongva village at Kuruvungna Springs, located approximately 2 miles east of the City's Downtown on the University High School, indicates that the Gabrieiliño/Tongva occupied and utilized natural resources within the proposed Project vicinity over an extended period. (See Section 3.13, *Tribal Cultural Resources*, for additional background information regarding the Gabrieiliño/Tongva tribes.)

3.4.1.2 Historical Setting

Spanish Exploration and Mexican Occupation of the Santa Monica Region

The Portuguese navigator, Juan Rodriguez Cabrillo, sailing under the Spanish flag, commanded the first expedition along the California coast in 1542. As he sailed the Southern California coastline, he gave names to several geographical features, including San Pedro Bay, Santa Catalina Island, and Santa Monica Bay, where he is believed to have dropped anchor on October 9, 1542. Although the territory was placed under Spanish rule at that time, the territorial lands were not explored until 1769 when the King of Spain sent a party of missionaries to colonize California, creating missions up and down the coast, located approximately one day's journey apart.

The first direct contact between the Europeans and the Gabrielino is thought to have occurred in 1542 with the arrival of Cabrillo's small fleet at Santa Catalina Island, and later in 1602 when the Sebastian Vizcaino expedition visited San Clemente and Santa Catalina islands and the mainland near present-day San Pedro (McCawley 1996). Later in 1769, the Gaspar de Portolá expedition crossed the Gabrielino homeland twice. Mission San Gabriel was founded on September 8, 1771 at a location near the Whittier Narrows. Sometime around 1774, Mission San Gabriel was moved to its present location to obtain more suitable land for agriculture. A second mission, San Fernando, was established within Gabrielino territory in 1797. During this same year, the Franciscan Father Juan Crespi, as part of the expedition party of Gaspar de Portola, is said to have named Santa Monica. The name was inspired by the free-flowing natural springs in the area, and the story of Saint Monica weeping for her wayward son Saint Augustine.

Other naming traditions cite that Santa Monica was named in the same year and during the same expedition; however, Juan Crespi is not attributed with the naming of the area, and the choice of names coincided with the discovery of the area on the May 4 celebration of Saint Monica's Day. Between 1769 and 1823, Spanish explorers and missionaries established 21 missions, four presidios, and four pueblos between San Diego and Sonoma, including the nearby Mission San Gabriel and the Mission San Fernando situated in the modern San Fernando Valley (Bean and Rawls 1983).

Mission life was highly regimented and contrasted sharply with the traditional Gabrielino lifeway; as a result, colonization had a dramatic and negative effect on Gabrielino society. The traditional Native American communities were depopulated and epidemics caused by the introduction of European diseases further reduced the Native American population. Mexico achieved independence from Spain in 1821, and Alta, California became the northern frontier of Mexico. Between 1832 and 1834, the Mexican government implemented a series of secularization acts that were theoretically designed to turn over the mission lands to the native populations; however, most of this land was taken over by Mexican civilians (McCawley 1996). The later American takeover of California brought further hardships to the Gabrielino who eventually settled at small Native American and Mexican settlements in the Eagle Rock and Highland Park districts of Los Angeles as well as in Pauma, Pala, Temecula, Pechanga, and San Jacinto.

Many of the soldiers of the Spanish explorers and missionaries were subsequently granted large tracts of land in payment for their services, which began the Rancho system in California. When California became Mexican territory in 1822, the area around Santa Monica was not included in any Spanish land grants. As early as 1828, Don Francisco Sepulveda took possession of an area that would later be granted to him by Mexican Governor Juan Alvarado in 1839 (City of Santa Monica 2002). The Rancho San Vicente y Santa Monica, as it came to be known, was a 33,000-acre area bordered by the Pacific Ocean on the west, Santa Monica Canyon on the north, present-day Pico Boulevard on the south, extending east to present-day Westwood, encompassing what eventually became Downtown Santa Monica. With the cession of California to the U.S. following the Mexican-American War, the 1848 Treaty of Guadalupe Hidalgo provided that the previous Mexican land grants would be honored. As required by the Land Act of 1851, a claim for Rancho San Vicente y Santa Monica was filed with the Public Land Commission.

The Early American Period (1850s-1880s)

The 1846 Mexican-American war eventually brought an end to the Rancho period as American settlers flooded Alta California during the second half of the 19th century. The territory was annexed by the U.S. in 1848. California was admitted as the thirty-first state in the Union on September 9, 1850. In 1851, the Board of Land Commissioners granted a deed to Sepulveda for the 30,000 acres known as the Rancho San Vicente y Santa Monica. The Reyes-Marquez families were then given the deed to 6,000 acres, which was known as the Boca de Santa Monica (Architectural Resources Group and Historic Resources Group [HRG] 2018a). Thereafter, Ysidro Reyes constructed the first structure in the area that would become modern Santa Monica. This adobe structure was built in 1839, and was located near 7th Street and Adelaide Drive. The adobe was demolished in 1906 (City of Santa Monica 2002).

In the years following the Civil War, rising wool prices prompted California landowners to add sheep herds to their lands. In 1872, Colonel R.S. Baker purchased the Sepulveda Rancho and established a

sheep ranch on the plateau (Architectural Resources Group and HRG 2018a). Soon after, Baker also purchased part of the Boca de Santa Monica lands to the northwest from the Reyes and Marquez families (City of Santa Monica 2010). In 1874, Nevada Senator John Percival Jones became Baker's partner and the two of them would later be credited as the City's founders. Originally born in England and raised in Ohio, Jones made his fortune mining silver in Nevada. He was involved in railroad development and envisioned a coastal town serving as the terminus for a California railroad (City of Santa Monica 2002, 2010; Architectural Resources Group and HRG 2018a).

Jones organized the Los Angeles and Independence Railroad to link the mines of Colorado and Nevada to the ocean. He then secured rights-of-way and commenced the construction of a wharf at the end of present-day Colorado Avenue. In 1875, the original townsite of Santa Monica was surveyed. North-south streets were numbered; east-west streets were named for states in the Union (Architectural Resources Group and HRG 2018a).

After the division and subsequent auction of lots in Santa Monica's original townsite in 1875, shops, taverns, and other businesses were established to cater to the needs of locals and beach tourists (Architectural Resources Group and HRG 2018a). New buildings were constructed in the new townsite during the final months of 1875 by several prominent Los Angeles residents (Architectural Resources Group and HRG 2018a). One of the earliest was a brick commercial building was constructed at 1438 2nd Street by William Rapp. This is the oldest commercial masonry structure still standing in Santa Monica today. By the time the railroad was completed to Santa Monica in November 1875, the town was growing with two new hotels, the sale of 615 lots, and a variety of active businesses, all of which were attracting new visitors and residents (City of Santa Monica 2002, 2010; Architectural Resources Group and HRG 2018a).

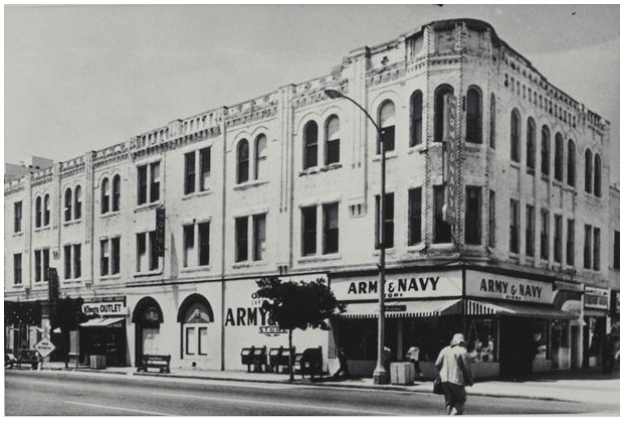
Historically significant buildings within the City's Downtown are scattered among modern structures, with adaptive reuse preserving buildings such as the Rapp Saloon Building constructed in 1875.

Soon after, a rate war between the Southern Pacific and Los Angeles and Independence Railroads caused a severe recession, during which the population plunged and many businesses closed (Architectural Resources Group and HRG 2018a). In 1876, with the Los Angeles and Independence Railroad losing money and unable to complete the planned rail line east of Los Angeles, the railroad went bankrupt and in 1877, the Southern Pacific Railroad purchased the abandoned line (City of Santa Monica 2010). Upon buying the line, the Southern Pacific Railroad immediately increased rates, which made wharf operations too expensive to be competitive. The wharf became economically unviable and was partially dismantled in 1879 (City of Santa Monica 2002, 2010; Architectural Resources Group and HRG 2018a).

The Atchison, Topeka, and Santa Fe Railway reached Southern California in the period between 1883 and 1885. The completion of the two transcontinental railways, particularly the latter, was a catalyst for economic development in Southern California (Architectural Resources Group and HRG 2018a). A frantic rate war between the two railroad giants drastically drove down the cost of traveling to Southern California from the East Coast, luring more easterners to the West Coast. In the 1880s, Santa Monica turned to establishing itself as an upscale beach resort community and succeeded in attracting new waves of visitors and residents (Architectural Resources Group and HRG 2018a).

Late Nineteenth and Twentieth Century Residential and Commercial Development (1880s-1970s)

Beginning in the 1880s, the City's commercial district included 2nd Street from Utah (now Broadway) to about a half block north. During the following decade, 3rd Street became the City's principal commercial street. The architecture of 3rd Street was primarily small-scale (i.e., one-story) brick vernacular commercial buildings (Architectural Resources Group and HRG 2018a). By 1888, a hotel and theater were built at the northeast corner of 3rd Street and Broadway. Within the next 5 years, two of the City's three most architecturally distinctive commercial buildings of the period were built on 3rd Street: the Keller Block building at 227 Broadway (designed by Carroll H. Brown in 1893), which still stands at the southwest corner of Broadway and 3rd Street; the Bank of Santa Monica Building (previously demolished) at the southeast corner of Santa Monica Boulevard; and the Whitworth Block (still standing, but previously altered) at 1460 2nd Street (City of Santa Monica 1986).



The Keller Block building at 227 Broadway is a distinctive local example of the Romanesque Revival architectural style as designed by architect, Carroll H. Brown.

In the early 1890s, Santa Monica renewed its efforts to establish the town as the major port in the region, but failed in 1893, when San Pedro was selected to serve as the Port of Los Angeles. Subsequently, local economic development refocused on cementing Santa Monica's position as the preeminent resort town in the area and a series of new hotels and pleasure piers were created to attract new visitors (City of Santa Monica 2002). The Southern Pacific Railroad leased the Santa Monica line to Los Angeles Pacific Electric Railroad, which operated until 1933. In 1892, the Santa Fe Railroad extended their Inglewood line north to Ocean Park along what is now Main Street. The new rail line brought large numbers of visitors to Ocean Park and Santa Monica for day trips (City of Santa Monica 2010).

In 1898, the Ocean Park Pier was constructed along with other attractions include a racetrack, auditorium, and casino (Architectural Resources Group and HRG 2018a). Amusement piers were popular tourist attractions and had a side benefit of increasing property values in their vicinity, which attracted

more real estate investors to add additional piers in the area (Architectural Resources Group and HRG 2018a).

The bath houses and later, the Santa Monica Pier, provided a hub for the City's early development. It was originally constructed as two adjacent, separately owned piers known as the Municipal Pier and the Pleasure Pier. The first Municipal Pier was constructed in 1908-1909 of an experimental concrete and steel construction process. It was advertised as the "largest concrete pier in the world." In 1921, the pier was reconstructed using a traditional timber structure, widened, and extended to nearly 1,600 feet. Looff's Pleasure Pier was added in 1916 by Charles and Arthur Looff, a father and son team specializing in the building and operation of carousels, roller coasters, and amusement parks. The pier extended over the Santa Monica Bay, immediately adjacent to the Municipal Pier. The Looffs also constructed the Hippodrome, the Carousel, and the pier's first roller coaster (Architectural Resources Group and HRG 2018a).

The 1920s was a period of huge growth for the City, spurred by the establishment of Douglas Aircraft at the Santa Monica Municipal Airport, which created a steady demand for housing (Architectural Resources Group and HRG 2018a). By 1923, it was estimated that 1,500 people per month were moving to Santa Monica. Between 1921 and 1925, over 40,000 people moved to the City (Architectural Resources Group and HRG 2018). By 1926, Santa Monica included approximately 11,000 homes (Architectural Resources Group and HRG 2018a). Boulevard and infrastructure improvements along Wilshire, Santa Monica, Pico, and Beverly (Sunset) supported these changes. The automobile became widely embraced and development during the 1920s reflected the new automobile-oriented culture. Residential garages appeared on properties, typically placed at the rear of residential lots and accessed by the back alleys (City of Santa Monica 2010; Architectural Resources Group and HRG 2018a).

An example of an apartment house is the El Cortez Apartment Building located at 827 4th Street, which was constructed in 1928.

Commercial activity increased as well, with new buildings constructed to accommodate the City's expanding businesses and increased tourist activity. Commercial trends that began in the early 20th century continued in the 1920s, with the establishment of numerous prominent commercial buildings in the Downtown district, including the City's first skyscrapers, along with the continued development of resort- and tourist-related resources (Architectural Resources Group and HRG 2018a).

The 1929 stock market crash and resulting economic crisis left Americans little money for luxuries like resort vacations and day trips to amusement piers. Several New Deal Works Progress Administration (WPA) projects were awarded to Santa Monica during the Depression, providing some economic relief by creating new jobs for workers. WPA projects in Santa Monica include the U.S. Post Office (1938), City Hall (1938), and a variety of school upgrades or replacements (e.g., Barnum Hall). All were built in the popular and forward-looking Moderne architectural style (City of Santa Monica 2010). In 1935, the WPA

also funded construction for a new concrete Ocean Avenue Bridge and double-arched tunnel (what is today the Interstate [I-] 10 McClure Tunnel), which replaced the earlier wooden bridge and tunnel.

Even after the stock market crash of 1929, residential construction in Santa Monica continued, and in 1931 a shortage of homes was reported. One of the key drivers of this shortage was growing enrollment at the nearby University of California, Los Angeles (UCLA). The shortage continued well into the late 1930s, this time driven by the expansion and influx of workers for the Douglas Aircraft plant (Architectural Resources Group and HRG 2018a).

The pace of development slowed nation-wide in the 1940s as the U.S. focused its efforts on World War II. However, due to the military presence in Santa Monica, Santa Monica's leisure industry adapted successfully to the wartime demands. During World War II, Douglas Aircraft was contracted by the U.S. Government to build military aircraft, resulting in a large upswing in local population as support military personnel and workers moved into the area (Santa Monica Conservancy 2012; Architectural Resources Group and HRG 2018a). In 1940, the population of Santa Monica was 53,500. During the war, Douglas aircraft had 44,000 people (mostly women) on its payroll at the Santa Monica Cloverfield facility, nearly doubling Santa Monica's population (Architectural Resources Group and HRG 2018a). Douglas Aircraft Company was the single most important employer in the history of Santa Monica. The war not only made a mark on and the City through population increases and the establishment of a substantial industrial base, but it also substantially changed the City's mix of single-family and multi-family residential housing (Architectural Resources Group and HRG 2018a).

Built in 1946 and designated in 2005, the Sears building serves as an example of late Streamline Moderne architecture and the explosion of consumerism after World War II.

The years following World War II saw an explosion of new construction in Santa Monica, particularly for multi-family housing and new businesses, spurred by a rise in consumer culture. For example, Sears opened its new store on Colorado Avenue in 1947, becoming the largest department store in the City. In 1948, the RAND Corporation was established as a private non-profit organization focusing on *"furthering and promoting scientific, educational, and charitable purposes for the public welfare and security of the U.S."* (City of Santa Monica 2010). Originally, Project RAND was housed in a Douglas Aircraft facility, but once transformed into a non-profit, the RAND Corporation moved to a Spanish Colonial building at 4th Street and Broadway. In the early 1950s, the RAND Corporation commissioned a new headquarters building in the Civic Center area, innovatively designed by H. Roy Kelley to heighten collaboration among the workers (City of Santa Monica 2010).

The I-10 (Santa Monica Freeway) was completed in 1965 and provided a fast, 20-minute trip to the Santa Monica beach from Downtown Los Angeles, spurring the development of Santa Monica as a commuter suburb to the Greater Los Angeles Area (City of Santa Monica 2010).

During the 1970s, a new wave of commercial development, the "office park," was taking hold throughout Southern California. Characteristics of these office parks included low-rise office buildings, a high percentage of landscaped areas, and insular, often circular, automotive circulation patterns that isolate the office park from traditional street grid patterns. With the recession of the early 1970s, commercial building all but ceased. By the middle of the decade, the office space market in the Greater Los Angeles Area was very tight (i.e., competitive). Office parks became popular in suburbs with large swaths of undeveloped land.

District and Neighborhood Descriptions

The district and neighborhood descriptions below are provided in the City's most recent Historical Resources Inventory (HRI) update, completed in 2018 (Architectural Resources Group and HRG 2018b; see Section 3.4.1.3, *Historic Built Environment Resources*). These districts and neighborhoods generally align with those that are described in the Santa Monica General Plan Land Use and Circulation Element (LUCE).

Civic Center

The Civic Center district is located along the western border of Santa Monica. It is generally bounded by Colorado Avenue on the north, Lincoln Boulevard on the east, Pico Boulevard on the south, and Ocean Front Walk on the west. The district is bisected by the I-10 (Santa Monica Freeway) where it turns into SR-1 (Pacific Coast Highway).

Historically, the Civic Center district comprised modest single- and multi-family residences constructed between the early 1900s and 1920s. Properties west of Ocean Avenue were developed as a mixed-use residential/resort area that capitalized on the success of the oceanfront Arcadia Hotel (previously demolished). East of Ocean Avenue, a triangular block bisected by Belmar Place became a hub of residential and commercial activity for Santa Monica's African American community. Santa Monica High School was constructed in 1912 and comprised the area north of 4th Street. In the 1930s, new civic development encroached on the residential neighborhoods between Ocean Avenue and 4th Street; in the 1950s, the construction of a new Civic Auditorium resulted in the demolition of Belmar Place and the reconfiguration of surrounding streets. Today, the Civic Center district now generally supports large civic buildings, including Santa Monica City Hall, Courthouse, and Civic Auditorium, as well as the recently completed Tongva Park. Some residential properties are still present west of Ocean Avenue and along 7th Street, but these areas are now largely defined by post-World War II multi-family residential development. Commercial properties are mostly located along Ocean Avenue and Lincoln Boulevard.

Downtown

The Downtown district is located in the westernmost portion of the City and is generally bounded by Wilshire Boulevard on the north, Lincoln Boulevard on the east, the I-10 (Santa Monica Freeway) on the south, and Ocean Avenue on the west.

The Downtown district includes the southern portion of Santa Monica's original township, which was subdivided in 1875 and initially contained 150 blocks. As the area grew, residential development clustered within the blocks north of Wilshire Boulevard, which are now located outside of the Downtown district boundaries. The area south of Santa Monica Boulevard assumed a commercial character, while a small "downtown" developed along 3rd Street. Today, the Downtown district is predominantly commercial in nature, and its boundaries exclude areas of the original township where substantial residential development occurred. Only a few residential properties remain, and of those, many have been re-zoned for commercial uses. Commercial, institutional, and mixed-use buildings comprise the majority of the neighborhood.

Gold Coast/Sunset Beach/Pacific Coast Highway (PCH)

The Gold Coast/Sunset Beach/PCH neighborhood comprises a stretch of beachfront properties along the City's western border. It encompasses the properties on the west side of SR-1 (Pacific Coast Highway), which face onto Santa Monica State Beach. The area is completely removed from the rest of the City by a large bluff, with vehicle access provided by the California State Incline and I-10 (Santa Monica Freeway), which both terminate at SR-1, as well as several pedestrian overcrossings.

The Gold Coast/Sunset Beach/PCH neighborhood is located along what was formerly known as Palisades Beach Road (now SR-1 [Pacific Coast Highway]), named for the jagged palisades on the opposite side of the highway. Prior to its subdivision, the area's earliest structures were a collection of tents and beach shacks. The portion of the beach north of Wilshire Boulevard was subdivided as the Sunset Beach Tract in 1900 and advertised for single- or multi-family residential development; due to the small, narrow lot sizes, the area initially comprised modest beach cottages. In the 1920s and 1930s, Palisades Beach Road became a prized getaway spot for Hollywood luminaries, who constructed grand, architecturally significant homes along the beachfront. Further north, Palisades Beach Road also became the site of several private beach clubs. Today, Gold Coast/Sunset Beach/PCH is composed mainly of single-family residences interspersed with surface parking lots. The northern portion of the area retains a handful of public and private beach clubs.

Mid-City

The Mid-City neighborhood is located near the center of the City, just north of I-10 (Santa Monica Freeway). It is generally bounded by Washington Avenue on the north, Centinela Avenue on the east, Colorado Avenue and Santa Monica Boulevard on the south and 20th Street and 5th Street on the west. This neighborhood is bisected by Wilshire Boulevard, a major east-west commercial thoroughfare that runs the length of the City. The neighborhood is also transected by several major north-south corridors including 7th Street, Lincoln Boulevard, 26th Street, 14th Street, Cloverfield Boulevard, and 26th Street.

Mid-City contains a large concentration of the City's multi-family residential building stock. It historically developed as a patchwork of early 20th century subdivisions and later tracts, which resulted in haphazard building patterns containing a wide variety of multi-family residential property types. In the 1920s and 1930s, apartment buildings, bungalow courts, and courtyard apartments became the most predominant building types. In the post-World War II period, multi-family residential building evolved to include large

modern apartments and dingbats. Like other neighborhoods, commercial development in Mid-City is concentrated on major east-west corridors like Wilshire Boulevard and Santa Monica Boulevard. The neighborhood also contains a substantial amount of institutional development such as schools, medical facilities, and parks, which are scattered throughout the area. Industrial development spills over from the Pico neighborhood into the area between Broadway and Colorado Avenue.

Northeast

The Northeast neighborhood is located within the northeastern portion of the City and is bounded by Montana Avenue on the north, Centinela Avenue on the east, Wilshire Boulevard on the south, and 26th Street on the west. The City of Los Angeles borders the neighborhood on the north and east.

The Northeast neighborhood historically comprised two residential tracts, Tract 3000/Fairmount Villas and Tract 2385, which were subdivided in the early 1900s. However, the area did not experience substantial growth until the 1920s and 1930s. Modest single-family residences comprise the area west of Stanford Street, while larger residences are found east of Stanford Street, particularly along Franklin Street. Multi-family properties are concentrated along Montana Avenue, and Wilshire Boulevard contains the neighborhood's only commercial development.

North of Montana

North of Montana is a residential neighborhood that is located in the northernmost section of the City. This neighborhood is roughly bounded by Adelaide Drive, San Vicente Boulevard, and La Mesa Drive on the north, 26th Street on the east, Montana Avenue on the south, and Ocean Avenue on the west.

The neighborhood, which is residential in character, is notable for its generous lot sizes, wide streets, broad parkways, and mature street trees. The neighborhoods north of San Vicente Boulevard are slightly different in character than the rest of the City, and are defined by small, winding streets and large, irregularly-shaped lots. North of Montana is traversed by several major north-south corridors including 20th Street, 14th Street, 7th Street, and 4th Avenue, which is also bisected by a landscaped median. Georgina Avenue, Marguerita Avenue, and Alta Avenue run through the neighborhood in the east-west direction. A landscaped park known as Palisades Park spans the bluff opposite of Ocean Avenue from Adelaide Drive to Montana Avenue.

North of Montana has historically been one of the most affluent neighborhoods of Santa Monica, and it contains several subdivisions that originally targeted the City's upper-class citizens. The Palisades Tract, Adelaide Drive/Adelaide Place, Gillette's Regent Square, and Canyon Vista Park (mostly comprising properties along La Mesa Drive) were just some of the tracts that advertised oversized lots, canyon and ocean views, proximity to the streetcar line along San Vicente Boulevard, and a general exclusivity not found in other parts of the City. By the 1930s, the neighborhood was mostly built out and contained some of the finest and most architecturally significant residences in the City. Today, the neighborhood remains residential in character, and still contains a notable concentration of 1920s and 1930s single-family houses. Some multi-family residential development can be found along Ocean Avenue, Montana Avenue, and San Vicente Boulevard, which contains a designated historic district of courtyard apartments west of

7th Street (San Vicente Boulevard Courtyard Apartments Historic District). The neighborhood also contains a stretch of low-scale commercial development along Montana Avenue between 7th Street and 17th Street and at the corner of 26th Street and San Vicente Boulevard.

Ocean Park

The Ocean Park neighborhood is located in the southwestern-most portion of the City. The neighborhood stretches from the beach eastward to Lincoln Boulevard (SR-1 [Pacific Coast Highway]), and from the City's southern boundary at Dewey Street northward to Pico Boulevard.

Ocean Park, historically known as "South Santa Monica," was initially developed in the late-19th century with vernacular beach cottages built as vacation rentals spurred by efforts to establish a seaside resort along the waterfront; a concentration of these cottages still exists in the South Beach area of Ocean Park. In the first decades of the 20th century, residential tracts of modest lots were quickly built out with bungalows, bungalow courts, boarding houses and apartment houses, first along streets closest to the beach, then extending inland to Lincoln Boulevard. It was also during this period that Main Street became the community's primary commercial corridor, lined with vernacular brick storefronts and anchored by commercial blocks, hotels, and institutional properties. After World War II, much of the older building stock along the waterfront was demolished to make way for upscale condominiums and new tourist-oriented development. Further inland, single-family homes were enlarged or replaced with multi-story, multi-unit dwellings, dramatically increasing the area's population density. In the 1960s, Ocean Park became a haven for the artistic community in Santa Monica. Today, Ocean Park contains a wide variety of property types and styles, reflecting the area's evolution over the past century. Main Street continues to serve as the area's primary shopping district, while also attracting visitors to its numerous shops, restaurants, and bars. Lincoln Boulevard, largely built-up in the post-war era, is characterized by its many auto-oriented businesses. Ocean Park is also home to one of Santa Monica's few designated historic districts, the 3rd Street Neighborhood Historic District.

Pico

The Pico neighborhood is located in the central portion of the City and is bounded by Lincoln Boulevard (SR-1 [Pacific Coast Highway]) on the west, Centinela Boulevard on the east, Santa Monica Boulevard and Colorado Avenue on the north, and Pico Boulevard on the south.

The development history of the Pico neighborhood has been largely influenced by major transportation routes, which link Santa Monica with Downtown Los Angeles. The neighborhood originally developed from west to east along the south side of the Southern Pacific railroad tracks. The area closer to the beach was subdivided into residential tracts and built up with modest one-story bungalows and tract houses primarily from the 1920s through the 1940s, while tracts further inland were typically zoned for multi-family residential or industrial uses. The Pico neighborhood has always been among the City's most ethnically diverse. In the 1930s and 1940s, it contained a high concentration of the City's African American, Japanese American, and Mexican American populations. During World War II, as the defense industry opened employment to African Americans for the first time, the City saw a demographic shift of its African American community to the Pico neighborhood, due to its proximity to the Douglas Aircraft

Company. It was also during this period that Broadway became the primary commercial corridor for the local African American community, becoming home to many Black institutions and Black-owned businesses.

After World War II, Pico began to see substantial infill construction as single-family homes were replaced with multi-family dwellings. In the 1960s, the neighborhood's lower property values made it a prime target for the extension of I-10 (Santa Monica Freeway). As previously described, the freeway sliced diagonally through the neighborhood, disrupting the grid pattern, demolishing hundreds of homes, and displacing many low-income residents. After the freeway was completed, many adjacent residential streets were converted to industrial use. Today, the Pico neighborhood is a mixture of development types and periods, reflecting the area's evolution over many decades.

Sunset Park

Sunset Park is a residential neighborhood located in the southeast portion of the City. It is situated south of I-10 (Santa Monica Freeway) and generally bounded by Pico Boulevard on the north, Centinela Avenue on the east, the Santa Monica Municipal Airport and Dewey Street on the south, and Lincoln Boulevard on the west.

The development of Sunset Park largely resulted from its proximity to the Douglas Aircraft Corporation, which was originally located at the present site of the Santa Monica Municipal Airport. Portions of the neighborhood were subdivided as early as the 1880s, but the area did not experience substantial development until the 1920s, when Douglas Aircraft relocated to Cloverfield. Development continued in full force into the 1930s and 1940s, as the City ramped up its wartime efforts and Douglas Aircraft experienced an influx of employees. As a result, Sunset Park predominantly contains modest single-family residences that were constructed for the area's working-class population. The neighborhood also features concentrations of multi-family residential properties such as courtyard apartments and bungalow courts, which are clustered near the airport. Low-scale, neighborhood-serving commercial development is concentrated along Pico Boulevard and Ocean Park Boulevard. Sunset Park also contains several institutional properties including schools and parks, as well as some industrial properties related to the development of the airport.

Wilshire Montana

The Wilshire Montana neighborhood encompasses a long, rectangular area that is sandwiched between four Santa Monica neighborhoods: North of Montana, Northeast, Mid-City, and Downtown. It is generally bounded by Montana Avenue on the north, 22nd Street on the east, Wilshire Boulevard on the south, and Santa Monica State Beach on the west.

Wilshire Montana largely comprises early twentieth century and post-World War II multi-family residential properties. The neighborhood encompasses the northern portion of the City's original township, which contained some of the area's largest and most prominent early residences, as well as several additional tracts. During the 1920s building boom, the area was substantially built out with a mix of more modest single-family residences and compatible multi-family property types such as duplexes, triplexes,

fourplexes, and bungalow courts, followed by courtyard apartment complexes in the late 1930s. In the post-World War II period, developers capitalizing on the neighborhood's proximity to the ocean constructed high-rise residential towers along Ocean Avenue. Today, Wilshire Montana is largely characterized by multi-family residential development, though small concentrations of single-family residences are found along 21st Street and 22nd Street. The neighborhood contains low-scale commercial development along Montana Avenue between 7th Street and 17th Street, while larger commercial properties can be found along Wilshire Boulevard. Institutional properties are scattered throughout the neighborhood and include schools, churches, and parks.

3.4.1.3 Historic Built Environment Resources

The historic built environment includes buildings, structures, and objects of historic or aesthetic importance. Referred to collectively as historic architectural resources, they amplify the local population's sense of community, enhance perceptions and enjoyment of the community by residents and visitors, and provide an important measure of the physical quality of life in the community. When a significant concentration of such resources occurs within a defined geographic space, a historic district may be defined. It should be noted that the absence of listed properties within a particular area does not indicate the absence of important cultural resources. Rather, listed properties are a result of studies conducted to determine whether certain properties should be considered significant under Federal, State, and local rubrics.

The City has conducted numerous studies of its history and potential historic resources in support of City historic preservation policies and programs. The City initiated Phase I of its first comprehensive HRI in 1983 as part of an effort to draft its first Historic Preservation Element for inclusion in the City of Santa Monica General Plan. During that effort, several potential historic districts were identified. Phases II and III followed in 1986 and 1993, respectively. Area updates were completed in 1994, 1997, 2002, 2004, 2006, and 2011. The most recent HRI update was completed in 2018.

Below is a list of the historic resource surveys completed within the City:

- *Santa Monica Historical Resources Inventory, Phases I & II Final Report, prepared by Johnson Heumann Research Associates, 1985-1986* – Phases I and II of the City's first comprehensive historic resources survey; includes brief history of Santa Monica.
- *Santa Monica Historic Resources Inventory, Phase III Final Report, prepared by Leslie Heumann and Associates, 1994* – Phase III of the City's first comprehensive historic resources survey.
- *Historic Resources Inventory Update, Final Report, prepared by Parkinson Field Associates, 1995* – Post-Northridge Earthquake survey; identified historic resources damaged in the earthquake.
- *Historic Resources Inventory Update, prepared by Parkinson Field Associates and Janet L. Tearnen, 1998*.
- *Historic Resources Inventory Update: Central Business District and the Third Street Promenade, Final Report, prepared by Janet L. Tearnen, Lauren Weiss Bricker, and William Scott Field, 1998* – Area survey of the Central Business District and Third Street Promenade.
- *City of Santa Monica General Plan: Historic Preservation Element, prepared by PCR Services Corporation and Historic Resources Group, 2002* – Historic Preservation Element of the City of

Santa Monica General Plan; includes brief historic context statement and identifies potentially significant resources throughout the City.

- *Historic Resources Survey Update: Ocean Park, Final Draft, prepared by Historic Resources Group, 2004* – Area survey of Ocean Park; includes historic context statement for Ocean Park.
- *Santa Monica Citywide Historic Resources Inventory Update, Final Report, prepared by ICF Jones & Stokes, 2010* – Citywide historic resources inventory update; includes historic context statement.
- *Santa Monica Citywide Historic Resources Inventory Update, Survey Report, prepared by Architectural Resources Group and Historic Resources Group, 2018* – City-wide historic resources inventory update; includes citywide historic context statement.

The HRI is a database containing building descriptions and evaluations of properties that exhibit potential historic, architectural, or cultural significance in Santa Monica. The HRI includes a survey of designated Landmarks, Structures of Merits, and potential historical resources at the Federal, State, and local level. The HRI is used to identify properties of potential historic significance, and properties on the HRI are eligible to apply the State Historical Building Code. The HRI[1] includes over 1,300 properties that have been evaluated for historic significance. Of these, over 900 properties have been either listed in or identified as eligible for listing in the National Register of Historic Places (NRHP; National Register), the California Register of Historic Resources (CRHR; California Register) and/or as Santa Monica Landmarks, Structures of Merit or as contributors to a historic district (HRG 2021; see Appendix D).

Individually Significant Historic Resources

Residential Properties

The majority of buildings (approximately 70 percent; Architectural Resources Group and HRG 2018b) listed as or identified as eligible for historic listing as an individual resource are residential properties, reflecting the largely residential character of Santa Monica. Single-family residences represent over half of these individual residential properties. These include residences constructed during the first decades of the 20th century, representative of the City's earliest patterns of residential development. Others are significant as notable examples of an architectural style or type, or as the work of an important architect. A wide range of architectural styles and periods of construction are represented, including Craftsman, Period Revival styles, and Mid-Century Modern. A small number of residences were found significant for their association with persons important in the City's history (HRG 2021).

The HRI also includes a large collection of multi-family residential properties, many of which are significant for representing patterns of multi-family residential development in the City. These include properties representing the City's earliest multi-family residential development, as well as excellent examples of early multi-family building types such as duplexes, triplexes, fourplexes, bungalow courts, and apartment houses constructed prior to World War II. Courtyard apartments dating from the period just prior to and immediately after World War II have also been identified. A small number of high-rise residential towers, dating from the 1960s and 1970s have also been identified as significant for their

[1] Santa Monica Historic Resources Inventory dated April 1, 2021 was reviewed during the preparation of the Historic Architectural Analysis (HRG 2021; see Appendix D).

association with post-war patterns of residential development and/or as notable examples of their architectural styles in the City (HRG 2021).

Commercial Properties

A smaller number of properties identified as eligible for historic listing in the HRI are commercial properties. Most of these are significant for their association with the initial development and expansion of the City's original central business district during the first four decades of the 20th century, or the increased development in the post-World War II period, when commercial development expanded beyond the original commercial center. Commercial properties identified as historically significant include retail storefronts, mixed-use buildings, offices, or restaurants, several of which are also significant for their architectural merit, primarily as excellent examples of pre-World War II Period Revival styles such as Italian Renaissance Revival, Spanish Colonial Revival, and Tudor Revival, and early Modern styles such as Art Deco and Streamline Moderne. A small number of commercial properties were found eligible as the long-term location of a local business important to the commercial identity of the City (HRG 2021).

Institutional Properties

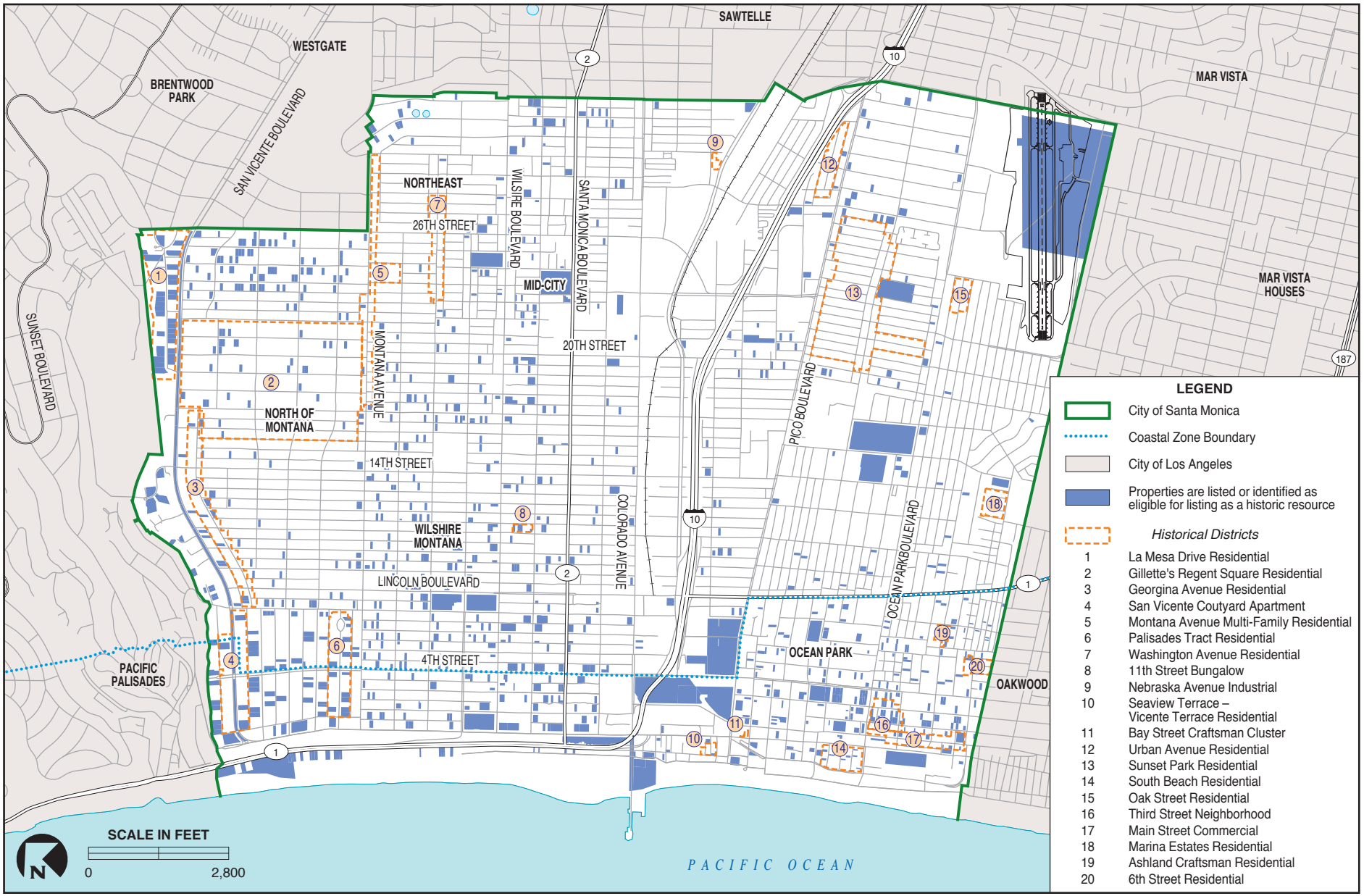
A collection of public and private institutional buildings were also identified as individually eligibly in the HRI. These include civic buildings such as schools, post offices, libraries, utility buildings and fire stations. Several Religious buildings have been identified as significant as excellent examples of architectural styles. A handful of private institutional buildings constructed to house clubs and fraternal organizations were also identified in the HRI as listed or eligible for historic listing. The HRI also includes a small handful of industrial buildings (HRG 2021).

Historic Districts

The HRI recognizes over 16 groupings of properties that are listed or identified as eligible for listing as a historic district (see Figure 3.4-1).[2]

- 6th Street Residential Historic District
- Ashland Craftsman Residential Historic District
- Georgina Avenue Residential Historic District
- Gillette's Regent Square Residential Historic District
- La Mesa Drive Residential Historic District
- Main Street Commercial Historic District
- Marina Estates Residential Historic District
- Montana Avenue Multi-Family Residential Historic District
- Nebraska Avenue Industrial Historic District
- Oak Street Multi-Family Residential Historic District
- Palisades Tract Residential Historic District
- Seaview Terrace-Vicente Terrace Residential Historic District
- South Beach Residential Historic District
- Sunset Park Residential Historic District
- Urban Avenue Residential Historic District
- Washington Avenue Residential Historic District

[2] The HRI also identified "Conservation Districts," which do not appear eligible for historic listing due to diminished integrity but still retain some cohesion with respect to character, massing, scale, and use. These were identified in Appendix D for planning purposes only and are not considered historical resources for the purposes of CEQA.



wood.

City of Santa Monica
Historical Districts and Resources

FIGURE 3.4-1

Similar to the individually significant resources, the majority of the historic districts within the City represent residential development, with most of these being single-family residential neighborhoods. Contributing buildings to these districts were largely constructed between 1920 and 1950 in Period Revival styles, although one district was constructed in the 1950s. Several historic districts representing multi-family development have also been listed or identified as eligible for historic listing (HRG 2021).

One commercial historic district, the Main Street Commercial Historic District, was identified as eligible for historic listing as a rare collection of retail storefronts constructed in during the first four decades of the 20th century in the Ocean Park neighborhood. A single, small industrial district, the Nebraska Avenue Industrial Historic District, has also been identified as a rare concentration of industrial properties developed during the post-World War II era (HRG 2021).

Many properties identified as contributors to a historic district have also been identified as individually significant.

3.4.1.4 Archaeological Resources

Archaeological resources represent and document activities, accomplishments, and traditions of previous civilizations and link current and former inhabitants of an area. Archaeological resources may date from the historic or prehistoric period, and include deposits of physical remains of the past (e.g., artifacts, manufacturing debris, dietary refuse, and the soils in which they are contained) or areas where prehistoric or historic activity measurably altered the earth.

The Greater Los Angeles Area is known to be rich in subsurface archaeological resources in certain settings, and the archaeological record indicates a high level of habitation/seasonal habitation and resource use by Native Americans. However, this archaeological record is scattered and sparse due to the intensive development in the region during the years before modern archaeological studies and the application of environmental protection for cultural resources. Nevertheless, important prehistoric age archaeological sites are known nearby, including the Topanga Site and the Malaga Cove Site (Heizer and Elasser 1980). The Malaga Cove Site is found several miles to the south, nearer Palos Verde Estates and the Topanga Site is found in closer proximity, just to the north of the City boundaries.

During prehistoric times, the City provided an especially favorable environment for Native American settlement given its location along the Pacific Ocean on a relatively level bluff above the Santa Monica Bay, with freshwater springs at nearby Ballona Creek and Santa Monica Canyon. While surface deposits may have been obscured by development since 1875, the City is situated on a terrace with uphill slopes trending to the north toward the Santa Monica Mountains, and it is likely that alluvial sediments eroding from those higher elevations have covered older archaeological deposits over the millennia prior to 1875. Thus, archaeological deposits dating back thousands of years could be uncovered at unknown depths anywhere in the City. Such prehistoric archaeological deposits could provide important information about the occupation, settlement practices, economy, trade, and life ways of Native Americans at this location during ancient times.

Prior to the 1920s, much of the Downtown's current commercial core contained dwellings on residential lots. While many of these residences have since disappeared from the landscape, it is possible that old foundations and buried, artifact-filled archaeological deposits such as privies (i.e., outhouses) and refuse dumps from residential occupation may be found within those parcels. Construction of commercial buildings, which accelerated in the 1920s, may have destroyed older deposits in some locations, but some areas may still contain intact buried deposits at unknown depths. Archaeological deposits from the 1870s-1920s could provide important information about the economy, consumer practices, product availability, and household lifestyles of residents during the early history of the City.

Various archaeological investigations have been completed throughout the City. Based on a literature review and records search conducted at the South Central Coastal Information Center (SCCIC) in support of the Downtown Community Plan (DCP) Program EIR (State Clearinghouse [SCH] No. 2013091056), at least 40 previous cultural resources surveys have occurred within a 0.25-mile radius of the Downtown. Additionally, a more recent record search prepared in support of the Ocean Avenue Project EIR (SCH No. 2018121060) identified at least 52 previous cultural resources investigations have occurred within a 1-mile radius of the Downtown. These studies identified seven historic-period archaeological resources within the search radius, but no prehistoric archaeological sites. A records search was prepared in support of the EIR for the Bergamot Transit Village Center (SCH No. 2010111062) in the Pico Neighborhood, which identified five previous cultural resource studies and one historic-age archaeological site within a 0.25 mile radius of the project site. Similarly, a records search was conducted in support of the Providence Saint John's Health Center Phase II Master Plan EIR (SCH No. 2017041030) in the Mid-City neighborhood. This record search indicated that 19 cultural resources studies have been conducted within a 0.5-mile radius of the project site, which identified two historic period archaeological resources, but no prehistoric archaeological sites.

As demonstrated by these record searches, previously identified buried archaeological resources are generally limited to a small number of historic period sites scattered throughout the City. However, the presence or absence of previously identified archaeological sites is not a reliable indicator of archaeological sensitivity. In highly developed urban settings, the original ground surface is typically not available for inspection, and prehistoric and historic archaeological deposits may be preserved beneath more recent soils. For this reason, there is a possibility that important prehistoric age resources could be found in the subsurface, especially beneath structures built before the application of environmental compliance laws requiring surveys prior to construction.

3.4.2 Regulatory Setting

3.4.2.1 Federal Policies and Regulations

National Register of Historic Places

The National Register was established by the National Historic Preservation Act (NHPA) to help identify and protect properties that are significant cultural resources at the Federal, State, and/or local levels. The National Register employs four criteria to determine if a resource is significant to U.S. history,

architecture, archaeology, engineering, or culture and should be listed in the National Register. These criteria include:

1. It is associated with events that have made a significant contribution to the broad patterns of our history;
2. It is associated with the lives of persons significant in our past;
3. It embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;
4. It yields, or may be likely to yield, information important in prehistory or history.[3]

Districts, sites, buildings, structures, and objects of potential significance that are at least 50 years in age must meet one or more of the above criteria to be eligible for listing in the National Register. However, the National Register does not prohibit the consideration of properties less than 50 years in age whose exceptional contribution to the development of U.S. history, architecture, archaeology, engineering, or culture can be clearly demonstrated under National Register Criteria Consideration G.

In addition to meeting the Criteria for Evaluation, a property must have integrity. *"Integrity is the ability of a property to convey its significance."* According to National Register Bulletin 15, the National Register recognizes seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity a property will always possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling and association.

In assessing a property's integrity, the National Register criteria recognize that properties change over time, therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity.

3.4.2.2 State Policies and Regulations

The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a State-wide level. The OHP also carries out the duties as set forth in the Public Resources Code and maintains the California Historic Resources Inventory and the California Register. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the State's jurisdictions. Also implemented at the State level, the California Environmental Quality Act (CEQA) requires projects to identify any substantial adverse impacts which may affect the significance of identified historical resources.

[3] "Guidelines for Completing National Register Forms," National Register Bulletin 16, U.S. Department of Interior, National Park Service, September 30, 1986. This bulletin contains technical information on comprehensive planning, survey of cultural resources and registration in the National Register of Historic Places (NRHP).

California Register of Historic Resources of Historical Resources

The California Register is *"an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."* Based on the criteria of eligibility for the California Register, a historic resource may be eligible for listing if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

A historic resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance to be recognizable as a historic resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.

The California Register automatically includes "*all properties formally determined eligible for, or listed in, the National Register of Historic Places,"* and certain specific California Historical Landmarks, and California Points of Historical Interests that have been evaluated and recommended for inclusion on the California Register. Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a Lead Agency should consider the resource to be potentially eligible for the California Register. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, not included in a local register of historical resources, or identified in an historical resources survey, does not preclude a Lead Agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

The California Register does not provide criteria for historic districts. California OHP Technical Assistance Series #7: How to Nominate a Resource to the California Register of Historical Resources bulletin describes historic districts:

> *"Historic districts are unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally. Historic districts are defined by precise geographic boundaries. Therefore, districts with unusual boundaries require a description of what lies outside the area, in order to define the edge of the district and to explain the exclusion of adjoining areas. The district must meet at least one of the criteria for significance discussed in Section 4852 (b)(1)-(4) of the regulations."*

California Environmental Quality Act

CEQA includes regulations that address historical resources. Specifically, according to Public Resources Code Section 5020.1(j), historical resources include, but are not limited to, *"any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California"* (OHP 2005). Resources included in a local register of historical resources (pursuant to Public Resources Code Section 5020.1[k]), or identified as significant in an historical resources survey (meeting the criteria in Public Resources Code Section 5024.1[g]), also are considered "historical resources" for the purposes of CEQA. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, not included in a local register of historical resources, or identified in an historical resources survey, does not preclude a Lead Agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

State Historical Building Code

Created in 1975, the State Historical Building Code (SHBC) provides regulations and standards for the preservation, restoration, rehabilitation, or relocation of historic buildings, structures, and properties that have been determined by an appropriate local or State governmental jurisdiction to be significant in the history, architecture, or culture of an area. Rather than being prescriptive, the SHBC constitutes a set of performance criteria. The SHBC is designed to help facilitate restoration or change of occupancy in such a way as to preserve original or restored elements and features of a resource; to encourage energy conservation and a cost-effective approach to preservation; and to provide for reasonable safety from earthquake, fire, or other hazards for occupants and users of such "buildings, structures and properties." The SHBC also serves as a guide for providing reasonable availability, access, and usability by the physically disabled.

Codes Governing Human Remains

The disposition of human remains is governed by Public Health and Safety Code Section 7050.5 and Public Resources Code Sections 5097.94 and 5097.98, and falls within the jurisdiction of the Native American Heritage Commission (NAHC). If human remains are discovered, the County Coroner must be notified immediately and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Public Resources Code Section 5097.98, will immediately notify the Most Likely Descendant (MLD) from the deceased Native American(s) so they can inspect the burial site and make recommendations for treatment or disposal. CEQA Guidelines Section 15064.5 also assigns special importance to human remains and specifies procedures to be used when Native American human remains are discovered.

3.4.2.3 Local Policies and Regulations

City of Santa Monica Landmarks and Historic District Ordinance

The City's Landmarks and Historic Districts Ordinance (Santa Monica Municipal Code [SMMC] Chapter 9.56) was adopted by the City in 1976 and amended in 1987, 1991, and 2015. The ordinance established the City's Landmarks Commission with the power to designate Landmarks, Structures of Merit, or Historic Districts. The ordinance established criteria and procedures for designating these historic resources. The Landmarks Commission has the sole authority for oversight of compliance with the Secretary of the Interior's Standards.

SMMC Section 9.56.100 sets forth the criteria for designation of Landmarks and Historic Districts. A geographic area or a noncontiguous grouping of thematically related properties may be designated a Historic District. An individually significant property may be designated a Landmark. Landmarks may include structures, natural features, or any type of improvement to a property that is found to have particular historic or architectural significance to the City. Such designations may be made provided that the subject property meets one or more of the following criteria outlined in the SMMC Section 9.56.100(A):

1. It exemplifies, symbolizes, or manifests elements of the cultural, social, economic, political or architectural history of the City.
2. It has aesthetic or artistic interest or value, or other noteworthy interest or value.
3. It is identified with historic personages or with important events in local, State or national history.
4. It embodies distinguishing architectural characteristics valuable to a study of a period, style, method of construction, or the use of indigenous materials or craftsmanship, or is a unique or rare example of an architectural design, detail or historical type valuable to such a study.
5. It is significant or a representative example of the work or product of a notable builder, designer or architect.
6. It has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community, or the City.

An historic district is defined by the City as a geographic area or noncontiguous grouping of thematically related properties that may be designated a Historic District if the City Council finds such area meets one of the following criteria, outlined in the SMMC Section 9.56.100(B):

1. Any of the criteria identified in SMMC Section 9.56.100(A)(1) through (6).
2. It is a noncontiguous grouping of thematically related properties or a definable area possessing a concentration of historic, scenic or thematic sites, which contribute to each other and are unified aesthetically by plan, physical development or architectural quality.
3. It reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning.
4. It has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community or the City.

SMMC Section 9.56.080 recognizes the significance of Structures of Merit and empowers the Landmarks Commission to designate such structures. The Landmarks Commission may designate Structures of Merit if the structure possesses one of the following characteristics:

A. The structure has been identified in the City's HRI.
B. The structure is a minimum of 50 years of age and meets one of the following criteria:
    1. The structure is a unique or rare example of an architectural design, detail or historical type.
    2. The structure is representative of a style in the City that is no longer prevalent.
    3. The structure contributes to a potential Historic District.

Other sections of the ordinance include an economic hardship provision, requirements and exemptions for maintenance and repair of resources, and procedures to respond to unsafe conditions. In addition to regulatory requirements, the ordinance provides for preservation incentives including waivers of fees and zoning regulations, use of the SHBC, and the Mills Act property tax reduction contracts.

The ordinance requires a Certificate of Appropriateness for any proposed alterations, restorations, construction, removal, relocation, or demolition, in whole or in part, of or to a Structure of Merit, Landmark or Landmark Parcel, or to a building or structure located within a historic district. Certificates are issued by the Landmarks Commission or the City Council if a determination can be made in accordance with any of the criteria stated in the ordinance. Generally, the proposed work should not detrimentally change, destroy, or adversely affect any exterior features of a protected resource and should be compatible with the character of the resource.

SMMC Requirements for Demolition

SMMC Chapter 9.25 establishes regulations that address the demolition of buildings and structures in the City. An important aspect of this code provision requires that the City cannot issue demolition permits for structures 40 years or older until after a period of 75 days during which an application for the designation of the structure as a Landmark, historic district, or structure of merit may be filed. If no application for designation is filed during the 75-day period, the demolition may proceed subject to all other legal requirements. However, if an application for designation is filed, the structure is then subject to designation procedures to determine whether the building or structure is eligible for designation pursuant to criteria set forth in the Landmarks and Historic Districts Ordinance.

Santa Monica General Plan Historic Preservation Element

The purpose of the Santa Monica General Plan Historic Preservation Element (2002) is to establish a long-range vision for the protection of historic resources in the City and to provide implementation strategies to achieve that vision. The Historic Preservation Element is part of the Santa Monica General Plan and it is organized into goals, objectives, and policies. Some of the goals include identifying and evaluating historic and cultural resources on a regular basis including conducting additional surveys to identify types and contexts, protecting historic and cultural resources from demolition and inappropriate alterations while ensuring compliance with CEQA and Section 106 of the NHPA, seeking designation for

historic resources, and protecting historic views and landscapes. Those that are directly relevant to the Housing Element include the following:

Goal 2: Identify and evaluate historic and cultural resources on a regular basis.

Objective 2.2	Review the identified property types in the current inventory and conduct additional surveys to identify types and contexts.

Goal 4: Protect historic and cultural resources from demolition and inappropriate alterations.

Objective 4.1	Discourage the demolition or inappropriate alteration of historic buildings.
Objective 4.3	Ensure compliance with CEQA and Section 106 of the NHPA.
Policy 4.3.4	Review all new development for potential impacts on historic resources as required by CEQA.
Objective 4.4	Seek designation for historic resources.
Policy 4.4.1	Seek designation for properties eligible for listing in the NRHP and/or the California Register.
Policy 4.4.2	Seek designation for properties eligible for listing as Santa Monica Landmarks, Points of Interest, Structures of Merit, or Historic Districts.
Objective 4.5	Protect historic views and landscapes.
Policy 4.5.1	Maintain and protect streetscapes that establish a context for historic buildings, structures, objects, sites, and districts.
Policy 4.5.2	Encourage urban design plans for parks, sidewalks, and other public areas to include historic considerations, protect historic views and landscapes, encourage public access, and promote awareness of the history of the City.

Goal 5: Promote the preservation of historic and cultural resources through incentives and technical assistance.

Santa Monica General Plan Land Use and Circulation Element

The LUCE seeks to ensure that historic preservation is a fundamental community value. The LUCE provides a range of policies to serve as tools for responding to a wide range of requirements for historic preservation, preservation of historically significant attributes, and conservation of neighborhood resources. The LUCE promotes an integrated set of policies and programs in historic preservation, neighborhood conservation, and urban form to reduce impacts to historic resources. All of the policies and programs were designed to build upon and incorporate consistently with the Historic Preservation Element. LUCE policies encourage historic preservation and aim to protect, preserve, and enhance the Downtown residential neighborhood and ensure that structures of historical significance are preserved. The LUCE seeks to promote an integrated set of policies and programs in Historic Preservation, Neighborhood Conservation, and Urban Form to reduce impacts to historic resources resulting from development or lack of care. Specifically, Chapter 2.3 of the LUCE includes policies to ensure that the City continues to protect what is unique and valued on a citywide and neighborhood level, including Palisades Park and the bluffs; Santa Monica Pier; and neighborhood streetscapes, architecture, and building scale. LUCE policies relevant to historic preservation are as follows:

Goal LU12: Encourage Historic Preservation. Preserve buildings and features which characterize and represent the City's rich heritage.

Policy LU12.1 *Integration.* Integrate the preservation of historic buildings into land use and planning practice.

Policy LU12.2 *Preservation Programs.* Preserve and protect historic resources through the development of preservation programs and economic incentives such as Transfer of Development Rights and conservation easements as well as neighborhood conservation approaches.

Policy LU12.3 *Rehabilitation of Historic Resources.* Promote adaptive reuse of historic structures and sensitive alterations where changes are proposed. New construction or additions to historic structures shall be respective of the existing historic resource.

Goal N26: Protect, preserve and enhance the Downtown residential neighborhood and ensure that structures of historical significance are preserved.

Policy N26.1 Develop a program to encourage the protection of existing historical properties in the Downtown neighborhood. Options that could be explored include:

- Developing a Pattern Book
- Modifying development standards
- Modifying demolition regulations
- Identifying an area or specific historic resources (e.g., old theaters) in the Downtown as a community benefit and a sending area for the Transfer of Development Rights program
- Establishing a façade easement program that would preserve historic façades in return for a cash payment to the owner.

Goal HP1: Preserve and protect historic resources in Santa Monica through the land use decision-making process.

Policy HP1.1 Follow policies for historic preservation contained in the Historic Preservation Element when making land use decisions.

Policy HP1.2 Maintain and regularly update the HRI.

Policy HP1.3 Ensure that new development, alterations or remodeling on, or adjacent to, historic properties are sensitive to historic resources and are compatible with the surrounding historic context.

Policy HP1.4 Continue to support Landmarks Commission review and public input for all structures proposed for demolition that are more than 40 years old.

Policy HP1.5 Support rehabilitation and restoration of historic resources through flexible zoning policies such as replacement of in-kind nonconforming features and reduced parking requirements.

Policy HP1.9 Promote the availability of financial incentives for historic preservation such as tax abatement, economic development, the transfer of development rights, and conservation easements.

Policy HP1.10 Review proposed developments for potential impacts on unique archaeological resources, paleontological resources, and human remains or associated funerary objects, and incorporate appropriate mitigation measures to protect or document the resource.

Goal HP2: Preserve and protect historic resources through the development of economic incentives and neighborhood conservation approaches.

Policy HP2.1 Establish a program for the Transfer of Development Rights for significant historic resources and character-defining structures in Neighborhood Conservation Districts or the Downtown area. Define such districts or

	individual resources as a "Community Benefit" and eligible as a "sending area" and/or "sending site." Identify "receiving areas" such as boulevards, transit corridors, activity centers, and Mixed-Use Creative Districts.
Policy HP2.2	Sponsor and support a conservation easement program to allow owners of historic properties to earn a one-time income tax deduction through the donation of a property easement to a qualified preservation organization.

Goal D7: Create a balanced mix of uses in the Downtown that reinforces its role as the greatest concentration of activity in the City.

Policy D7.5	Explore options for the adaptive re-use or retention of historic resources. Require new buildings constructed in proximity to existing historic resources to respect the context and character-defining features of the historic resource.
Policy D7.6	Utilize the Secretary of the Interior's Standards to preserve identified character-defining features of historic resources.

Goal D18: Preserve the low-scale character and appearance of the Beach and Oceanfront area and ensure its continued role as Santa Monica's character-defining open space.

Policy D18.5	Encourage the sensitive rehabilitation of historic resources.
Policy D18.6	Employ the Secretary of the Interior's Standards, in preserving the identified character-defining features of the resource when modifying historic resources.
Policy D18.7	Preserve and enhance the Santa Monica Pier as a key component of Santa Monica's history and character.

3.4.3 Impact Assessment Methodology

3.4.3.1 Thresholds for Determining Significance

The following thresholds of significance for cultural resources are based on Appendix G of the CEQA Guidelines. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a Lead Agency may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For the purposes of this EIR, the proposed project would have a significant adverse impact on cultural resources if:

A. The project would cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5 of the CEQA Guidelines;

B. The project would cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 of the CEQA Guidelines; and/or

C. The project would disturb any human remains, including those interred outside of formal cemeteries.

3.4.3.2 Methodology

This analysis evaluates potential cultural impacts associated with implementation of the proposed Housing Element Update on a programmatic level. In accordance with CEQA, project-specific analysis

will still be needed for any individual future residential development projects that could result in a potentially significant impact(s) on cultural resources.

The analysis of the potential impacts of the proposed Housing Element Update on historic architectural resources is based on a review of information and analysis available in several reports, including: 6th Cycle Housing Element Historical Resources Technical Analysis (2021), City of Santa Monica Citywide Historic Resources Inventory Update Survey Report (2018), and the City of Santa Monic Historic Preservation Element. The analysis of archaeological resources is based on a review of information and analysis provided in various cultural resources reports that have been previously conducted within the City, including data gathered from the SCCIC records searches and consultation with tribal representatives pursuant to the requirements of Assembly Bill (AB) 52 (see Section 3.13, *Tribal Cultural Resources*). Taken together, this background research and the targeted assessment performed form the basis for this EIR analysis.

Historic Architectural Resources

Analysis of impacts to historic architectural resources requires that a Lead Agency first determine whether a building, structure, object, or feature is a historical resource as defined in CEQA Guidelines Section 15064.5. If the Lead Agency determines a building, structure, object, or feature is a historical resource, its significance may be materially impaired for the reasons outlined below. Typically, the significance of a historical resource of an architectural or structural nature is materially impaired through demolition or alteration. The resource may also be materially impaired by incompatible adjacent new construction that alters the setting of the resource, thereby diminishing its integrity and significance.

According to the CEQA Guidelines Section 15064.5(b), a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment. A substantial adverse change means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings, resulting in material impairment of the historical resource (CEQA Guidelines Section 15064.5[b][1]). According to CEQA Guidelines Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Public Resources Code Section 5020.1(k) or its identification in an historical resources survey meeting the requirements of Public Resources Code Section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

The maintenance, repair, stabilization, restoration, preservation, conservation, or reconstruction of a historic resource in a manner consistent with the Secretary of the Interior's Standards (Weeks and

Grimmer 1995), generally will constitute mitigation of impacts to a less than significant level. Documentation of historic buildings and structures, while potentially permitting demolition or substantial alteration, typically include documentation (e.g., research, reports, photo documentation, displays, informational signage, etc.) to the standards of the Historic American Buildings Survey or Historic American Engineering Record (HABS/HAER), may also reduce impacts but may not reduce them to less than significant levels.

The Secretary of the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations [CFR] Part 68) defines four options for the treatment of historic buildings: (1) preservation; (2) rehabilitation; (3) restoration; and (4) reconstruction. Generally:

1. Preservation involves the application of measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment (Weeks and Grimmer 1995).
2. Rehabilitation entails making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values (Weeks and Grimmer 1995).
3. Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period (Weeks and Grimmer 1995).
4. Reconstruction involves new construction to recreate the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location (Weeks and Grimmer 1995).

The Secretary of the Interior's Standards for the Treatment of Historic Properties are not prescriptive but instead provide general guidelines and are intended to be flexible and adaptable to specific project conditions, including aspects of adaptive use, functionality, and accessibility. The goal is to balance continuity and change and retain historic building fabric to the maximum extent feasible. The National Park Service (NPS) has compiled a series of bulletins to provide guidance on specific historic preservation topics.

The analysis in this EIR considers both direct impacts and indirect impacts on historic resources. Direct impacts may occur by:

1. Physically damaging, destroying, or altering all or part of the resource;
2. Altering characteristics of the surrounding environment that contribute to the resource's significance;
3. Neglecting the resource to the extent that it deteriorates or is destroyed; or
4. The incidental discovery of cultural resources without proper notification.

Removal, demolition, or alteration of historical resources can directly impact their significance by destroying the historic fabric of an archaeological site, structure, or historic district. Direct impacts can be assessed by identifying the types and locations of proposed development, determining the exact locations

of historical resources within the project area, assessing the significance of the resources that may be affected, and determining the appropriate mitigation.

Indirect impacts result from blocking significant public views of a resource's defining character; isolating a resource from its setting or relationship to the streetscape; altering the setting of a resource; introducing incompatible visual, audible, or atmospheric elements to a resource's setting; or introducing shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance. Indirect impacts may also involve potential damage to fragile off-site historical structures during typical construction procedures (e.g., pile driving) that could undermine the stability of a historic resource through ground-borne vibration.

A key element in this impact assessment methodology involves consideration of the effectiveness of the City's well-established historical preservation program and existing protections for historical resources, such as the policies contained in the Historic Preservation Element, LUCE, DCP, and Bergamot Area Plan as well as regulations in the SMMC (e.g., SMMC Chapter 9.56 [Landmarks and Historic Districts Ordinance]). The analysis below considers the efficacy and effectiveness of this combination of goals, policies, actions, and City regulations in avoiding or minimizing impacts to historic resources in the City, as a result of residential development projects planned for under the proposed Housing Element Update.

Archaeological Resources and Human Remains

CEQA provides guidelines for mitigating impacts to archaeological resources in CEQA Guidelines Section 15126.4. According to the CEQA Guidelines, public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered for a project involving such an archaeological site:

1. Preservation in place (i.e., avoidance) is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
2. Preservation in place may be accomplished by, but is not limited to, the following:
    - Planning construction to avoid archaeological sites;
    - Incorporation of sites within parks, greenspace, or other open space;
    - Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site; or
    - Deeding the site into a permanent conservation easement.
3. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Health and Safety Code Section 7050.5.
4. Data recovery shall not be required for an historical resource if the Lead Agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the

determination is documented and that the studies are deposited with the California Historical Resources Information Center.

Typically, such measures will reduce impacts on archaeological resources to less than significant levels.

3.4.4 Project Impacts and Mitigation Measures

Would the project cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5?

Impact Description (CR-1)

CR-1 **As the proposed 6th Cycle 2021-2029 Housing Element Update does not include individual proposals for residential development projects, detailed information (e.g., project size, type, location) regarding potential effects on specific historic resources are unknown. However, it is conceivable that the demolition or substantial modification of a historic resource could occur as a result of some residential development projects, resulting in the potential for a substantial adverse change in the significance of an historical resource as defined in California Environmental Quality Act (CEQA) Guidelines Section 15064.5. Therefore, even with existing State and local regulations and policies in place to protect historic resources, impacts would remain *significant and unavoidable.***

As described in Section 3.4.1, *Environmental Setting*, the City has conducted a comprehensive windshield survey of historic architectural resources over the years as part of the HRI (the most recent update to its HRI was in 2018). The City contains numerous resources of historic and cultural value. Some of these resources are listed on the National Register and the California Register, while the majority of these resources are listed in a local inventory for the City (refer to Figure 3.4-1 and Appendix D). The proposed Housing Element Update would plan for the development of up to 8,895 to approximately 11,000 new dwelling units and associated potential ground-floor commercial space. The proposed Housing Element Update does not propose the construction of any individual residential development project, instead it identifies potentially suitable housing sites as well as action programs that would be implemented to provide for future development of new dwelling units necessary to meet the RNHA, consistent with State Housing Law. Historically significant resources would be identified on a project-by-project basis through site-specific, on-site reconnaissance prior to approval. Any future residential development projects planned for under the proposed Housing Element Update would be required to comply with applicable Federal, State, and local polices and regulations that protect historical resources (refer to Section 3.4.2, *Regulatory Setting*). Nevertheless, individual residential development projects, while not currently proposed as part of the proposed Housing Element Update, could result in direct impacts to historic architectural resources through alteration and/or demolition of historical structures. Additionally, indirect impacts could occur as a result of off-site ground-borne vibration during construction or through the loss of historical character/setting, such as potentially siting new large-scale structures next to potentially smaller historic structures or other alterations to historic character.

Direct Impacts Through Demolition and/or Alteration

The HRI includes over 1,300 properties – including residential, commercial, and institutional properties as well as historic districts – that have been evaluated for historic significance. Of these, over 900 properties have been either listed in or identified as eligible for listing in the National Register, the California Register, and/or as City-designated Landmarks, Structures of Merit, or as contributors to a historic district (HRG 2021; see Appendix D).

Recognizing the important role of these historic architectural resources in amplifying the local population's sense of community, the City has established various goals, objectives and policies encouraging preservation of these resources (refer to Section 3.4.2, *Regulatory Setting*). For example, the Historic Preservation Element establishes a long-range vision for the protection of historic resources in the City and to provides implementation strategies to achieve that vision. Goal 4 of the Historic Preservation aims to *"[p]rotect historic and cultural resources from demolition and inappropriate alterations"* and Goal 5 aims to *"[p]romote the preservation of historic and cultural resources through incentives and technical assistance."* Similarly, the LUCE promotes an integrated set of policies and programs in historic preservation, neighborhood conservation, and urban form to reduce impacts to historic resources. Specifically, Chapter 2.3 of the LUCE includes policies to ensure that the City continues to protect what is unique and valued on a City-wide and neighborhood level. Policy LU12.1 calls for the integration of preservation into the City's land use and planning practice. Policy LU12.2 and Policy LU12.3 call for preservation and rehabilitation of historic structures. Further, Policy HP1.3 requires that *"…new development, alterations or remodeling on, or adjacent to, historic properties are sensitive to historic resources and are compatible with the surrounding historic context."* The DCP and Bergamot Area Plan include similar policies specific to their individual planning areas.

The City considered these policies at the planning level during the preparation of the Draft Housing Element Update. For example, as described in the Summary Report on Preliminary Suitable Sites Inventory Analysis, as a first step in preparing the Suitable Sites Inventory analysis, parcels that are not considered to be potential candidates for new development as housing sites were filtered out based on a set of criteria including, *"[p]arcels with existing Landmarks or Historic Resources."* Importantly, while the City has not planned for the re-development of historic architectural buildings, the proposed Housing Element Update does not include policies that preclude such redevelopment. Further, as discussed below, because of the City-wide scale of the proposed Housing Element Update and the high demand for potential housing sites, it was not considered infeasible to filter out potential sites adjacent to those sites that support historic resources. Given that the specific location and design (e.g., associated bulk, size, and scale) of new residential development projects is not known, this may leave open the potential for indirect impacts to such resources through adjacent construction. This is particularly true for projects that would be subject to the administrative approval process, which would further limit the City's discretionary authority (e.g., through the CEQA review process) to impose design changes, necessary to preserve the historic context of adjacent historic architectural resources.

The proposed Housing Element Update includes regulatory and policy changes to encourage new housing development. For example, the proposed Housing Element Update includes increases in maximum allowable height and Floor Area Ratio (FAR), reduced parking requirements, and new policies

for non-traditional housing models to address the City's housing needs. These revised development standards would apply to future residential projects throughout the City, including the Downtown and Bergamot Area, as well as segments of Colorado Avenue, Lincoln Boulevard, Pico Boulevard, Santa Monica Boulevard, and Wilshire Boulevard. All of these areas have properties that are either listed as historic resources or identified as eligible for listing. Further, these areas may also have additional historically significant properties that have yet to be identified, because they were not of the appropriate age during the most recent update to the HRI conducted in 2018 (buildings constructed after 1977 were not included as part of the survey). The proposed increases in allowable building height and FAR would result in increased housing production across the City – potentially on properties containing historical resources, or on properties adjacent to such resources. As such, the proposed Housing Element Update would have the potential to result in direct impacts to historic resources through alteration and/or demolition of existing historical structures as well as creating potential indirect impacts to the character of historic structures adjacent to potential new development.

Given the programmatic nature of the proposed Housing Element Update, the degree and extent to which individual projects could result in direct and indirect impacts to historical structures would vary based on the following factors:

1. The type of residential projects anticipated to occur (e.g., interior renovations to create additional dwelling units to complete building demolition);
2. The condition of the individual project sites (e.g., vacant or underutilized);
3. The listing status of potentially significant historical resources; and
4. The revised development standards (e.g., increased height and/or FAR; refer to Section 2.0, *Project Description*) that would apply to individual residential projects.

As discussed in Section 3.4.2, *Regulatory Setting,* the historic preservation policies in plans such as the Historic Preservation Element, LUCE, DCP, and Bergamot Area Plan as well as the SMMC Chapter 9.56 (Landmarks and Historical Districts Ordinance), would be protective of historical resources, while balancing the need and allowing for new residential development.

Given that the City's requirements for altering or demolishing a potentially significant historical resource differ based on the listing and designation status of the historical resource, the potential for significant impacts to occur to historical resources would vary. For example, a project site designated as a City Landmark would be subject to the requirements within the SMMC Chapter 9.56 (Landmarks and Historical Districts Ordinance) prior to undergoing any alternation or demolition (refer to Section 3.4.2, *Regulatory Framework*). In contrast, a historic building over 40 years old may be eligible for listing in the HRI, but may not yet be included in the City's HRI (which generally has a 5-year gap between updates), and therefore, would not be subject to the Landmarks and Historic Districts Ordinance. These buildings would be subject to SMMC Chapter 9.25 (Demolition and Relocation), which requires that the City cannot issue demolition permits for structures 40 years or older until the application has been sent for review to the Landmarks Commission. (As described in Section 3.4.2, *Regulatory Framework* the ordinance provides a period of 75 days during which an application for the designation of the structure as a Landmark, historic district, or structure of merit may be filed.)

Even with adherence to the City's regulatory requirements, individual residential projects anticipated to occur under the proposed Housing Element Update could conceivably result in direct and indirect impacts to historic resources as discussed below. This potential for impacts to such structures could incrementally increase for future projects reviewed through the administrative approval process, which would not involve the same level of review and protection of historic structures associated with discretionary projects (e.g., project-specific CEQA review), possibly increasing the potential for impacts.

Landmarks

There are over 100 locally designated Landmarks within the City (HRG 2021), which include a variety of buildings and features that are protected by the City's existing Landmarks and Historic District Ordinance (SMMC Chapter 9.56). Under the ordinance, any new development project occurring on a property with one or more City-designated Landmark(s) would be required to obtain a Certificate of Appropriateness, regardless of the requirement for a ministerial or discretionary permit process. Certificates of Appropriateness are issued by the Landmarks Commission (or the City Council on appeal) when it is determined that the project would not detrimentally change, destroy, or adversely affect any exterior feature of the City-designated Landmark or Landmark Parcel upon which such work is proposed to be done. In general, any proposed alteration, restoration, construction, removal, relocation, demolition, in whole or in part, of or to a City-designated Landmark must be determined to occur in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties.

As previously described, parcels that are not considered to be potential candidates for new development as housing sites were filtered out based on a set of criteria including, *"[p]arcels with existing Landmarks or Historic Resources."* However, while the City has not planned for the re-development of historic architectural buildings, the proposed Housing Element Update does not include policies that preclude such redevelopment. Any new development on City-designated Landmark properties would be required to comply with the SMMC Chapter 9.56 (Landmarks and Historic District Ordinance). As described in Section 3.4.2, *Regulatory Setting*, the ordinance requires a Certificate of Appropriateness for any proposed alterations, restorations, construction, removal, relocation, or demolition, in whole or in part, of or to a Structure of Merit, Landmark or Landmark Parcel, or to a building or structure located within a historic district. Certificates are issued by the Landmarks Commission or the City Council if a determination can be made in accordance with any of the criteria stated in the ordinance. Generally, the proposed work should not detrimentally change, destroy, or adversely affect any exterior features of a protected resource and should be compatible with the character of the resource. However, SMMC Section 9.56.140 states that the Landmarks Commission shall issue a certificate of appropriateness for any proposed alteration, restoration, construction, removal, relocation, demolition if it makes a determination in accordance with any one or more of the following criteria, including:

D. The applicant has obtained a certificate of economic hardship in accordance with Section 9.56.160.
E. The Commission makes both of the following findings:

1. That the structure does not embody distinguishing architectural characteristics valuable to a study of a period, style, method of construction or the use of indigenous materials or craftsmanship and does not display such aesthetic or artistic quality that it would not

reasonably meet the criteria for designation as one of the following: National Historic Landmark, National Register of Historic Places, California Registered Historical Landmark, or California Point of Historical Interest.

2. *That the conversion of the structure into a new use permitted by right under current zoning or with a conditional use permit, rehabilitation, or some other alternative for preserving the structure, including relocation within the City, is not feasible."*

Therefore, notwithstanding the stringent regulatory framework established by the City to protect historic resources, demolition of a City-designated Landmark or alteration of the physical characteristics that convey its historical significance could conceivably occur, which could be a significant impact pursuant to CEQA. Potential impacts are, therefore, conservatively considered to be *significant and unavoidable*.

Non-Designated Resources Listed in the Historic Resources Inventory

A review of the City's HRI indicates that there are properties within the City that appear to be individually eligible for local listing/designation as a historical resource and/or appear to be a contributor to a district that appears eligible for local listing/designation. The City's HRI includes over 1,300 properties that have been evaluated for historic significance. Of these, over 900 properties have been either listed in or identified as eligible for listing in the National Register, the California Register and/or as Santa Monica Landmarks, Structures of Merit or as contributors to a historic district (HRG 2021). Future residential development projects planned for under the proposed Housing Element Update could potentially occur on properties that are identified on the HRI, but are not formally designated. Depending on the individual residential project, direct alterations and/or demolition (in part or whole) of the potential historic resource may be proposed.

The stringent historic preservation standards and policies identified in Historic Preservation Element, LUCE, DCP, and Bergamot Area Plan would generally be protective of historical resources. For example, LUCE Policy HP1.3 states that projects on HRI-listed properties should be reviewed for conformance with The Secretary of the Interior's Standards for the Treatment of Historic Properties when alterations to the exterior or demolition of any historic structure is proposed. However, new residential development projects planned for under the proposed Housing Element Update could still result in direct impacts to non-designated properties listed in the HRI, including the loss of historical integrity through alteration and/or demolition. This is particularly true for new residential development projects that are processed through the administrative approval process, which limit the City's discretionary authority (e.g., through the CEQA review process) to impose design changes, which could otherwise preserve historic features. Therefore, direct impacts to potentially historic properties listed on the HRI would be *significant and unavoidable.*

Structures over 40 Years Old

As previously described, the HRI was last updated in 2018, and provides a windshield survey of buildings constructed in or before 1977. Currently, the cut-off date to be considered historic (i.e., 40 years of age; refer to Section 3.4.2, *Regulatory Setting*, particularly Policy HP1.4) for the HRI and Landmarks is 1980. Due to the current and futures gaps in inventory coverage throughout the planning horizon (i.e., 5-year gaps between updates to the HRI), there could be buildings in the City over 40 years of age not listed in

the HRI. These properties have not been evaluated and could be eligible in the future as potential historic resources. Additionally, since the HRI was limited to a windshield survey, there could be other properties eligible as historic resources that have not been captured in the HRI.

New residential development projects planned for under the proposed Housing Element Update could potentially occur on properties with buildings that are over 40 years of age. Depending on the individual project, direct alterations and/or demolition (in part or whole) of the building may be proposed. As described in Section 3.4.2, *Regulatory Setting*, these buildings would be subject to SMMC Chapter 9.25 (Demolition and Relocation), which requires that the City cannot issue demolition permits for structures 40 years or older until the application has been sent for review to the Landmarks Commission. However, particularly for projects that would be processed through the administrative approval process, alterations of a historical resource's physical characteristics could conceivably occur, leading to the potential loss of integrity that conveys its historical significance. Pursuant to CEQA, a historical resource must retain enough integrity, including materials, design, workmanship, setting, feeling, association, and location, to convey its historical and architectural significance. Therefore, impacts would be *significant and unavoidable*.

Indirect Impacts Through Ground-borne Vibration

New residential development projects anticipated to occur under the proposed Housing Element Update could result in indirect impacts to historical resources through ground-borne vibration generated during the construction phase of individual projects. Substantial ground-borne vibration could be generated during demolition, grading, excavation, boring, drilling, and the use of heavy construction equipment (e.g., bull dozers and heavy-duty truck trips), and could undermine the stability of on- and off-site historic structures located adjacent to or near individual project sites.

For example, construction activities associated with a residential development project could occur immediately adjacent to an off-site designated Landmark building. These activities – including extensive excavation – would have to the potential to result in inadvertent, indirect structural damage to this resources as a result of construction-related vibration. Ground-borne vibration may damage exterior finishes and result in cracking within the buildings plaster walls. While mitigation measures may be available to reduce potential ground-borne vibration, its effectiveness in fully mitigating adverse impacts would depend on the specific intensity of construction activities, condition of the adjacent historic property, and other factors (e.g., cooperation and acceptance of measure from the owner of the adjacent historic property). As further discussed in Section 3.8, *Noise,* MM NOI-1 would be required to address potential ground-borne vibration impacts to vibration-sensitive historical structures located adjacent to or near an individual project site. However, even with the implementation of MM NOI-1, there is no guarantee that indirect effects to historical structures would be entirely avoided. As such, construction ground-borne vibration impacts to historical resources are conservatively concluded to be *significant and unavoidable.*

Indirect Impacts/Loss of Historic Integrity

Land use changes anticipated to occur under the proposed Housing Element Update would potentially include the construction of new residential buildings with increased maximum heights and FARs as well as new open space and access improvements (e.g., new driveways, wider sidewalks, bicycle lane connections, etc.). The proposed Housing Element Update largely leaves the existing development standards of the residential zoned areas (i.e., R-1, R-2, R-3, and R-4) unchanged, where many of the historic buildings and historic districts are located. However, the construction of new residential buildings adjacent to historic resources within the Downtown, along Boulevards, and other areas of the City, may still alter the historic setting and context of existing historic resources and inadvertently diminish the integrity of its character-defining features. The potential for indirect impacts would vary depending on the individual project, relative to the historic sensitivity of the particular building, its surroundings, and the size, massing, and scale of future development. Future development of individual residential projects on vacant or underutilized project sites in the City could be potentially incompatible with the massing, size, and scale of an adjacent significant historic building, which would be considered an adverse impact to a historic resource. Such potential indirect impacts would be difficult to address during the administrative approval process, as the City would not have the discretion to require substantial project design changes that could address such potential indirect impacts. Even with adherence to the City's robust regulatory framework, which addresses the protection of historic resources, new development under the proposed Housing Element Update could result in the potential for indirect impacts to adjacent historical resources in the event that such an adjacency exists. Therefore, indirect impacts related to the loss of historic integrity are conservatively considered to be *significant and unavoidable.*

Mitigation Measures

Implementation of MM CR-1a and -1b, and MM NOI-1 would reduce many of the potential adverse effects to historical resources that could conceivably occur under the proposed Housing Element:

MM CR-1a ***Incentives for Housing Projects.*** *To encourage the preservation, rehabilitation, restoration, and/or adaptive reuse of existing buildings, the City shall consider adoption of an Adaptive Reuse Ordinance that could provide incentives to project applicants, including but not limited to an expedited approval process, reduced parking requirements, fee reductions, and other benefits.*

MM CR-1b ***Historic American Building Survey (HABS) Documentation.*** *Prior to the demolition or alteration of an identified historic resource on the Historic Resources Inventory (HRI) that cannot comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties, historical resources shall be documented to the standards of the HABS Document Level II.*

Residual Impacts

Existing City regulations and policies minimize the potential for development to adversely affect historic architectural resources within the City. For example, the Landmarks and Historic District Ordinance requires that any new development project occurring on a property with one or more City-designated

Landmark(s) must obtain a Certificate of Appropriateness. Certificates of Appropriateness are issued by the Landmarks Commission (or the City Council on appeal) when it is determined that the project would not detrimentally change, destroy, or adversely affect any exterior feature of the City-designated Landmark or Landmark Parcel upon which such work is proposed to be done. Additionally, SMMC Chapter 9.25 (Demolition and Relocation) requires that the City cannot issue demolition permits for structures 40 years or older until the application has been sent for review to the Landmarks Commission. (As described in Section 3.4.2, *Regulatory Framework* the ordinance provides a period of 75 days during which an application for the designation of the structure as a Landmark, historic district, or structure of merit may be filed.)

However, new residential development projects planned for under the proposed Housing Element Update could still result in direct impacts to historic architectural resources as a result of alteration and/or demolition.

MM CR-1a would provide incentives to individual project applicants to encourage the preservation, rehabilitation, restoration, and/or reconstruction of a historical resource in a manner that maintains its historical significance and integrity. For projects involving City-designated landmarks, MM CR-1b would ensure that significant historic structures are fully documented prior to demolition or alterations that cannot comply with The Secretary of the Interior's Standards for the Treatment of Historic Properties. However, as demolition or significant alteration of a historic resource could still occur as a result of future residential development projects, impacts would remain *significant and unavoidable.*

Additionally, while the implementation of MM NOI-1 would help reduce adverse impacts to adjacent or off-site historical structures during the construction phase for future residential projects, the City does not have the jurisdiction or control to mandate implementation of MM NOI-1 by off-site property owners. Therefore, it has been conservatively concluded that construction activities could have potentially *significant and unavoidable* construction vibration impacts to fragile historical structures because the consent of off-site property owners to implement such mitigation cannot be guaranteed.

Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines?

Impact Description (CR-2)

CR-2 **Ground disturbing activities associated with residential development projects planned for under the proposed 6th Cycle 2021-2029 Housing Element Update could potentially uncover and disturb previously unknown prehistoric or historic archaeological deposits during earthwork activities that may cause a substantial adverse change in the significance of an archaeological resource. If improperly handled, such resources could be adversely impacted. Impacts would be reduced to *less than significant with mitigation incorporated*.**

As described in Section 3.4.1, *Environmental Setting*, the City provided a favorable environment for Native American settlement and as such prehistoric archaeological deposits could be preserved at depth

beneath existing roads and buildings. Due to the nature of the resources and the logistical constraints of conducting test excavations in an urban built environment, comprehensive archaeological testing at properties is impractical. In addition, depending on the geographical extent of a project, phasing of construction, and the level of historical detail about the project site, there may be substantial limits to the ability to predict the location of potentially significant deposits, which in turn limits the effectiveness of standard archaeological testing techniques alone to identify subsurface cultural resources.

Future residential development projects planned for under the proposed Housing Element Update, including construction of new buildings, streetscape enhancements, and circulation/mobility improvements (e.g., new driveways, etc.), could involve grading and excavation in areas that could potentially uncover significant subsurface archaeological remains, including artifact-rich waste dumps, trash pits, sheet refuse, privies, and wells, as well as documented and undocumented structural remains dating from 1875 to the 1950s. If improperly handled, buried archaeological deposits could be damaged. The protection of such resources would be assured through implementation of mitigation measures MM CR-2a and MM CR-2b. This impact would be *less than significant with mitigation*.

Mitigation Measures

Implementation of MM CR-2a and -2b, as well as MM TCR-1 would reduce the potential adverse effects to archaeological resources that could conceivably occur under the proposed Housing Element. Under MM TCR-1 new residential development projects involving grading/excavation greater than 5 feet below ground surface (bgs), would require a Native American monitor (if requires by the tribe during consultation) to be present during project construction excavations such as clearing/grubbing, grading, trenching, or any other excavation activities.

MM CR-2a ***Archaeological Data Recovery.*** *For residential development projects that inadvertently discover buried prehistoric or historic-period archaeological resources (either by the construction contractor or by the Native American monitor) the City shall apply a program that combines resource identification, significance evaluation, and mitigation efforts into a single combined effort. This approach would combine the discovery of deposits (Phase 1), determination of significance and assessment of the project's impacts on those resources (Phase 2), and implementation of any necessary mitigation (Phase 3) into a single consolidated investigation. This approach must be driven by a Treatment Plan that sets forth explicit criteria for evaluating the significance of resources discovered during construction and identifies appropriate data recovery methods and procedures to mitigate project effects on significant resources. The Treatment Plan shall be prepared prior to issuance of building permits by a Registered Professional Archaeologist (RPA) who is familiar with urban historical resources, and at a minimum shall include:*

- *A review of historic maps, photographs, and other pertinent documents to predict the locations of former buildings, structures, and other historical features and sensitive locations within and adjacent to the specific development area;*
- *A context for evaluating resources that may be encountered during construction;*

- *A research design outlining important prehistoric and historic-period themes and research questions relevant to the known or anticipated sites in the study area;*
- *Specific and well-defined criteria for evaluating the significance of discovered remains; and*

Data requirements and the appropriate field and laboratory methods and procedures to be used to treat the effects of the project on significant resources.

The Treatment Plan shall also provide for a final technical report on all cultural resource studies and for curation of artifacts and other recovered remains at a qualified curation facility, to be funded by the developer. To ensure compliance with State and City preservation laws, this plan shall be reviewed and approved by the Historic Landmarks Commission and the City of Santa Monica Planning Division prior to issuance of building permits.

MM CR-2b ***Inadvertent Discoveries.*** *In the event of any inadvertently discovered prehistoric or historic-period archaeological resources during construction, the developer shall immediately cease all work within 50 feet of the discovery. The proponent shall immediately notify the City of Santa Monica Planning Division and shall retain a Registered Professional Archaeologist (RPA) to evaluate the significance of the discovery prior to resuming any activities that could impact the site. If the archaeologist determines that the find may qualify for listing in the California Register of Historic Resources (California Register), the site shall be avoided or a data recovery plan shall be developed pursuant to MM CR-2a. Any required testing or data recovery shall be directed by an RPA prior to construction being resumed in the affected area. Work shall not resume until authorization is received from the City.*

Residual Impacts

The implementation of MM CR-2a and -2b as well as MM TCR-1 would reduce potentially significant adverse impacts to archaeological resources to a *less than significant* level.

Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact Description (CR-3)

CR-3 **Ground disturbing activities associated with residential development projects planned for under the proposed 6th Cycle 2021-2029 Housing Element Update could potentially uncover buried Native American human remains. In the unlikely event of this occurrence, construction activities would immediately cease in the vicinity of the discovery and remains would be handled in accordance with existing State regulations. Therefore, impacts would be *less than significant*.**

Although human remains have not been identified previously in the City, tribal representatives indicated the extensive geography of the Gabrieiliño Band of Mission Indians – Kizh Nation across the City where Native Americans lived and dispersed (see Section 3.13, *Tribal Cultural Resources*). As such, the area is

generally considered to be sensitive for prehistoric archaeological deposits (refer to Section 3.4.1, *Environmental Setting*) and the possibility exists that such remains could be uncovered during development in the City.

California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code Section 7050.5 requires that in the event that human remains are discovered within the proposed project site, disturbance of the site shall be halted. A Registered Professional Archaeologist (RPA) shall inspect the remains and confirm that they are human, and if so, shall immediately notify the City of Santa Monica Planning Division and contact the County coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner shall contact the NAHC. As provided in Public Resources Code Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

With compliance with existing regulations prescribed in California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, impacts to human remains would be *less than significant.*

3.4.5 Cumulative Impacts

Historic Resources

Cumulative impacts can result from the gradual negative effects of past, present, and future projects or actions over a certain period of time. For the historic built environment, the cumulative impacts analysis encompasses the City and the Greater Los Angeles Area, where common patterns of historic-era settlement have occurred over the past roughly two centuries. Land use changes anticipated to occur under the proposed Housing Element Update – when considered with growth throughout the region (e.g., the SCAG's 6th Cycle RHNA would enable the development of approximately 812,060 dwelling units throughout Los Angeles County) – may contribute to a cumulatively considerable impact on the historic built environment in the Greater Los Angeles Area and its common history, shared significant events, individuals, and architectural styles.

Urban development that has occurred over the past several decades in the Greater Los Angeles Area has resulted in the demolition and alteration of innumerable significant historical resources. Despite the ongoing commitment to historic preservation, it is reasonable to assume that present and future development activities throughout the Greater Los Angeles Area would continue to result in impacts on significant historical resources, including residential, commercial, and civic properties that are listed or eligible for listing on national, state, or local registers. Federal, State, and local laws protect historical resources in most instances outside of the City, but are not always feasible to protect historical resources, particularly when in-place preservation would frustrate implementation of future development projects. For

this reason, the cumulative effects of development in the Greater Los Angeles Area on historical resources are considered significant.

As discussed in Impact CR-1 above, the City contains numerous resources of historic and cultural value. In addition, undocumented buildings or structures of historic age which qualify as historical resources pursuant to CEQA may also exist within the City. The City's existing policies would ensure that development activities resulting from implementation of the proposed Housing Element would undergo rigorous review to determine impacts on historical resources in accordance with CEQA and would encourage the avoidance of significant impacts through explicitly defined actions (e.g., adaptive reuse) and development incentives. Notwithstanding the stringent regulatory framework established by the Historic Preservation Element, LUCE, DCP, Bergamot Area Plan and SMMC, demolition or alteration of a historical resource's physical characteristics that convey its historical significance could potentially occur, which could result in a significant impact pursuant to CEQA. Further, because existing City policies do not explicitly prohibit demolition or alteration of historic-period buildings or structures and cannot ensure that sub-surface historical resources would be maintained, it is conceivable that an individual development project under the proposed Housing Element Update could involve the demolition or substantial alteration of a historical resource.

Even after implementation of the broad protections included in the Historic Preservation Element, LUCE, DCP, Bergamot Area Plan, and SMMC, it is conceivable that modification or demolition of individual historic resources by future development allowed under the proposed Housing Element Update could occur and that the City could allow individual projects to affect significant historical resources. Therefore, incremental contribution of the proposed Housing Element Update could result in a considerable contribution to a cumulatively substantial impact on the historic built environment.

Archaeological Resources and Human Remains

For the proposed Housing Element Update, the regional resource base for archaeological and human remains is defined geographically and ethnographically. Thus, the geographic scope of the cumulative impact analysis takes in the Greater Los Angeles Area. The analysis also takes into consideration the cultural geography of the Gabrielino people who occupied the region prehistorically, considering the integrity of the entire suite of resources that make up the cultural patrimony of the group.

Trends that have led to degradation of the regional cultural resource base, and are expected to continue in the future, include continuing urban development in the Greater Los Angeles Area. Cumulative development in the City and the Greater Los Angeles may uncover previously undisturbed archaeological resources and human remains and could potentially result in damage or loss of such resources. However, project-specific impacts on archaeological resources would be addressed on a project-by-project basis with mitigation measures for inadvertent discovery and treatment of previously unknown archaeological resources as well as compliance with existing regulations prescribed in California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98. With the implementation of MM CR-2a and -2b, MM TCR-1, and compliance with Federal, State, and local regulations, residential projects anticipated to occur under the proposed Housing Element Update would not contribute to any significant cumulative impacts to archaeological resources or human remains.

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3.0 Environmental Impact Analysis and Mitigation

3.5 Energy

The City consumes energy produced by a mix of renewable and non-renewable resources and generally has its energy needs met by utility providers, including the Clean Power Alliance, Southern California Edison, and Southern California Gas Company, which maintain and operate the existing energy infrastructure. Implementation (i.e., buildout) of the proposed 6th Cycle 2021-2029 Housing Element Update would increase the energy demand in the City as a result of the construction, and in particular, the operation of new residential development (e.g., heating, cooling, lighting, appliances, transportation fuel consumption). However, new residential development would be required to incorporate energy efficient building design, contribute to active and complete communities, and would have access to transit, thereby avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

The City's electricity demands are provided by the Clean Power Alliance (CPA), which is a Community Choice Aggregation (CCA) electricity provider, made up of 31 communities in Los Angeles and Ventura Counties. CPA purchases clean power, and Southern California Edison (SoCal Edison) delivers that power to businesses and customers within the City.

This section of the Environmental Impact Report (EIR) quantifies and assesses the impacts of direct and indirect energy consumption associated with implementation (i.e., buildout) of the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update). The discussion of the anticipated energy demand associated with the proposed Housing Element Update includes electricity, natural gas, and gasoline and other transportation-related fuel consumption (e.g., diesel fuel). The anticipated energy demand and energy conserving features associated with potential future residential development planned for under the proposed Housing Element Update have been evaluated to determine whether the proposed growth would result in unnecessary or wasteful energy consumption or whether the proposed Housing Element Update would conflict with all applicable State and local energy conservation regulations and policies (e.g., compliance with California Code of Regulations, Title 24, Building Energy Efficiency Standards [Part 6] CALGreen [Part 11]). These features include, but are not limited to, development density, location efficiency, mixed uses, transit accessibility, and pedestrian and bicycle facilities to reduce vehicle miles traveled (VMT). Criteria air pollutant emissions and greenhouse gas (GHGs) emissions due to energy consumption are addressed in Section 3.3, *Air Quality* and Section 3.7, *Greenhouse Gas Emissions and Climate Change*, respectively.

3.5.1 Environmental Setting

The City receives its power from a range of renewable and non-renewable energy sources, consisting primarily of electric power, natural gas, and transportation-related fuels (e.g., gasoline). In February 2019 the Clean Power Alliance (CPA) became the new electricity supplier for residential customers and May 2019 for non-residential customers, within the City of Santa Monica (City). CPA distributes its electric power through the electrical grid largely owned and operated by Southern California Edison (SoCal Edison). Natural gas service is provided by the Southern California Gas Company (SoCalGas), which owns and operates the natural gas distribution system in the City. Transportation-related fuel (e.g., gasoline and diesel fuel) are distributed by a variety of private firms and there are no major fuel refineries or major distribution lines within the City. Conservation, a key element in the City's sustainability strategies, is also discussed. In addition, electricity, natural gas, and renewable energy production, consumption, research, and conservation within the State of California are managed by the California Energy Commission (CEC), which can influence on City energy policy development and decisions. City energy sources, distribution systems, energy demand and conservation are discussed below.

The commercial sector of the City, comprised largely of Downtown businesses, generally dominates energy consumption contributing over 49 percent of total energy demands while the industrial sector accounted for 12 percent and the residential sector accounted for 37 percent (City of Santa Monica 2006, 2017a). Energy consumption in new buildings is regulated by California Building Energy Standards (California Code of Regulations, Title 24) and several City ordinances, such as the Green Building Ordinance, Solar Ordinance, and Zero Net Energy (ZNE) Ordinance. Currently, energy services in City are considered adequate, and no deficiencies in service capacities have been identified or are foreseen over the near-term planning horizon (City of Santa Monica 2017b).

3.5.1.1 Electricity

The production of electricity within the State of California requires the consumption or conversion of energy resources, including natural gas, coal, water, nuclear, and renewable resources such as wind, solar, and geothermal. In 2018, Californians consumed 282,488,129,510 kilowatt hours (kWh) (282,488 gigawatt hours [GWh]) of electricity (CEC 2018a; U.S. Census Bureau 2018; City of Santa Monica 2018).[1] In the County of Los Angeles, 67,907,482,625 kWh (67,907 GWh) were consumed in 2018. Approximately 787,770,753 kWh (788 GWh) were consumed within the City in the same year (CEC 2018a; City of Santa Monica 2018).

In 2018 California's electric power mix included 10.68 percent generated by natural gas-fired power plants, 3.30 percent generated by coal-fired power plants, 34.91 percent from large hydroelectric dams, 0.16 percent generated by oil and other petroleum or waste heat, and 9.05 percent from nuclear power plants. The remaining 31.36 percent of electricity production in California was supplied by renewable sources including biomass, geothermal, small hydro, solar, and wind power (CEC 2018b).

[1] A kilowatt hour (kWh) is a measure of electrical energy equivalent to a power consumption of 1,000 watts for 1 hour. One kWh is equal to one million kWh.

The most recent publicly available data on City-wide electric energy consumption is provided in the City of Santa Monica Greenhouse Gas Inventory Report 2018 Update (City of Santa Monica 2018). In 2018, overall electricity consumption in the City from the industrial, commercial, and residential sectors was 787,770,753 kilowatt-hours, approximately 5 percent lower than 2015 and 9 percent higher than 1990 (City of Santa Monica 2018).

Facilities and infrastructure providing electric service within the City include regional transmission and distribution lines, electrical substations, and transformers. The City has no electrical generating plants or other major sources of electrical energy production, with the exception of relatively solar photovoltaic (PV) systems installed on rooftops or within public parking structure and surface parking lots. All areas of the City are served by electric infrastructure (e.g., power lines, substations, etc.) owned and operated by SoCal Edison, with maintenance and periodic upgrades provided, as needed. The existing electrical distribution system, which includes electrical distribution lines, transformers, and poles is maintained on a regular basis by SoCal Edison. Periodic, but infrequent, power outages can be due to a number of factors, including elevated high fire conditions, vegetation/wildlife, third-party causes such as car accidents, and equipment failure due to excess demand. SoCal Edison assesses electrical reliability using three indexes. Based on SoCal Edison's Circuit Reliability Review (2021), reliability indexes for the City are generally better than system-wide (SoCal Edison 2021a). For example, the System Average Interruption Frequency Duration Index (SAIFI) is the number of times the average SoCal Edison customer experienced a sustained outage in a given year. The City's SAIFI in 2020 was 0.7 (with Major Event Days excluded), or less than 1 day per customer, as compared to SoCal Edison's system-wide average of 1.1 (SoCal Edison 2021a).

The City supports the installation of underground utilities and the relocation of overhead utilities underground. The City's underground utility requirements are codified in Santa Monica Municipal Code (SMMC) Section 7.04.820.

Table 3.5-1 2018 State, County, and City Electricity Demand

	Population	Electricity Demand (kWh)	
		Total	Per Capita
State	39,557,045	282,488,129,510	7,141.3
County	10,105,518	67,907,482,625	6,719.8
City	91,411	787,770,753	8,617.9

Notes: The commercial sector of the City, comprised largely of Downtown businesses, generally dominates energy consumption contributing over 49 percent of total energy demands. The residential sector accounts for 37 percent (City of Santa Monica 2006, 2017a). This is the probable cause for the higher per capita electricity demand relative to the State and the County.
Sources: CEC 2018a; U.S. Census Bureau 2018; City of Santa Monica 2018.

CPA purchases electricity from a mix of renewable sources and partners with SoCal Edison to distribute electricity through its existing electric power facilities to residential and commercial customers throughout the City. With the recent switch in energy providers, electricity customers in the City are automatically defaulted to receiving electricity from 100 percent renewable energy sources. Alternatively, customers can opt to have their electric power consist of 50 percent renewable content, or they can opt out of CPA (City of Santa Monica 2021b). According to the City's Office of Sustainability and the Environment, in 2019, 97 percent of residents and businesses have opted to receive clean power from the CPA (City of Santa Monica 2021a).

For customers opting out of the CPA, SoCal Edison is their electricity service provider. SoCal Edison provides electricity to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area across Central California and Southern California, an area bounded by Mono County to the north, Ventura County to the west, San Bernardino County to the east, and Orange County to the south (SoCal Edison 2021b). SoCal Edison produces and purchases energy from a mix of conventional and renewable electric power generating sources (see Table 3.5-2).

Table 3.5-2 2019 SoCal Edison and CPA Power Sources

Energy Resource	SoCal Edison			CPA		
	Standard Power Mix	Green Rate (50%)	Green Rate (100%)	Lean Power (40%)	Clean Power (50%)	Green Power (100%)
Eligible Renewable[1]	35.1%	67.5%	100%	0%	47.5%	100%
Biomass & Biowaste	0.6%	0.3%	0%	0%	4.8%	0%
Geothermal	5.9%	2.9%	0%	0%	8.9%	0%
Hydroelectric	1%	0%	0%	0%	0%	0%
Solar	16%	12.3%	100%	0%	7.4%	89.6%
Wind	11.5%	10.2%	0%	0%	26%	9.4%
Coal	0%	0%	0%	0%	0%	0%
Large Hydroelectric	7.9%	4%	0%	1.4%	13.5%	0%
Natural Gas	16.1%	8.1%	0%	0%	0%	0%
Nuclear	8.2%	4.1%	0%	0%	0%	0%
Other	0%	0.1%	0%	0%	0%	0%
Unspecified[2]	32.6%	16.3%	0%	98.5%	38.5%	0%
Total	100%	100%	100%	100%	100%	100%

Notes:
SoCal Edison
Green Rate (50%) = Provides 50% renewable energy; Green Rate (100%) = Provides 100% renewable energy
CPA
Lean Power = Provides 40% clean power; Clean Power = Provides 50% clean power; Green Power = Provides 100% clean power
[1] The "Eligible Renewable" percentage does not reflect the California Public Utilities Commission (CPUC) Renewable Portfolio Standard (RPS), which is determined using a different methodology.
[2] "Unspecified" means electricity from transactions that are not traceable to specific generation sources.
2019 is the most recent publicly available data on power sources provided by SoCal Edison and CPA.
Retail customers include residential, commercial, and industrial users.
Sources: CPA 2020; SoCal Edison 2020.

Table 3.5-3 2020 Clean Power Alliance Customers within the City

Account Type	Lean Power (36%)	Clean Power (50%)	Green Power (100%)
Residential Accounts	1,637	345	43,737
Commercial Accounts	340	68	7,449
Total	1,977	413	51,186

Notes:
Lean Power = Provides 40% clean power; Clean Power = Provides 50% clean power; Green Power = Provides 100% clean power
Customer data provided up through January 26, 2021.
Source: City of Santa Monica 2021b.

3.5.1.2 Natural Gas

Natural gas is a fossil fuel formed when layers of buried organic matter are exposed to intense heat and pressure over thousands of years. The energy is stored in the form of hydrocarbons and can be extracted

in the form of natural gas, which can be combusted to generate electricity, enabling this stored energy to be transformed into usable power or to be used directly for heating, cooking, and other use. Californians consumed 1,266,564,077,900 kilo British thermal units (kBTU)[2] of natural gas in 2018 (see Table 3.5-4; CEC 2018a). In comparison, approximately 292,150,728,400 kBTU were used throughout the County and 2,753,150,000 kBTU were used in the City in 2018 (CEC 2018a; City of Santa Monica 2018).

Table 3.5-4 2018 State, County, and City Natural Gas Demand

	Population	Natural Gas Demand (kBTU)	
		Total	Per Capita
State	39,512,223	1,266,564,077,900	32,055.0
County	10,039,107	292,150,728,400	29,101.3
City	90,401	2,753,150,000	30,454.9

Notes:
1 therm = 100,000 British thermal unit (BTU) = 10,000 kilo British thermal units (kBTU)
Gas consumption data was not available from the CEC for Alpine, Del Sierra, Lake, Inyo, Modoc, Mono, Plumas, Sierra, Siskiyou, or Tuolumne Counties. Therefore, total and per capita gas State-wide gas consumption are slightly greater than presented.
Sources: CEC 2018a; U.S. Census Bureau 2018.

As previously described, natural gas service in the City is provided by SoCalGas, which provides natural gas to 21.8 million consumers through 5.9 million meters in more than 500 communities. The company's service territory includes communities throughout Central California and Southern California, from Visalia to the Mexican border (SoCalGas 2019). The City is located in SoCalGas's Pacific Region, which includes all coastal areas between Ventura and Long Beach. Natural gas is delivered by SoCalGas from in-State and out-of-State suppliers and delivered to the City through its integrated gas pipeline system. All areas of the City are served by gas infrastructure (i.e., pipelines of varying diameters), with maintenance and periodic upgrades provided, as needed, by SoCalGas.

The annual natural gas sale to SoCalGas customers in 2018 is shown in Table 3.5-4. Total natural gas sales/usage for SoCalGas is compared to the State-wide natural gas sales/usage from the corresponding year.

3.5.1.3 Transportation Energy

Transportation energy demand in California is largely related to vehicular traffic (e.g., passenger vehicles, light duty trucks, semi-trucks, etc.), with the majority of transportation-related energy demand current met by gasoline and diesel fuel. In 2018, California consumed 14.24 billion gallons of gasoline (including aviation fuel) and 3.07 billion gallons of diesel fuel (California Department of Tax and Fee Administration 2019). Within the City, approximately 58.26 million gallons of gasoline and 8.67 million gallons of diesel fuel were consumed in 2018 (City of Santa Monica 2018). Gasoline and diesel fuel is supplied to City residents by a widely distributed series of service stations both inside and around the City. The California Department of Transportation (Caltrans) reports that approximately 25.5 million automobiles, 5.76 million trucks, and 881,386 motorcycles were registered in the state as of January 1, 2018, resulting in a total estimated 344.3 billion VMT in 2017 and 13 billion gallons of transportation fuel consumed (Caltrans 2018a, 2018b). Within the City, almost 1.43 billion gasoline, diesel, and electric vehicle miles were

[2] A British thermal unit (BTU) is a unit of heat; it is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit. One kilo British thermal unit (kBTU) is equal to 1,000 BTU.

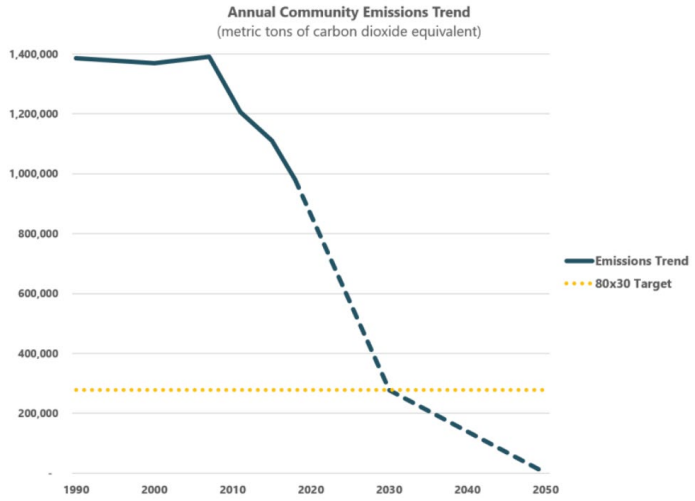
traveled in 2018, accounting for approximately 0.4 percent of the State's total VMT and an estimated 58,261,528 gallons of gasoline were consumed (City of Santa Monica 2018). However, the City has implemented several policies and regulations to reduce VMT, encourage the use of electric vehicles, and prioritize mass transit services (see Section 3.12, *Transportation*). Accordingly, gasoline consumption in the City has declined over the past several years. The City's 2018 GHG Inventory Update predicts that the demand for gasoline will continue to decline over the next 10 years and will be 27 percent lower than 2015 levels by the year 2030 (City of Santa Monica 2018).

3.5.1.4 Energy Conservation

Appendix F, *Energy Conservation* of the CEQA Guidelines expresses the goal of conserving energy in the State of California and provides guidance for the analysis of energy impacts. Under CEQA (Public Resources Code Section 21100[b][3]), EIRs must include a discussion of the potentially significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F lists the following methods to achieve this goal: (1) decreasing overall per capita energy consumption; (2) decreasing reliance on natural gas and oil; and (3) increasing reliance on renewable energy sources. In addition to building code compliance, relevant considerations may include, among others, the project size, location, orientation, equipment use and any renewable energy features that are incorporated into the project (CEQA Guidelines Section 15126.2[b]).

Energy conservation plays a key role in State-wide, regional, and City efforts to reduce the reliance on non-renewable energy sources such as fossil fuels and to reduce the level of GHGs as well as the adverse effects of climate change. Energy conservation measures include a range of approaches such as optimizing building design to reduce heating and cooling energy uses at residential, mixed-use, and commercial developments, reducing single occupancy vehicle use, encourage a transition to hybrid and electric vehicles, etc. As described further in Section 3.5.2, *Regulation Setting*, energy conservation measures at the City level are guided and often required through both State legislation and City plans and ordinances. Key State legislation that requires energy conservation include Senate Bill (SB) 350, which requires the State to double State-wide energy efficiency savings in electricity and natural gas use by 2030 and the California Building Code (CBC) requires increased energy efficiency and conservation structures. SB 100 established that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by the end of 2045. At the local level the City has adopted the 2014 Update of the Sustainable City Plan, which focuses reducing the City's energy needs through increased energy efficiency, increased renewable energy production, and reduced transportation-related emissions through increased use of alternative transportation. The City's 2020 Energy Reach Code, which took effect on January 1, 2020, requires new buildings to achieve one of two design pathways for complying with the City's Energy Code: all-electric design and mixed-fuel design. However, as an incentive to design all-electric buildings, a higher level of energy efficiency would be required for mixed-fuel buildings.

Collectively these plans and ordinance have resulted in a substantial net decrease in energy consumption from 2015 for the industrial, commercial, and residential sectors, with the exception of commercial natural gas usage. For example, between 2015 and 2018 total electricity usage was reduced by 1,741,330,057 kWh. As described in further detail in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, the City has been tracking local GHG emissions for over 20 years through an annual community (i.e., sector-based) emissions inventory. The City's emissions have declined by 29 percent during the period between 1990 and 2018 data. The changes are largely driven by: increased efficiency in vehicle fuel; increased renewable energy for electricity generation; reduced waste being sent to the landfill; a decline in natural gas consumption; and reduced aviation activity.



The City's energy conservation measures – required by local plans and ordinances – have resulted in a substantial reduction in GHG emissions during the period between 1990 and 2018.

3.5.1.5 Solar Energy

Currently, less than 2 percent of the City's electricity needs are met by solar PV systems on local rooftops (City of Santa Monica 2019). The City's 2019 Climate Action and Adaptation Plan (CAAP) proposes to work towards zero net carbon buildings by installing 100 megawatts (MW) of local solar energy and includes multiple goals and objectives to expand the City's solar energy sector. In 2018, there were 6.3 MW of solar installed community-wide. Additionally, the City's 2020 Energy Reach Code, which took effect on January 1, 2020, continues to require the installation of solar PV systems for new multi-family residential buildings and requires new buildings in the City to achieve one of two design pathways for complying with the City's 2020 Energy Reach Code: all-electric design and mixed-fuel design. However, as an incentive to design all-electric buildings, a higher level of energy efficiency is required for mixed-fuel buildings (see Section 3.5.2, *Regulatory Setting*).

The City has installed a number of solar PV systems, including at public parking structures.

Solar Santa Monica is a free service offered by the City that provides property owners within the City with unbiased technical advice to help navigate the changing rules, incentives, and financing options of installing solar panels (City of Santa Monica 2021c). Services include:

- Energy efficiency recommendations
- Solar potential analysis
- Bid comparison
- Financial Analysis

Solar Santa Monica continues to deploy energy efficiency, solar power, and clean distributed generation in the City (City of Santa Monica 2021c).

3.5.2 Regulatory Setting

3.5.2.1 State Policies and Regulations

Senate Bill 350

SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 under Executive Order S-14-08 to 50 percent by 2030. This objective will increase the use of Renewable Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal and others. SB 350 also requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help meet these goals and reduce GHG emissions, large utilities will be required to develop and submit Integrated Resource Plans (IRPs). These plans detail how utilities will meet their customers' resource needs, reduce GHG emissions, and increase the use of clean energy resources. SB 350 also transforms the California Independent System Operator, a nonprofit public corporation, into a regional organization, contingent upon approval from the State Legislature. The bill also authorizes utilities to undertake transportation electrification.

Senate Bill 100

In 2018, SB 100 established that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by the end of 2045. SB 100 also creates new standards for the RPS, increasing required energy from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by the end of 2030. Incrementally, these energy providers must also have a renewable energy supply of 44 percent by the end of 2024, and 52 percent by the end of 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

California Building Code

California Code of Regulations, Title 24 is known as the CBC, which establishes the regulations for building construction and system design and installation to achieve energy efficiency and preserve outdoor and indoor environmental quality. The CBC includes the following:

California Code of Regulations, Title 24, Part 6 comprises the California Energy Code, which was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to increase the baseline energy efficiency requirements. The current California Energy Code references the 2019 Title 24 standards, which became effective in 2020. The 2019 Title 24 standards include efficiency improvements to the residential standards for attics, walls, water heating, and lighting; and efficiency improvements to the non-residential standards are in alignment with the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 National Standards. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

California Code of Regulations, Title 24, Part 11 comprises CALGreen, which establishes mandatory green building code requirements as well as voluntary measures (Tier 1 and Tier 2) for new buildings in California. The mandatory provisions in CALGreen will reduce the use of Volatile Organic Compound (VOC) emitting materials, strengthen water efficiency conservation, increase construction waste recycling, and increase energy efficiency. Tier 1 and Tier 2 are intended to further encourage building practices that minimize the building's impact on the environment and promote a more sustainable design.

3.5.2.2 Local Policies and Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties. SCAG addresses regional issues related to transportation, the economy, community development, and the environment. SCAG develops plans pertaining to transportation, growth management, hazardous waste management, housing, and air quality. SCAG prepares the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that supports the land use and transportation components of the Air Quality Management Plans (AQMPs), which provide GHG-reduction co-benefits (see Section 3.7, *Greenhouse Gas Emissions and Climate Change* as well as Section 3.12, *Transportation*). On September 3, 2020, SCAG's Regional Council unanimously voted to approve and fully adopt the 2020-2045 RTP/SCS (Connect SoCal) (SCAG 2020). Connect SoCal includes more than 3 years of consultation with stakeholders and the public to capture the goals and objectives of the people within the region and capture the most current available data for determining future demographic projections. The intent of the plan is to build upon and expand land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The Connect SoCal plan achieves per capita GHG emissions reductions relative to 2005 of 19 percent in 2035 (SCAG 2020).

Santa Monica General Plan Land Use and Circulation Element

The Santa Monica General Plan Land Use and Circulation Element (LUCE), adopted in 2010 and revised in 2017, guides land use and development within the City with design guidelines, policies, programs, recommended improvements, including policies for resource management and use:

Policy LU16.1	Design Buildings with Consideration of Solar Patterns. In designing new buildings, consider the pattern of the sun, the impact of the building mass throughout the day and the year to create habitable outdoor spaces and protect adjacent structures to minimize shadows on public spaces at times of the day and year when warmth is desired and provide shade at times when cooling is appropriate, and minimize solar disruption on adjacent properties.
Policy S3.1	Actively strive to implement the City's "zero net" electricity consumption goal by 2020 through a wide variety of programs and measures, including the generation of renewable energy in the City and energy efficiency measures.
Policy S3.2	Consider a requirement for all new residential buildings to use net zero energy by 2020 and all new commercial buildings by 2030.
Policy S3.3	Continue to promote the retrofitting of existing buildings, including the following programs and actions: • Weatherization programs • Commercial lighting retrofits and heating, ventilation, and air conditioning (HVAC) upgrades • Whole house retrofit programs • Retro commissioning
Policy S3.4	Explore creating an ordinance to require all buildings sold in Santa Monica to meet minimum energy efficiency requirements with energy efficiency upgrades occurring at the time of resale and prior to the transfer of title.
Policy S4.1	Explore creating an ordinance to require solar installations, both photovoltaic and hot water, on new construction projects.
Policy S4.3	Pursuant to AB 811 (Municipal Clean Energy Program), create a mechanism to finance and help amortize commercial and residential solar installations under the Solar Santa Monica Program.
Policy S4.4	Continue to maintain the Solar Santa Monica Program to help finance and provide technical know-how for residential and commercial solar installations.
Policy S5.1	Continue to maintain a Building Code and prescriptive compliance options that meet or exceed state requirements for energy, water and other sustainability standards. Specifically, pursue California Energy Commission goals to achieve net zero energy buildings by 2020 for low-rise residential buildings and 2030 for commercial buildings and achieve a Leadership in Energy and Environmental Design (LEED)-equivalent building code by 2020.
Policy S5.4	Consider a requirement that all new construction utilize solar water heaters.
Policy S5.5	Encourage shade trees on south- and west-facing sides of all new buildings to reduce building energy loads.
Policy S5.6	Encourage cool roofs or green roofs on new buildings
Policy S5.7	Encourage cool paving on new plazas and parking lots.
Policy S5.8	Encourage installation of electrical outlets in loading zones and on the exterior of new buildings to reduce emissions from gas-powered landscape maintenance and operating refrigeration for delivery trucks.

Santa Monica General Plan Conservation Element

The following policies of the City's existing Conservation Element apply to energy-related impacts:

Policy 25	The Public Works Department shall continuously investigate new materials for street surfacing which will enhance energy conservation of vehicles.
Policy 31	The City shall expand the current building codes to require the use of new, as well as known, energy conserving technology and materials when they become available and are deemed practical in economic terms and functional application as well.

Climate Action and Adaptation Plan

In May 2019, the City adopted the CAAP, which provides the roadmap for the City to achieve carbon neutrality by 2050 and to prepare and adapt for climate change impacts. The intent of the CAAP is to provide overarching policy direction with respect to climate change through City-wide objectives and broad strategies to reduce GHG emissions. The CAAP focuses on eight City-wide objectives in three sectors: zero net carbon buildings, zero waste, and sustainable mobility. The adoption of the City's Energy Reach Code is one implementation program aimed at achieving the CAAP's goal of reducing GHG emissions in new buildings. Refer to Section 3.7, *Greenhouse Gas Emissions and Climate Change* for further discussion.

Sustainable City Plan

The 2014 Update of the Sustainable City Plan integrates 10 Guiding Principles that provide the basis from which effective and sustainable decisions can be made for a range of issues in the City, including Resource Conservation, Environmental and Public Health, Transportation, Sustainable Local Economy, Open Space and Land Use, Housing, Community Education and Civic Participation, Human Dignity, and Arts and Culture. The Sustainable City Plan focuses reducing the City's energy needs through increased energy efficiency, increased renewable energy production, and reduced transportation-related emissions through increased use of alternative transportation. The following City goals were developed to support the achievement of targeted reductions in energy needs listed in the Sustainable City Plan.

- Resource Conservation Goal 1: Significantly decrease overall community consumption, specifically the consumption of non-local, non-renewable, non-recyclable and non-recycled materials, water, and energy and fuels.
- Resource Conservation Goal 2: The City should take a leadership role in encouraging sustainable procurement, extended producer responsibility and should model innovative strategies to become a zero waste city.
- Resource Conservation Goal 3: Within renewable limits, encourage the use of local, non-polluting, renewable and recycled resources (water, energy, and material resources).
- Environment and Public Health Goal 1: Protect and enhance environmental health and public health by minimizing and where possible eliminating the levels of pollutants entering the air, soil and water.
- Transportation Goal 1: Create a multi-modal transportation system that minimizes and, where possible, eliminates pollution and motor vehicle congestion while ensuring safe mobility and access for all without compromising our ability to protect public health and safety.

- Transportation Goal 2: Facilitate a reduction in automobile dependency in favor of affordable alternative, sustainable modes of travel.
- Sustainable Local Economy Goal 2: Businesses, organizations and local government agencies within Santa Monica continue to increase the efficiency of their use of resources through the adoption of sustainable business practices.
- Open Space and Land Use Goal 2: Implement land use and transportation planning and policies to create compact, mixed-use Housing Elements, forming urban villages designed to maximize affordable housing and encourage walking, bicycling and the use of existing and future public transit systems.

One of the key measures included in the Sustainable City Plan increases the percent of new and substantially-rehabilitated housing that achieves LEED certification at LEED Silver or higher. The City offers expedited plan review for buildings pursuing LEED certification. The City also adopted a policy for new municipal buildings to achieve at least a Gold rating by the U.S. Green Building Council's LEED rating system.

Energy Reach Code (SMMC Chapter 8.36 and Chapter 1.106)

What are Reach Codes? *Reach codes provide an opportunity for local governments to amend the 2019 State Building Code for new homes and commercial buildings. The amendments or "Reach Codes" are designed to encourage low-cost all-electric new construction of healthier, safer, and zero emission buildings while making it easier to charge electric vehicles.*

The City recently updated its Energy Code to provide local amendments to Title 24, Part 6 of the California Energy Code and Title 24, Part 11 of CALGreen. The local amendments are part of the City's efforts to achieve carbon neutrality. The City's 2020 Energy Reach Code, which took effect on January 1, 2020, requires new buildings in Santa Monica to achieve one of two design pathways for complying with the City's Energy Code: all-electric design and mixed-fuel design. As previously described, to incentivize more buildings to be all-electric (which is cost-effective, healthier, and safer while significantly reducing GHG emissions), the City requires that mixed-fuel building be designed with a higher level of energy efficiency. All-electric buildings would not be subject to higher levels of energy efficiency and may be built to the State's standard design requirements. All-electric buildings would not be subject to higher levels of energy efficiency and may be built to the State's standard design requirements. All-electric buildings powered by a combination of onsite solar and 100 percent Green Power from the CPA are effectively Zero-Emission Buildings. The energy requirements for new building types are shown in Table 3.5-5.

Table 3.5-5 Energy Requirement for New Buildings within the City

Building Type	Code Compliance Pathways (choose one)	
	All-Electric Design Requirements	Mixed-Fuel Design Requirements
New single-family, duplex, and multi-family residential buildings (3 stories or less)	Efficiency: Meet 2019 California Energy Code Solar: No requirement	Efficiency: Must meet CalGreen Tier 1 established by the 2019 California Energy Code. CalGreen Tier 1 buildings have additional integrated efficiency and on-site renewable energy sufficient to achieve a Total Energy Design Rating of 10 or less.
New multi-family buildings (4+ stories) as well as new hotels and motels	Efficiency: Meet 2019 California Energy Code Solar: Solar PV system with a minimum rating of 2 watts per square foot (sf) of the building's footprint.	Efficiency: Must be designed to be 5 percent more efficient than the 2019 California Energy Code Solar: Solar PV system with a minimum rating of 2 watts per sf of the building's footprint.
All other new non-residential buildings:	Efficiency: Meet 2019 California Energy Code Solar: Solar photovoltaic (PV) system with a minimum rating of 2 watts per sf of the building's footprint.	Efficiency: Must be designed to be 5 percent more efficient than the 2019 California Energy Code Solar: Solar PV system with a minimum rating of 2 watts per sf of the building's footprint.

Green Building Standards Code (SMMC Chapter 8.106)

SMMC Chapter 8.106 adopts by reference the CALGreen requirements with the local amendments that require solar pool heating and solar PV installations. The City's Green Building Standards Code includes the following energy standards:

- For new pool construction (if the pool is to be heated), renewable energy shall be used for such heating provided that:
  - The surface area of the solar collectors used to generate such renewable energy is equal to or greater than 70 percent of the surface area of the pool; or
  - Renewable energy provides at least 60 percent of the total energy necessary for heating purpose.
- Solar requirements under SMMC Section 8.106.055 (Santa Monica Solar Ordinance), which requires rooftop solar systems for all new construction in the City:
  - New single-family dwellings are required to install a solar PV system, with a minimum total wattage of 1.5 times the square footage of the dwelling (1.5 watts per sf). That means a 2,000-sf home would need a 3-kWh system, which is a typical size already seen on many homes.
  - New multi-family dwellings are required to install a solar PV system, with a minimum total wattage 2.0 times the square footage of the building footprint (2.0 watts per sf of building footprint). That means a four-story building with a building footprint of 10,000 sf would need a 20-kWh system.
- Electric vehicle (EV) charging shall be provided.

Green Building, Landscape Design, Resource Conservation and Construction and Demolition Waste Management Standards (SMMC Chapter 8.108)

SMMC Chapter 8.108 provides requirements for new development projects to comply with Water-Efficient Landscape and Irrigation Standards. Projects must include a submission of plans and reports to the City

for review and approval prior to the installation of landscaping and/or irrigation system. This section also requires construction and demolition projects to meet a minimum 70 percent diversion rate and submit a waste management plan for City approval.

Electric Vehicle Charging Stations Ordinance (SMMC Chapter 9.28.160)

The City requires electric recharge stations in new development projects required to provide at least 25 parking spaces and for remodeling and expansion of existing development projects that either have 50 or more existing parking spaces prior to the remodel or expansion or the scope of work adds at least five more parking spaces. Parking lots with 50 to 99 parking spaces are required to provide at least two charging stations, plus one for each additional 50 parking spaces.

Santa Monica Electric Vehicle Action Plan

The City adopted the Electric Vehicle Action Plan (EVAP) in November 2017. The City's vision is to wholly decarbonize their transportation system by replacing non-electrical vehicle use with walking, bicycling, transit, and EVs when driving. The overarching goal of the EVAP is to implement policies, Housing Elements, and programs to accelerate the adoption of electric vehicles within the City. The EVAP seeks to expand the public charging infrastructure from 89 to approximately 300 chargers by 2020, with a long-term goal of 1,000 chargers by 2025. By providing additional infrastructure, the EVAP aims to increase the percentage of EVs on the road from 2 percent to 15 percent by 2025.

3.5.3 Impact Assessment Methodology

3.5.3.1 Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a Lead Agency may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For the purposes of this EIR, the proposed Housing Element Update may have a significant adverse impact related to energy if:

a) The project would result in potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation; and/or
b) The project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

This analysis also considers Appendix F, *Energy Conservation* of the CEQA Guidelines, which provide assistance to lead agencies with regard to evaluation of impacts related to energy resources in EIRs, recommends consideration of the following environmental impacts to the extent relevant and applicable:

c) The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.

d) The effects of the project on local and regional energy supplies and on requirements for additional capacity.
e) The effects of the project on peak and base period demands for electricity and other forms of energy.
f) The degree to which the project complies with existing energy standards.
g) The effects of the project on energy resources.
h) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

3.5.3.2 Methodology

This section utilizes data from the CEC and the California Emissions Estimator Model (CalEEMod), Version 2016.3.2, consistent with the air quality analysis in Section 3.3, *Air Quality*, and the GHG emissions analysis in Section 3.7, *Greenhouse Gas Emissions and Climate Change*. Potential energy impacts of the proposed 6th Cycle Housing Element Update were evaluated by reviewing the change in residential and commercial land uses that could occur under the proposed Housing Element Update (see Table 3.5-6) and assessing the potential to affect the capacities of energy service utilities. As described in Section 2.0, *Project Description*, the proposed Housing Element Update plans for the development of up to 8,895 to approximately 11,000 new dwelling units and potential associated ground floor commercial space. Projected utility demands for the proposed Housing Element Update were estimated by assuming an average persons per household (pph) of 2.0, estimated by the City based on the American Communities Survey (ACS) and a variety of the City's long-range plans (e.g., LUCE, Downtown Community Plan [DCP], etc.). The estimated energy demand associated with the residential development planned for under the proposed Housing Element Update was then compared to the current overall energy demand of the City and the County to provide context for the projected changes in energy demand. Potential impacts resulting from the proposed Housing Element Update were compared with the significance thresholds described in Section 3.5.3.1, *Thresholds for Determining Significance*.

Table 3.5-6 Future (2030) Land Use and Population Assumptions

Category	Adjusted Baseline (2020)	Future (2030) No Project	Future (2030) With Project	Percent Change from Future (2030) No Project
Population	92,357	101,583	116,245	14%
Employment	90,992	95,409	92,760	-3%
Total Dwelling Units	52,589	57,552	64,883	13%
Total Commercial Space[1]	31,457,321	32,880,837	31,874,889	-3%

Notes: [1]Total commercial space includes office, retail, restaurant, hotel, hospital, etc.

Construction Energy Use

Construction of new residential development planned for under the proposed Housing Element Update would result in energy demand as a result of the use of heavy-duty construction equipment, on-road trucks, and workers commuting to and from the specific construction site. Heavy-duty construction equipment would be primarily diesel-fueled. Energy demand (specifically transportation fuel consumption) from heavy-duty construction equipment is estimated based on the CalEEMod analysis (see Appendix B) and transportation fuel consumption data from the California Air Resources Board (CARB) OFFROAD2011 model (see Appendix B). As described in Section 3.3, *Air Quality*, the analysis considers

continuous development with an average net increase of approximately 1,221 dwelling units per year through 2030.

Operational Energy Use

New residential development planned for by the proposed Housing Element Update would require long-term energy consumption from building heating, cooling, cooking, lighting, electronics, appliances, water use, wastewater treatment, and transportation-fuel consumption, primarily gasoline associated with increased vehicular traffic. Electricity and natural gas demand for new residential development planned for under the proposed Housing Element Update were estimated using CalEEMod. The energy usage takes into account building energy standards pursuant to the Title 24 Building Standards Code, CALGreen Code, and City's Green Building Standards Code.

This assessment also includes a discussion of the sustainable design and energy conservation features that would be incorporated as a part of new residential development planned for under the proposed Housing Element Update. These features would reduce projected increases in energy and water usage and encourage recycling and waste diversion, above and beyond State regulatory requirements.

Gasoline and diesel fuel consumption for increases in development-related vehicular traffic is estimated based on the number of trips and the estimated VMT calculated by Fehr & Peers for the buildout associated with the proposed Housing Element Update (see Section 3.12, *Transportation*; see Appendix G). The estimated fuel economy for vehicles is based on fuel consumption factors from the CARB EMission FACtors (EMFAC) model. EMFAC is incorporated into CalEEMod. Therefore, this energy assessment is consistent with the modeling approach used for the other quantitative environmental analysis provided in this EIR and is consistent with standard practice for impact analysis pursuant to CEQA.

3.5.4 Project Impacts and Mitigation Measures

Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Impact Description (EN-1)

EN-1 **Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would increase energy demand, but would not result in wasteful, inefficient, and unnecessary consumption of energy resources during construction or operation of individual residential developments. Compliance with State and local regulations – including the 2020 Energy Reach Code, and Green Building Standards Code – would reduce this impact to *less than significant*.**

Construction Energy Use

New residential development planned for by the proposed Housing Element Update would require energy consumption for on-site construction activities, transport of demolition debris, soil, and construction materials, and commute trips by construction workers.

Electricity would be used during construction of each individual residential development project in order to provide temporary power for lighting, electronic equipment, and certain construction equipment (e.g., hand tools). Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment and would be temporary for the duration of construction activities. However, construction-related electricity use for each housing site would be temporary and comparatively negligible compared to citywide and regional use over the long-term.

The construction period for each individual residential development project planned for under the proposed Housing Element Update would vary from a few months for additions or small developments to potentially more than 3 years for large developments with more than 100 units. Diesel fuel would be required to power heavy construction equipment and heavy haul trucks. The assumption that diesel fuel would be used for all equipment represents the most conservative scenario for reasonable maximum potential energy use during construction. The total construction fuel consumption is calculated as the sum of total estimated fuel consumption for each piece of equipment used in each phase of construction. Section 3.0, *Construction Detail* in the CalEEMod Worksheets (see Appendix B), provides generalized construction phasing, construction equipment used in each phase, total number of days worked, equipment horsepower, equipment load factor, and equipment quantities based on typical construction equipment and default model assumptions. These assumptions are by nature broad-based and were used to calculate fuel consumption for specific equipment. The estimated energy consumption provided below describes the maximum energy consumption, which correlates with the conservative worst-case (i.e., maximum) criteria pollutant and GHG emissions scenarios described in Section 3.3, *Air Quality* and Section 3.7, *Greenhouse Gas Emissions and Climate Change*.

Fuel consumption is based on a fuel consumption factor of 0.05 gallons per horsepower per hour (gal/hp/hr) for diesel engines as derived from the South Coast Air Quality Management District (SCAQMD) CEQA Handbook Table A9-3E.

The annual construction-related fuel consumption that is projected to be required as a result of buildout residential development planned for under the proposed Housing Element Update is estimated to be 866,309.6 gallons (see Table 3.5-7). As shown in Table 3.5-7, the Housing Element estimates 6,520,362.56 gallons of fuel would be required for construction equipment and 3,059,184.75 gallons of fuel would be required for construction vehicle trips. Total fuel consumption for construction worker vehicle trips is based on average fuel consumptions for light-duty vehicles assuming that 100 percent of construction workers would utilize such vehicles during construction of each new residential development. The average fuel consumption rate for construction vehicle trips is based on light-duty fuel efficiency estimates from 1990 to 2015, as provided by Bureau of Transportation Statistics. Refer to detailed calculations of Construction Fuel Consumption in Appendix E. The total fuel consumption associated with the proposed Housing Element Update would be approximately 6,930,476.83 gallons.

Table 3.5-7 Estimated Annual Construction Fuel Consumption

Fuel Consumption from Construction Equipment (Gallons)		Fuel Consumption from Construction Vehicle Trips (Gallons)		Total Construction (Gallons)	
Annual	Total	Annual	Total	Annual	Total
483,911.51	6,520,362.56	382,398.09	3,059,184.75	866,309.6	6,930,476.83

Notes: "Annual" estimated fuel consumption refers to the estimated average number of units that would be developed per year under the proposed Housing Element Update.
Source: See Appendix E.

For comparison purposes, the energy demand from transportation fuel associated with the proposed Housing Element Update has been compared to the Los Angeles County transportation fuel sales. As shown in Table 3.5-8, the proposed Housing Element Update would represent a very small fraction – less than 4 percent – of the County's annual fuel consumption.

Table 3.5-8 Comparison of Housing Element Construction and County Diesel Fuel Usage

	Diesel Fuel Consumption (Gallons)
Los Angeles County (2018)	228,000,000
Annual Construction during Buildout of the Housing Element Update	6,930,476.83

Source: see Appendix E.

Compliance with the State and City policies – including California Idling Regulations as defined by CARB, which prohibit heavy-duty diesel vehicles with a Gross Vehicle Weight Rating of 10,000 pounds or more from idling for longer than 5 minutes (refer to Section 3.3, *Air Quality*) – and the temporary nature of construction would result in a more efficient use of construction-related energy and minimize or eliminate wasteful and unnecessary consumption of energy. In addition, it should be noted that the State has determined that the construction of housing pursuant to each city's or county's RHNA is essential and necessary to protect the general health and welfare of the residents of the City and the Greater Los Angeles Area. Therefore, the proposed Housing Element Update would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not increase the need for new energy infrastructure. Construction energy impacts would be *less than significant*.

Operational Energy Use

Residential development planned for under the proposed Housing Element Update would permanently increase the demand for electricity and natural gas primarily for building heating and cooling. However, development under the proposed Housing Element Update would, at a minimum, comply with the requirements of the CALGreen and the City's Green Building Standards Code. Specifically, each new residential development with a height of 4+ stories would be constructed to comply with the City's 2020 Energy Reach Code, which requires:

- All-Electric Building: shall be designed to code established by the 2019 California Energy Code.
- Mixed-Fuel Building: shall be designed to be 5 percent more efficient than the 2019 California Energy Code.

Conservatively assuming that each new residential development planned for under the proposed Housing Element Update is designed as mixed-fuel (electric and natural gas), the proposed Housing Element

Update would generate a net new annual electricity demand of 67,381,244 kWh per year (see Table 3.5-9) and a net new annual natural gas demand of 559,345,882 kBTU per year (see Table 3.5-10). These estimates correspond with approximately 8.6-percent and 20.3-percent increase in electricity and natural gas consumption, respectively, relative to the electricity and natural gas consumption for the City in 2018. While the City's 2020 Energy Reach Code currently allows for new buildings to choose between an all-electric design or mixed-fuel design, the City anticipates that in the near future, the code will be modified to mandate an all-electric design.

Table 3.5-9 Estimated Annual Electricity Demand of the Proposed Housing Element Update

	Projected Increase	Consumption Factor	Annual Usage (kWh/year)
Residential			
Estimated Net Annual	1,221	5,626.50 kWh/unit/year[1]	6,869,957
Total	10,994		61,857,741
Commercial			
Estimated Net Annual	40,525	13.63 kWh/sf/year[2]	5,69,148
Total	405,246		5,691,452
Projected Net Total Demand Increase[3]	-	-	67,381,244
Existing Demand (2018)	-	-	**787,770,753**
Percent Increase	-	-	**8.6%**

Notes:
[1] The electricity demand factor for residential uses is provided in Table A9-11-A SCAQMD CEQA Air Quality Handbook (1993). For reference the energy analysis in the LUCE used the rate of 6,081 kWh/unit/year from the SCAQMD Air Quality Handbook (1987). Additionally, the calculated energy consumption for the Ocean Avenue Project (State Clearinghouse [SCH] No. 2018121060) was 3,960 kWh/year.
[2] The electricity demand for factor for commercial uses is provided in CEC's 2006 California Commercial End-use Survey
[3] The "net change is residential and commercial demand" is representative of the change in demand that is specifically attributable to the proposed Housing Element Update.

Table 3.5-10 Estimated Annual Natural Gas Demand of the Proposed Housing Element Update

	Projected Increase	Consumption Factor	Annual Usage (kBTU/year)
Residential			
Estimated Annual	1,221	49,919 kBTU/unit/year	60,951,099
Total	10,994		548,809,486
Commercial			
Estimated Annual	40,525	26 kBTU/sf/year[2]	1,053,650
Total	405,246		10,536,396
Projected Total Demand Increase[3]	-	-	559,345,882
Existing Demand (2018)	-	-	**2,753,150,000**
Percent Increase	-	-	**20.3%**

Notes:
[1] The natural gas demand factor for residential uses is provided in Table A9-12-A SCAQMD CEQA Air Quality Handbook (1993). For reference the energy analysis for the LUCE (SCH No. 2009041117) used the rate of 492.6 therms/unit/year (49,260 kBTU/unit/year) from the SCAQMD Air Quality Handbook (1987). Additionally, the calculated energy consumption for the Ocean Avenue Project (SCH No. 2018121060) was 92.2 therms/unit/year (9,217 kBTU/unit/year).
[2] The natural gas demand for factor for commercial uses is provided in CEC's 2006 California Commercial End-use Survey.
[3] The "net change is residential and commercial demand" is representative of the change in demand that is specifically attributable to the proposed Housing Element Update.

In addition, compliance with the City's 2020 Energy Reach Code, new development would also be required to comply with the Santa Monica Solar Ordinance (SMMC Section 8.106.055), which requires

new multi-family dwellings are required to install a solar PV system, with a minimum total wattage 2.0 times the square footage of the building footprint (2.0 watts per sf of building footprint).

Additionally, as described in Section 3.5.2, *Regulatory Setting*, electric vehicle charging stations shall be included in new residential developments that are required to provide at least 25 parking spaces and for remodeling and expansion of existing development projects that either have 50 or more existing parking spaces prior to the remodel or expansion or the scope of work adds at least five more parking spaces (SMMC Chapter 9.23.160).

Residential development planned for under the proposed Housing Element Update may also install charging stations to encourage electric vehicle use and reduce transportation-related fuel consumption and emissions.

Other sustainable design features, which would be formalized during the entitlement process for each individual residential development, could include the installation of energy efficient HVAC systems, operable windows to increase air flow, high-performance building envelope to maximize insulation, lighting systems with occupancy sensors and dimmers, energy efficient building materials and appliances, cool roof or green roofs (consistent with LUCE Policy S5.6), and landscaping to reduce building energy loads (consistent with LUCE Policy S5.5). Additionally, many of the individual developments would likely optimize passive design strategies consistent with LUCE Policy LU16.1, which use ambient energy sources (e.g., daylight/solar) to supplement electricity and natural gas to increase the energy efficiency. As described in Section 3.5.2, *Regulatory Setting,* the City incentivizes these types of sustainable design features by offering expedited plan review for buildings pursuing LEED certification.

As previously discussed, since May 2019, all residential and commercial users in the City receive electricity from the CPA. The CPA buys electricity from renewable sources and partners with SoCal Edison to distribute electricity to residential and commercial customers throughout the City. The City has chosen 100 percent Green Power as a step to reaching carbon neutrality. However, the City and CPA allow for the individual user's selection of lower percent renewable power or to stay with SoCal Edison's renewable generation percentage (refer to Section 3.5.1.1, *Electricity*).

The combination of energy-saving and energy-generating features included in the proposed Housing Element Update demonstrates the City's commitment to use of renewable energy supplies and energy conservation ensures that buildout under the proposed Housing Element Update would not use energy in a wasteful or inefficient manner. The incorporation of the energy requirements established within local regulations, which go above and beyond typical State requirements, would ensure that buildout of the proposed Housing Element Update would be consistent with the City's energy use goals. In addition, it should be noted that the State has determined that the development of up to 8,895 to approximately 11,000 new dwelling units within the City is essential and necessary to protect the general health and welfare of the residents of the City and the Greater Los Angeles Area. Therefore, implementation of the proposed Housing Element Update would not constrain local or regional energy supplies and would not

require the expansion or construction of new electricity generation and/or transmission facilities. As such, implementation of the proposed Housing Element Update would not use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner. Impacts would be *less than significant*.

Operational Vehicle Fuel Consumption

New residential development planned for under the proposed Housing Element Update would result in increases in daily consumption of vehicle fuel for trips. However, much of the projected residential development would be anticipated to occur along major transit routes (e.g., Big Blue Bus routes, Metro routes, Metro E [Expo] Light Rail Transit [LRT] stations). In addition, residential development planned for under the proposed Housing Element Update could include the development of short- and/or long-term bicycle parking spaces to encourage residents and employees to use alternative modes of transportation such as bicycling.

As described in Section 3.12, *Transportation*, residential development planned for under the proposed Housing Element Update is anticipated to result in an increase in daily VMT. Under Future With Project (2030) conditions the future population of 116,245 residents is estimated to produce a total of 198,651 daily trips and 1,162,450 daily residential VMT, with an average of 10.0 miles per capita. The 92,760 employees are estimated to generate a total of 117,070 commute trips and 1,233,708 commute VMT, with an average of 13.3 miles per employee. Using estimated vehicle fleet mix data provided in Appendix E and average fuel economy information provided by the Bureau of Transportation Statistics, the increase in VMT would result in the consumption of approximately 135,970,676 gallons per year (see Table 3.5-11). See Section 3.12, *Transportation* for additional discussion regarding projected VMT associated with the proposed Housing Element Update.

Although the increase in City-wide VMT associated with the proposed Housing Element Update would necessarily result in the consumption of transportation fuels, the proposed Housing Element Update would increase housing opportunities in the jobs-rich City. Only 9 percent of workers in the City live within the City. The proposed Housing Element Update would plan for the development of a minimum of 8,895 new dwelling units (of which 69 percent must be provided at lower income levels), thus creating opportunities for many of the City's workers to live closer to their jobs and thereby reducing VMT and associated fuel consumption on a regional basis. New residents would also have access to the City's extensive pedestrian facilities, bicycle network, and transit options such as the Big Blue Bus routes, Metro routes, and Metro E (Expo) LRT line. As described further in Section 3.12, *Transportation*, new residential development planned for under the proposed Housing Element Update would also be required to comply with SMMC Chapter 9.53, which requires the implementation of transportation demand management (TDM) programs. For example, new residential development resulting in the addition of 16 dwelling units or more would be required to:

- Provide all new residents with a welcome package that shall, at minimum, including:
  - Current maps, routes and schedules for public transit routes within a 0.5-mile radius.
  - Regional ridesharing agency, local transit operators, and certified Traffic Management Office (TMO), where available.
  - Ridesharing promotions material supplied by commuter-oriented organizations.

- Bicycle route and facility information, including rental and sales locations, regional/local bicycle maps, and bicycle safety information within a 0.5-mile radius.
- A list of facilities available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians.
- Walking and biking maps, including information about convenient local services and restaurants within walking distance of the project.

- Prepare a Local Preference Marketing Plan that gives preference to leasing units to local employees described in SMMC Section 9.53.130(1)(c)(ii).
- Participate in the formation and ongoing activities of a certified TMO, including payment of annual dues so that trip reduction services are provided.
- Offer a monthly transportation allowance.

The combination of providing new housing opportunities in the jobs-rich City along with the City's requirements for the provision of EV charging stations and implementation of TDM measures would help reduce increases in VMT and associated fuel consumption and avoid the unnecessary use of energy in a wasteful or inefficient manner. In addition, State and City initiatives to promote the transition to use of electric and hybrid vehicles would also help slow increases in fuel consumption associated with the implementation of the proposed Housing Element Update. Further, it should be noted that the State has determined that the development of up to 8,895 to approximately 11,000 new dwelling units within the City is essential and necessary to protect the general health and welfare of the residents of the City and the Greater Los Angeles Area. Therefore, buildout under the proposed Housing Element Update would not cause wasteful, inefficient, or unnecessary use of energy and impacts would be *less than significant*.

Table 3.5-11 Estimated Annual Fuel Demand of the Proposed Housing Element Update

Vehicle Type	Percent of Vehicle Trips[1]	Daily VMT	Average Fuel Economy (miles/gallon)[2]	Total Daily Fuel Consumption (gallons)
Passenger Cars	54.8	3,652,023.2	23.3	156,739.2
Light/Medium Duty Vehicles	36.9	2,459,117.8	17.1	143,808.1
Heavy Duty Vehicles/Other	7.8	519,813.5	7.3	71,207.3
Motorcycles	0.5	33,321.4	43.4	767.8
Total Daily	**-**	**6,664,2756**	**-**	**372,522.4**
Annual	**-**	**2,432,460,703.5**	**-**	**135,970,676**

Notes:
[1] Percentage of Vehicle Trips and Fleet Mix information provided in Table 4.4, Fleet Mix of Appendix B.
- Passenger Cars is the sum of the light-duty-auto fleet mix trip percentage column.
- Light/Medium Duty Vehicles is the sum of the LDT1, LDT2, and MDV fleet mix trip percentage columns. LDT = light-duty truck; MDV = medium-duty vehicle
- Heavy Duty Vehicles/Other is the sum of the LHD1, LHD2, MHD, HHD, and bus fleet mix trip percentage columns. LHD = light-heavy-duty; MHD = medium-heavy-duty; HHD = heavy-heavy-duty

Motorcycles is the sum of the MCY fleet mix trip percentage column. MCY = motorcycle

[2] Average fuel economy based on average 2014 U.S. vehicle fuel efficiency (mpg) from Table 4-12: Average Light Duty Vehicle, Long Wheel Base Fuel Consumption and Travel, and Table 4-13: Single-Unit 2-Axle 6-Tire or More Truck Fuel Consumption and Travel of the National Transportation Statistics.

Sources: See Appendix B, CalEEMod Worksheets, Section 4.2. *Trip Summary Information*; Bureau of Transportation Statistics 2016; City of Santa Monica 2018.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Description (EN-2)

EN-2 **The proposed 6th Cycle 2021-2029 Housing Element Update would conform with the policies of the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) as well as the City's 2020 Energy Reach Code, and Green Building Standards Code; therefore, this impact would be *less than significant*.**

The proposed Housing Element Update would support the City's energy conservation and GHG reduction goals and policies established in the LUCE, Sustainable City Plan, CAAP, 2020 Energy Reach Code, and Green Building Standards Code. As required by the City's 2020 Energy Reach Code, the proposed Housing Element Update would be designed to be all electric or if designed as mixed-fuel buildings, consume at least 5 percent less energy than required by the California Energy Code. New housing projects as planned by the proposed Housing Element Update would be required to incorporate green building design features intended to reduce overall energy impacts. For example, new developments would install solar PV systems as required by the City's Green Building Standards Code and Santa Monica Solar Ordinance (SMMC Section 8.106.080) and EV charging stations as required by SMMC Section 9.23.160. Implementation of these sustainable design features as well as the other sustainable design features described in Impact EN-1 demonstrate the City's commitment to reduced power demand, reliance on renewable energy supplies, and efficient and non-wasteful energy use, as called for in the City's LUCE, Sustainable City Plan, CAAP, 2020 Energy Reach Code, and Green Building Standards Code.

With regard to transportation energy, the proposed Housing Element Update would promote energy efficient sustainable development as it would provide significant housing opportunities in the jobs-rich City, particularly in areas served by transit. Further, the implementation of required TDM program for each residential development under the Housing Element Update would further minimize vehicle trips and VMT. The proposed Housing Element Update would be consistent with and support the goals and benefits of Connect SoCal. As a result, the proposed Housing Element Update would support State, regional, and City efforts to improve transportation energy efficiency and would not conflict with or obstruct plans for renewable energy or energy efficiency. Impacts would be *less than significant*.

See Section 3.6, *Land Use and Planning* for a summary of the proposed Housing Element's consistency with the goals and policies established in SCAG's RTP/SCS and the City's LUCE, Sustainable City Plan, CAAP, Energy Reach Code, and Green Building Standards Code.

3.5.5 Cumulative Impacts

Electricity and Natural Gas

Potential future development within the City, the Greater Los Angeles Area, and the State would incrementally contribute to the need for regional energy production and distribution facilities. As previously discussed, these facilities are operated and maintained by private utility companies that plan

for and accommodate anticipated growth. Electric and natural gas services are provided upon demand from consumers and expanded as needed to meet demand, consistent with applicable local, State, and Federal regulations. With respect to electricity, the City requires that all new buildings comply with the City's 2020 Energy Reach Code, which is more stringent than the State requirements, and implement the prescriptive solar PV requirements described in the City's Solar Ordinance (SMMC Section 8.106.055). While the City's 2020 Energy Reach Code currently allows for new buildings to choose between an all-electric design or mixed-fuel design, the City anticipates that in the near future, the code will be modified to mandate an all-electric design. As such, cumulative development in addition to the proposed Housing Element Update would also be required to be more energy efficient than the California Energy Code. Additionally, as previously described, the City receives electricity from the CPA and therefore, the proposed Housing Element Update and cumulative development would consume electricity that would be generated by a large percentage of renewable energy sources (e.g., solar, solid waste conversion, etc.).

With regard to natural gas consumption, California natural gas demand is expected to decrease at a rate of 1.0 percent per year from 2018 to 2035 as a result of stricter codes/standards, energy efficiency improvements, and the State's transition away from fossil fuel-generated electricity to increased renewable energy. The 2020 SoCalGas California Gas Report predicts a decline in every sector (i.e., residential, industrial, commercial, electricity generation, and transportation), with the exception of wholesale and international gas sales to Mexico (California Gas and Electric Utilities 2020). While cumulative projects would result in the use of nonrenewable natural gas resources, which could limit future availability, the use of such resources would be on a relatively small scale and would be consistent with regional and local growth expectations for SoCalGas's service area. Further, as with the residential development under the proposed Housing Element Update, cumulative development within the City (e.g., commercial development, Capital Improvement Program projects, etc.) would be expected to comply with the City's 2020 Energy Reach Code, which incentivizes the building of all-electric buildings. Initially cumulative projects could result in increased natural gas demand; however, the overall demand for natural gas over time is expected to decline.

Given that all recent past, present, and reasonably foreseeable cumulative development within the City would be required to meet at minimum State and local energy requirements; the proposed Housing Element Update would not result in a substantial contribution to cumulatively considerable impacts.

Transportation Energy

Residential development planned for under the proposed Housing Element Update along with future growth within the City would cumulatively increase the demand for transportation-related fuel in the State and region. However, over the last decade the State has implemented several policies, rules, and regulations to improve vehicle fuel economy, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT which would reduce reliance on petroleum fuels. According to the CEC, gasoline consumption has declined by 6 percent since 2008, and the CEC predicts that the demand for gasoline will continue to decline over the next 10 years and that there will be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity. In 2020, Governor Gavin Newsome also signed Executive Order (N-79-20) which calls for Zero-Emission Vehicles by 2035. Locally, the City expects to see the number of EVs increase and a

decrease in the consumption of non-renewable fossil fuels for transportation. By providing additional EV infrastructure, the City's EVAP aims to increase the percentage of EVs on the road from 2 percent to 15 percent by 2025.

Additionally, as discussed previously, the proposed Housing Element Update would support regional and City-wide goals and policies to increase housing opportunities in jobs-rich and transit-served areas. The proposed Housing Element Update is also consistent State's overall goals to reduce VMT pursuant to SB 375, and as outlined in Connect SoCal (SCAG 2020). These local and regional plans encourage the development of new uses in proximity to transit to reduce overall VMT. Therefore, the proposed Housing Element Update would not result in a substantial contribution to cumulatively considerable impacts.

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3.0 Environmental Impact Analysis and Mitigation

3.6 Land Use and Planning

The proposed 6th Cycle 2021-2029 Housing Element Update serves as the plan for addressing the housing needs of the City's existing and future residents. The proposed Housing Element Update, which covers the 8-year planning period from October 15, 2021 through October 15, 2029, the Southern California Association of Governments has determined that the City's Regional Housing Needs Allocation is 8,895 dwelling units, more than 5 times than the 5th Cycle Regional Housing Needs Allocation. As part of the proposed Housing Element Update, the City must demonstrate to the State it has the policies and regulations in place as well as land capacity to meet its numerical housing target. However, development of this many new dwelling units could potentially create land use impacts such as inconsistency with local and regional policies, and related physical impacts related to issues such as transportation, noise, air quality and cultural resources which are discussed in relevant resource chapters.

This section of the Environmental Impact Report (EIR) describes the existing land uses in the City as well as the goals, policies, and regulations that affect land use planning particularly the City's Land Use and Circulation Element (LUCE), and its implementing plans and ordinances such as the Zoning Ordinance, Downtown Community Plan (DCP), and Bergamot Area Plan. Additionally, this section reviews the consistency of the proposed Housing Element Update with State and regional plans and regulations, including, the Southern California Association of Governments' (SCAG's) Regional Housing Needs Allocation (RHNA), 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal). This section also describes the changes in land use patterns that could result from the proposed Housing Element Update and evaluates the consistency of the proposed Housing Element Update with adopted State, regional, and local plans and regulations.

3.6.1 Environmental Setting

3.6.1.1 Regional Setting

The City of Santa Monica is an urbanized, incorporated community located on the western edge of Los Angeles County, approximately 15 miles west of downtown Los Angeles. The City is bound to the north, south, and east by the City of Los Angeles and to the west by the Pacific Ocean. Surrounding communities include Pacific Palisades to the north, Brentwood and West Los Angeles to the east, and Mar Vista and Venice to the south. The City of Santa Monica is directly accessible from the Los Angeles area via the Interstate (I-) 10 (Santa Monica Freeway) and I-405. The I-10 freeway terminates at its western end at State Route (SR-) 1 (Pacific Coast Highway), which links the City to Malibu and the Santa Monica Mountains.

Local Land Use Patterns

The City, which is highly developed with established residential, commercial, light industrial, and institutional uses, is organized around a grid system of streets providing a high level of connectivity within the City and to adjacent communities. This grid street system is interrupted by the I-10, which bisects the

City from east to west, dividing neighborhoods and districts north and south of the freeway. Despite its relatively small size, the City contains a range of land uses more commonly found in large cities. This urban quality can be seen in the City's many distinct neighborhoods and districts, which include:

- A traditional Downtown with retail, office, and mixed-use residential;
- A Civic Center with uses that include City Hall, government uses, Tongva Park, Santa Monica High School, and office uses;
- An active industrial spine that runs parallel to the I-10;
- Multiple commercial corridors; and
- Established residential neighborhoods with a diverse range of housing types and densities.

These land uses are arranged in an overall pattern defined by the City's historical growth. Residential neighborhoods are the predominant land use in the City with a wide range of housing types and densities. Higher density multi-family housing and mixed-use structures are located in the Downtown and along major boulevards in the central portions of the City, which transition to lower density single-family neighborhoods in the north and southeast portions of the City. Commercial land uses include retail, restaurant, entertainment, office, fitness, and service uses (e.g., spas, salons, dry cleaners), which are concentrated within the Downtown and along boulevards and avenues such as Wilshire Boulevard, Broadway, Santa Monica Boulevard, Lincoln Boulevard, and Colorado Avenue. Smaller scale, neighborhood serving uses are located on Main Street, Montana Avenue, and Ocean Park Boulevard. The City also has distinct office areas in the Bergamot Area and in the Office Campus area adjacent to the Santa Monica Municipal Airport (SMO). A description of the City's geographic land use patterns is provided below:

- **North** (North of Montana, Wilshire Montana, and Northeast Neighborhoods) **–** The northern-most area of the City generally consists of lower density, one- to two-story single-family housing on large parcels along tree-lined streets. This area is known as the North of Montana (NOMA) neighborhood and is mostly zoned for single-unit or low-density housing with the parcels along Ocean Avenue developed with medium-density housing. Montana Avenue is the primary commercial corridor in this area, and is characterized by low-scale one- to two-story neighborhood serving retail/restaurant uses. To the south of Montana Avenue and north of Wilshire Boulevard between Ocean Avenue and 21st Street is the Wilshire Montana (Wilmont) neighborhood. This area is developed with multi-family apartment buildings with scattered single-unit dwellings. The northeast portion of the City includes the Northeast Neighborhood which is characterized by mostly single-family housing with a small mix of multi-family buildings. Wilshire Boulevard serves as the southern boundary of the Wilmont and Northeast Neighborhoods and has a mixed-use character of primarily commercial uses such as office, retail, restaurant, and hotel.
- **East** (Mid-City and Pico Neighborhoods) – The eastern area of the City includes the Mid-City Neighborhood which is bounded by Washington Avenue to the north, Centinela Avenue to the east, Colorado Avenue (adjacent to the industrial areas) and Santa Monica Boulevard to the south and 5th Street to the west. The Mid-City neighborhood includes primarily low to mid rise multi-family housing and a range of commercial services along Santa Monica Boulevard and Broadway. In particular, this area includes the City's two prominent hospitals, University of California, Los Angeles (UCLA) Hospital and Providence Saint John's Health Center Campus along with supporting healthcare and medical uses. A significant portion of Santa Monica Boulevard is also lined with automobile dealerships, resulting in its moniker as "auto row." Further to the south is the Pico Neighborhood which is characterized by a diverse mix of low- to medium-rise multi-family residential uses with interspersed single-family residential uses, commercial, and

light industrial uses. Commercial uses include the low scale retail/restaurant uses concentrated along Pico Boulevard, the office uses and light industrial uses within the Bergamot Plan Area, and the light industrial uses near Olympic Boulevard.

- **South** (Ocean Park Neighborhood and Sunset Park Neighborhoods) – In the southern area of the City are the Ocean Park and Sunset Park neighborhoods. Sunset Park neighborhood comprises the southeast portion of the City and is one of the largest residential neighborhoods in Santa Monica, bound by Pico Boulevard to the north, the eastern City limits, the southern City limits, and Lincoln Boulevard to the west. The Sunset Park neighborhood includes SMO (slated to close December 31, 2028; see Section 3.8, *Noise*) on the southeast edge of the City as well as the adjacent office campus south of Ocean Park Boulevard that includes a number of large plate office buildings surrounded by swaths of surface parking. To the southwest of the City is the Ocean Park neighborhood bounded by Pico Boulevard to the north, Lincoln Boulevard to the east, the southern City limit to the south and the Pacific Ocean on the west. The Ocean Park neighborhood consists of low to mid rise multi-family housing with interspersed single-family units. The main commercial area is Main Street, a neighborhood street that is home to many retail outlets, restaurants and neighborhood-serving businesses.
- **West** – (Downtown, Civic Center and Ocean Front Districts) – The western edge of the City include the Downtown, considered to be the heart of the City and a popular regional and local destination. The Downtown is comprised of a diverse mix of uses including retail, restaurant, hotel, entertainment, office, and residential. The Downtown is home to a world class retail district encompassing the Third Street Promenade (Promenade) and Santa Monica Place shopping center, with a mix of restaurants, shops, movie theaters, hotels, and entertainment uses that contribute to the high activity level throughout the day and into the evening hours. Adjacent to the south of the Downtown is the Civic Center district which includes the Los Angeles County Courthouse, Santa Monica City Hall, Tongva Park, Ken Genser Square, Santa Monica Civic Center, Santa Monica High School, RAND, and the Village Mixed-Use Project. West of the Downtown are Palisades Park, the Santa Monica Pier, the beach, and single family and multi-family residential uses.

Transportation

The City is well served by transit, particularly by the Metro E (Expo) Light Rail Transit (LRT) line stations. The Metro E (Expo) LRT provides light rail service from Downtown Los Angeles to Santa Monica, providing access to popular destination such as University of Southern California (USC), Exposition Park, Crenshaw District, Culver City, Santa Monica Pier, and the Third Street Promenade. The Metro E Line has three stations in Santa Monica: Bergamot Station, Santa Monica College Station, and Downtown Santa Monica Station. The Metro E (Expo) LRT provides service every 12 minutes during the weekday morning peak periods and weekend peak periods. The City is also served by the Big Blue Bus, Los Angeles County Metropolitan Transportation Authority (Metro) Bus Service, bicycle facilities, pedestrian facilities, and other transportation services described in detail in Section 3.12, *Transportation*.

3.6.2 Regulatory Setting

The proposed Housing Element Update is influenced by Federal and State legislation. Over the past 3 years, the State legislature has passed multiple packages of housing legislation intended to address the housing shortage by limiting local control and also modifying State Housing Law to further ensure that cities and counties are making meaningful efforts to address housing needs and to address broader social inequity issues within their housing elements. Adopted local plans and policies have also guided the proposed Housing Element Update. In order to ensure compliance with State and regional regulatory

requirements, amendments to local plans and regulations are required for the proposed Housing Element Update as further described below.

3.6.2.1 Federal Regulations, Plans, and Policies

Fair Housing Act

The Fair Housing Act of 1968 (Title VIII of the Civil Rights Act of 1968) prohibits discrimination concerning the sale, rental and financing of housing based on race, religion, national origin, religion, sex, familial status, and disability. The act has two main purposes – prevent discrimination and reverse housing segregation.

3.6.2.2 State Regulations, Plans, and Policies

California Government Code Section 65300

California Government Code Section 65300 requires that each county and city prepare a general plan that serves as the blueprint for how that particular jurisdiction will develop over time. The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private. Zoning ordinances, specific plans, development projects, capital improvements, and development agreements are required to conform to the general plan. In addition, preparing, adopting, implementing, and maintaining the general plan serves to identify the community's land use, circulation, environmental, economic, and social goals and policies as they relate to future growth and development. A general plan consists of individual sections, or elements, that address a specific area of concern, but collectively, they comprehensively make up an integrated planning approach for the jurisdiction. State law requires that general plans include seven elements: land use, transportation, conservation, noise, open space, safety, and housing. Each county and city may choose to have additional elements as part of their general plan.

Since 1969, California has required that all local governments (i.e., counties and cities) adequately plan to meet the housing needs of everyone in the community. State law requires that communities prepare and update the Housing Element every 8 years. State Housing Law acknowledges that, in order for the private market to adequately address the housing needs and demand of Californians, local governments must adopt plans and regulatory systems that provide opportunities for (and do not unduly constrain), housing development. As a result, housing policy in California rests largely upon the effective implementation of local general plans and, in particular, local housing elements.

State Housing Law

Housing Elements are regulated by provisions under California Government Code Sections 65580-65589.8 and are reviewed by the California State Department of Housing and Community Development (HCD). Consistent with the requirements of State law (California Government Code Section 65583), the Housing Element must consist of five major components:

- A Housing Needs Assessment;
- Identification of Barriers to Market Rate and Affordable Housing Development;
- Evaluation of Progress from Prior Cycle;
- Identification of Sites that can Accommodate Housing Needs; and
- Goals, Policies, and Implementation Actions

The passage of Assembly Bill (AB) 686 in 2020 creates new requirements for all state and local agencies (including, but not limited to, all cities, counties, cities and counties, and housing authorities) to ensure that their laws, programs and activities affirmatively further fair housing, and that they take no action inconsistent with this obligation. AB 686 also creates new requirements specifically in Housing Element Law. Beginning January 1, 2019, all housing elements must now include a program that promotes and affirmatively furthers fair housing opportunities throughout the community for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics protected by the California Fair Employment and Housing Act (FEHA), California Government Code Section 65008, and any other state and Federal fair housing and planning law.

General Plan Elements

Under State law, each General Plan must contain at least the following seven elements:

- *Land Use*
- *Circulation*
- *Housing*
- *Conservation*
- *Open Space*
- *Noise*
- *Safety*

A General Plan may also include optional elements that address other issues of importance to the local community. The City's current General Plan contains all seven of these required elements as well as a Historic Preservation Element.

Upon completion of its draft, each county and city must submit its draft Housing Element to HCD for review to determine if it complies with State law. If HCD finds that the draft element does not comply, the county or city may either amend the draft element so it will comply as recommended by HCD, or it may adopt the Housing Element without changes and adopt written findings explaining why the Housing Element substantially complies despite HCD's objections. HCD similarly reviews the adopted Housing Element and within 90 days must "report its findings" to the locality. If HCD determines that a Housing Element fails to substantially comply with the State Housing Law, there are potentially serious

consequences including limited access to State funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its general plan is at risk of being deemed inadequate, and therefore invalid. If a jurisdiction is sued over an inadequate general plan, the court may impose requirements for land use decisions until the jurisdiction brings its general plan – including its Housing Element – into compliance with State Housing Law.

3.6.2.3 Regional Regulations, Plans, and Policies

SCAG Regional Housing Needs Assessment

Every 8 years, the State of California requires all city and county governments to prepare plans to adequately meet the housing needs of the community. Housing needs are determined by the HCD, who decides what the numerical housing targets should be for each regional council of governments. Each council of government across the state then further allocates the regional housing number (known as the Regional Housing Needs Allocation, or RHNA) to every city and county within its jurisdiction. To ensure that housing planning is coordinated and integrated with the RTP/SCS, California Government Code Section 65584.04 requires that the RHNA allocation plan shall allocate housing units within the region consistent with the development pattern included in the RTP/SCS.

The purpose of the RHNA is to plan for population growth, so that the region and subregion will collectively produce sufficient housing to meet population needs and address social equity, with each jurisdiction providing its fair share housing needs. The RHNA identifies the housing needs for very low income, low income, moderate income, and above moderate income groups.

The RHNA process is predicated on five main objectives:

- Increase the housing supply and mix of housing types, tenure and affordability within each region in an equitable manner;
- Promote infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns;
- Promote an improved intraregional relationship between jobs and housing;
- Allocate a lower proportion of housing need in income categories in jurisdictions that have a disproportionately high share in comparison to the County distribution; and
- Affirmatively further fair housing.

This year, the regional allocation for Southern California is significantly larger than it has been in past years, in recognition that the State's housing crisis has reached critical levels and that more aggressive action is needed to make up for years of unmet housing demand. The allocation is based on both the "projected need" (i.e., units we need to accommodate new residents) of housing and "existing need" (i.e., units we need to alleviate challenges like overcrowding and homelessness). The allocation also takes affordability into account by identifying the percentage of units that are needed at each income level (very low, low, and moderate).

SCAG is the regional planning agency for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. SCAG serves as the regional council of governments for Southern California and is responsible for the RHNA for six counties and 191 cities, including the City of Santa Monica. As part of

the RHNA process, SCAG must develop a final RHNA methodology, which determines the RHNA for each jurisdiction as a share of the regional determination. On March 4, 2020, SCAG-approved a methodology for the 8-year planning period of October 15, 2021 through October 15, 2029 that utilized a three-step process:

1. Determine the jurisdiction's regional projected household growth based on local input;
2. Determine future vacancy need based on a jurisdiction's existing composition of owner and renter households and apply a vacancy rate on projected household growth; and
3. Determine a jurisdiction's net replacement need based on replacement need survey results.

The 6th Cycle RHNA allocation for all jurisdictions within the SCAG region was adopted by the SCAG Regional Council on March 4, 2021. This allocation identifies housing needs for the planning period between January 2021 and October 2029. As described in Section 2.0, *Project Description*, based on SCAG's adopted RHNA methodology, the 6th Cycle RHNA for the City is 8,895 dwelling units, of which 69 percent must be affordable. As part of the proposed Housing Element Update, the City must demonstrate to the State that it has the policies and regulations in place to meet its targeted RHNA number and that there is available capacity within its jurisdictional boundaries.

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

As the regional planning agency for the Southern California region, SCAG is responsible for maintaining a continuing, cooperative and comprehensive transportation planning process which involves the preparation and updating of a RTP every 4 years. SCAG is also responsible for preparing, adopting, and updating every four years the SCS pursuant to California Government Code Section 65080. The SCS is a component of the RTP document that demonstrates how the region will meet its greenhouse gas reduction targets as determined by the California Air Resources Board (CARB).

On September 3, 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS (Connect SoCal). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal includes a regional growth forecast that was developed by working with local jurisdictions using the most recent land use plans, policies, and assumptions. Connect SoCal's growth projects are utilized by SCAG for regional modeling purposes and were not adopted as part of Connect SoCal. The growth forecasts do not affect a local jurisdiction's authority or decision on future development projects or plans. When adopting the Connect SoCal, SCAG recognized that cities and counties will foreseeably update their housing elements as part of General Plans and amend zoning designations to accommodate the 6th Cycle RHNA. For many cities and counties, SCAG acknowledged that the required RHNA and Housing Element may need to accommodate more housing units than reflected in the Connect SoCal's household and population growth projections for the jurisdictions.

3.6.2.4 Local Regulations, Plans, and Policies

The City's housing and land use goals, policies, and programs are embodied in various plans and regulations.

Santa Monica General Plan Land Use and Circulation Element

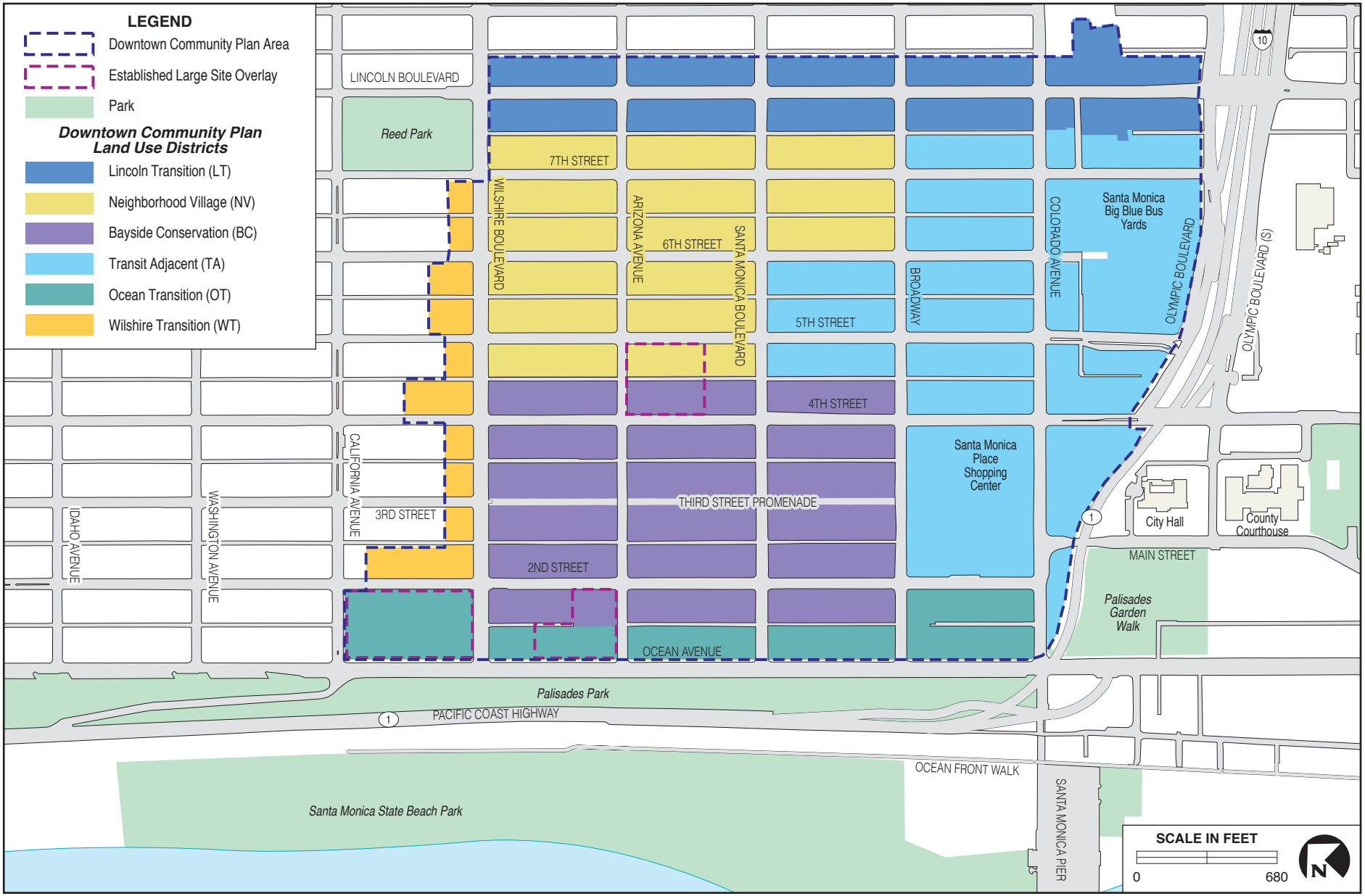
The LUCE, originally adopted July 6, 2010 and last amended on March 10, 2020, is the land use and transportation planning document governing existing and future land uses in the City. The LUCE sets forth goals, policies, and standards that are intended to guide the future growth and development in the City. The LUCE is the fundamental land use policy document of the City, identifying the appropriate location of land uses, as well as the basic design and function of circulation, open space and infrastructure policies, sustainability policies, and public service needs. The vision of the LUCE is to create a vibrant and diverse land use pattern that enriches the City's neighborhoods and districts, and which is supported by robust transportation alternatives that help reduce greenhouse gas (GHG) emissions and vehicle miles traveled (VMT).

The LUCE establishes a tiered land use system to determine the maximum allowable height and floor area ratio (FAR) for new development in the City. Each land use designation includes a base level "by-right" tier (Tier 1) and up to two tiers requiring discretionary approval by the City (Tiers 2 and 3). Projects requesting a height above the base height (Tiers 2 and 3) are subject to discretionary review and must provide community benefits. The LUCE identifies five priority categories of community benefits: Trip Reduction and Traffic Management; Affordable and Workforce Housing; Community Physical Improvements; Social and Cultural Facilities; and Historic Preservation. The goal of the LUCE tier system is to ensure that new development contributes to the community through priority categories of community benefits such as affordable housing, transportation demand management, physical and infrastructure improvements, and social, cultural, and education facilities.

Downtown Community Plan

The DCP, adopted in July 2017, is a specific plan to implement the LUCE goals and policies for the City's Downtown area. The DCP addresses important issues in the Downtown including historic preservation, high quality architecture, sensitive urban design, diverse housing opportunities, sustainable features, expansion of cultural arts offerings, additional open spaces that support quality of life, walkability, additional office space to meet the needs of creative businesses, and integration with the Metro E (Expo) LRT line.

The DCP establishes six land use districts as shown in Figure 3.6-1: Ocean Transition (OT), Lincoln Transition (LT), Wilshire Transition (WT), Bayside Conservation (BT), Neighborhood Village (NV), and Transit Adjacent. For each land use district, the DCP establishes a modified tier system, with a maximum FAR and height based on tier. With the exception of the Transit Adjacent zone (which has 3 tiers), all zones are afforded a base tier (Tier 1) and a second tier (Tier 2) requiring the provision of community benefits. The DCP also includes requirements for affordable housing (including commercial linkage fees), building form, and open space.



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City of Santa Monica
Downtown Community Plan Land Use Districts

FIGURE 3.6-1

Bergamot Area Plan

The Bergamot Area Plan, adopted in 2013, is an area plan that provides guidance on transitioning former industrial lands of the Bergamot Area into an arts-focused, mixed use, pedestrian-oriented neighborhood. As stated in Bergamot Area Plan Goal LU1:

> *"[t]he Bergamot Plan area is a high quality, mixed-use, creative-sector district offering opportunities for jobs, housing, arts and culture and community-serving retail, and which benefits from access to the Exposition Light Rail Station and the area's creativity and innovation."*

The Bergamot Area Plan includes two distinct areas: The Bergamot Transit Village (BTV) in the western portion and the Mixed-Use Creative (MUC) District in the eastern portion, with Stewart Street dividing the two areas. Two additional districts within the BAP include the Conservation: Art Center (CAC) District (in the southwestern Bergamot Transit Village) and the Conservation: Creative Sector (CCS) District (see Figure 3.6-2).

The Bergamot Area Plan includes development standards regulating FAR, building height, transitional zones, mix of uses, building form, open space, and street frontages. The Bergamot Area Plan also defines mandatory and flexible development standards, and standards related to special signage, solar energy requirements, parking and loading, and transportation demand management (TDM).

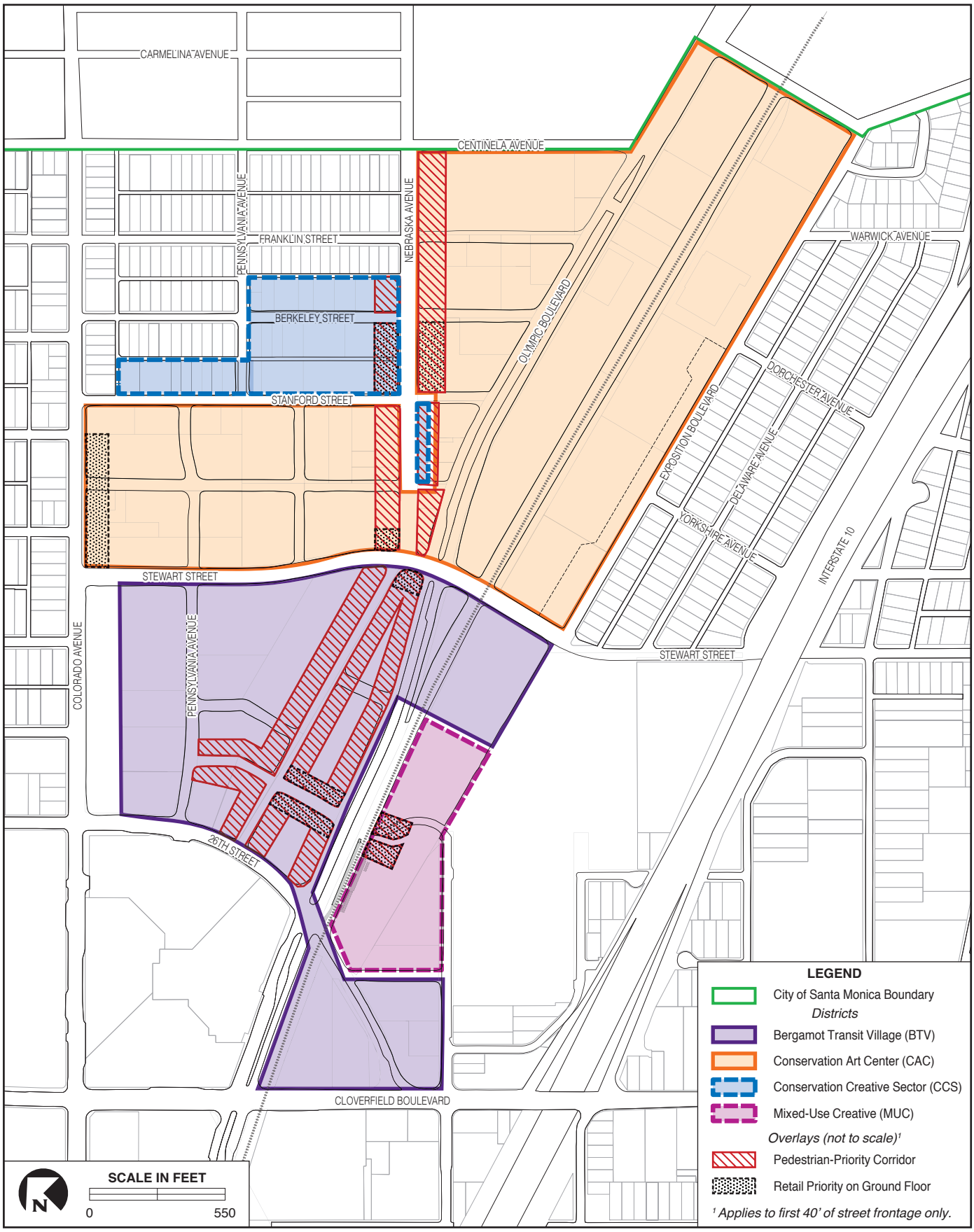
Hospital Area Specific Plan

The City is home to two prominent hospitals: the UCLA Hospital and the Providence Saint John's Health Center. The area immediately around and between these facilities fall within the Hospital Area Specific Plan (HASP), which was first adopted in 1988. The LUCE calls for an amended HASP to address the evolving needs of the healthcare community with expanded medical office uses and outpatient services, along with retail and non-medical services.

The HASP was last revised in 1993 and 1998 concurrently with the Providence Saint John's Health Center Development Agreement and associated EIR, which was certified in 1998. The HASP states that the development standards, including heights and FARs for the PSJHC campus shall be established in a development agreement between the Providence Saint John's Health Center and the City.

Civic Center Specific Plan

The Civic Center Specific Plan (CCSP), originally adopted on June 28, 2005 and last amended on May 22, 2018, provides the vision for approximately 67 acres adjacent to the south of the Downtown. The CCSP is bounded by 4th Street to the east, Ocean Avenue to the west, Pico Boulevard to the south and Colorado Avenue to the north. The CCSP divided the Civic Center area into the following Special Use Districts (SUDs), each with specific policies and property development standards aimed at achieving the overall vision for the area: Village Special Use District, Palisades Garden Walk Special Use District, Civic Core Special Use District, Civic Auditorium Special Use District, Colorado Avenue Special Use District.



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City of Santa Monica
Bergamot Area Plan Land Use Districts

FIGURE 3.6-2

Land Use Plan of the Local Coastal Program (LCP)

Implementation of the Coastal Act occurs at the local level through implementation and development of a Local Coastal Program (LCP), including a Land Use Plan (LUP). LCPs determine the short- and long-term use of coastal resources in their jurisdiction within the Coastal Zone consistent with the Coastal Act goals. The City adopted an updated LUP in July 2018 and is awaiting certification by the California Coastal Commission (CCC). The Final Draft 2018 LUP update includes but is not limited to policies based on a "people-focused" public access approach to ensure high quality beach visitor experience, consistency with the DCP, and identification and protection of significant coastal views and scenic corridors.

Santa Monica Zoning Ordinance

The Santa Monica Comprehensive Zoning Ordinance (Zoning Ordinance), Divisions 1 through 5 of Article 9 of the Santa Monica Municipal Code (SMMC), provides the regulations and standards for development in the City. The comprehensive update of the Zoning Ordinance was adopted by the City Council on June 23, 2015 and went into effect on July 24, 2015. The Zoning Ordinance sets forth specific design guidelines, height limits, building density, building design and landscaping standards, architectural features, sign regulations, and open space and setback requirements by zoning districts. For the Downtown and Bergamot Area, the Zoning Ordinance defers the design and development standards to the DCP and Bergamot Area Plan, respectively.

2020-2024 Consolidated Plan

The 2020-2024 Consolidated Plan outlines housing, community, and economic development needs, priorities, strategies, and projects to be undertaken by the City of Santa Monica with the funds received from the U.S. Department of Housing and Urban Development (HUD). The Consolidated Plan serves the following functions: (1) a planning document for the City, which builds upon a citizen participation process; (2) an application for federal funds under HUD's formula grant programs; (3) a strategy to be followed in carrying out HUD programs; and 4) an action plan that provides a basis for assessing performance.

Given the extent of City's affordable housing need and the limited resources available to address those needs, the Consolidated Plan establishes the following priorities for how federal funding will be used to assist low- and moderate-income persons and neighborhoods:

- Expand and Improve Public Infrastructure and Facilities;
- Preserve and Develop Affordable Housing;
- Public Services and Quality of Life Improvements for Low and Moderate Income (LMI) and Special Needs Populations;
- Economic Development Opportunities; and
- Provide Assistance of Homelessness Services and Shelters.

City of Santa Monica Fair Housing Assessment

The City of Santa Monica Assessment of Fair Housing (AFH), adopted in April 2020, is a thorough examination of structural barriers to fair housing choice and access to opportunity for members of

historically marginalized groups protected from discrimination by the Federal Fair Housing Act (FHA). The AFH also outlines fair housing priorities and goals to overcome fair housing issues. The goals include:

- Goal 1: Increasing the supply of affordable housing.
- Goal 2: Preserving the existing stock of affordable rental housing and rent stabilized housing.
- Goal 3: Preventing the displacement of low- and moderate-income residents.
- Goal 4: Increasing community integration for persons with disabilities.

The goals were drafted based on meetings and conversations with over three-hundred stakeholders, including residents, City officials, commissions, developers, service providers, and members of protected classes.

3.6.3 Impact Assessment Methodology

3.6.3.1 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The CEQA guidelines provides that lead agencies may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects, and the use of Appendix G as a significance threshold is routinely sanctioned by the courts (although such use is not mandatory). Based on the Appendix G question regarding land use and planning, a project would have a significant impact if:

a) The project would physically divide an established community; or
b) The project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.6.3.2 Methodology

The following land use impact analysis is based on a review of the proposed Housing Element Update along with its proposed amendments to adopted plans, policies and regulations.

As described in Section 2.0, *Project Description*, the City's 6th Cycle RHNA is 8,895 dwelling units, of which 69 percent must be affordable. To ensure that sufficient capacity exists in the housing element to accommodate the RHNA throughout the planning period, HCD recommends that a jurisdiction create a buffer in the housing element Suitable Sites Inventory (SSI) of at least 15 to 30 percent more capacity to accommodate new housing than required, especially for capacity to accommodate the lower income portions of the RHNA. Therefore, the SSI associated with the proposed Housing Element Update identifies the capacity to accommodate at least 11,025 dwelling units providing a 24 percent buffer above the City's RHNA of 8,895 dwelling units.

With the capacity for up to approximately11,000 dwelling units in the next 8 years, housing development as planned for in the proposed Housing Element Update would substantially exceed the City's prior growth forecasts and the land use capacity and development standards of the City's adopted plans. State law requires that the City ensure that enough land is zoned for residential development to accommodate its RHNA with a sufficient buffer to accommodate specific site conditions and development trends to

maintain adequate capacity. Therefore, adoption of the Housing Element Update would require amendments to the LUCE as well as the DCP, Bergamot, and the Zoning Ordinance to ensure internal consistency; the amendments would include, but not limited to the following revisions to many of the goals, policies, and development standards of these City plans:

- Increasing height and floor area ratio (FAR) for all non-residential districts to levels that support housing production and inclusionary housing per the Affordable Housing Production Program.
- Allowing housing uses in as a permitted use in non-residential zoning districts (e.g., Industrial Conservation, Office Creative, etc.) that currently do not permit residential uses.
- Establishing an affordable housing overlay in targeted areas within the City for housing projects setting aside 100 percent of units to be made available to households with up to 120 percent of the Area Median Income (AMI).
- Removing the density caps for parking lots on residentially zoned parcels.
- Incentivizing housing on the parking lots of religious congregations.
- Explore the revision of parking requirements for housing projects.
- Revising the accessory dwelling unit (ADU; also known as “granny flats”) ordinance regulations to incentivize the production of ADUs.
- Revising policy language to be consistent with the programs associated with the proposed Housing Element Update.

The amendments would serve the purpose of:

- Addressing past practices of discrimination and to affirmatively further fair housing (meaning taking meaningful actions to overcome patterns of segregation and foster inclusive communities).
- Ensuring that the City has the land, policies, and regulations/zoning in place to sufficiently meet the RHNA target of 8,895 dwelling units, of which 69 percent must be affordable.
- Complying with State Housing Law which require that development standards, including FARs, codified in the Zoning Ordinance could support the production of housing projects including the required amount of inclusionary housing units.

In order to address whether the proposed Housing Element Update would physically divide an established community, this analysis reviews the 6th Cycle RHNA, programs design to achieve this level housing production (e.g., increased building height, bonus density, incentives for redevelopment of underutilized properties), and required changes to many of the goals, policies, and development standards of adopted City plans to determine potential for division of established communities could occur.

3.6.4 Project Impacts and Mitigation Measures

Would the project physically divide an established community?

Impact Description (LU-1)

LU-1 **Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update and associated new residential development would not physically divide an established community. This would be a *less than significant* impact.**

The proposed Housing Element Update would amend the development standards in the LUCE as well as the DCP, Bergamot Area Plan, and Zoning Ordinance to provide opportunities for increased housing

production that are aligned with regional growth objectives and State law as well as City priorities. The proposed Affordable Housing Overlay and proposed changes to zoning densities that would increase the potential number of dwelling units in the City, but would not create new infrastructure, such as roadways, that could physically divide an established community. New residential development planned for under the proposed Housing Element Update would occur on underutilized infill sites and would generally redevelop existing structures or vacant properties (e.g., surface parking lots). Additionally, the proposed Housing Element Update would allow new residential uses in commercial areas that previously did not permit housing (e.g., areas zoned for Office Campus, Industrial Conservation, and Creative Conservation) creating more integrated, sustainable neighborhoods. All such new residential development would occur under the guidance and requirements of adopted City plans such as the LUCE, which even when amended, would continue to ensure that new residential development proceeds in a that would not create physical land use conflicts. In summary, increased housing opportunities throughout the City would be guided by and required to be consistent with policies designed to maintain overall community cohesiveness and would not divide an established community but rather would create more inclusive communities. Therefore, this impact would be *less than significant*.

Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Description (LU-2)

LU-2 **To comply with State Housing Law, implementation of the proposed Housing Element Update would require amendments to the City's Land Use and Circulation Element (LUCE), Downtown Community Plan (DCP), Bergamot Area Plan, and the Zoning Ordinance. With these amendments, the proposed Housing Element Update would not conflict with applicable land use plans, policy, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, this impact would be *less than significant*.**

State Plans and Regulations

Since 1969, State Housing Law requires that jurisdictions provide a plan to adequately meet their housing needs through the preparation of a Housing Element. Housing Elements must be prepared in accordance with statutory requirements in Housing Element Law. Housing Elements are regulated by provisions under Article 10.6 of the Government Code (California Government Code Sections 65580-65589.8) and are reviewed by HCD.

The City is required to submit the 6th Cycle 2021-2029 Housing Element Update to HCD for review to ensure compliance with State law prior to its certification deadline of October 15, 2021. The proposed Housing Element Update must include, among other things: (1) identification and analysis of existing and projected housing needs; (2) identification of resources and constraints to address these needs; (3) a program that promotes and affirmatively furthers fair housing opportunities throughout the community for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics; (4) set of goals, policies and scheduled programs for the

maintenance, improvement, and development of housing; and (5) an inventory of land suitable for residential development (i.e., SSI).

The proposed Housing Element Update includes all of the above requirements pursuant to State law. Additionally, the proposed Housing Element Update identifies programs to achieve not just the RHNA, but also the goals and policies set forth within. These programs, including rezoning, would need to be implemented within 3 years of adoption. As required, the City will submit its draft Housing Element to HCD for review to determine whether the draft complies with State Housing Law. Review of the proposed Housing Element Update would ensure that the proposed Housing Element Update would not conflict with State law. Therefore, impacts would be *less than significant*.

Regional Plans and Regulations

SCAG's 6th Cycle RHNA

The SCAG has determined that the City's 6th Cycle RHNA is 8,895 dwelling units of which 69 percent must be at affordable levels. As previously discussed, State law requires that the City ensure that enough land is zoned for residential development to accommodate this number of housing units with a sufficient buffer to accommodate specific site conditions and development trends to maintain adequate capacity. With the draft Housing Element proposing programs which include increase building heights and FARs, primarily in commercial areas of the City, the proposed Housing Element's SSI would have a capacity of 11,025 units, providing a buffer of 24 percent above the RHNA. Additionally, the proposed Housing Element Update includes programs to affirmatively further fair housing such as adding housing as a permitted use in all non-residential zones and increasing FARs to incentivize housing in areas where housing has historically not occurred (e.g., Main Street and Montana Avenue). As such, there would be no conflicts with the 6th Cycle RHNA and impacts would be *less than significant*.

SCAG's Connect SoCal

The projected increases in housing and associated population growth would be greater than the projections than was anticipated in SCAG's Connect SoCal (refer to Section 3.3, *Air Quality*, which discusses this issue in more detail). However, as previously described, when adopting the Connect SoCal, SCAG recognized that counties and cities will foreseeably update their housing elements as part of their general plans and amend zoning designations to accommodate the 6th Cycle RHNA. For many cities and counties, SCAG acknowledged that the required RHNA and Housing Element may need to accommodate more housing units than reflected in the Connect SoCal's household and population growth projections for the jurisdictions. Further, neither SCAG nor the Connect SoCal precludes a local jurisdiction from planning and approving growth that is different in terms of total units or geographic extent. Therefore, impacts would be *less than significant*.

Local Plans and Regulations

As set forth by California Government Code Section 65300, the General Plan serves as the primary planning document for the City, and all elements of the General Plan are required to be internally consistent. The Housing Element is a mandatory element of the General Plan and is required to be

updated every 8 years. SCAG, the regional planning agency, has determined that the proposed Housing Element Update must plan for enough housing to meet the City's 6th Cycle 2021-2029 RHNA of 8,895 dwelling units.

Although implementation of the proposed Housing Element Update does not, in and of itself, directly propose new residential development to be constructed in the City, rezoning and other changes to development standards could result in inconsistencies with regional and/or local adopted plans and policies governing land use in the City. Land use impacts would be significant if the proposed Housing Element Update were to conflict with any applicable adopted land use plan, policy, or regulation and the conflict results in or relates to a significant environmental effect. The following discussion section analyzes the relationship and consistency of the proposed Housing Element Update with City plans and regulations including the LUCE as well as the DCP, Bergamot Area Plan, and the Zoning Ordinance. As described below, the proposed Housing Element Update would remedy potential inconsistencies through proposed amendments to the LUCE as well as the DCP, Bergamot Area Plan, and the City's Zoning Ordinance as described in Section 2.0, *Project Description*. The proposed amendments, which would enable the City to meet the community's housing needs over the next 8 years and to affirmatively further fair housing, would result in physical environmental effects that would include:

- Housing development of greater scale than currently permitted;
- Greater dispersal of housing across the City, particularly in areas of the City that have historically not been available to disadvantaged communities;
- Introduction of new housing in areas that previously did not accommodate housing such as Office Campus and Industrial Conservation;
- New affordable housing across the City (except in disadvantaged areas); and
- Increased production of ADUs.

With respect to land use, these environmental effects would not be significant in the context of the developed, mixed-use character of the City. Housing is already a significant land use in the City and has been woven into the urban fabric of the City. The introduction of up to approximately 11,000 new dwelling units would not result in land use conflicts as the City's land use policy framework within adopted plans (e.g., LUCE) would minimize such conflict and ensure that new development be sensitive to the context of existing neighborhoods. Further, new residential development planned for under the proposed Housing Element Update would lead to more integrated and diverse neighborhoods, districts, and boulevards. Additionally, from a broader perspective, the physical effects of increased housing would have a beneficial effect on further the City's existing adopted housing and social equity goals considering the housing crisis and inequities in housing that exist. As analyzed and discussed throughout this EIR, while the proposed Housing Element Update would result in significant impacts on air quality, cultural resources, noise, public services, utilities, and transportation, which must be addressed through mitigation measures or future funding for improvements or increased services/programs, the proposed Housing Element Update would have the beneficial effects of addressing the existing housing shortage and affirmatively furthering fair housing.

Santa Monica General Plan Land Use and Circulation Element

The City's LUCE provides guidance for the development of new land uses and the circulation system in the City through 2030. Although the LUCE established a strategy to encourage housing production around major transportation systems, it does not account for the mandate to Affirmatively Furthering Fair Housing. While key LUCE principles such as the interrelationship between land use and transportation and ensuring that housing is located within easy access to daily services remain, the proposed Housing Element Update is driven largely through an equity lens. The proposed Housing Element Update augments the LUCE and proposes amendments to increase and distribute housing throughout the City consistent with State mandate. The proposed Housing Element Update also addresses important housing equity issues in the City. The proposed LUCE amendments are necessary to incentivize housing in areas that have historically excluded diverse populations, which may be areas that are not immediately adjacent to major transportation systems. The amendments would include revisions to the existing development standards and also allowance for ground floor residential uses. In addition, the existing language for various LUCE goals and policies will be revised to reaffirm the City's commitment to inclusive neighborhoods that preserves the existing housing stock and to establish a more dispersed housing approach, where housing is supported not just in transit areas but also in other areas of the City, particularly in high opportunity areas outside of historically disadvantaged communities. However, although proposed LUCE amendments would substantially advance the goals of the proposed Housing Element Update of promoting fair housing and increasing production of affordable housing, broad LUCE goals and policies that promote protection of the City's environment and existing housing would remain in effect, This would include land use goals, such those associated with avoiding cut through traffic and general protection of human health and environment. In addition, larger residential development projects would be concentrated outside of established single family neighborhoods and where adjacent to such neighborhoods would be subject to development standards within the Zoning Ordinance. In addition, although the production of ADUs projected under the proposed Housing Element would occur within single-family neighborhoods, ADUs are already permitted by right under State law and would be required to conform to the existing height requirements of the underlying zone. Because projected new housing growth and proposed LUCE amendments would remain consistent with the purpose and intent of the LUCE regarding protection of the City's environment and housing for existing residents, impacts would be *less than significant*.

Downtown Community Plan

The DCP was adopted in 2017 and already includes a number of incentives to support housing, including increased FARs for housing projects, no minimum parking requirements, and a higher discretionary review threshold for housing projects as compared to other areas of the City. However, in order to ensure that housing projects are feasible and to facilitate the equitable distribution of housing, development standards may need to be revised, as necessary. The proposed Housing Element Update includes a program to amend the DCP that would include modifying development standards for building heights and FARs, as necessary, to levels that can support housing projects accounting for the City's Affordable Housing Production Program. With the proposed amendments to the DCP, impacts associated with any inconsistencies with the DCP would be *less than significant*.

Bergamot Area Plan

The adoption of the Bergamot Area Plan in 2013 heralded a change in the planning approach for the Bergamot Planning Area. With the vision of transforming the former industrial area to a complete transit-focused, mixed-use community, the Bergamot Area Plan allowed housing and local-serving retail and services to be developed in the Bergamot area for the first time ever. The Bergamot Area Plan envisioned that new residences distributed throughout the area are occupied by a diversity of households including singles and families, renters and owners and a range of income levels. However, since adoption of the Bergamot Area Plan, housing growth in this area has not occurred to the levels anticipated. As previously described, prospective housing developers have often cited that the Bergamot Area Plan's discretionary review process, FAR and height that cannot support housing supports with inclusionary units at higher levels, lack of housing incentives, and complex design standards are barriers to housing projects. Further, in order to ensure that housing projects can feasibly accommodate the City's Affordable Housing Production Program, development standards would need to be revised. The Housing Element Update proposes changes to the development standards to incentivize housing, as well as clarification to the design standards to incentivize and support housing projects with the amount of affordable (inclusionary) housing per the City's Affordable Housing Production Program. With the modification of the development standards, impacts associated with any inconsistencies with the Bergamot Area Plan would be *less than significant*.

Land Use Plan of the Local Coastal Program

As previously described, the City adopted an updated LUP in July 2018 and is awaiting certification by the CCC. The Final Draft 2018 LUP update includes but is not limited to policies based on a "people-focused" public access approach to ensure high quality beach visitor experience, consistency with the DCP, and identification and protection of significant coastal views and scenic corridors. The implementation of the proposed Housing Element would not affect the public's ability to gain access to, and/or to make use of, the coast and nearby recreational facilities. The proposed Housing Element Update would not interfere with public recreational use of coastal resources. Further, the proposed Housing Element Update would not result in the potential for significant impacts to water quality or sensitive coastal habitats. As described in the Initial Study (IS) prepared for the proposed Housing Element Update, the Final Draft 2018 LUP update identifies and designates View Corridors and Vantage Points to be protected as community assets. Implementation of the proposed Housing Element Update would plan for new residential development, some of which could occur in proximity to these scenic vistas. However, while new residential development planned for under the proposed Housing Element Update may result in new taller structures than currently exist, new buildings would occur on infill sites and would not occur on vacant parcels that provide public scenic vistas throughout the City. Additionally, the LUCE policies intended to preserve public view corridors, including western views of the ocean from east-west streets and boulevards, would continue to protect public views of the ocean and the Pier from Palisades Park. Therefore, potential impacts related to the LUP would be *less than significant*.

Zoning Ordinance

The comprehensive update of the Zoning Ordinance (Article 9 of the SMMC) was adopted in 2015 to implement the LUCE. The LUCE established the outer parameters for maximum building heights and FARs of new development, but the Zoning Ordinance adjusted these standards to lower numbers in some cases. For example, market-rate housing projects on Wilshire Boulevard were reduced from a possible maximum height and FAR of 60 feet (2.75 FAR) to 50 feet (2.25 FAR) (approximately 5 stories to 4 stories) in the Zoning Ordinance. To ensure that housing projects are feasible to support the amount of inclusionary housing specified in the City's Affordable Housing Production Program, FAR and associated height in all commercial and mixed-use zones would be increased as part of the proposed Housing Element Update. Additionally, as part of the proposed Housing Element Update, the City is proposing a number of other Zoning Ordinance changes to affirmatively further fair housing, eliminate barriers to housing production, encourage a variety of housing opportunities, such as ADUs. These revisions include:

- Revising development standards to support feasible housing projects;
- Establishing an affordable housing overlay for projects that set aside 100 percent of the units to households making up to 120 percent AMI (i.e., moderate income) in targeted areas within the City;
- Allowing housing as a permitted use in non-residential zoning districts that do not currently permit residential uses;
- Revising the standards, which include removing the density housing caps and removing commercial replacement requirements, for residentially zoned parking lots;
- Revising the development standards for sites of religious congregations to incentivize housing;
- Evaluating revisions to the minimum parking requirements for housing projects; and
- Revising the ADU ordinance regulations to incentivize the production of affordable ADUs.

With the revisions to the Zoning Ordinance, impacts associated with any inconsistencies with the Zoning Ordinance would be *less than significant*.

3.6.5 Cumulative Impacts

Adoption of the proposed Housing Element Update could contribute to cumulative impacts if it would physically divide communities or conflict with State mandates and land use plans and/or policies such that a physical environmental effect with occur.

Division of an Established Community

As previously described, the City of Santa Monica is an urbanized coastal city that is primarily built out. The development of new housing would occur on underutilized infill sites within the City. The extent of housing construction would not extend beyond the City's jurisdictional boundaries. Therefore, the proposed Housing Element Update would not contribute to cumulative land use effects leading to the division of an established community, within or outside of its borders. Therefore, the proposed Housing Element Update would not substantially contribute to a cumulatively considerable impact.

Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

The proposed Housing Element Update is compliant with Housing Element Law, and includes goals, policies, and programs to address its RHNA. Similarly, other jurisdictions across the SCAG region are required to update their housing elements to comply with State law. HCD has the responsibility to review and certify all housing elements in the State to ensure compliance with State Law.

The City's proposed Housing Element Update and other housing elements in the region would be required to demonstrate goals, policies, and capacity available to meet the RHNA. While residential development pursuant to the proposed Housing Element Update would contribute to an overall increase in density and intensity of uses throughout the City, it would have the beneficial effect of alleviating the Statewide and regional housing shortage. The City's existing framework of adopted land use plans and associated goals, policies and development standard s contained within the LUCE, other adopted plans and the zoning ordinance, even as modified by changes proposed as part of the proposed Housing Element Update, would continue to ensure that potential land use conflicts are minimized. As such, the City's existing and newly modified policy framework would ensure that new development enabled under the proposed Housing Element Update would be consistent with adopted local plans and regulations governing land use and development in the City and that new development would generally be compatible with the City's existing and uses, including established neighborhoods. Therefore, the proposed Housing Element Update would not substantially contribute to a cumulatively considerable impact.

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3.0 Environmental Impact Analysis and Mitigation

3.7 Greenhouse Gas Emissions and Climate Change

The proposed 6th Cycle 2021-2029 Housing Element Update promotes sustainable land use planning by providing increased housing opportunities, particularly affordable housing, for all. The proposed Housing Element Update would continue to promote efficient land use patterns, consistent with the guiding principles of the Santa Monica General Plan Land Use and Circulation Element and the Southern California Association of Governments' 2040-2045 Regional Transportation Plan/Sustainable Communities Strategy. New housing in proximity to transit and jobs remains an important strategy to meet the City's housing needs and achieve the City's sustainability goals. In addition, the proposed Housing Element Update further promotes the creation of walkable, mixed-use neighborhoods by increasing housing opportunities in areas that have historically not accommodated housing. These strategies would help limit the increase in the City's greenhouse gas emissions related to the proposed Housing Element Update.

This section of the Environmental Impact Report (EIR) analyzes the potential environmental impacts of the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update) related to greenhouse gas (GHG) emissions and climate change. Analysis of GHG emissions involves assessing the primary sources of GHGs, such as vehicle trips, energy demands for building heating, cooling, and power, and construction of new buildings and infrastructure. The analysis focuses on the key GHGs generated by human activities including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and chlorofluorocarbons (CFCs). As described further in Section 3.7.3, *Impact Assessment and Methodology*, GHG emissions associated with the proposed Housing Element Update have been estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, consistent with the analysis of criteria pollutants in Section 3.3, *Air Quality*.

There are several unique challenges to analyzing GHG emissions and global climate change under the California Environmental Quality Act (CEQA). Impact analyses typically address local development projects or long-term land use plans that have local or regional impacts. In contrast, climate change presents the considerable challenge of analyzing the relationship between local activities and the resulting potential for a contribution to global environmental impacts, if any. Regarding global climate change, however, it is generally accepted that while the magnitude of global impacts is substantial, the contribution of traditional development projects or even major long-term land use plans is so small that direct project-specific significant impacts – albeit not cumulatively significant impacts – are unlikely. Further, the approach to analysis of GHG emissions under CEQA is also fundamentally different from the approach to analysis of criteria pollutant emissions (refer to Section 3.3, *Air Quality*), in that air quality is linked to conditions in a particular air basin, which GHG emissions are a global issue regardless of the particular location of the emission source.

3.7.1 Environmental Setting

The City of Santa Monica (City) is located in Los Angeles County along the coastline of the Pacific Ocean, within the South Coast Air Basin (Basin). The Basin includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties. As described in Section 3.3, *Air Quality*, the Basin is an area of high air pollution potential as it is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity.

The City supports a variety of land uses, including single-family and multi-family housing, mixed-use boulevards, commercial districts, parks and open space, industrial uses, and the Downtown. Single-family residential uses are concentrated in the northern portion of the City north of Montana Avenue and northeast of 21st street, and in the southern portion of the City between Pico Boulevard and Dewey Street. Low- and medium-density residential uses are generally closer to major local and regional transportation corridors. Land uses in Downtown consist predominantly of commercial uses with residential mixed-use buildings scattered throughout Downtown, particularly along 5th, 6th, and 7th Streets (refer to Section 3.6, *Land Use and Planning*). Sources of GHG emissions within the City include motor vehicles, building energy needs, as well as the construction and maintenance of buildings, streets, and infrastructure. Automobiles, motorcycles, and trucks are the primary existing source of GHG emissions. GHG emissions in the City also occur from various stationary sources, such as mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] systems) associated with buildings, the operation of various types of businesses, and sources at residential locations.

3.4.1.1 Overview of Global Climate Change

The U.S. Environmental Protection Agency (USEPA) defines climate change as *"any significant change in the measures of climate lasting for an extended period of time."* In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer. These changes are caused by a number of natural factors, including oceanic processes, variations in solar radiation received by Earth, plate tectonics and volcanic eruptions as well as anthropogenic (i.e., human-related) activities. The primary anthropogenic driver of climate change is the release of GHGs into the atmosphere.

The Earth's natural warming process is known as the "greenhouse effect." The Earth's atmosphere consists of a variety of gasses that regulate the Earth's temperature by trapping solar energy; these gases are cumulatively referred to as GHGs because they trap heat like glass of a greenhouse. Relying on decades of research, the overwhelming majority of the scientific community agree that human activities, which include the burning of fossil fuels to produce energy and deforestation, have contributed to elevated concentration of GHGs in the atmosphere since the Industrial Revolution. The human production and release of GHGs to the atmosphere have caused an increase in the average global temperature. While the increase in global temperature is known as "global warming," the resulting change in a range of global weather patterns is known as "global climate change."

3.4.1.2 Potential Effects of Global Climate Change

Global climate change could result in several potential adverse physical and environmental effects including sea level rise, flooding, increased weather variability and intensified storm events, increased wildfire frequency and severity, reduced reliability and/or quality of water supplies, and increased stress on ecosystems, which would reduce biodiversity. Additionally, climate change may impact human health due to heat waves and extreme weather events, reduced air quality, and increased climate-sensitive diseases, including food-borne, water-borne, and animal-borne diseases (World Health Organization 2018).

Adverse effects from climate change could occur all across the globe and could have significant global consequence. Sensitive communities, such as low-lying nations that are more susceptible to impacts from sea level rise, may be more heavily impacted than communities in other regions. In California, increased wildfire frequency and severity, changes in water supply, and sea level rise are of particular concern.

3.4.1.3 Greenhouse Gases

GHGs consist of a variety of gases that have the potential to trap heat in the earth's atmosphere; mainly water vapor, CO_2, CH_4, N_2O, ozone (O_3), and CFCs. Water vapor and its relationship to climate change are not clearly understood and defined, so these GHGs are not currently regulated. Methodologies and regulations approved by the Intergovernmental Panel on Climate Change (IPCC), USEPA, and the California Air Resources Board (CARB) focus on CO_2, CH_4, N_2O, and CFCs. CFCs have been banned in the U.S. and have no natural source, so these GHGs are not included in this analysis. The following provides a brief description of each of the remaining GHGs and their sources:

CO_2 The production and absorption of CO_2 from human activities occurs through the burning of fossil fuels (e.g., oil, natural gas, and coal), solid waste, trees and wood products, and as a result of other chemical reactions, such as those required to manufacture cement. CO_2 is constantly being exchanged among the atmosphere, ocean, and land surface as it is both produced and absorbed by many microorganisms, plants, and animals. However, emissions and removal of CO_2 by these natural processes tend to balance. Since the Industrial Revolution began around 1750, human-related activities have increased CO_2 concentrations in the atmosphere by approximately 47 percent, primarily resultant from fossil fuel combustion and cement production (World Meteorological Organization 2018; USEPA 2021). Globally, the largest source of human-related CO_2 emissions is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. CO_2 is sequestered (i.e., removed from the atmosphere) when it is absorbed by plants as part of the biological carbon cycle. When in balance, total CO_2 emissions and removals from the entire carbon cycle are roughly equal.

CH_4 CH_4 is emitted from a variety of both human-related and natural sources. Anthropogenic sources of CH_4 include the production and transport of coal, natural gas, and oil, from livestock and other agricultural practices, and from the decay of organic waste in municipal solid waste landfills. It is estimated that up to 65 percent of global CH_4 emissions are related to human activities. Natural

sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and wildfires (USEPA 2020).

N_2O Concentrations of N_2O also began to rise at the beginning of the Industrial Revolution, reaching 314 parts per billion (ppb) by 1998. Microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen, produce N_2O. In addition to agricultural sources, some industrial processes (e.g., fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to the atmospheric load of N_2O (USEPA 2020).

"Global warming potential" is one type of simplified index based upon radiative properties that can be used to estimate the potential future impacts of emissions of different gases upon the climate system. Because the global warming potential that each GHG has on climate change varies, the common metric of carbon dioxide equivalent (CO_2e) is used to report a combined impact from all of the GHGs. This metric scales the global warming potential of each GHG to that of CO_2. GHG emissions are typically expressed in metric tons (MT CO_2e), teragrams (millions of metric tons; Tg CO_2e), or gigatons (billions of metric tons; Gt CO_2e).

3.4.1.4 Existing GHG Emissions from Human Activity

The burning of fossil fuels, such as coal and oil, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions (and thus substantial increases in atmospheric concentrations). In 2019, atmospheric CO_2 concentrations were 412 parts per million (ppm), which represented an increase of nearly 50 percent above the pre-industrial concentrations that were present prior to 1750 (National Aeronautics and Space Administration [NASA] 2019).

Global GHG Emissions

The IPCC was formed by the World Meteorological Organization in 1988 to provide governments at all levels with scientific information that they can use to develop climate policies. The IPCC is the United Nation's body for assessing the science related to climate change and is responsible for tracking and reporting global emissions of GHGs. The IPCC is in the process of preparing the Sixth Assessment Report, tentatively scheduled for publication in June 2022. IPCC's Fifth Assessment Report, which was published in 2014 reported that global GHG emissions were estimated at 49 Gt CO_2e per year, with CO_2 making up 76 percent of the total anthropogenic GHG emissions. This is an overall increase in GHG emissions of 71 percent from the 28.7 Gt CO_2e of emissions in 1970 (IPCC 2014a). Annual anthropogenic GHG emissions have increased by 10 Gt CO_2e between 2000 and 2010, with this increase directly coming from energy supply (47 percent), industry (30 percent), transportation (11 percent), and buildings (30 percent) sectors. About half of cumulative anthropogenic CO_2 emissions between 1750 and 2010 have occurred in the last 40 years. Cumulative CO_2 emissions from fossil fuel combustion, cement production, and flaring from 1750 to 1970 were 420 Gt CO_2e; from 1970 to 2010, that cumulative total tripled to 1300 Gt CO_2e (IPCC 2014b).

U.S. GHG Emissions

In 2019, the total gross U.S. GHG emissions were 6,577.2 Tg CO_2e (USEPA 2021). Total U.S. emissions have increased by 2.0 percent from 1990 to 2019, but decreased by 1.7 percent from 2018 to 2019 and by 12.9 percent from 2005 to 2019 (116.0 Tg CO_2e). Between 2018 and 2019, the decrease in total GHG emissions was driven largely by a decrease in CO_2 emissions from fossil fuel combustion. The decline reflects many long-term trends, including population, economic growth, energy market trends, technological changes including energy efficiency, and carbon intensity of energy fuel choices (e.g., transitioning land uses to support renewable energy generation) (USEPA 2021).

In 2019, total U.S. GHG emissions by sector were 25.2 percent for the electric power sector, including fossil fuel combustion, 28.9 percent for the transportation sector, 22.8 percent for industry, 10.2 percent for agriculture, 6.7 percent for the commercial sector, and 5.8 percent for the residential sector (USEPA 2021).

State of California GHG Emissions

In 2018, the most recent publicly available data on State-wide GHG emissions, California generated approximately 425.3 Tg CO_2e, or nearly 7 percent of total U.S. emissions. This is due primarily to the high population and size of California compared to other states. Despite a population increase of 6.2 percent between 2000 and 2018, the State's gross per capita emissions were reduced 24 percent from the 14.1 MT CO_2e per person in 2001 to 10.7 MT CO_2e per person in 2018 (CARB 2020). This reduction indicates the contributions that energy conservation as well as energy efficiency have in reducing per capita emissions. Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states. Reductions in 2008 and 2009 have also been attributed to the economic recession and higher fuel prices, with marked declines in on-road transportation, cement production and electricity consumption (CARB 2014).

Transportation is the source of approximately 39.9 percent of the state's GHG emissions, followed by industrial sources at 21 percent, and electricity generation – both in-state and out-of-state – at 14.8 percent. Residential and commercial sources account for 9.7 percent, combined, while agriculture accounts for 7.7 percent. High Global Warming Potential (GWP), such as refrigerants, gases comprised 4.8 percent of California's GHG emissions in 2018. Waste accounted for approximately 2.1 percent of State emissions (CARB 2020).

City of Santa Monica Emissions

The City has been tracking local GHG emissions for over 20 years through an annual community, sector-based emissions inventory, which measures the emissions in a given region using data from energy consumption in buildings, vehicles, waste, and industry. The 2018 GHG emissions inventory for the City accounted for electricity, natural gas, gasoline, and diesel consumption, as well as solid waste generation within the City. Total emissions in 2018 were estimated at approximately 981,249 MT CO_2e, approximately 29 percent below the 1990 emission total of 1,386,642 MT CO_2e. The changes are largely driven by increased efficiency in vehicle fuel consumption, reduced waste being sent to landfills, a decline in natural gas consumption, and reduced aviation activity. The emissions reduction is also owed to increased renewable energy for electricity generation, since the City began to purchase electricity from the Clean Power Alliance (CPA) (refer to Section 3.5, *Energy*).

Sustainable Santa Monica at a Glance

- *In 2019, Santa Monica started to receive 100 percent renewable energy from the Clean Power Alliance.*
- *To date, the City's vehicle fleet includes over 130 electric vehicles.*
- *Despite substantial population growth, the City reduced emission levels for City operations to 6 percent below 1990 in 2018.*
- *The City aims to reduce total City emissions by 80 percent below 1990 levels by 2030.*

In addition to the sector-based inventory, the 2018 GHG emissions inventory also includes a consumption-based inventory, which focuses on the consumption of goods and services (e.g., food, clothing, electronic equipment, etc.) by the City's residents. The consumption-based method results in about 56 percent higher emissions than the traditional sector-based approach for the City, largely due to higher emissions from air travel, food, and household purchases. Vehicle transportation remains the largest source of emissions (24 percent), followed by food (17 percent), goods (18 percent), services (19 percent), air travel (7 percent), home construction (3 percent) and electricity (3 percent) (City of Santa Monica 2018).

3.7.2 Regulatory Setting

Global climate change is addressed through the efforts of various Federal, State, regional, and local government agencies as well as national and international scientific and governmental conventions and programs. These agencies work jointly and individually to understand and regulate the effects of GHG emissions and resulting climate change through legislation, regulations, planning, policymaking, education, and a variety of programs. The significant agencies, conventions, and programs focused on global climate change are discussed below.

3.4.1.5 International/Federal Regulations

International Climate Change Protocols

In 1988, the United Nations established the IPCC to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In June 1992, the U.S. joined other countries in the United Nations Framework Convention on Climate Change (UNFCCC) agreement with the goal of stabilizing GHG emissions. The treaty itself set no binding limits on GHG

emissions for individual countries and contains no enforcement mechanisms. In that sense, the treaty is considered legally non-binding. Instead, the treaty provides a framework for negotiating specific international treaties, referred to as "protocols," that may set binding limits on GHGs.

The Kyoto Protocol was the first treaty made under the UNFCCC on December 1, 1997 and was the first international agreement that commits signatories to reduce GHG emissions. The Kyoto Protocol sets emissions targets for developed countries which are binding under international law. The Kyoto Protocol has had two commitment periods, the first of which lasted from 2005 to 2012, and the second from 2012 to 2020. The U.S. has not ratified the Kyoto Protocol. It has been estimated that if the commitments outlined in the Kyoto Protocol were met, global GHG emissions could have been reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008-2012.

In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Kyoto, but no binding agreements were reached. Many of the industrialized countries that ratified the Kyoto Protocol have not and/or are not expected to meet their targets. However, countries did ratify the Copenhagen Accord, a nonbinding agreement. The Copenhagen Accord, a voluntary agreement between the U.S., China, India, and Brazil, recognizes the need to keep global temperature rise to below 2 degrees Celsius (°C) or 3.6 degrees Fahrenheit (°F) and obligates signatories to establish measures to reduce GHG emissions and to prepare to provide help to poorer countries in adapting to global climate change.

Representatives from 194 United Nations member states, including business leaders and nongovernment organizations, met in Cancun, Mexico in December 2010 to participate in the United Nations Climate Change Conference (COP-16). In all, approximately 12,000 participants met to work out the language and reduction targets of a new agreement. The result was the Cancun Agreements, a voluntary agreement similar to the Copenhagen Accord, but with broader United Nation member nation support. The Cancun Agreements set the stage for the next year's climate conference in Durban, South Africa, where the unresolved issues – including the future of the Kyoto Protocol and a binding agreement – will once again be on the table. The key elements of the Cancun Agreements are as follows:

- Countries agree to keep temperature rise below 2 °C above pre-industrial levels and developed countries are urged to make more aggressive pledges on cutting emissions.
- A $30 billion package, referred to as "fast-start financing," for 2012 to aid nations taking immediate action to adapt to global warming.
- The creation of a "Global Climate Fund" that will provide financing of $100 million annually for longer-term adaptation and mitigation measures in developing countries (although where this aid will come from is still unresolved). The World Bank was designated as its interim trustee.
- The creation of the forestry program, Reducing Emissions from Deforestation and Forest Degradation, which provides compensation for the preservation of tropical forests in developing countries.
- Specific language and a formal system for monitoring and reporting emissions. This includes a process of "international consultations and analysis" for developing countries that is "nonintrusive, nonpunitive, and respectful of national sovereignty," incorporating analysis by technical experts and resulting in a summary report.

The UNFCCC met again in December 2011 in Durban, South Africa to continue deliberating on a treaty to replace the Kyoto Protocol, which ended in 2012. The conference agreed to a legally binding deal comprising all countries, which will be executed by 2015, and to take effect in 2020. There was also progress regarding the creation of a Green Climate Fund (GCF) for which a management framework was adopted.

The 2015 United Nations Climate Change Conference (COP-21) was held in Paris, from November 30 to December 11, 2015. It was the 21st annual session of the Conference of the Parties to the 1992 UNFCCC and the 11th session of the Meeting of the Parties to the 1997 Kyoto Protocol. The conference agreed to a legally binding deal to limit temperature rise well below 2 °C. The deal also includes a long-term emissions goal, which aims to peak global GHG emissions "as soon as possible" and to achieve "balance" between emissions and sinks in the second half of the century. Countries which have submitted targets for 2025 are then urged to come back in 2020 with a new target, while those with 2030 targets are invited to "communicate or update" them. This process will essentially be repeated every 5 years, with the first post-2020 stocktake occurring in 2023. The agreement also places a legal obligation on developed countries to continue to provide climate finance to developing countries. It also encourages other countries to provide support voluntarily – a compromise between the highly-polarized positions that have taken center stage at the negotiations. The U.S. – along with all 195 United Nations member countries present at the COP-21, committed to the Paris Agreement – and accepted it by Executive Order in September 2016. In June 2017, the U.S. gave notice of withdrawal from the Paris Agreement.[1] However, on January 20, 2021, the President of the United States announced that the U.S. would re-enter the agreement. Further, on January 27, 2020, the President of the United States issued Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, implementing – and building upon – the Paris Agreement's three overarching objectives (i.e., achieving a safe global temperature, increased climate resilience, and financial flows aligned with a pathway toward low greenhouse gas emissions and climate-resilient development).

U.S. Environmental Protection Agency

The USEPA is responsible for implementing Federal policy to address global climate change. The Federal government administers a wide array of public-private partnerships to reduce U.S. GHG emissions. These programs focus on energy efficiency, renewable energy, methane and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions.

In *Massachusetts v. Environmental Protection Agency et al.* (2007*) 549 U.S. 497*, the U.S. Supreme Court held that GHGs are pollutants under the Clean Air Act (CAA) and directed the USEPA to decide whether the gases endangered public health or welfare. On December 7, 2009, the USEPA issued an Endangerment Finding under Section 202(a) of the CAA, opening the door to Federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the CAA.

[1] Article 28 of the Paris Agreement states a country may give notice of withdrawal from the agreement after 3 years of its start date in the country, which was on November 4, 2016 for the U.S.

On May 13, 2010, the USEPA issued a Final Rule that took effect on January 2, 2011, setting a threshold of 75,000 MT CO_2e per year for GHG emissions from major industrial facilities. The USEPA has not yet adopted thresholds for other GHG sources, although carbon pollution standards have been proposed to cut carbon pollution from existing and new power plants, the largest source of GHG emissions in the U.S. These standards are anticipated to be adopted in mid-2015.

To date, Congress has not enacted any legislation requiring economy-wide mandatory reductions in GHG emissions. Several different "cap-and-trade" proposals, which would require such reductions, have recently been introduced in Congress, but none of them have been passed by either branch of Congress, nor have become law. All such plans would place caps on the total amount of GHG which can be emitted during future years, and would allow emitters to buy and sell emission credits. However, such plans vary widely on what caps they would place on emissions and how quickly such caps would come into effect, as well as how their specific mechanisms would work.

Currently, the Federal government's policy on climate change has three objectives: (1) slowing the growth of emissions; (2) strengthening science, technology, and institutions; and (3) enhancing international cooperation, which it is implementing through voluntary and incentive-based programs.

Pavley Standards

In 2009, a national policy was adopted for fuel efficiency and emissions standards in the U.S. auto industry, which applies to passenger cars and light-duty trucks for model years 2012 to 2016 (referred to as the Pavley standards). The standards surpass the prior Corporate Average Fuel Economy standards, and requires an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO_2 per mile by model year 2016, based on USEPA calculation methods. In 2012, standards were adopted for model year 2017 to 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO_2 per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle (USEPA 2012).

3.4.1.6 State Policies and Regulations

California Greenhouse Gas Reduction Targets

Executive Order B-55-18

Executive Order B-55-18 establishes a State-wide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The executive order demonstrates the State's continued commitment to address climate change.

Executive Order S-30-15 and SB 350

Executive Order B-30-15 established a new State-wide policy goal to reduce GHG emissions 40 percent below their 1990 levels by 2030. This Executive Order acts as an intermediate goal to achieving 80 percent reductions by 2050 as outlined in Executive Order S-3-05. Additionally, this Executive Order

aligns California's GHG reduction targets with those of leading international governments, including the 28 nations comprising the European Union. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal established by Executive Order S-3-05 of reducing GHG emissions 80 percent under 1990 levels by 2050 (California Energy Commission [CEC] 2017). Refer to Section 3.5, *Energy* for further discussion.

Senate Bill 350, passed in 2015, codifies two of the "pillars" in Executive Order B-30-15; requiring the Renewable Portfolio Standard (RPS) reach 50 percent by 2030, and to *"achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers,"* which in effect means a doubling of energy efficiency in the entire portfolio of California's buildings by 2030.

Executive Order S-3-05 and Assembly Bill 32

Former California State Governor Arnold Schwarzenegger signed on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels; and
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

The Secretary of the California Environmental Protection Agency (CalEPA) has been charged with coordination of efforts to meet these targets and formed the Climate Action Team to implement the Executive Order. The Climate Action Team also provided strategies and input to the CARB Scoping Plan discussed below.

In 2006, the California State Legislature adopted Assembly Bill (AB) 32, California Global Warming Solutions Act, to codify the targets in Executive Order S-3-05 of reducing GHG emissions in California to 1990 levels by 2020. The California Global Warming Solutions Act requires that CARB to adopt rules and regulations directing State actions that would achieve GHG emissions reductions equivalent to 1990 State-wide levels by 2020. AB 32 also establishes a state goal of reducing GHG emissions to 1990 levels by 2020 – a reduction of approximately 30 percent from projected State emission levels and 15 percent from current State levels, with even more substantial reductions required in the future.[2]

California Air Resources Board

CARB, a part of CalEPA, is responsible for the coordination and administration of both Federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets State ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the Federal government and the local air

[2] CARB has determined the State-wide levels of GHG emissions in 1990 to be 427 Tg CO_2e.

districts. CARB has also recently adopted a State-wide GHG emissions limit for 2020 (427 Tg CO_2e), an emissions inventory, and requirements to measure, track, and report GHG emissions by major industries.

CARB Scoping Plan

As directed by AB 32, CARB adopted the first Scoping Plan, which presented a set of actions designed to reduce overall GHG emissions in California. This initial Scoping Plan provided an economy-wide approach to reducing emissions and highlighted the value of combining carbon pricing with other complementary programs to meet California's 2020 GHG emissions target while ensuring progress in all sectors. Relative to transportation, the Scoping Plan included nine measures or recommended actions related to reducing VMT and transportation-related GHGs through fuel and efficiency measures. These measures would be implemented State-wide rather than on a project-by-project basis.

AB 32 requires CARB to update the scoping plan at least every 5 years. CARB released the First Update to the Climate Change Scoping Plan in May 2014 to provide information on the development of specific regulations and to adjust projections in consideration of the economic recession. The 2014 Update to the Scoping Plan presented an update on the program and its progress toward meeting the 2020 limit. It also developed the first vision for long-term progress beyond 2020. It also identified the need for a 2030 mid-term target to establish a continuum of actions to maintain and continue reductions, rather than only focusing on targets for 2020 or 2050.

In response to Executive Order B-30-15 and Senate Bill (SB) 32, all State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target. The 2017 Update to the Climate Change Scoping Plan was approved by CARB on December 14, 2017 (CARB 2017). The 2017 Scoping Plan builds upon the framework established by the initial 2018 Scoping Plan and 2014 Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that the state meets its GHG reduction targets.

Subsequent to the 2017 Scoping Plan, CARB adopted more aggressive SB 375 targets in 2018 as one measure to support progress toward the Scoping Plan goals, which encourage Sustainable Communities Strategies (SCSs) that plan to achieve, in aggregate, a 19 percent reduction in State-wide per capita GHG emissions reductions relative to 2005 by 2035 from passenger vehicles. However, CARB recognized that additional State and local actions are needed to achieve the transportation system reductions necessary to meet our climate goals, which is approximately 25 percent reduction in State-wide per capita GHG emissions by 2035 relative to 2005. In 2019, CARB released a 2017 Scoping Plan Update which includes a discussion of the relationship between local government actions and achievement of the State's long-term GHG emissions reduction goals, and non-binding recommendations to support local governments in their efforts to reduce GHG emissions. The 2017 Scoping Plan Update also identifies that slower growth in VMT from more efficient land use development patterns would promote achievement of the State's climate goals.

Greenhouse Gas Emissions and Land Use Planning

Senate Bill 375, Sustainable Communities and Climate Protection Act

The passage of SB 375 on September 30, 2008 created a process whereby local governments and other stakeholders must work together within their region to achieve the GHG reductions specified in AB 32 through integrated development patterns, improved transportation planning, and other transportation measures and policies. Additionally, SB 375 required that those targets be incorporated within a SCS, a newly required element within the Metropolitan Planning Organization's (MPO's) Regional Transportation Plan (RTP).

On September 23, 2010, CARB adopted the vehicular GHG emissions reduction targets that require a 7 percent to 8 percent reduction by 2020 and between 13 percent and 16 percent reduction by 2035 relative to emissions in 2005 for each MPO. Southern California Council of Governments (SCAG) is the MPO for the Southern California region and is required to work with local jurisdictions, including the City. CARB has determined SCAG's reduction target for per capital vehicular emissions to be 8 percent by 2020 and 13 percent by 2035.

Greenhouse Gas Emissions from the Transportation Sector

California Low Carbon Fuel Standard Regulation

The Low Carbon Fuel Standard (LCFS) is one of the key AB 32 measures designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits. The LCFS is a key part of a comprehensive set of programs in California to cut GHG emissions and other smog-forming and toxic air pollutants by improving vehicle technology, reducing fuel consumption, and increasing transportation mobility options. The LCFS is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits. The transportation sector is responsible for about 50 percent of GHG emissions (including industrial sector emissions from refining and crude production), 80 percent of O_3-forming gas emissions, and over 95 percent of diesel particulate matter. The LCFS sets annual carbon intensity standards, or benchmarks, which reduce over time, for gasoline, diesel, and the fuels that replace them.

Assembly Bill 1493 (Health and Safety Code Section 42823 and 43018.5)

In response to the transportation sector accounting for a large percentage of California's CO_2 emissions, AB 1493, enacted in 2002, required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In setting these standards, CARB must consider cost-effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers. The Federal CAA ordinarily preempts state regulation of motor vehicle emission standards; however,

California is allowed to set its own standards with a Federal CAA waiver from the USEPA, which the USEPA granted in 2009.

However, as discussed previously, the USEPA adopted Federal standards for model year 2012 through 2016 light-duty vehicles. As such, California – and States adopting the California emissions standards (referred to as the Pavley standards) – agreed to defer to the Federal standard through model year 2016. The 2016 endpoint of the Federal and State standards is similar, although the federal standard ramps up slightly more slowly than required under the state standard. The State standards require additional reductions in CO_2 emissions beyond model year 2016 (referred to as the Pavley Phase II standards). Also as noted above, the USEPA adopted GHG emission standards for model year 2017 through 2025 vehicles. These standards are slightly different from the Pavley Phase II standards, but the State has agreed not to contest these standards, in part due to the fact that while the national standard would achieve slightly less reductions in California, it would achieve greater reductions nationally, and is stringent enough to meet state GHG emission reduction goals. In 2012, CARB adopted regulations that allow manufacturers to comply with the 2017 through 2025 national standards to meet State law.

Advanced Clean Cars Program

In 2012, CARB adopted a set of regulations to control emissions from passenger vehicles, collectively called Advanced Clean Cars. Advanced Clean Cars, developed in coordination with the USEPA and National Highway Traffic Safety Administration (NHTSA), combined the control of smog-causing (i.e., criteria) pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle III Regulation for criteria (LEV III Criteria) and GHG (LEV III GHG) emissions, and a technology-forcing mandate for zero-emission vehicles. The goal of the program was to guide the development of environmentally advanced cars that would continue to deliver the performance, utility and safety car owners have come to expect. Advanced Clean Cars includes the following elements:

- LEV III Criteria: Reducing Smog-Forming Pollution;
- LEV III GHG: Reducing Greenhouse Gas Emissions; and
- Zero Emission Vehicle Regulation: Promoting the Cleanest Cars.

Greenhouse Gas Emissions from the Energy Sector

California Renewables Portfolio Standard

California's RPS program was established in 2002 by SB 1078 with the initial requirement that 20 percent of electricity retail sales must be served by renewable resources by 2017, thereby reducing GHG emissions from fossil fuel power plants (e.g., coal, natural gas, etc.). The program was accelerated in 2015 with SB 350, which mandated a 50 percent RPS by 2030. SB 350 includes interim annual RPS targets with 3-year compliance periods and requires 65 percent of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increases the RPS to 60 percent by 2030 and requires all the State's electricity to come from carbon-free resources by 2045.

The California Public Utilities Commission (CPUC) implements and administers RPS compliance rules for California's retail sellers of electricity, which include large and small investor-owned utilities, electric service providers and community choice aggregators. The CEC is responsible for the certification of electrical generation facilities as eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities.

California Energy Efficiency Standards and Green Building Standards Code

Title 24 of the California Code of Regulations is known as the California Building Code (CBC). The 2013 California Building Code was updated in 2013 and includes the following:

California Code of Regulations Title 24, Part 6 comprises the California Energy Code, which was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to increase the baseline energy efficiency requirements. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

California Code of Regulations Title 24, Part 11 comprises the California Green Building Standards Code (CALGreen), which establishes mandatory green building code requirements as well as voluntary measures (Tier 1 and Tier 2) for new buildings in California. The mandatory provisions in CALGreen will reduce the use of Volatile Organic Compound (VOC) emitting materials, strengthen water efficiency conservation, increase construction waste recycling, and increase energy efficiency. Tier 1 and Tier 2 are intended to further encourage building practices that minimize the building's impact on the environment and promote a more sustainable design.

3.4.1.7 Regional Policies and Regulations

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the Greater Los Angeles Area. In order to provide GHG emissions guidance to local jurisdictions within the South Coast Air Basin, the SCAQMD has organized a Working Group to develop GHG emission analysis guidance and thresholds.

As of the present date, the only regulation adopted by the SCAQMD addressing the generation of GHG emissions is the establishment of a 10,000 MT CO_2e per year screening level threshold of significance for stationary/source/industrial projects for which the SCAQMD is the lead agency.

SCAQMD released a draft guidance document regarding interim CEQA GHG significance thresholds in October 2008. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary sources (i.e., industrial projects) where the SCAQMD is lead agency. SCAQMD proposed a tiered approach, whereby the level of detail and refinement needed to determine significance increases with a project's total GHG emissions. The tiered approach defines projects that are exempt under CEQA and projects that are within the jurisdiction of, and subject to the

policies of, a GHG Reduction Plan as less than significant. This tiered approach is discussed in in Section 3.7.3, *Impact Assessment and Methodology*.

SCAG Regional Transportation Plan/ Sustainable Communities Strategy

As required by SB 375, SCAG has adopted the RTP/SCS, which is the culmination of a multi-year effort involving stakeholders from across the SCAG region. The SCS is a newly required element of the RTP that provides a plan for meeting emissions reduction targets set forth by the ARB. SCAG's 2016–2040 RTP/SCS provides growth forecasts that are used in the development of air quality–related land use and transportation control strategies by the SCAQMD. The RTP/SCS includes a strong commitment to reducing emission from transportation sources and emphasizes the crucial linkages and interrelationships between the economy, the regional transportation system, and land use. Strategies for achieving goals of available, safe, sustainable and affordable transportation include: (1) investing in bus, light rail and heavy rail transit, passenger and high-speed rail, pedestrian and bicycle transportation corridors, infrastructure and transportation demand management (e.g., carpooling to reduce demand for individual transport); (2) encouraging public participation in the planning processes; and (3) educating the public about available transportation methods available in the region.

On September 3, 2020, SCAG's Regional Council unanimously voted to approve and fully adopt the 2020-2045 RTP/SCS (Connect SoCal) (SCAG 2020). The 2020-2045 RTP/SCS includes more than 3 years of consultation with stakeholders and the public to capture the goals and objectives of the people within the region and capture the most current available data for determining future demographic projections. The intent of the plan is to build upon and expand land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The Connect SoCal plan achieves per capita GHG emissions reductions relative to 2005 of 19 percent in 2035 (SCAG 2020).

3.4.1.8 Local Policies and Regulations

Santa Monica General Plan Land Use and Circulation Element

The Land Use and Circulation Element (LUCE) provides a set of goals, policies, and standards to guide land use and transportation decisions in the City through 2030. An important principle of the LUCE is to create a more sustainable City by providing the framework to achieve the GHG reduction goals of the Sustainable City Plan. The LUCE addresses GHG emissions through its land use and transportation decisions such as focusing new land uses near transit, creating complete neighborhoods, supporting infill mixed-use projects, affordable and diverse housing near jobs and transit. In addition, the LUCE supports a complete network of walking and bicycling, transit improvements, carpooling, car-sharing, and Transportation Demand Management (TDM) strategies to reduce vehicle trips. The following are selected LUCE policies related to GHG emissions:

Goal U2: *Integrate Land Use and Transportation for GHG Reduction*. Integrate land use and transportation, carefully focusing new development on transit-rich boulevards and in the districts, to create sustainable active pedestrian-friendly centers that decrease reliance on the automobile, increase walking, bicycling and transit use and improving community quality of life..

Policy LU2.5 *Vehicle Trip Reduction.* Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalk, bicycle and roadway improvements, expand transit service, manage parking, and strengthen TDM programs that support accessibility by transit, bicycle and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjust bus and shuttle services to ensure success of the transit system.

Policy LU2.6 *Active Spaces.* Focus new development in defined districts to enable active places that can support diverse local-serving retail and services, walkability, arts and culture. Require, whenever possible, new development to provide convenient and direct pedestrian and bicycle connections.

Goal LU16: *Sustainable Urban Form.* Assure that buildings are sustainable, environmentally sound and contribute to the City's urban form.

Policy LU16.1 Design Buildings with Consideration of Solar Patterns. The design of new building's need to consider the pattern of the sun, the impact of the building mass throughout the day and the year to create habitable outdoor spaces and protect adjacent structures to minimize shadows on public spaces at times of the day and year when warmth is desired and provide shade at times when cooling is appropriate, and minimize solar disruption on adjacent properties.

Policy LU16.2 Preserve Solar Access to Neighborhoods. The same development standard that is adopted to require a step down building envelope to transition commercial buildings to lower adjacent residential properties also needs to assure solar access to the residential buildings.

Goal S1: Reduce the City's GHG emissions and climate change impacts.

Policy S1.1 Pro-actively cooperate with the State to implement AB 32, which calls for reducing GHG emissions to 1990 levels by 2020 and 80 percent below 1990 levels by 2050.

Policy S1.2 Prepare a GHG emissions inventory approximately every five years using accounting standards approved by the International Council for Local Environmental Initiatives (ICLEI) and CARB.

Policy S1.3 Implement the LUCE policies in order to achieve the following GHG reduction targets as reflected in the Sustainable City Plan Goals:

- Reduce community-wide GHG emissions to 15 percent below 1990 levels by 2015.
- Reduce emissions from municipal operations by 30 percent below 1990 levels by 2015.

Policy S1.4 Prepare a climate action plan every 10 years to address citywide GHG emissions.

Policy S1.5 Monitor the effectiveness of the City's climate action plans against its periodic GHG emissions inventories.

Policy S1.6 Prepare a Community Urban Forest Management Plan and update it a minimum of every ten years to assist with local sequestration of CO_2 emissions.

Policy S1.7 Amend the Santa Monica Sustainable City Plan to include the following target with regard to renewable energy use:

- By 2030, 40 percent of all electricity use in Santa Monica should come from renewable sources.

Goal S2: Reduce GHG emissions from land use and transportation decisions.

Policy S2.1	Implement the Vehicle Miles Traveled (VMT) reducing policies of the LUCE including, but not limited to: focusing new growth in higher density, mixed-use, transit-oriented districts; focusing new growth along existing corridors and nodes; creating complete, walkable neighborhoods with goods and services within walking distance of most homes; and, implementing and supporting a wide range of pedestrian, bicycle and transit improvements in the City.
Policy S2.2	In cooperation with the state and SCAG, proactively promote the implementation of SB 375, in particular utilizing its incentives for transit-oriented development. The City will also ensure that its local plans are consistent with the SCS Plan requirement of SB 375.
Policy S2.7	Encourage major employers to find ways to provide housing assistance as part of their employee benefits package.
Policy S2.9	Consider incorporating the “no net new P.M. peak hour vehicle trips” policy into the City’s CEQA environmental analysis and require mitigation of significant impacts for projects that will generate new net vehicle trips.

Goal S3: Reduce overall energy use in the City.

Policy S3.1	Actively strive to implement the City’s “zero net” electricity consumption goal by 2020 through a wide variety of programs and measures, including the generation of renewable energy in the city and energy efficiency measures.

Goal S4: Increase the use of renewable energy in the City.

Policy S4.1	Explore creating an ordinance to require solar installations, both photovoltaic and hot water, on new construction projects.

Goal S5: Improve the environmental performance of buildings.

Policy S5.1	Continue to maintain a Building Code and prescriptive compliance options that meet or exceed state requirements for energy, water and other sustainability standards. Specifically, pursue California Energy Commission goals to achieve net zero energy buildings by 2020 for low-rise residential buildings and 2030 for commercial buildings and achieve a Leadership in Energy and Environmental Design (LEED)-equivalent local building code by 2020.
Policy S5.5	Encourage shade trees on south- and west-facing sides of all new buildings to reduce building energy loads.
Policy S5.6	Encourage cool roofs or green roofs on new buildings.
Policy S5.8	Encourage installation of electrical outlets in loading zones and on the exterior of new buildings to reduce emissions from gas-powered landscape maintenance and operating refrigeration for delivery trucks.

Goal S10: Create a sustainable local economy that focuses on “green” jobs.

Policy S10.3	Market Santa Monica as a green tourist destination by encouraging green retail and sustainable tourism industry practices.

Sustainable City Plan

The 2014 Update of the Sustainable City Plan integrates 10 Guiding Principles that provide the basis from which effective and sustainable decisions can be made for a range of issues in the City, including Resource Conservation, Environmental and Public Health, Transportation, Sustainable Local Economy, Open Space and Land Use, Housing, Community Education and Civic Participation, Human Dignity, and Arts and Culture. Refer to Section 3.5, *Energy* for further discussion.

City of Santa Monica Climate Action and Adaptation Plan

In May 2019, the City adopted the Climate Action and Adaptation Plan (CAAP) to help the City meet its goal of carbon neutrality by 2050 and its interim goal of reducing GHG emissions to 80 percent below 1990 levels by 2030. The CAAP identifies eight objectives that, if completed by the end of 2030, would achieve the City's interim GHG emissions reduction goal. These objectives are grouped in the following three categories: Zero Net Carbon Buildings, Zero Waste, and Sustainable Mobility. Objectives relevant to the proposed Housing Element Update include:

Objective 1: Achieve 100 percent renewable grid electricity.

Objective 2: Install 100 MW of local solar energy.

Objective 3: Reduce fossil fuel use 20 percent in existing buildings.

Objective 4: Discourage fossil fuels in new buildings.

Objective 6: Convert 50 percent of local trips to foot, bike, scooter & skateboard.

Objective 7: Convert 25 percent of commuter trips to transit.

Objective 8: Convert 50 percent of vehicles to electric or zero emission.

The intent of the CAAP is to provide overarching policy direction with respect to climate change through City-wide objectives and broad strategies to reduce GHG emissions. The CAAP is not a regulatory plan to be applied on a project-by-project basis. Rather, the City recognizes that GHG reduction goals cannot be achieved by individual projects alone, but instead requires a comprehensive City-wide approach that would include the enactment of future plans, changes to existing ordinances, and an integrated and sustainable approach to land use/transportation planning.

The following City programs and policies support or were developed to support the achievement of targeted reductions in GHG emissions listed in the CAAP.

Policy ZNC1	*Implement a Community Choice Energy (CCE) Program.* Implement CCE in Santa Monica, offering the highest amount of cost-competitive renewable energy. Develop programs to incentivize new local renewable-energy projects. Adopt rates to achieve 100% renewable energy by 2025.
Policy ZNC5	*Adopt a Carbon Reduction Ordinance for Existing Buildings.* Adopt a Carbon Reduction Ordinance to require energy benchmarking and carbon performance of existing buildings over 20,000 square feet, including multifamily buildings. Require a reduction of fossil fuel use of covered buildings by 15% in five years and elimination of fossil fuel use by 2050.

Policy ZNC8	*Adopt Carbon Neutral Construction Codes.* Require New Construction for commercial, mixed-use and multi-family properties to achieve zero net carbon onsite or pay in-lieu carbon impact fee to offset fossil fuel use. Require electric-ready construction for future electrification of appliances and buildings systems. Ensure that affordable housing developers have additional financing or compliance alternatives available.
Policy ZNC11	*Create Equitable Access to Clean Energy Programs.* Partner with utilities and the Clean Power Alliance to provide free home-energy audits and upgrade incentives for low-income households and affordable housing developers and property owners.
Policy ZW1	*Implement Citywide Organics Recycling.* Require waste diversion stations (trash, recycling, composting) in all businesses. Develop outreach and enforcement programs to ensure commercial and residential organics recycling citywide.
Policy ZW5	*Increase Construction and Demolition Debris Diversion Requirements.* Explore fees and fines to create more incentives for recycling, composting and salvage, while discouraging landfill waste. Provide educational resources to promote responsible demolition and deconstruction.
Policy SM6	*Complete Streets Network.* Increase the extent and quality of the complete street network and greenways to ensure residents and visitors alike have safe, convenient, and affordable transportation options. Create designated bike lanes that are protected to provide greater safety and assurance for all riders. Emphasize the movement of people with greater space dedicated to space efficient and low emission modes of transportation. Lower speed limits to improve safety. Expand publicly owned spaces and work with property owners to facilitate public access.
Policy SM8	*Prioritize Transit-Oriented Affordable Housing.* Increase the housing-to-jobs ratio by prioritizing the expansion and investment in affordable housing located near dense transit hubs with limited parking, through local zoning and incentives.
Policy SM12	*Increase Charging Infrastructure for Electric Vehicles and Electric Mobility Devices.* Expand network of off- and on-street public charging stations to 1,000 ports by 2025. Provide charging stations that will accommodate a wide range of vehicle types including bicycles, scooters and other mobility devices. Provide outreach and additional incentives for renters, lower-income individuals and non-profit property owners. Implement emerging best practices in EV technology, including mobile charging, wireless charging, energy storage, and web/smartphone applications.

Santa Monica Green Building Ordinance

The City's Green Building Ordinance (Santa Monica Municipal Code [SMMC] Chapters 8.106 and 8.108) adopts by reference the 2013 California Green Building Standards Code with local amendments. The local amendments address electric vehicle charging capacity for electrical services and installation of dedicated multi-meter enclosures for electric vehicle charging in new multi-family residential developments. Additionally, Chapter 8.108 address construction and demolition waste recycling, with a required diversion rate for construction and demolition waste of 70 percent.

3.7.3 Impact Assessment and Methodology

3.4.1.9 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts related to GHG emissions and climate change. Specifically, the CEQA Guidelines state that a proposed project may have a significant adverse impact related to GHG emissions if:

a) The project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
b) The project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

According to the California Air Pollution Control Officers Association (CAPCOA), *"GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective"* (CAPCOA 2008). Due to the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that a single project's increase in annual GHG emissions would cause a measurable change in global GHG emissions necessary to influence global climate change. Section 15064.4(b) of the CEQA Guidelines states that *"in determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions."* Due to the global context of climate change, GHG analysis is based on the cumulative impact of emissions.

Generally, the evaluation of an impact under CEQA involves comparing the project's effects against a threshold of significance. The CEQA Guidelines clarify that "*when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.*" For GHG emissions and global warming, there is not, at this time, one established, universally agreed-upon quantified threshold of significance for GHG impacts. The CEQA Guidelines do not establish a quantified threshold of significance for GHG impacts. Instead, lead agencies have the discretion to establish significance thresholds for their respective jurisdictions. A lead agency may look to thresholds developed by other public agencies or other expert entities, so long as the threshold chosen is supported by substantial evidence.

The CEQA Guidelines Section 15064.4(b) recommend considering certain factors when determining the significance of a project's GHG emissions, including: (1) the extent to which the project may increase or reduce GHG emissions as compared to the existing conditions; (2) whether the project's GHG emissions exceeds a significance threshold that the lead agency determines applies to the project; and (3) extent to which the project complies with regulations or requirements adopted to implement a State-wide, regional, or local plan for the reduction or mitigation of GHGs.

Even in the absence of clearly defined thresholds for GHG emissions, the law requires that an agency makes a good faith effort to disclose the GHG emissions from a project and mitigate to the extent feasible

whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact. Regardless of which threshold(s) are used, the agency must support its analysis and significance determination with substantial evidence (CEQA Guidelines Section 15064.7).

CEQA Guidelines Section 15183.5 allows lead agencies to choose to analyze GHG emissions of a project at a programmatic level, tiering from a plan for the reduction for GHG emissions or similar document, such as a Climate Action Plan. Plans used for tiering must include all of the plan elements identified in CEQA Guidelines Section 15183.5(b)(1). While the City completed their CAAP in 2018, it does not qualify for tiering pursuant to CEQA Guidelines Section 15183.5 because the CAAP has not undergone CEQA review per the tiering requirements from CEQA Guidelines Section 15183.5. Therefore, the analysis herein cannot rely on a qualitative tiering analysis with the City's CAAP.

To date, neither CARB, SCAQMD, SCAG, nor the City have adopted new efficiency targets established consistent with SB 32 for each sector for the 2030 and 2050 target years; however, various other organizations have published technical guidance evaluating potential 2030 efficiency metrics. For instance, in October 2016, the Association of Environmental Professionals (AEP) published The Final White Paper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California (2016). AEP's technical guidance presents data and calculations for a potential adjusted State-wide 1990 land use sector emissions inventory and new metric for 2030 of 2.7 MT CO_2e/service population/year for the land use sector.

In addition to evaluation of a project's impacts against a quantifiable significant threshold, per CEQA Guidelines Section 15064(h)(3), a project's contribution to a cumulatively considerable impact would not be substantial if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially reduce the cumulative impact within the geographic area of the project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include *"[a] water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."* Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with programs and/or other regulatory schemes to reduce GHG emissions.

In light of this shifting regulatory environment and available threshold concepts recommended by expert agencies, the determination of whether the proposed Housing Element Update would result in a cumulatively considerable contribution to the cumulative impacts of global climate change is based on the following:

- Would the proposed project conflict with (and thereby be inconsistent with) the applicable regulatory plans and policies to reduce GHG emissions, which include the emissions reduction measures included within the LUCE, Sustainable City Plan, and CAAP; SCAG's 2020-2045 RTP/SCS (Connect SoCal); AB 32, SB 32, and SB 375; the California Governor's Office of Planning and Research (OPR) and Climate Action Team recommendations; or CARB's 2017 Scoping Plan Update?

3.4.1.10 Methodology

CEQA Guidelines Section 15064.4 gives lead agencies the discretion to determine whether to assess the significance of GHG emissions quantitatively or qualitatively. Under either approach, the lead agency's analysis must demonstrate a good faith effort to disclose the amount and significance of GHG emissions resulting from a project, based to the extent possible on scientific and factual data (CEQA Guidelines Section 15064.4[a]). The threshold for evaluating the significance of GHG emissions is based on consistency with applicable regulatory plans and polices to reduce GHG emissions; however, in a good faith effort to fully disclose the potential GHG emissions associated with the proposed Housing Element Update, the City has also chosen to quantify GHG emissions associated with the proposed Housing Element Update, as described in further detail below.

Methodology for Assessing Consistency with GHG Reduction Plans

The analysis of potential conflicts with an applicable regulatory plans and policies to reduce GHG emissions assesses whether the proposed Housing Element Update would be consistent with applicable GHG plans at the State, regional, and local levels. At the State level, the CARB's 2017 Scoping Plan Update provides strategies and recommendations for achieving the State's 2020, 2030, and 2050 GHG reduction targets. Additionally, the 2017 Scoping Plan Update specifically addresses transportation-related GHG emissions, and provides technical information on what level of State-wide VMT reduction would promote achievement of State-wide GHG emissions reduction targets and the 2017 Scoping Plan Update. Further, the California Climate Action Team Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in AB 32 and Executive Order S-3-05.

Locally, the City's GHG reduction goals are contained within the CAAP. The intent of the CAAP is to provide overarching policy direction with respect to climate change through City-wide objectives and broad strategies to reduce GHG emissions. For the purposes of this EIR, the analysis focuses on whether the proposed Housing Element Update would support, and not hinder, the City-wide objectives and goals of the CAAP. The City has also adopted the LUCE and Sustainable City Plan as well as Green Building Standards and the 2020 Energy Reach Code, each of which include goals, policies and actions for the purpose of reducing local GHG emissions. Thus, if implementation of the proposed Housing Element Update is consistent with these policies and regulations, it would result in a less than significant impact, because it would be consistent with the overarching local and State regulations on GHG reduction.

Methodology for Estimating GHG Emissions

As previously described, in the interest of full disclosure, this section of the EIR also quantifies and discloses potential GHG emissions that would be generated as a result of land use changes anticipated to occur under the proposed Housing Element Update through the planning horizon of 2030. Given that the details of construction, design/size, and timing of each residential and mixed-used development under the proposed Housing Element Update are unknown, this projection is meant to serve merely as an illustration of the possible GHG emissions that could occur through the planning horizon of 2030. The analysis of operational (i.e., long-term) GHG impacts employs modeling to forecast operational GHG

emissions, including those from City-wide vehicle trips, that may be generated under the proposed Housing Element Update through 2030.

Total GHG emissions (i.e., construction and operation) resulting from the proposed Housing Element Update were quantified to provide information to decision makers and the public regarding the level of annual GHG emissions associated with the proposed Housing Element Update. GHG emissions are typically separated into three categories that reflect different aspects of ownership or control over emissions:

- **Scope 1:** Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- **Scope 2:** Indirect, off-site emissions associated with purchased electricity or purchased steam.
- **Scope 3:** Indirect emissions associated with other emissions sources, such as energy required to transport solid waste, water, and wastewater.

Implementation of the proposed Housing Element Update would result in GHG operational emissions directly from on-road mobile vehicles, electricity, and natural gas, and indirectly from water conveyance, wastewater generation, and solid waste handling. In addition, construction activities such as demolition, hauling, and construction worker trips would generate GHG emissions. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions have been estimated on an annual basis.

Construction GHG Emissions Methodology

Construction equipment typically utilizes fossil fuels, which generate GHGs such as CO_2, CH_4, and N_2O. CH_4 may also be emitted during the fueling of heavy equipment. The raw materials used to construct new buildings (e.g., wood) can sequester carbon; however, demolition of building can result in the gradual release of the carbon stored in waste building materials as those materials decompose in landfills. Since the exact nature of the origin or make-up of the construction locations and materials is unknown within the City, this analysis provides programmatic-level evaluation of construction-related GHG emissions. It is assumed that all construction equipment used would be diesel powered. For the purposes of this analysis, it is assumed that new residential development in the City would be constructed incrementally over time. Construction-related GHG emissions are amortized over 30 years per current SCAQMD methodology.

Construction GHG emissions were estimated using CalEEMod and were assessed in the Air Quality and GHG Study prepared for the proposed Housing Element Update (see Appendix B). As described in Section 3.3, *Air Quality*, three potential buildout scenarios were developed for the construction analysis to assess the range of potential construction emissions, and include the average development size scenario, maximum development size scenario, and continuous development scenario. The average development size scenario and maximum development size scenario were combined to assess a reasonable mix of simultaneous development projects occurring in the City (referred to as the individual project mix). The analysis evaluates the potential emissions from the individual project mix, which assumes the construction of 14 average sized development projects (i.e., 25 dwelling units per development) and 3 maximum development sized projects (i.e., 397 dwelling units per development), as

well as from the continuous development scenario, which assumes an average of 1,221 dwelling units per year.

Operational GHG Emissions Methodology

Residential development planned for under the proposed Housing Element Update would also generate operational GHG emissions following completion and occupation. Operational GHG emissions that could occur over the lifespan of the proposed Housing Element Update have been estimated using CalEEMod developed by the SCAQMD for mobile source, area, and energy emissions. Data for this section were taken from the Transportation Study prepared by Fehr & Peers (see Section 3.12, *Transportation* and Appendix G). Area source emissions would be generated by the use of consumer products, architectural coating (e.g., interior and exterior painting), and landscape maintenance equipment. Energy source emissions would be generated by electricity and natural gas consumption for space and water heating. The default emissions were used for area and energy sources with no additional mitigation, and represent conservative, worst-case emissions. State and SCAQMD regulations as well as existing City standards for new development, were incorporated in the calculation of emissions reductions in CalEEMod inputs (see Appendix B).

The following activities are typically associated with the operation of residential development that will contribute to the generation of GHG emissions:

- **Vehicle trips.** Vehicle trips generated by new residential development as planned for under the proposed Housing Element Update would result in GHG emissions through the combustion of fossil fuels. In calculating mobile-source GHG emissions, emissions are estimated based on the predicted number of trips to and from as well as within the City as determined in the Transportation Study (see Section 3.12, *Transportation* and Appendix G). Daily vehicle trips under existing baseline conditions and in 2030 were multiplied by corresponding GHG emission factors produced by CARB's mobile source emissions model named EMissions FACtor (EMFAC2017; see Appendix B).
- **On-site use of natural gas and other fuels.** Increases in the use of on-site natural gas and other fuels for heating of new development and cooking activities would occur; resulting in a direct release of GHGs. Estimated emissions from the combustion of natural gas and other fuels is based on the extent and type of development. The City's 2020 Energy Reach Code requires All-Electric Building designed to code established by the 2019 CEC or Mixed-Fuel Building designed to be 5 percent more efficient than the code established by the 2019 CEC (refer to Section 3.5, *Energy*).
- **Electricity use**. Use of electricity for the operation of individual residential development projects under the proposed Housing Element Update would contribute to the indirect GHG emissions associated with electricity production. Estimated GHG emissions from the consumption of electricity are based on the number of residential dwelling units and square footage of commercial space, using the standard electrical consumption rates from CalEEMod. Beginning in early 2019, the City has received electricity from the CPA (refer to Section 3.5, *Energy*). The CPA buys electricity from renewable sources and partners with the Southern California Edison Company (SoCal Edison) to distribute electricity to residential and commercial customers throughout the City. The City has chosen 100 percent Green Power as a step towards achieving carbon neutrality and all customers are defaulted to receive electricity from 100 percent renewable resources. City data shows that approximately 92 percent of residents and businesses receive 100 percent Green Power (City of Santa Monica 2021).

- **Water use and wastewater generation.** The amount of water used and wastewater generated by units developed under the proposed Housing Element Update has indirect GHG emissions as a result of the energy used to supply, distribute and treat water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both CH_4 and N_2O depending on the treatment method. Estimated emissions from the generation of wastewater were estimated as presented in the CalEEMod modeling output.
- **Solid waste disposal.** Emissions calculated for solid waste reflect the indirect GHG emissions associated with waste that is disposed of at a landfill. GHG emissions from solid waste disposal are also calculated using CalEEMod. Disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) are used to estimate amount of disposal for individual land uses. GHG emissions associated with the decomposition of waste are quantified based on amount of degradable organic carbon. The GHG emission factors, particularly for CH_4, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery) are State-wide averages and are used in this assessment.CO_2 emissions are also quantified based on associated CH_4, if applicable.

Operational emissions were estimated using CalEEMod and were assessed in the Air Quality and GHG Study prepared for the proposed Housing Element Update. As described in Section 3.3, *Air Quality*, the operational analysis estimated operational emissions for the Future (2030) No Project Scenario and the Future (2030) With Project Scenario. The Future (2030) With Project Scenario evaluates the potential for up to 10,994 new dwelling units as planned for by the proposed Housing Element Update.

Estimate of Construction and Operational GHG Emissions Associated with the Proposed Housing Element Update

Construction

Construction-related GHG emissions would through the planning horizon of 2030 for the proposed Housing Element Update. As previously described, such emissions are difficult to quantify as the details of construction, design/size, and timing of each individual residential development project under the proposed Housing Element Update is unknown. As such, this projection is meant to serve as an illustration of the possible construction-related GHG emissions that could occur under the proposed Housing Element Update. For example, the construction period for each individual residential development project as planned for under the proposed Housing Element Update would vary from a few months for additions or small developments to more than 3 years for large developments with more than 100 units. Therefore, the construction-related emissions that would result from future land uses would also vary on an annual basis. It should be noted that the GHG emissions shown in Table 3.7-1 are based on construction equipment operating continuously throughout the workday. In reality, construction equipment operates periodically or cyclically throughout the workday. These values were applied to the same construction phasing assumptions used in the air quality criteria pollutant analysis (refer to Section 3.3, *Air Quality*) to generate annual GHG emissions for each construction year. A complete listing of construction equipment by phase, emission factors, and calculation parameters used in this analysis is included within the CalEEMod worksheet results provided in Appendix B.

Table 3.7-1 GHG Emissions from Construction Activities Under the Proposed Housing Element

	GHGs (MT CO_2e)
Individual Project Mix	6,501.41
Amortized over 30 years	216.71 per year

Notes: see Appendix B.

As indicated in Table 3.7-1 above, construction activities associated with implementation (i.e., buildout) under the proposed Housing Element Update would result in the generation of GHG emissions totaling up to 6,501.41 MT CO_2e through 2030. As described above, SCAQMD recommends that construction-related GHG emissions be amortized over a project's 30-year lifetime to include these emissions as part of a project's annualized lifetime total emissions.[3] In accordance with SCAQMD methodology, the estimated construction-related GHG emissions have been amortized over a 30-year lifetime period, and included in the annualized operational GHG emissions in Table 3.7-1.

Construction-related GHG emissions are further divided by year and total construction-related GHG emissions are amortized over an anticipated 30-year period to provide an average annual estimate of 216.71 MT CO_2e/year.

Operational

Direct operational emissions would primarily result from increased mobile emissions associated with travel and vehicle trips, with approximately 71 percent of total emissions related to this source. Direct and indirect energy use for heating, cooling, cooking and lighting within proposed housing would constitute the next largest source of GHG emissions and would comprise approximately 19 percent of all GHG emissions. This would be related to use of natural gas as a result of daily operational activities and indirect operational emissions from the consumption of electricity for use in residential and commercial land uses, as well as electricity used for transportation. Other indirect operational emissions would be related to increased landfill emissions due to greater solid waste generation, and increased electricity used for water pumping to supply greater water demand which together would comprise less than 7 percent of all projected GHG emissions. Operational emissions depend on the type and use of the developed space, as well as the types of heating systems installed and installation of renewable energy production systems, such as solar power. Residential units, for example, would typically generate less operational GHG emissions per sf than commercial space, both from energy use within structures and related to vehicle trip generation. Energy efficiency-based and sustainable standards are included in existing City regulations, such as the Energy Reach Code. Further, the plan to increase housing opportunities, particularly affordable housing, in the jobs-rich City would serve as self-mitigating features for transportation impacts and vehicle-related GHG emissions.

As discussed above, the 2017 Climate Change Scoping Plan Update sets the state on a course to reduce GHG emissions an additional 40 percent below 1990 levels by 2030 under SB 32. The GHG emissions associated with the proposed Housing Element Update have therefore been evaluated in the context of

[3] South Coast Air Quality Management District Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (October 2008). Available here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf. It should be noted that while SCAQMD recommends construction-related GHG emissions be amortized over a project's 30-year lifetime, most projects within the City of Santa Monica could be expected to have a longer lifetime of 50 to 75 years, resulting in a conservative analysis of amortized construction emissions.

AEP's data and calculations for a potential adjusted State-wide 1990 land use sector emissions inventory and new GHG efficiency metric for 2030 of 2.7 MT CO_2e/service population/year for the land use sector, set forth in The Final White Paper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California (2016).

Based on the forecasted amount of net new residential and ground-floor commercial uses that could occur under the proposed Housing Element Update, the proposed Housing Element Update could result in operational GHG emissions of as much as 139,831.16 MT CO_2e per year (see Table 3.7-2). These total City-wide emissions, which would occur over the life of the proposed Housing Element Update, represent a conservative worst-case scenario and do not account for all energy efficiency measures that might be applied to new residential development projects under the proposed Housing Element Update. Based on projected employment and population growth, implementation of the Housing Element Update could result in up to 1.2 MT CO_2e/year per service population, less than 50 percent of the GHG efficiency metric for 2030 of 2.7 MT CO_2e/service population/year for the land use sector.

Table 3.7-2 Projected Operational GHG Emissions (MT CO_2e per year)

Emission Source	Projected Emissions in 2030
Area Source[1]	2,736.83
Energy	26,369.41
Mobile[2]	100,894.64
Waste	3,039.33
Water Use	6,790.96
Annual Total	**139,831.16**
Projected Service Population in 2030	116,245
Annual Total / Service Population (MT CO_2e / year per service population)	**1.2**
Exceeds 2.7 MT CO_2e / year per service population?	No

Notes:
[1] Area and energy emissions are based on existing land uses from the City's land use database as well as proposed land use changes under the proposed Housing Element Update. An area source is defined as one emitting less than 10 tons per year of criteria or hazardous air pollutant or less than 25 tons per year of a combination of pollutants. Commercial and residential buildings generally are assigned to this category.
[2] Mobile source emissions are based on City-wide trip generation identified in the Fehr and Peers Transportation Study (see Appendix G) prepared for the proposed Housing Element Update, and include the beneficial effects of trip generation reducing measures proposed under the proposed Housing Element Update.
Source: see Appendix B.

It should be noted that the operational emissions presented in Table 3.7-2 provide a highly conservative estimate of the actual GHG emissions, considering the CalEEMod does not account for the City's participation in CPA and cleaner-burning vehicles in the future. The City's decision to participate in the CPA as a step towards achieving carbon neutrality, would ensure all customers are defaulted to receive electricity from 100 percent renewable resources. Although customers can opt out of the CPA, City data shows that approximately 92 percent of residents and businesses receive 100 percent Green Power (City of Santa Monica 2021).

Operational-related GHG emissions would also likely decline in future years as emissions reductions from the State's Cap-and-Trade program are fully realized. More than 71 percent of the GHG emissions associated with the proposed Housing Element Update would result from mobile sources. Reductions in

mobile source GHGs would occur over the next decade, and beyond, ensuring that the total GHG emissions associated with the proposed Housing Element Update would be further reduced. Emissions from mobile sources would decline in future years as older vehicles are replaced with newer vehicles resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards, such as the model year 2017-2025 Pavley Phase II standards (refer to Section 3.7.2, *Regulatory Framework*).

3.7.4 Project Impacts and Mitigation Measures

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Description (GHG-1)

GHG-1 **Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would generate increases in greenhouse gas (GHG) emissions through the planning horizon of 2030. However, the proposed Housing Element Update would be consistent with all applicable plans, policies or regulations of an agency adopted for the purpose of reducing the emissions of GHGs. Therefore, this impact would be *less than significant*.**

Project Consistency with City of Santa Monica Goals and Actions

The proposed Housing Element Update would generate increases in GHG emissions from both the construction and operation of new land uses over the planning horizon (2030) (refer to Tables 3.7-3 and 3.7-4). However, although the CalEEMod modeling outputs show that the proposed Housing Element Update would increase GHG emissions, this analysis does not fully account for the regional reduction in mobile GHG emissions that would be likely to occur due to the benefits of increased housing opportunities in the City. Specifically, the proposed Housing Element Update would increase housing opportunities in a jobs-rich City, where only 9.4 percent of employees within the City currently live within the City (see Section 3.10, *Population, Employment, and Housing*). Los Angeles County has built fewer housing units in comparison to existing demand, particularly in the coastal communities thereby requiring individuals to commute greater distances (State Legislative Office 2015). To that end, it is reasonable to assume that mobile GHG emissions associated with the new residents are occurring elsewhere in the SCAG region under baseline conditions. The proposed Housing Element Update would plan for the development of a minimum of 8,895 dwelling units (of which 69 percent must be provided at lower income levels), thus creating opportunities for many of employees within the City to live closer to their jobs, reducing VMT and associated GHG emissions on a regional basis. For example, as described in Section 3.12, *Transportation* and Appendix G, under the Adjusted Baseline (2020), the 92,357 employees in the City are estimated to generate a total of 118,939 commute trips and 1,392,162 commute VMT. In comparison, the 92,760 employees under the Future (2030) With Project Scenario would generate a total of 117,070 commute trips and 1,233,708 commute VMT, with an average of 13.3 miles per employee. Additionally, the proposed Housing Element Update

would generally increase housing proximate to transit, employment, commercial and entertainment opportunities. As described in further detail below, residential development in the mixed-use, jobs-rich, and transit-served City would generally be consistent with the City's GHG reduction goals and policies established in the LUCE, Sustainable City Plan, and CAAP to reduce GHG emissions. Further, the City's existing land use policy and regulatory framework as well as the policies contained in proposed Housing Element Update would ensure that new residential development planned for under the proposed Housing Element Update would occur in the most sustainable manner possible in a way that minimizes generation of GHG emissions.

Table 3.7-3 Consistency of GHG Policies of the Sustainable City Plan

Resource Conservation Goal 1. Significantly decrease overall community consumption, specifically the consumption of non-local, non-renewable, non-recyclable and non-recycled materials, water, and energy and fuels.	**Consistent.** The residential development planned for under the proposed Housing Element Update would comply with the City's Green Building Ordinance and would reduce the consumption of non-local, non-renewable, non-recyclable, and non-recycled materials. As described in Section 3.13, *Utilities*, residential development planned for under the proposed Housing Element Update would increase water demand. However, each individual residential development would be required to comply with the City's Water Neutrality Ordinance, which requires new development to offset all increases in water demand at a ratio of 1:1 using on-site water efficiency measures, except for 100 percent affordable housing projects, which must offset water demand at a ratio of 0.5:1. In addition, low flow fixtures and other water efficient equipment and plumbing infrastructure would be required in compliance with the City's Green Building Ordinance. Compliance with the adopted Water-Efficient Landscape and Irrigation Standards would also be required for new residential development projects (SMMC 8.108.100). As described in Section 3.5, *Energy,* the residential development planned for under the proposed Housing Element Update may increase the consumption of energy, fuels, and water. However, with the City's continued participation in the CPA as well as implementation of existing City policies and programs (e.g., compliance with CALGreen and the City's Green Building Standards Code) and the 2020 Energy Reach Code, buildout of the proposed Housing Element Update would be consistent with the City's energy use goals.
Resource Conservation Goal 2. The City should take a leadership role in encouraging sustainable procurement, extended producer responsibility and should model innovative strategies to become a zero-waste city.	
Resource Conservation Goal 3. Within renewable limits, encourage the use of local, non-polluting, renewable and recycled resources (water, energy, and material resources).	
Environment and Public Health Goal 1. Protect and enhance environmental health and public health by minimizing and where possible eliminating the levels of pollutants entering the air, soil and water.	**Consistent.** Residential development planned for under the proposed Housing Element Update would incorporate numerous measures, actions, and design features to reduce air pollutant emissions, including construction best management practices, sustainable design features, and additional actions to reduce emissions from construction and operational activities, vehicle idling, fuel use, and other activities. Additionally, MM AQ-1 describes additional emissions reductions measures that would be required for individual residential development projects planned for under the proposed Housing Element Update (refer to Section 3.2, *Air Quality*).
Transportation Goal 1. Create a multi-modal transportation system that minimizes and, where possible, eliminates pollution and motor vehicle congestion while ensuring safe mobility and access for all without compromising our ability to protect public health and safety.	**Consistent.** The proposed Housing Element Update would increase housing opportunities in a jobs-rich City, where currently only 9.4 percent of employees within the City (see Section 3.10, *Population, Employment, and Housing*), thereby reducing commute VMT. The proposed Housing Element Update would generally increase housing proximate to transit, employment, commercial, and entertainment opportunities. Additionally, the City's TDM Ordinance (SMMC Chapter 9.53) would continue to be implemented to proactively manage traffic congestion, reduce dependence on the single occupant automobile, and enhance transportation choices by requiring trip reduction plans.
Transportation Goal 2. Facilitate a reduction in automobile dependency in favor of affordable alternative, sustainable modes of travel.	
Open Space and Land Use Goal 2. Implement land use and transportation planning and policies to create compact mixed-use projects, forming urban villages designed to maximize affordable housing and encourage walking, bicycling, and the use of existing and future public transit systems.	

Table 3.7-4 Consistency of GHG Policies of the Climate Action and Adaptation Plan

1: Increase energy efficiency of new buildings to perform 10 percent better than 2013 Title 24 Standards	**Consistent.** As described in Section 3.5, *Energy*, residential development planned for under the proposed Housing Element Update would permanently increase the demand for electricity and natural gas primarily for building heating and cooling. However, development under the proposed Housing Element Update would, at a minimum, comply with the requirements of the CALGreen and the City's Green Building Standards Code. For example, each new residential development with a height of 4+ stories would be constructed to comply with the City's 2020 Energy Reach Code.
2: Reduce energy use citywide in existing buildings by 1 million kilowatt hours (kWh) annually	**Consistent.** The proposed Housing Element Update would not affect the energy consumption in existing buildings. Where existing buildings are demolished or adapted for residential uses, each individual residential development project would be required to comply with the requirements of the CALGreen and the City's Green Building Standards Code.
3: Increase total citywide solar capacity by 500 kW annually	**Consistent.** As described in Section 3.5, *Energy*, new development would also be required to comply with the Santa Monica Solar Ordinance (SMMC Section 8.106.055), which requires new multi-family dwellings are required to install a solar photovoltaic (PV) system, with a minimum total wattage 2.0 times the square footage of the building footprint (2.0 watts per sf of building footprint).
4: Divert 80 percent of waste from landfills	**Consistent.** As described in Section 3.11, *Utilities*, the City has already achieved a diversion rate of 81 percent that is in excess of the requirements of AB 939 and AB 341 to achieve a 75 percent diversion by 2020. The City remains committed to continuing its existing waste reduction programs and minimization efforts with the programs with goals, targets, and programs to achieve 85 percent diversion rates by 2020 and 95 percent diversion by 2030. Individual residential development projects in the City under the proposed Housing Element Update would be required to comply with all applicable solid waste regulations in effect at the time of operation, including solid waste diversion requirements described in SMMC Section 5.08.400. Additionally, individual residential development projects would comply with the Construction and Demolition Ordinance (SMMC Section 8.108.010 Subpart C) by submitting a waste management plan to the City and diverting at least 70 percent of construction and demolition debris from landfills.
5: Reduce daily vehicle miles traveled within the city by 13,000 miles.	**Consistent.** The proposed Housing Element Update would increase housing opportunities in a jobs-rich City, where only 9.4 percent of employees within the City currently live within the City (see Section 3.10, *Population, Employment, and Housing*). The proposed Housing Element Update would generally increase housing proximate to transit, employment, commercial, and entertainment opportunities. Additionally, the City's TDM Ordinance (SMMC Chapter 9.53) would continue to be implemented to proactively manage traffic congestion, reduce dependence on the single occupant automobile, and enhance transportation choices by requiring trip reduction plans.
6: Increase biking and walking mode share to 15 percent	**Consistent.** As described in Section 3.12, *Transportation*, the proposed Housing Element Update would promote the goals and objectives of the Bike Action Plan and Pedestrian Action Plan by placing housing along multimodal corridors with bicycle lanes and pedestrian facilities. Additionally, new residential development as planned for under the proposed Housing Element Update would continue to be required to pay the Transportation Impact Fee (TIF) to fund transportation improvements such as new sidewalks, crosswalks, and bicycle facilities.

Table 3.7-4 Consistency of GHG Policies of the Climate Action and Adaptation Plan (Continued)

7: Expand public and private infrastructure to support electric vehicle technology	**Consistent.** All new residential development would be required to comply with Zoning Ordinance standards addressing electric vehicle charging infrastructure. For example, electric vehicle charging stations shall be included in new residential developments that are required to provide at least 25 parking spaces and for remodeling and expansion of existing development projects that either have 50 or more existing parking spaces prior to the remodel or expansion or the scope of work adds at least five more parking spaces (SMMC Chapter 9.23.160).
8: Create vibrant mixed-use villages that enhance neighborhoods	**Consistent.** The programmatic approaches in the proposed Housing Element Update reflect both the City's desire to continue to reinforce LUCE policies to develop complete neighborhoods in transit-adjacent mixed-use areas and significant changes in State Housing Law and events that have affected funding streams for affordable housing.
9: Expand the age, diversity and number of trees in the urban forest	**Consistent.** Pursuant to existing programs and policies, the City continue would pursue additional forest expansion at locations appropriate for urban forest development and work to accomplish the desired species composition. New development under the Housing Element Update could occur in proximity to existing City trees potentially resulting in removal or damage of trees. However, all street trees are protected and maintained in place during construction in accordance with the requirements of the City's Tree Code (SMMC Section 7.40.160) and the Urban Forest Master Plan.
10: Reduce water demand by 200,000 gallons per day	**Consistent.** As described in Section 3.13, *Utilities*, residential development planned for under the proposed Housing Element Update would increase water demand. However, each individual residential development would be required to comply with the City's Water Neutrality Ordinance, which requires new development to offset all increases in water demand at a ratio of 1:1 using on-site water efficiency measures, except for 100 percent affordable housing projects, which must offset water demand at a ratio of 0.5:1. In addition, low flow fixtures and other water efficient equipment and plumbing infrastructure would be required in compliance with the City's Green Building Ordinance. Compliance with the adopted Water-Efficient Landscape and Irrigation Standards would also be required for new residential development projects (SMMC 8.108.100). As described in Section 3.5, *Energy,* the residential development planned for under the proposed Housing Element Update may increase the consumption of energy, fuels, and water. However, with the City's continued participation in the CPA as well as implementation of existing City policies and programs (e.g., compliance with CALGreen and the City's Green Building Standards Code) and the 2020 Energy Reach Code, buildout of the proposed Housing Element Update would be consistent with the City's energy use goals.
11: Reduce consumption of carbon intensive foods	**Not Applicable.** Not relevant to the proposed Housing Element Update.
12: Increase the production and consumption of local food	**Not Applicable.** Not Relevant to the proposed Housing Element Update. Residential development planned for under the proposed Housing Element Update would not inhibit the production or consumption of local food.
13: Reduce municipal GHG emissions	**Consistent.** As previously described, residential development under the proposed Housing Element Update would, at a minimum, comply with the requirements of the CALGreen and the City's Green Building Standards Code. Additionally, he proposed Housing Element Update would increase housing opportunities in a jobs-rich City, where only 9.4 percent of employees within the City currently live within the City (see Section 3.10, *Population, Employment, and Housing*), thereby reducing commute VMT.

Table 3.7-4 Consistency of GHG Policies of the Climate Action and Adaptation Plan (Continued)

14: Monitor GHG emissions	**Consistent.** The City would continue to monitor GHG emissions through GHG inventories, etc. Implementation of the proposed Housing Element Update would not conflict with this policy.
15: Adapt to the effects of climate change	**Consistent.** The City would continue to adapt to the effects of climate change through the implementation of existing City programs and policies. Implementation of the proposed Housing Element Update would not conflict with this policy.

Santa Monica General Plan Land Use and Circulation Element

A detailed analysis of the proposed Housing Element Update and its consistency with the LUCE is provided in Section 3.6, *Land Use and Planning*. The LUCE provides guidance for the development of new land uses and the circulation system in the City through 2030. The proposed Housing Element Update envisions that the City would evolve with a balance of residential uses and complementary land uses that supports a strong multi-modal transportation system. Land use changes in transit-served areas of the City be consistent with LUCE goals of focusing land use changes in limited areas of the City near transit and along transportation corridors to preserve the City's existing residential neighborhoods (consistent with Goal LU2 and Goal S2). This approach is expected to increase the use of public transit and reduce the distance between new housing, jobs, and services, thus reducing net increases in City-wide traffic, overall VMT, peak-hour congestion, and GHG emissions.

Sustainable design features, which would be formalized during the entitlement process for each individual residential development project, could include the installation of energy efficient HVAC systems, operable windows to increase air flow, high-performance building envelope to maximize insulation, lighting systems with occupancy sensors and dimmers, energy efficient building materials and appliances, cool roof or green roofs (consistent with LUCE Policy S5.6), and landscaping to reduce building energy loads (consistent with LUCE Policy S5.5). Additionally, many of the individual developments would likely optimize passive design strategies consistent with LUCE Policy LU16.1, which use ambient energy sources (e.g., daylight/solar) to supplement electricity and natural gas to increase the energy efficiency. As described in Section 3.7.2, *Regulatory Setting,* the City incentivizes these types of sustainable design features by offering expedited plan review for buildings pursuing LEED certification, consistent with the Sustainable City Plan's targets for demonstrating an increase in the percentage of residential and non-residential buildings achieving energy efficiency and green construction certifications.

Sustainable City Plan

As described in Section 3.7.2, *Regulatory Setting*, the Sustainable City Plan targets GHG reductions from increased energy efficiency, increased renewable energy production, and reduced transportation-related emissions through increased use of alternative transportation. In particular, the Sustainable City Plan increases the percent of new and substantially-rehabilitated housing that achieves LEED certification at LEED Silver or higher. The LUCE addresses GHG emissions through its land use and transportation decisions such as focusing new land uses near transit, creating complete neighborhoods, supporting infill mixed-use projects, affordable and diverse housing near jobs and transit. In addition, the LUCE supports a complete network of walking and bicycling, transit improvements, carpooling, car-sharing, and TDM strategies to reduce vehicle trips and associated GHG emissions.

The proposed Housing Element Update will continue to promote sustainable land use patterns, consistent with the Sustainable City Plan. New housing in proximity to transit and jobs remains an important strategy to meet the City's housing needs and achieve sustainability goals. In addition, the proposed Housing Element Update further promotes the creation of walkable, mixed-use neighborhoods by increasing housing opportunities in areas that have historically not accommodated housing.

Climate Action and Adaptation Plan

The City's CAAP targets GHG emissions reductions within the following three categories: Zero Net Carbon Buildings, Zero Waste, and Sustainable Mobility. The proposed Housing Element Update would not conflict with the City's energy conservation and GHG reduction goals and policies established in the CAAP.

Based on the above, the proposed Housing Element Update would be consistent with the City's GHG reduction goals and policies established in the LUCE, Sustainable City Plan, and CAAP. Impacts would be *less than significant*.

Project Consistency with State-wide and Regional Mandates, Plans, Policies, and Regulations

The primary focus of many of the State-wide and regional mandates, plans, policies and regulations is to address worldwide climate change. Global GHG emissions, in their aggregate, contribute to climate change, not any single source of GHG emissions alone.

In addition to assessing consistency with local policies and regulations, the significance of the GHG emissions associated with the proposed Housing Element Update has also been evaluated based on whether it would be consistent with the relevant State-wide and regional mandates, plans, policies and regulations to reduce GHG emissions. These include AB 32 and SB 32 (Health and Safety Code Division 25.5), SB 375, Connect SoCal, and other State-wide and regional regulations and programs. Because the City's existing regulatory framework incorporates sustainability goals and policies that would promote a reduction in GHG emissions, development of new residential development planned for under the proposed Housing Element Update would not contribute to significant climate change effects and would not conflict with the GHG reduction goals of Health and Safety Code Division 25.5 and associated GHG reduction plans such as Connect SoCal. Connect SoCal also strives towards enhancing the existing transportation system and integrating land use into transportation planning. Connect SoCal recommends local jurisdictions accommodate future growth within existing urbanized areas to reduce VMT, congestion, and GHG emissions. As previously described, the proposed Housing Element Update would increase housing opportunities in a jobs-rich City, where only 9.4 percent of the employees within the City currently live within the City (see Section 3.10, *Population, Employment, and Housing*). Los Angeles County has built fewer housing units in comparison to existing demand, particularly in the coastal communities thereby requiring individuals to commute greater distances (State Legislative Office 2015). To that end, it is reasonable to assume that mobile GHG emissions associated with the new residents are occurring elsewhere in the SCAG region under baseline conditions. The proposed Housing Element Update would plan for the development of a minimum of 8,895 dwelling units (of which 69 percent must be provided at

lower income levels), thus creating opportunities for many of the employees within the City to live closer to their jobs, reducing VMT and associated GHG emissions on a regional basis. Providing new housing as planned for under the proposed Housing Element Update would create a more diverse, denser, and mixed use City with opportunities to walk, bike, and take transit, consistent with Connect SoCal's alignment of transportation, land use, and housing strategies. As such, the proposed Housing Element Update would be consistent with regional plans to reduce VMT and associated GHG emissions, and impacts would be *less than significant*.

The proposed Housing Element Update would also be consistent with the State's strategies in the 2017 Scoping Plan Update to reduce GHG emissions. The 2017 Scoping Plan Update relies on a broad array of GHG reduction strategies, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms, such as the Cap-and-Trade Program. These potential strategies include increasing the fuel economy of vehicles, reducing the rate of growth in VMT, supporting high speed rail and other alternative transportation options, and use of high efficiency appliances, water heaters, and HVAC systems. The proposed Housing Element Update would benefit from State-wide, regional, and City efforts towards increasing the portion of electricity provided from renewable resources as well as State-wide efforts towards increasing the fuel economy standards of vehicles. Furthermore, as discussed previously, new residential development projects as planned for by the proposed Housing Element Update would continue to be subject to the City's requirements for sustainable design, energy efficiency, water efficiency, and VMT reduction – all of which are consistent with state and regional mandates that address GHG emissions. While CARB is in the process of developing a framework for the 2030 reduction target, the proposed Housing Element Update would support implementation of these potential reduction strategies identified by the CARB.

Based on the above, the proposed Housing Element Update would be consistent with the California RPS, SB 350, SB 100, Title 24 of the CCR, CalGreen, SB 375, and recommendations of the State Attorney General, OPR and Climate Action Team. Therefore, the proposed Housing Element Update would be consistent with applicable plans, policies, and regulations and impacts would be *less than significant*.

3.7.5 Cumulative Impacts

Due to the global context of climate change, the analysis of GHG emissions is cumulative in nature because impacts are caused by cumulative global emissions. As described in Section 3.7.4, *Project Impacts and Mitigation Measures*, the proposed Housing Element Update would have less than significant impacts related to GHG emissions. Therefore, the implementation of the proposed Housing Element Update would not have a considerable contribution to a cumulatively significant impact related to GHG emissions.

3.0 Environmental Impact Analysis and Mitigation

3.8 Noise

The ambient noise environment in the City is largely attributed to noise from vehicle traffic and public transit (e.g., Big Blue Bus and Metro E [Expo] Light Rail Transit line) and to a lesser extent pedestrian and recreational activities. In some areas (e.g., Downtown), nightlife and community events contribute to the ambient noise environment and at the Santa Monica Municipal Airport aircraft takeoff and landing activities create noise extending beyond the airport's boundaries. Construction projects also generate periodic peak daytime noise levels. New residential development planned for under the proposed Housing Element Update would result in additional construction noise. Operationally, new residential development planned for under the proposed Housing Element Update would create increases in noise (e.g., new vehicle trips).

This section of the Environmental Impact Report (EIR) describes the existing noise environment and evaluates the potential noise and ground-borne vibration impacts that could result from implementation of the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update). This analysis addresses both temporary construction-related impacts as well as long-term operational noise impacts that could result from residential development planned for under the proposed Housing Element Update.

3.8.1 Fundamentals of Sound and Environmental Noise

Noise is typically defined as unwanted sound that interferes with normal activities or otherwise diminishes the quality of the human or natural environment. Prolonged exposure to high levels of noise is known to have several adverse effects on people, including hearing loss, communication interference, sleep interference, physiological responses, and annoyance (Federal Interagency Committee on Urban Noise [FICUN] 1980). The ambient noise environment (i.e., background noise level) typically includes noise generated from both near and distant noise sources. These can vary from an occasional aircraft or train passing by to continuous noise from sources such as vehicle traffic along an arterial road or pedestrian activity within open space recreational areas or other places where people congregate.

The City is a fully developed urban area with a range of land use types. This urban configuration results in potential noise conflicts from construction and land uses occurring in close proximity to adjacent uses and structures.

Sound is technically described in terms of the loudness (i.e., amplitude) and frequency (i.e., pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Sound frequency is measured in terms of hertz (Hz), and the normal human ear can detect sounds ranging from about 20

to 15,000 Hz. All sounds in the wide range of frequencies are not heard equally well by the human ear, which is most sensitive to frequencies in the 1,000 to 4,000 Hz range. Since the human ear is not equally sensitive to sound at all frequencies (i.e., between 1,000 and 8,000 cycles per second), a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel (dBA) scale adjusts very high and very low frequencies to approximate the human ear's lower sensitivity to those frequencies since. Decibels are based on a logarithmic scale, which compresses the wide range in sound pressure levels to a more useable range of numbers. This is called "A-weighting" and is commonly used in the measurement of ambient community environmental noise. Unless otherwise noted, all decibel measurements presented in the following noise analysis are dBA.

In terms of human response to noise, a noise level increase of 3 dBA is barely perceptible to most people, a 5-dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness (100 percent increase) (FICUN 1980; Harris Miller Miller & Hanson Inc. 2006).

According to the Santa Monica General Plan Noise Element, everyday sounds within the City normally range 30 to 100 dBA. Examples of various sound levels in different environments are shown in Table 3.8-1.

Table 3.8-1 Representative Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Power saw	—110—	Rock band
Jet fly-over at 100 feet		Crying baby
Subway	—100—	
Gas lawnmower at 3 feet		
	—90—	
Jack hammer		Food blender at 3 feet
	—80—	Garbage disposal at 3 feet
Noisy urban area during daytime		
Gas lawnmower at 100 feet	—70—	Vacuum cleaner at 10 feet
		Normal speech at 3 feet
Heavy traffic at 300 feet	—60—	Sewing machine
Air conditioner		Large business office
Quiet urban area during daytime	—50—	Dishwasher in next room
		Refrigerator
Quiet urban area during nighttime	—40—	Theater, large conference room (background)
Quiet suburban area during nighttime		
	—30—	Library
Quiet rural area during nighttime		Bedroom at night, concert hall (background)
	—20—	
		Broadcast/recording studio
	—10—	
Lowest threshold of human hearing	—0—	Lowest threshold of human hearing

Source: California Department of Transportation (Caltrans) 1998.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider the effect of noise upon people to be largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Each noise rating scale applicable to this analysis is defined as follows:

- *Equivalent continuous noise level (L_{eq})* is the average acoustic energy content of noise for a given period. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. This rating scale does not "weight" or "penalize" noise, depending on whether it occurs during the day or the night.
- *Community Noise Equivalent Level (CNEL)* is a 24-hour average L_{eq} with a 5-dBA "weighting" or "penalty" during the hours of 7:00 P.M. to 10:00 P.M. and a 10-dBA "weighting" or "penalty" during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL. CNEL is often used due to its utility in identifying noise-related sleep disturbance effects, often a key community concern for increases in noise levels. This metric is typically used by State and local agencies for noise analyses and environmental documents compliant with the California Environmental Quality Act (CEQA).
- *Day-night average noise level (L_{dn})* is a 24-hour average L_{eq} with a 10 dBA "weighting" or "penalty" during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA Ldn. This metric is typically used by Federal agencies (e.g., Federal Aviation Administration [FAA]) for noise analyses and environmental documents compliant with the National Environmental Policy Act (NEPA).
- *Minimum instantaneous noise level (L_{min})* is the minimum instantaneous noise level experienced during a given period.
- *Maximum instantaneous noise level (L_{max})* is the maximum instantaneous noise level experienced during a given period.

Noise levels from a particular source decline (i.e., attenuate) as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding by buildings or other structures, also intensify or reduce the noise level at a location. A common method for estimating roadway noise is that for every doubling of distance from the source, the noise level is reduced by approximately 3 dBA at acoustically "hard" locations (i.e., mostly asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., exposed soil or landscaping, such as grass).

Noise from stationary sources – including construction noise – is reduced by approximately 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by approximately 5 dBA, while a solid wall or berm can reduce noise levels by up to 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller Miller & Hanson Inc. 2006).

3.8.1.1 Vibration

Service vehicles, such as delivery trucks and garbage trucks can generate ground-borne vibration in the vicinity of residences and other vibration-sensitive land uses.

Vibration is sound radiated through the ground. 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 ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a road is smooth (e.g., newly constructed or newly re-paved) the ground-borne vibration from traffic is rarely perceptible. The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a rumble noise. The rumble is the noise radiated from the motion of the room surfaces. In essence, the room surfaces act like a giant loudspeaker causing what is called ground-borne noise. Ground-borne vibration rarely disturbs people in outdoor settings. Although the motion of the ground may be perceived, without the effects associated with the shaking of a building the motion does not provoke the same human reaction. In addition, the rumble noise that usually accompanies the building vibration is perceptible only inside buildings. Typically, ground-borne vibration generated by anthropogenic (i.e., human-made) activities attenuates rapidly with distance from the source of the vibration. Anthropogenic ground-borne vibration issues are therefore usually confined to short distances from the source.

The ground motion caused by vibration can be measured as particle velocity in inches per second (in/sec) (Harris Miller Miller & Hanson Inc. 2006; California Department of Transportation [Caltrans] 2013). The vibration level at which continuous vibration is strongly perceptible is 0.1 in/sec. For incidental ground-borne vibration, 0.035 in/sec is barely perceptible while 2.0 in/sec is felt severely (Caltrans 2013). General human response to different levels of ground-borne vibration velocity levels are described in Table 3.8-2 and guidelines for the effect of vibration levels in structures are summarized in Table 3.8-3.

Table 3.8-2 Human Response to Different Levels of Ground-borne Vibration

Human Response	Transient (in/sec)	Continuous (in/sec)
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.9	0.1
Severe/Disturbing	2	0.4

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
Source: Caltrans 2013.

Table 3.8-3 Vibration Thresholds for Potential Structural Damage

Structure and Condition	Transient (in/sec)	Continuous (in/sec)
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1	0.5
Modern industrial/commercial buildings	2	0.5

Source: Caltrans 2013.

3.8.2 Environmental Setting

Land uses within the City include a range of residential, commercial, institutional, and recreational areas that are common to urbanized coastal areas in Southern California (refer to Section 3.6, *Land Use and Planning*). According to Federal Interagency Committee on Noise (FICON), the authority on Federal policy and guidance regarding noise, typical suburban communities have an outdoor noise level of 53 to 57 L_{dn}, while more densely populated urban areas have sound levels in the range of 63 to 67 L_{dn} (FICON 1992). These typical noise levels are generally corroborated by a variety of noise studies that have been conducted for various projects throughout the City over the past decade. The City contains a municipal airport; however, the primary source of noise within the City is vehicle traffic, particulalrly along Interstate (I-) 10 (Santa Monica Freeway) and major arterials and boulevards. Other sources of noise associated with land uses in the City include, but are not limited to, the following: exposed mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] equipment, elevator shafts, etc.); delivery, loading, and garbage truck operations; and other noise sources associated with restaurant, retail and residential uses (e.g., amplified music, talking, etc.). These sources of noise are described in further detail below.

3.8.2.1 Mobile Sources

Arterial Roadways

I-10 (Santa Monica Freeway) runs through the City, between Centinela Avenue and State Route (SR-) 1 (Pacific Coast Highway). The high volume of daily vehicle trips along I-10 are a major source of vehicle noise. In particular, the portions of I-10 east of Lincoln Boulevard can carry a relatively high percentage of heavy truck traffic (e.g., between 5 to 10 percent), which can add to higher noise levels. I-10 runs through the through the City for approximately 3 miles, passing a mix of residential, commercial, light industrial and residential uses. Over this segment I-10, is sometimes located at or above the grade of these existing uses, with some areas screened by existing sound walls, and other areas left unprotected. Within the Downtown, I-10 is located within a deep road cut (approximately 30 to 50 feet below ground surface [bgs]), which tends to contain the noise generated and limits the area affected by this noise source. Thus, noise spill over into City neighborhoods can vary substantially by area. Similarly, SR-1 runs parallel to Ocean Avenue throughout the Downtown to the west; however, this roadway is located approximately 100 feet below the adjacent Palisades Bluffs, so the vehicle noise generated along this highway is generally blocked from the Downtown.

SR-1 and I-10 (pictured to the left and right, respectively) serve as major transportation corridors in the City and generate continuous vehicle noise.

The majority of traffic noise within the City is generated on arterial streets and boulevards such as Santa Monica Boulevard, California Avenue, and Lincoln Boulevard, which traverse the City in an extensive grid network. Some of these roadways, such as Lincoln Boulevard, can carry in excess of 40,000 vehicle trips per day. Noise generated by passenger vehicles, motorcycles, buses, and heavy-duty trucks on streets is the common source of sustained noise, and is often in close proximity to sensitive land uses. Noise contours along the City's arterial roadway streets were modeled in 2009 during the preparation of the Land Use and Circulation Element (LUCE) Program EIR. Existing roadway noise levels typically ranging from 60 dBA CNEL to 65 dBA CNEL on north-south and east-west routes that traverse the City (City of Santa Monica 2010; see Figure 3.8-1). North-south routes such as San Vincente Boulevard, Montana Avenue, Wilshire Boulevard, Santa Monica Boulevard, Colorado Boulevard, Pico Boulevard, and Ocean Park Boulevard consistently range from 60 dBA CNEL to 65 dBA CNEL, with noise generally attenuating to 55 dBA CNEL within half a City block. East-west routes such as Ocean Avenue, 4th Street, 7th Street, Lincoln Boulevard, 20th Street, and 26th Street were likewise identified in the LUCE Program EIR as ranging from approximately 60 dBA CNEL to 65 dBA CNEL (City of Santa Monica 2010; see Figure 3.8-1).

Existing roadway noise levels in the City were calculated using previously modeled vehicle operations and noise levels from the LUCE Program EIR. The Adjusted Existing Baseline (2020) noise levels for primary roadway corridors within the City (CNEL at 100 feet) were calculated based on adjustments to the noise levels that were modeled for the LUCE Program EIR. These adjustments account for changes in traffic levels following the preparation of the LUCE Program EIR. The noise levels in the LUCE Program EIR were modeled using the Federal Highway Administration's (FHWA's) Traffic Noise Model 2.5 (City of Santa Monica 2010). The percentage difference in ADT was then used to calculate a CNEL increase or decrease based on the assumptions that vehicle fleet mix and 24-hour vehicle distribution remained constant over time (see Table 3.8-4).

3.8-7

wood.

City of Santa Monica
Existing Roadway Noise Contours

FIGURE 3.8-1

Table 3.8-4 Adjusted Existing Baseline (2020) Roadway Noise Levels

Corridor	Roadway Segment	LUCE (2009) ADT	LUCE (2009) CNEL at 100 feet	Adjusted Baseline (2020) ADT	Percent Change ADT	Difference in CNEL at 100 feet	Adjusted Baseline (2020) CNEL at 100 feet
Ocean	Ocean Ave N of Colorado Ave	23,460	62.5	22,000	-6.22	-0.3	62.2
2nd Street	2nd St N of Santa Monica Blvd	10,010	58.8	6,000	-40.06	-2.2	56.6
Colorado	Colorado Ave W of 4th St	13,800	60.2	5,800	-57.97	-3.8	56.4
4th Street	4th St N of I-10 WB Off-Ramp	27,730	63.2	37,700	35.95	1.3	64.5
4th Street	4th St S of Pico Blvd	25,160	62.8	11,000	-56.28	-3.6	59.2
5th Street	5th St S of Santa Monica Blvd	10,040	58.8	8,400	-16.33	-0.8	58.0
Montana	Montana Ave E of 7th St	9,950	58.7	8,100	-18.59	-0.9	57.8
Wilshire	Wilshire Blvd W of Lincoln Blvd	26,040	62.9	23,500	-9.75	-0.4	62.5
Santa Monica	Santa Monica Blvd W of Lincoln Blvd	14,220	60.3	12,500	-12.10	-0.6	59.7
Lincoln	Lincoln Blvd N of I-10 WB Off-Ramp	34,180	64.1	46,100	34.87	1.3	65.4
Pico	Pico Blvd E of Lincoln Blvd	13,950	60.2	13,900	-0.36	0.0	60.2
Ocean Park	Ocean Park Blvd E of Lincoln Blvd	14,680	60.4	11,000	-25.07	-1.3	59.1
20th Street	20th St N of Wilshire Blvd	15,040	60.5	8,300	-44.81	-2.6	57.9
20th Street	20th St N of Pico Blvd	17,840	61.2	5,200	-70.85	-5.4	55.8
Ocean Park	Ocean Park Blvd E of 23rd St	20,240	61.8	23,300	15.12	0.6	62.4
Olympic	Olympic Blvd W of Cloverfield Blvd	26,070	65.8	33,900	30.03	1.1	66.9
26th Street	26th St S of San Vicente Blvd	11,720	59.4	7,900	-32.59	-1.7	57.7
San Vicente	San Vicente Blvd W of 26th St	25,270	63.2	18,700	-26.00	-1.3	61.9
Montana	Montana Ave W of 26th St	17,580	61.2	16,200	-7.85	-0.4	60.8
Santa Monica	Santa Monica Blvd E of 26th St	25,380	62.8	26,700	5.20	0.2	63.0
Olympic	Olympic Blvd E of 26th St	26,020	65.8	24,500	-5.84	-0.3	65.5

Notes:
ADT = Average Daily Traffic; CNEL = Community Noise Equivalent Level.
Please refer to the methodology discussion under Section 3.8.4, *Impact Assessment and Methodology*, and to the Transportation Study in Appendix F for more information regarding calculations.

Metro E (Expo) Light Rail Transit Line

The Metro E (Expo) Light Rail Transit (LRT) line spans approximately 15.2 miles between Downtown Los Angeles and Downtown Santa Monica. Within the City, the Metro E (Expo) LRT line spans approximately 3 miles within the Downtown, Memorial Park, and Bergamot areas through the center of the City. The Metro E (Expo) LRT line runs roughly parallel to I-10, along segments of Colorado Avenue and Olympic Boulevard, generating noise as part of its operational activities. Light rail vehicles travel in both east- and west-bound directions throughout with approximately 80 trains per day; operations cease for approximately 3 hours in the early morning hours (e.g., generally between the hours of 1:00 A.M and 4:00 A.M. (Los Angeles County Metropolitan Transportation Authority [Metro] 2020). Noise-sensitive receptors along the Metro E (Expo) LRT line include single- and multi-family residences, schools, and other institutions (e.g., Crossroads Elementary School, Santa Monica High School, etc.). Several traction power substations (TPSS) are also present along the Metro E (Expo) LRT line, and are the only ancillary equipment associated with the Metro E (Expo) LRT line. The ventilation provided at each substation is the dominant noise source of most TPSS units. Several of these substations are adjacent to residential land uses; however, design features ensure that maximum TPSS noise levels remain below 50 dBA at 50 feet (Exposition Metro Line Construction Authority 2009).

Santa Monica Municipal Airport

Aircraft operations at Santa Monica Municipal Airport (SMO) generate noise in the eastern portion of the City. In response to concerns from the community regarding airport noise and a long-standing goal of minimizing aircraft noise exposure, SMO established the Santa Monica Airport Noise Management Program. This program summarizes aircraft operations in an annual report, monitors airport noise exposure and noise violations, and provides recommendations to the public and Los Angeles County Airport Land Use Commission (ALUC) for reducing airport noise operations and improving the management of noise at SMO.

The Santa Monica Municipal Airport is located in the eastern portion of the City and regularly generates noise as part of its aircraft operations.

In 2019 (the most recent year in which data is tabulated), SMO managed a total of 77,038 aircraft operations (City of Santa Monica 2020a).[1] Of these operations, approximately 92 percent were from propeller aircraft, approximately 4 percent were from helicopter operations, and approximately 4 percent were from jet aircraft, with jet aircraft operations typically representing the loudest noise occurrences. According to the Calendar Year 2019 CNEL Contours for SMO, the 60 dBA CNEL contour is almost entirely located within the SMO property boundary, except for a small portion along the airport's northwestern boundary that is adjacent to a commercial business park (City of Santa Monica 2020b).

[1] Aircraft operations are defined as one departure, one arrival, one arrival associated with a closed pattern, or one departure associated with a closed pattern.

City of Santa Monica
Municipal Airport Noise Contours

FIGURE 3.8-2

SMO operates 24 hours per day and 7 days per week; however, the Santa Monica Municipal Code (SMMC) establishes curfews for late night aircraft arrivals and prohibitions on nighttime aircraft departures. Based on the 2019 Annual Operations Report, the most recent publicly available data, operations at SMO resulted in 10 curfew violations (pursuant to SMMC Section 10.04.04.080[b]), and a total of 46 noise violations in 2019.

On February 1, 2017, the City entered a consent decree with the FAA to close SMO in 2028 and shorten the runway from 4,973 feet in length to 3,500 feet by December 7, 2017 to reduce the number of flight operations at the airport. Under this agreement, the City is required to maintain stable and continuous operations at SMO until its planned closure on December 31, 2028 (City of Santa Monica 2018a).

3.8.2.2 Stationary Sources

Noise in the City also occurs as a result of various stationary sources associated with typical urban uses (e.g., commercial, residential, office, public facilities, utilities, etc.). The major sources of stationary noise in the City are discussed below.

Commercial and Industrial Sources

Commercial uses can generate noise through the use of heating and cooling equipment, landscape maintenance activities (e.g., gasoline-powered lawnmowers, weed cutters, etc.) and trash collection. Additional noise can emanate from within businesses and result from truck deliveries. Delivery operations include noise associated with large diesel truck engines and beeping alarms; an idling diesel engine generates noise levels of between 64 dBA L_{eq} and 66 dBA L_{eq} at a distance of 75 feet (City of Santa Monica 2020c). Parking garages can generate noise levels of between 49 dBA L_{eq} and 74 dBA L_{eq} at a distance of 50 feet from the source (City of Santa Monica 2020c). Large HVAC systems associated with commercial and mixed-use buildings can generate noise levels which range between 50 dBA L_{eq} and 65 dBA L_{eq} at a 50-foot distance (City of Santa Monica 2020c). SMMC Section 4.12.130 prohibits locating HVAC and other stationary mechanical equipment adjacent to residential uses unless it complies with exterior noise standards provided in SMMC Section 4.12.060.

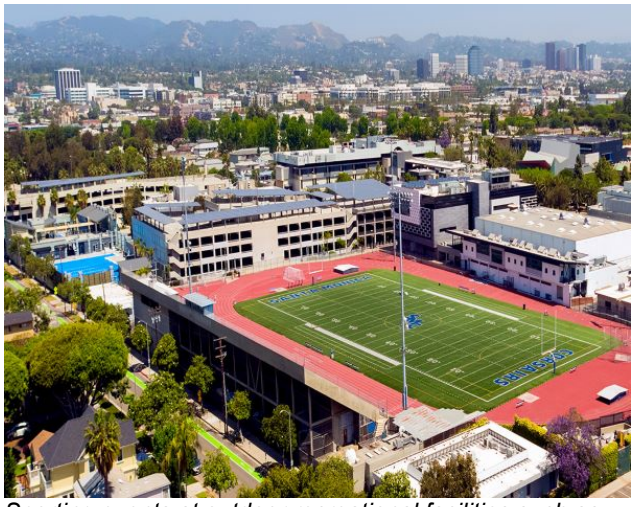
During the evening hours, operation of late-night businesses such as bars, restaurants, and nightclubs can expose residents and visitors to nuisance noise including live music, loud late-night conversations, etc. Such noises do not constitute long-term or extensive, high-level exposures; however, the potential for increased peak noise levels in the early morning and late at night can result in sleep disturbance for residents. Therefore, SMMC Sections 4.12.140 and 4.12.170 include requirements for nighttime noise reduction and a review process for proposed projects (see Section 3.8.3, *Regulatory Setting*).

As described in the LUCE Program EIR, industrial uses comprise approximately 3 percent of the City's land area and are largely located in the Olympic Boulevard corridor between the Downtown and Bergamot Area. These industrial uses are primarily parallel to Olympic Boulevard, between the I-10 freeway and Colorado Avenue. Industrial sources of noise in this area include businesses engaged in design, development, manufacturing, fabricating, testing, and product assembly. Most light industrial uses in the City consist of a variety of small businesses, such as storage unit rentals, video production, and distribution services. City Yards, located at 2500 Michigan Avenue, is one of the City's largest industrial

properties and is used as a base for the City's maintenance operations. On-site uses include facilities and fleet maintenance, resource recovery and recycling, water and wastewater operations, a fire department training area, and hazardous waste storage. Existing daytime noise levels measured at City Yards and in the vicinity of the surrounding industrial area generally range from 55.2 dBA L_{eq} to 75.4 dBA L_{eq} (City of Santa Monica 2018b).

Recreational Uses and Schools

Recreational uses, schools, and related facilities exist throughout the City and generate noise depending on the type of recreational or educational facility, time of day, number of attendees and/or students, class schedule, and nature of the specific activities / events on-site. The type and level of noise generated by each land use varies depending on the types of activities occurring on-site. For instance, recreational uses in City parks may generate noise due to children playing on playgrounds, sports games, landscaping and maintenance, and periodic conversations between park visitors. Conversely, outdoor sports facilities that attract large numbers of spectators, such as high school football fields, can produce noise that affects nearby receptors. The level of noise produced is highly variable and depends on the size of the facility and the attendance for a specific event. Noise associated with schools include bells (e.g., attendance and dismissal), public announcement systems (e.g., announcements), children's voices from recess/outdoor play areas, student conversations, and vehicle traffic during student pick-up and drop-off times. The greatest noise levels generated by park activities would come from sports events, in which spectators rather than players would generate the majority of noise. In such case, a single shouting person can generate a noise level of approximately 80 to 90 dBA from a distance of 3 feet (ACOUSTICS 2011), while a crowd of 20 screaming people can generate a noise level of approximately 69 dBA at a distance of 50 feet (Culbertson, Adams & Associates, Inc. 2002). Use of a public address system can require 6 to 10 dB more than crowd noise to perform adequately during a sporting event, though this peak noise level is infrequent and avoidable when the public address system is offset from peak crowd noise.



Sporting events at outdoor recreational facilities such as the Corsair Field at Santa Monica College can produce noise that affects nearby receptors.

Construction

Construction projects in the City generate construction noise, including various public improvements and the construction of multiple new mixed-use and hotel buildings. While construction occurs throughout the City, the majority of construction projects are concentrated in the Downtown. Construction noise is typically generated during weekdays between the standard construction hours identified in the City's Noise Ordinance (SMMC Section 4.12.110). The noise levels generated by construction activities vary depending on the nature of each project and the types of construction equipment involved. Construction

noise levels are estimated based on a project's anticipated construction equipment inventory, estimated duration of construction, anticipated construction phasing distance, and between the construction activities at the construction site and the noise sensitive land uses (refer to Table 3.12-5). See Section 3.8.4, *Impact Assessment and Methodology*, for a more detailed discussion of the typical noise levels generated by construction equipment.

The majority of construction noise in the City is focused in the Downtown, and typically generated during weekdays between the standard construction hours identified in the City's Noise Ordinance.

An interior renovation would generate minimal amounts of exterior noise whereas a major development project with ground-disturbing activities (e.g., pile driving) would have the potential to generate noise levels of up to 101 dBA at 50 feet. For example, the Initial Study / Mitigated Negative Declaration (IS/MND) for the proposed Santa Monica Post Office Productions (State Clearinghouse [SCH] No. 2015121068) described that the project would involve the development of additional floor area in the rear of the building, extension of basement, and partial third floor. The construction techniques would involve excavation and the use of typical "drill and pour" cast-in-place concrete. These activities would occur over a period of 18 months. Approximate noise levels anticipated to occur at nearby sensitive receptors would be a maximum of 94 dBA at 20 feet, 86 dBA at 50, and 80 dBA at 100 feet during the excavation phase. In contrast the EIR for the proposed Ocean Avenue Project (SCH No. 2018121060) described that the project would require demolition of approximately 44,450 square feet (sf) of existing structures and surface parking lots, excavation of approximately 108,000 cubic yards (cy) of soil for the subterranean parking garage followed by construction of the five proposed new buildings. These activities would occur over a construction period of 3 years. Approximate noise levels anticipated to occur at nearby sensitive receptors would be a maximum of 101 dBA at 25 feet and 89 dBA at 100 feet during the demolition phase. Noise levels during the excavation/grading phase would reach a maximum of 99 dBA at 25 feet and 87 dBA at 100 feet. See Section 3.8.4, *Impact Assessment and Methodology* for a more detailed discussion of the typical noise levels generated by construction equipment.

3.8.2.3 Noise and Vibration Sensitive Land Uses

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure and the types of activities typically involved at the receptor location. Land uses identified by the City's Noise Ordinance (SMMC Chapter 4.12) as noise sensitive land uses include schools, hospitals, and institutional uses such as churches, museums, and libraries within 500 feet. The City also considers residential units to be noise sensitive land uses. Vibration sensitive land uses are affected by existing construction activity in the City as well as traffic and transportation vehicles, especially heavy-duty vehicles (e.g., delivery trucks) on local roadways. Vibration sensitive land uses, including historic buildings, are typically more structurally fragile, due to older building materials and techniques.

Designated City landmarks and structures potentially eligible for City landmark designation are identified within the City's Historic Resources Inventory (HRI) (refer to Section 3.4, *Cultural Resources*).

3.8.3 Regulatory Setting

Various standards have been developed to address the compatibility of land uses and noise levels. The applicable standards are presented in the following discussion. Special emphasis is placed on land uses that are considered to be noise sensitive, as previously discussed.

3.8.3.1 Federal Policies and Regulations

No Federal noise requirements or regulations apply to local actions of the City. However, Federal regulations influence the audible landscape where Federal funding is involved. The FHWA requires abatement of highway traffic noise for highway projects through rules in 23 Code of Federal Regulations (CFR) Part 772. Further, the FTA and Federal Railroad Administration (FRA) each recommend thorough noise and vibration assessments through comprehensive guidelines for any mass transit or high-speed railroad projects that would pass by residential areas. For housing constructed with assistance from the U.S. Department of Housing and Urban Development, minimum noise insulation standards must be achieved (24 CFR Part 51, Subpart B).

3.8.3.2 State Policies and Regulations

State Department of Health Services

The California State Office of Noise Control in the Department of Health Services has established guidelines to provide a community with a noise environment that it deems to be generally acceptable. Specifically, ranges of noise exposure levels have been developed for different land uses to serve as the primary tool a city uses to assess the compatibility between land uses and outdoor noise (see Table 3.8-5). To achieve a clearly compatible land use/noise zone, a noise level standard of 60 dBA L_{dn} is used for the exterior living areas of new single-family, duplex, and mobile home residential land uses. A 45 dBA L_{dn} to 65 dBA L_{dn} noise level standard is used for the interior and exterior of all new multi-family residential uses. Where a land use is denoted as "normally acceptable" for the given L_{dn} noise environment, the highest noise level in that range should be considered the maximum desirable for conventional construction which does not incorporate any special acoustic treatment. The acceptability of noise environments classified as "conditionally acceptable" or "normally unacceptable" depends on the anticipated amount of time that will normally be spent outside the structure and the acoustic treatment to be incorporated in the structure's design.

California Building Code

California Code of Regulations, Title 24 includes Sound Transmission Control requirements that establish uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwelling units other than detached single-family units. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room of new dwellings. Where such units are proposed in areas subject to exterior noise levels greater than 60 dBA

CNEL, the standards require an acoustical analysis demonstrating how dwelling units have been designed to meet the interior standard. Dwelling units are to be designed so that interior noise levels would meet this standard for at least 10 years from the time of a building permit application.

California Air Resources Board Anti-Idling Measure

In 2004, the California Air Resource Board (CARB) adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling (California Code of Regulations, Title 13, Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at a time at a location, thereby minimizing vehicle noise from idling vehicles.

California Department of Transportation

The Caltrans Transportation and Construction Vibration Guidance Manual provides guidance and procedures that *"should be treated as screening tools for assessing the potential for adverse vibration effects related to human perception, structural damage, and equipment. This document is not an official policy, standard, specification, or regulation, and should not be used as such."*

As discussed above, the Caltrans vibration criteria for assessing structural damage and human perception are shown in Table 3.8-2 and Table 3.8-3, respectively.

3.8.3.3 Regional Policies and Regulations

Los Angeles County Airport Land Use Plan

The Los Angeles County ALUC prepared and adopted the Los Angeles County Airport Land Use Plan (ALUP) to coordinate land use planning for projects within any public use airport boundary. The ALUP serves to protect the public health, safety, and welfare through ensuring the appropriate development or expansion of airports and the establishment of regulations for development of land uses that are compatible with airports. The ALUP has adopted planning boundaries for each of the 14 general aviation and air carrier airports within its jurisdiction, including SMO. The ALUP establishes policies and programs applicable to all of these airports which relate to land use planning, noise, and safety. Local actions, including rezoning and new housing projects located within an Airport Influence Area (AIA) must be submitted to the ALUC for review.

3.8.3.4 Local Policies and Regulations

Santa Monica General Plan Land Use and Circulation Element

Policies relating to noise were identified in the following goals of the LUCE:

Goal N1: Protect, preserve, and enhance the residential neighborhoods.

Policy N1.4. Preserve and protect existing neighborhoods against potential impacts related to development, traffic, noise, air quality and encroachment of commercial activities.

Santa Monica General Plan Noise Element

The Noise Element addresses the issue of noise by identifying sources of noise in the City and providing objectives and policies that ensure that noise from various sources would not create an unacceptable noise environment. The Noise Element also provides guidance about acceptable noise levels based upon the proposed land use (see Table 3.8-5). Based on these standards, which follow the State guidelines, exterior noise levels of 60 dBA CNEL and lower are "clearly compatible" for residential uses and commercial uses that include hotels, motels, and transient lodging; while exterior noise levels of up to 70 dBA CNEL are "compatible with mitigation." "Clearly compatible" is defined as the highest noise level that should be considered for the construction of new buildings that incorporate conventional construction techniques, but without any special noise insulation requirements. "Compatible with mitigation" includes the highest noise levels that should be considered only after detailed analysis of the noise reduction requirements are made and needed noise insulation features are determined. The City's noise standard for the design of commercial hotels, motel, and transient lodging requires a noise level at or below 45 dBA CNEL for interior areas and 65 dBA CNEL for exterior areas: exterior areas include pools and other outdoor recreational areas of the hotel.

In addition, the Noise Element places limitations on noise produced by equipment operation, human activities, and construction. Applicable policies and actions from the Noise Element are identified below.

Policy 1: Provide for measures to reduce noise impacts from transportation noise sources.

- Action 1.2 Provide for continued evaluation of truck movements and routes in the City to provide effective separation from residential or other noise sensitive land uses.

Policy 2: Incorporate noise considerations into land use planning decisions (as they apply to finished projects, not construction actions).

- Action 2.2 Through the Noise Ordinance, incorporate noise reduction features during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses. The noise referral zones identified in Exhibits 6 and 7 (areas exposed to noise levels greater than 60 dBA CNEL) can be used to identify locations of potential conflict. New developments would be permitted only if appropriate mitigation measures are included such that the standards contained in this Element are met.
- Action 2.3 Continue to enforce the State of California Uniform Building Code that specifies that the indoor noise levels for residential living spaces not exceed 45 dBA CNEL due to the combined effects of all noise sources. The State requires implementation of this standard when the outdoor noise levels exceed 60 dBA CNEL. The Noise Referral Zones (60 dBA CNEL) can be used to determine when this standard needs to be addressed. The Uniform Building Code (specifically, the California Administrative Code, Title 24, Part 6, Division T25, Chapter 1, Subchapter 1, Article 4, Sections T25-28) requires that "Interior community noise levels (CNEL/L_{dn}) with windows closed, attributable to exterior sources shall not exceed an annual CNEL or L_{dn} of 45 dBA in any habitable room." The code requires that this standard be applied to all new hotels, motels, apartment houses and dwellings other than detached single-family dwellings. The City should also, as a matter of policy, apply this standard to single-family dwellings.

Table 3.8-5 Land Use/ Noise Compatibility Matrix

Proposed Land Use Categories		Compatible Land Use Zones (dBA CNEL)					
Categories	**Uses**	**<60**	**60-65**	**65-70**	**70-75**	**75-80**	**>80**
RESIDENTIAL	Single Family, Duplex, Multiple Family	A	B	B	C	D	D
RESIDENTIAL	Mobile Home	A	B	C	C	D	D
COMMERCIAL Regional, District	Hotel, Motel, Transient Lodging	A	B	B	C	C	D
COMMERCIAL Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater	A	A	A	B	B	C
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Office Building, Research and Development, Professional Offices, City Office Building	A	A	B	B	C	D
COMMERCIAL Recreation INSTITUTIONAL Civic Center	Amphitheatre, Concert Hall, Auditorium, Meeting Hall	B	C	C	D	D	D
COMMERCIAL Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	B	B	D	D
COMMERCIAL General, Special INDUSTRIAL, INSTITUTIONAL	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	B	B	B
INSTITUTIONAL General	Hospital, Church, Library, Schools' Classroom, Day Care	A	B	C	C	D	D
OPEN SPACE	Parks	A	A	B	C	D	D
OPEN SPACE	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	A	A	A	B	C	C
AGRICULTURE	Agriculture	A	A	A	A	A	A

Notes:

ZONE A – Clearly Compatible: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

ZONE B – Compatible with Mitigation: New construction or development (i.e., substantial remodels and additions representing 50% or more of existing square footage, including garage square footage), should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems on air conditioning, will normally suffice.

ZONE C – Normally Incompatible: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

ZONE D – Clearly Incompatible: New construction or development should generally not be undertaken.

Policy 3: Develop measures to control non-transportation noise impacts.

Action 3.3 Require that new commercial and residential projects to be built near existing residential land use demonstrate compliance with the City Noise Ordinance prior to approval of the project. This shall include a requirement that all project plans show the location of mechanical equipment in relation to adjacent noise-sensitive (i.e., residential) uses. Require that all Building Permit applicants, including contractors, sign a form acknowledging requirements of the noise ordinance, and assuming responsibility for compliance with the noise ordinance. This is particularly important for the non-resident contractor installing mechanical equipment.

Policy 4: The City shall develop measures to control noise impacts.

Action 4.1 Consider incorporating provisions into the Noise Ordinance to address the problems of construction noise:

- Clearly state the permitted hours of construction and expressly prohibit construction on Sunday.
- Consider exempting the resident/builders in single family zones from the Sunday construction and maintenance ban provided such construction is limited to the hours specified in the Noise Ordinance or meets the noise limits set in the Noise Ordinance.
- During the environmental review of all projects requiring extensive construction, determine the proximity of the site to the established residential areas. If the project will involve pile-driving, nighttime truck hauling, blasting, 24-hour pumping (important in coastal excavations), or any other very high noise equipment, the environmental review shall include a construction noise alternative analysis. From this analysis, specific mitigation measures shall be developed to mitigate potential noise impacts. This may include but not be limited to:
  - Requirements to use quieter albeit costlier construction techniques.
  - Notification of residents (homeowners and renters) of time, duration, and location of construction.
  - Relocation of residents to hotels during noise construction periods.
  - Developer reimbursement to City for 24-hour on-site inspection to verify compliance with required mitigation.
  - Limit hours of operation of equipment 15 dBA above noise ordinance limits to the hours of 10:00 A.M. to 4:00 P.M.

  The selection of which of the above measures to include should be determined on a project-by-project basis depending on the type of equipment used and the proximity to established residential areas. It should also be recognized that during the early planning phases for a project such as zone change application, sufficient data may not be available to determine the extent of construction noise mitigation required. In such cases the project should be required to prepare this analysis as part of the site design or building permit process for review and approval by the Director of Community and Economic Development.

Noise Ordinance (SMMC Chapter 4.12)

The City's Noise Ordinance (SMMC Chapter 4.12) includes limitations on unnecessary, excessive, and annoying noises within the City. SMMC Section 4.12.010 establishes the general standards relative to disturbance of the peace as follows:

> *"It is determined that certain noise levels and vibration are detrimental to public health, welfare, and safety, and contrary to public interest, and, therefore, the City Council of the City of Santa Monica does ordain and declare that creating, maintaining, causing, or allowing to be created, caused, or maintained, any noise or vibration in a manner prohibited by, or not in conformity with, the provisions of this Chapter, is a public offense and shall be punishable as such."*

SMMC Section 4.12.050 (Designated Noise Zones) defines designated noise zones in the City, which include a variety of land use types, depending on their nature. Residential districts are designated as

Noise Zone I; commercial districts are designated Noise Zone II; and manufacturing or industrial districts are designated as Noise Zone III.

- *Noise Zone I.* All property in any residential district established by Municipal Code Subchapter 9.04.04 or any revisions thereto. In addition, property zoned Low Density Multiple Residential Beach District (R2B), Medium Density Multiple Family Coastal Residential District (R3R), Ocean Park Single Family Residential District (OP1), OP Duplex Ocean Park Duplex Residential District (OP-Duplex) OPD, Ocean Park Low Multiple Residential District (OP2), Ocean Park Medium Multiple Residential District (OP3), and Ocean Park High Multiple Residential District (OP4) shall be included in this noise zone. The Santa Monica Pier shall be excluded from this noise zone.
- *Noise Zone II.* All property in any commercial district established by SMMC Subchapter 9.04.04 or any revisions thereto. In addition, property zoned Beach Parking District (BPD), Civic Center (CC), Bayside Commercial District (BSCD) and the Santa Monica Pier shall be included in this noise zone.
- *Noise Zone III.* All property in any manufacturing or industrial district as established by SMMC Subchapter 9.04.04 or any revisions thereto. In addition, property zoned Light Manufacturing and Studio District (LMSD) shall be included in this noise zone.

Section 4.12.060 outlines the exterior noise standards for Noise Zones I, II, and III in the City (see Table 3.8-6).

Table 3.8-6 Exterior Noise Standards in the City of Santa Monica

Noise Zone	Land Use Types	Time Interval	Allowable L_{eq} for 15-minute continuous measurement period	Allowable L_{eq} for 5-minute continuous measurement period
I	Residential	**Monday – Friday**		
		10 P.M. to 7 A.M.:	50 dBA	55 dBA
		7 A.M. to 10 P.M.:	60 dBA	65 dBA
		Saturday and Sunday		
		10 P.M. to 8 A.M.:	50 dBA	55 dBA
		8 A.M. to 10 P.M.:	60 dBA	65 dBA
II	Commercial	**All days of Week**		
		10 P.M. to 7 A.M.:	60 dBA	65 dBA
		7 A.M. to 10 P.M.:	65 dBA	70 dBA
III	Industrial	**Anytime**	70 dBA	75 dBA

Source: SMCC Section 4.12.060 (Exterior Noise Standards).

SMMC Section 4.12.060(b) also states, *"[i]f the ambient noise level exceeds the allowable exterior noise level standard, the ambient noise level shall be the standard."* Subsection (d) states that *"[i]f any portion of a parcel is located within 100 feet of a noise zone with higher noise standards as compared to the noise standards for the noise zone in which the parcel is located, then the maximum allowable exterior equivalent noise level for the entire parcel shall be the average of the noise standards of the two noise zones. However, any noise level measurement must be taken at least 25 feet from the parcel line of the source of the noise."*

Further, SMMC Section 4.12.170 states that *"[n]ew development may only be permitted if noise mitigation measures are taken in project siting and design such that exterior noise levels meet equivalent noise level requirements of Section 4.12.060 and the standards contained in the Interior and Exterior Noise*

Standards Matrix as contained in the Noise Element of the General Plan for any existing noise sources near the project or contained within the project."

SMMC Section 4.12.110 restricts the hours for construction activity to between 8:00 A.M. and 6:00 P.M. on Mondays through Fridays and 9:00 A.M. to 5:00 P.M. on Saturdays, with some exceptions for construction that the City deems to be in the public interest. Construction activity is prohibited on Sundays and Holidays. SMMC Section 4.12.110 also sets limits for noise from construction activities relative to the noise standards set in Section 4.12.060, with the equivalent noise level not to exceed 20 dBA above standards and the maximum instantaneous noise level not to exceed 40 dBA above standards. Any construction exceeding this limit is required to occur between 10:00 A.M. and 3:00 P.M. Monday through Friday.

With regard to noise from stationary equipment, SMMC Section 9.21.140 requires all exterior mechanical and electrical equipment to be screened on all vertical sides at least to the height of the equipment it is screening and incorporated into the design of buildings to the maximum extent feasible. Screening materials may include landscaping or other materials that shall be consistent with the exterior colors and materials of the building. Solar energy systems are exempt from this screening requirement.

Regarding vibration, SMMC Section 4.12.070 (Vibration) prohibits any person to create, maintain or cause any ground vibration that is perceptible without instruments at any point on any property. The perception threshold shall be presumed to be more than 0.05 in/sec root-mean-square velocity. The vibration caused by construction activity, moving vehicles, trains, and aircraft is exempt from this section.

3.8.4 Impact Assessment and Methodology

3.8.4.1 Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a Lead Agency may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For the purposes of this EIR, the proposed Housing Element Update may have a significant adverse impact related to noise if:

a) The project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

b) The project would result in generation of excessive ground-borne vibration or ground-borne noise levels; and/or

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the project would expose people residing or working in the project area to excessive noise levels.

Construction Noise Levels (Temporary Increase in Ambient Noise Levels in Excess of Standards)

The timing of construction noise impacts is an important factor in determining significance. In any urban area, residents expect to periodically be exposed to construction noise during normal working hours on weekdays and for more abbreviate periods on Saturdays (and sometimes Sundays). The City's Noise Ordinance (SMMC Chapter 4.12) establishes noise standards which vary depending on the zone of the construction location and the period. As set forth in the previous discussion of the City's Noise Ordinance, construction activities are generally permissible only between 8:00 A.M. and 6:00 P.M. on weekdays, and between 9:00 A.M. and 5:00 P.M. on Saturdays. During these hours, the City permits construction noise up to 20 dBA in excess of normally acceptable levels, or up to 40 dBA above normally acceptable levels for any "maximum instantaneous" noise event. Construction noise even beyond these heightened levels is permitted only between 10:00 A.M. and 3:00 P.M. on weekdays. Given the fact that residents of urban areas are used to such temporary construction noise from time to time, the City does not consider construction activities consistent with these timing limits to constitute significant environmental effects.

Operational Noise Levels (Permanent Increase in Ambient Noise Levels in Excess of Standards)

The CEQA Guidelines do not define the levels at which temporary and permanent increases in ambient noise levels are considered "substantial." As discussed in Section 3.8.1, *Fundamentals of Sound and Environmental Noise,* a noise level increase of 3 dBA is barely perceptible to most people, a 5 dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness (FICUN 1980; Harris Miller Miller & Hanson Inc. 2006). For the purposes of this EIR and to be consistent with the thresholds used in the City's recent EIRs, the following noise thresholds are used to assess operational roadway noise (see Table 3.8-7).

Table 3.8-7 Significance Thresholds for Operational Ambient Noise Impacts

Ambient Noise Levels Without Projects (L_{dn} or CNEL)	Threshold (L_{dn} or CNEL)
< 60 dBA	+ 5.0 dBA or more
60-65 dBA	+ 3.0 dBA or more
> 65 dBA	+ 1.5 dBA or more

Source: City of Santa Monica 2017.

The justification for these thresholds is that people that are already exposed to high noise levels would not notice and would not be annoyed by a small increase in the amount of noise in their community. In contrast, if the existing noise levels are already low, an equivalent increase in the amount of noise would be much more noticeable and could cause increased levels of annoyance.

Ground-borne Vibration

The CEQA Guidelines do not define the levels at which ground-borne vibration or ground-borne noise is considered "excessive." For the purpose of this analysis, Caltrans vibration damage potential threshold criteria, previously described above in Table 3.8-3 are used to evaluate potential structural damage impacts related to vibration from project construction and operation. Pursuant to the Caltrans guidelines, ground-borne vibration impacts associated with human annoyance would be significant if a proposed

project exceeds the threshold of 0.1 in/sec within 25 feet of a sensitive use or a fragile building. This threshold corresponds to the level at which vibration can cause a “strongly perceptible” degree of human annoyance and has the potential to cause structural damage in fragile buildings.

3.8.4.2 Methodology

The analysis of potential noise impacts includes an assessment of existing noise conditions and the potential for residential development planned for under the proposed Housing Element Update to increase noise levels in the City. Information used to prepare this section was derived from various sources, including the Noise Element, FHWA Highway Noise Prediction Model (FHWA-RD-77-108; FHWA Model), and FTA’s 2006 Transit Noise and Impact Assessment. The methodology and assumptions used for the analysis of noise impacts that could result from implementation of the proposed Housing Element Update are detailed below.

As defined by the City’s Noise Ordinance (SMMC Chapter 4.12), noise sensitive land uses include schools, hospitals, and institutional uses such as churches, museums, and libraries. The City also considers residential uses to be noise sensitive receptors. In addition, the noise attenuation features of new residential uses are reviewed on a project-by-project basis as part of the City’s development review process. As new residential development projects are proposed near major roadways or other potential noise sources, future noise levels would be evaluated and noise mitigation strategies would be required, as appropriate, to meet the City’s noise standards.

Construction Noise Levels (Temporary Increases in Ambient Noise Levels)

Construction-related noise and ground-borne vibration associated with residential development planned for under the proposed Housing Element Update would be generated by various types of heavy construction equipment. Depending on the timing of entitlements and permit processing, construction activities for individual residential development projects in the City could begin shortly after adoption of the proposed Housing Element Update through the planning horizon of 2030, and could occur up to 6 days per week as permitted by the SMMC.

Construction noise would occur during each phase of construction, including demolition, grading/excavation, and building construction. However, the specific construction details (e.g., project locations, scheduling/phasing, equipment, building construction size, grading, etc.) for future residential development projects in the City is unknown at this time. Therefore, it is difficult to quantify the construction-related noise levels that may potentially occur. As such, the analysis of construction-related noise impacts is qualitative in nature and involves discussing the potential range of construction-related impacts that could potentially occur from individual residential development projects.

Construction noise levels for typical development projects are evaluated using data published by the U.S. Department of Transportation (U.S. DOT). The U.S. DOT has compiled data regarding the noise-generating characteristics of typical construction activities.

As described in Section 3.8.1, *Fundamentals of Sound and Environmental Noise*, these noise levels would diminish rapidly with distance from the construction site, at a rate of approximately 6 dBA per

doubling of distance as equipment is generally stationary or confined to specific areas during construction. For example, a noise level of 86 dBA measured at 50 feet from the noise source to the receptor would reduce to 80 dBA at 100 feet from the source to the receptor, and reduce by another 6 dBA to 74 dBA at 200 feet from the source to the receptor. In an urban setting, this generally results in construction-related noise that impacts immediately adjacent uses, while uses that are further removed typically experience reduced increases in noise. The noise levels from construction at the off-site sensitive uses can be determined with the following equation from the Harris Miller Miller & Hanson Inc. (2006) Transit Noise and Vibration Impact Assessment, Final Report: L_{eq} = L_{eq} at 50 feet – 20 Log(D/50), where L_{eq} = noise level of noise source, D = distance from the noise source to the receptor, L_{eq} at 50 feet = noise level of source at 50 feet.

Table 3.8-8 Noise Ranges of Typical Construction Equipment

Construction Equipment	Noise Levels in dBA L_{eq} at 50 Feet
Pile Driver	95-101
Auger Drill Rig	80-85
Front Loader	73–86
Trucks	82–95
Cranes (moveable)	75–88
Cranes (derrick)	86–89
Vibrator	68–82
Saws	72–82
Pneumatic Impact Equipment	83–88
Jackhammers	81–98
Pumps	68–72
Generators	71–83
Compressors	75–87
Concrete Mixers	75–88
Concrete Pumps	81–85
Back Hoe	73–95
Tractor	77–98
Scraper/Grader	80–93
Paver	85–88

Note: Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.
Source: U.S. DOT 2013.

Operational Noise Levels (Permanent Increase in Ambient Noise Levels in Excess of Standards)

Roadway noise levels in the City were calculated using previously modeled vehicle operations and noise levels from the LUCE Program EIR, adjusted using ADT volumes provided by Fehr & Peers (2021) for the Adjusted Existing Baseline (2020), Future (2030) With Project, and Future (2030) No Project Scenarios (see Section 3.12, *Transportation* and Appendix G).

As previously described, the Adjusted Existing Baseline (2020) ADT noise levels for primary roadway corridors within the City (CNEL at 100 feet) were calculated based on adjustments to the noise levels that were modeled for the LUCE Program EIR. These adjustments account for changes in traffic levels

following the preparation of the LUCE Program EIR. The noise levels in the LUCE Program EIR were modeled using the FHWA's Traffic Noise Model 2.5 (City of Santa Monica 2010). The percentage difference in ADT was then used to calculate a CNEL increase or decrease based on the assumptions that vehicle fleet mix and 24-hour vehicle distribution remained constant over time (refer to Table 3.8-4). This same methodology was applied when calculating noise levels for the Future (2030) With Project (2030) and Future (2030) No Project Scenarios. Traffic volumes projected for each roadway corridor were taken from the Transportation Study prepared for this EIR (see Appendix G). The resulting changes in roadway noise levels were then compared to applicable CEQA and City noise thresholds to assess noise impacts related to traffic volumes.

With respect to stationary sources of noise, projected noise levels which may be generated by new residential development are estimated based on the typical dBA levels generated from urban uses, such as HVAC equipment, delivery trucks, and other common uses (refer to Table 3.8-1).

Ground-borne Vibration Levels

Construction

Since the exact size, design, timing, and construction details of future development projects in the City are unknown, ground-borne vibration levels that could be generated by construction equipment have also been qualitatively described and compared to applicable thresholds of significance.

Ground-borne vibration levels resulting from construction activities occurring within the City were estimated using the Caltrans (2020) Transportation and Construction Vibration Guidance Manual. Potential vibration levels are identified for on-site and off-site locations that are sensitive to vibration, including nearby residences. Caltrans provides thresholds of significance for vibration and methodology for calculating vibration levels at distances from generation. Vibration levels at off-site sensitive uses may be determined with the following equation:[2]

$$PPV_{Projected} = PPV_{Ref} (25/D)^{n}$$

Where: PPV_{Ref} = reference PPV at 25 feet; D = distance from equipment to the receiver in feet; n = 1.1 (a recommended conservative value pertaining to attenuation rate of vibration through ground).

Operation

Residential development planned for under the proposed Housing Element Update would not be anticipated to generate excessive levels of ground-borne vibration. Occasionally, vibration could occur as a result of truck travel to and from individual project sites for periodic deliveries. However, such incidences would be temporary in nature and would not be expected to exceed 0.1 in/sec, which is below the level for potential damage to fragile structures. No substantial sources of ground-borne vibration would be introduced as part of any residential development planned for under the proposed Housing Element. Therefore, operational activities associated with future development would not expose sensitive

[2] Caltrans 2020, *Transportation and Construction Vibration Guidance Manual*, Equation 12.

receptors on-site or off-site to excessive ground-borne vibration or ground-borne noise levels and these are not discussed further in this EIR.

3.8.5 Project Impacts and Mitigation Measures

Would the proposed project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Description (NOI-1)

NOI-1 **Construction activities associated with the residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in a temporary increase in noise levels in the vicinity of individual project sites or clusters of such sites. However, each individual residential development project would comply with the requirements of the City's Noise Ordinance. Given that each individual residential development project would comply with City regulations and requirements – including the preparation of a Construction Noise Management Plan, as necessary – construction noise impacts would be *less than significant.***

The City is an established, built-out, urbanized community with a variety of existing land uses including commercial, industrial, institutional, visitor serving, and residential uses. As described in Section 2.0, *Project Description*, the proposed Housing Element Update plans for the development of up to 8,895 to approximately 11,000 dwelling units throughout the City. This new residential development would involve construction activities that would generate noise, including on-site noise from heavy construction equipment as well as off-site noise from heavy haul trucks and construction worker commutes. Construction activities would occur incrementally throughout the entire planning horizon associated with proposed Housing Element Update, with associated construction noise temporarily and intermittently affecting localized areas through 2030. As such, noise generated by construction activities occurring under the proposed Housing Element Update could result in a temporary increase in ambient noise levels.

This effect is likely to be greatest in the Downtown and along boulevards, where a substantial portion of the infill redevelopment projects are anticipated to occur. Under the proposed Housing Element Update, construction activities would include the demolition of existing uses, construction of new residential developments, infrastructure improvements (i.e., replacement/installation of new utility lines; see Section 3.11, *Utilities*), and other similar types of construction related to residential land uses. Though precise locations would vary, construction activities at one or more locations within the City could potentially occur continuously through the year 2030. Further, the potential exists for large construction projects located in the same area or on the same block to overlap construction schedules.

Construction activities anticipated to occur in the City would require the use of heavy equipment, generators, power tools, and other equipment, which may generate noise in close proximity to sensitive receptors, such as residences.

The construction of new residential buildings in the City would require the use of heavy construction equipment, generators, power tools, and other sources of noise for various types of construction activities. As such, construction activities would result in temporary noise impacts that could affect noise sensitive receptors. For example, construction activities along the north side of Wilshire Boulevard could generate noise that would adversely affect the adjacent residential uses to the north, and construction activities on the east side of Lincoln Boulevard could generate noise that would adversely affect the adjacent residential uses to the east. Heavy haul truck trips in this area (among others) and along haul routes could generate noise up to between 82 dBA L_{eq} and 95 dBA L_{eq} at 50 feet (refer to Table 3.8-8).

The U.S. DOT and U.S. Environmental Protection Agency (USEPA) have compiled data regarding the noise generating characteristics of typical construction activities (refer to Table 3.8-8 and see Table 3.8-9). As described in Section 3.8.1, *Fundamentals of Sound and Environmental Noise,* these noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance at acoustically hard locations. For example, a noise level of 86 dBA measured at 50 feet from the noise source to the receptor would reduce to 80 dBA at 100 feet from the source to the receptor, and reduce by another 6 dBA (to 74 dBA) at 200 feet from the source to the receptor.

Table 3.8-9 Typical Outdoor Construction Noise Levels

Construction Phase	Noise Levels in dBA L_{eq} at 20 Feet	Noise Levels in dBA L_{eq} at 50 Feet with Mufflers	Noise Levels in dBA L_{eq} at 100 Feet with Mufflers
Ground Clearing	90	82	76
Excavation, Grading	94	86	80
Foundations	85	77	71
Structural	91	83	77
Finishing	94	86	80

Source: USEPA 1971.

Potential construction-related noise impacts on sensitive uses would be dependent on the relative distance of the sensitive use from construction activities. In some cases, it can be expected that construction activities would occur immediately adjacent to sensitive receptors, with setbacks of as little as 20 to 50 feet. Where construction activities are located within 20 feet of a sensitive receptor, maximum noise levels could reach as high as 94 dBA at the exterior of adjacent sensitive receptors during the grading and finishing construction phases of potential future projects. Where a sensitive receptor is within 50 feet of an individual construction project requiring the use of a pile driver, unmuffled noise exposure could reach peaks of up to 101 dBA L_{eq} at 50 feet.

Given the density of development in the City, construction activities associated with multiple projects can often overlap. The logarithmic effect of these additions (refer to Section 3.8.1, *Fundamentals of Sound*

and Environmental Noise) is that two individual projects with individual construction noise of up to 94 dBA, would result in a noise level of up to 97 dBA experienced at the sensitive receptor.

According to the SMMC Section 4.12.060 (Exterior Noise Standards), noise from construction activities shall not exceed 20 dBA over the exterior noise standards specified for the noise zone. As identified under SMMC Section 4.12.110(d), construction noise can exceed those standards discussed above so long as it occurs between the hours of 10:00 A.M. and 3:00 P.M. Further, SMMC Section 4.12.110 limits construction activities to the hours of 8:00 A.M. to 6:00 P.M. on weekdays and 9:00 A.M. to 5:00 P.M. on Saturdays. No construction activities would be allowed on Sundays or public holidays. As such, individual projects that would not comply or are not anticipated to comply with the City's Noise Ordinance would be required to implement a Construction Noise Management Plan to ensure that the noisiest activities be limited to between the hours of 10:00 A.M. and 3:00 P.M., consistent with SMMC Section 4.12.110(d). The Construction Noise Management Plan would also require the implementation of noise attenuation, as necessary, including the use of noise barriers (e.g., sound walls) or noise blankets (e.g., sound absorbing materials). As a general rule, a sound wall can reduce noise by 5 dBA. In addition, a Construction Noise Management Plan may require that construction staging areas and earthmoving equipment be located as far as possible from noise and vibration sensitive land uses, further reducing construction-related noise levels of individual residential development projects.

As previously deiscribed, construction activities associated with individual residential development projects, or clusters of projects, could result in noise levels above normal acceptable levels (e.g., greater than 85 dBA) and would potentially create a substantial temporary or periodic increase in ambient noise levels. Although the City's Noise Ordinance exempts increases of noise during construction activities of up to 20 dBA and 40 dBA depending on the timing of high noise-generating activities, the potential for a substantial periodic impact is based on a perceived increase by the receptor. However, construction activities would generally only occur during the permitted hours designated in the SMMC, and therefore, would not occur during recognized sleep hours for residences or on Sundays or Federal holidays. There is a limited and slight potential for construction to occur during noise-sensitive periods (or recognized sleep hours) if a conditional use permit is issued. This would presumably only occur in the case of projects conducted in the public interest and in compliance with SMMC Section 4.12.110(e). Such construction is considered a rare occurrence, requiring multiple discretionary approvals. As such, while an increase in ambient noise levels could occur from construction activities, compliance with the noise restrictions in the City's Noise Ordinance would ensure that receptors are not exposed to excessive noise levels.

All development projects located within 500 feet of residential uses would be required to adhere to SMMC Section 4.12.110(c). This section of the SMMC requires applicants of construction projects located within 500 feet of any residential development, or other noise sensitive land uses, to submit a list of equipment and construction activities to City staff prior to the issuance of a building permit. At a minimum, the list shall include: (1) construction equipment to be used, such as pile drivers, jackhammers, pavement breakers, or similar equipment; (2) construction activities such as 24-hour pumping, excavation or demolition; and (3) a list of measures that will be implemented to minimize noise impacts on nearby residential uses. Since all construction activities would be required to adhere to the noise standards and

requirements established the City's Noise Ordinance, construction noise impacts would be *less than significant*.

Would the proposed project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Description (NOI-2)

NOI-2 **Residential development as planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would incrementally increase vehicle trips and associated operational noise levels in the City, particularly vehicle noise along boulevards. New residential development would also result in new permanent sources of noise from deliveries, trash hauling, parking noise, and mechanical equipment. However, the operation of new residential developments would not result in a substantial permanent increase in ambient noise levels in the City, and impacts would be *less than significant.***

Increases in Ambient Noise from Traffic Volume Changes

Residential development planned for under the proposed Housing Element Update would not result in substantial net increases in ambient noise levels. Under typical circumstances, and where roadway conditions are constant (i.e., size, configuration, and speed limit), projected traffic volumes generally need to double over existing volumes in order for associated noise levels to increase by approximately 3 dBA, the increase in noise level that is generally perceptible to the human ear. Based on the projected traffic volumes anticipated to occur in the City under the proposed Housing Element Update, estimated future transportation noise levels are not expected to increase by 3 dBA or more from the Adjusted Existing Baseline (2020) to the Future (2030) No Project scenarios; therefore, the increased noise levels at these roadway segments would generally not be perceptible to nearby sensitive receptors (see Table 3.8-10). The largest increase in noise levels would occur on Olympic Boulevard and 5th Street, with increases of 0.5 dBA CNEL and 0.4 dBA CNEL, respectively, under the Future (2030) With Project Scenario. In addition, changes in noise levels would occur gradually over the 30-year planning horizon for the proposed Housing Element Update, further decreasing the potential for sensitive receptors to perceive incremental increases in noise levels. Sensitive uses in close proximity to each individual project site, or cluster of project sites, would potentially experience slight changes in noise levels and types of noise generated as a result of increased density and mix of uses; however, these changes would be minor considering the existing urban noise environment of the City. Therefore, operational noise impacts from vehicle trips generated under the proposed Housing Element would be *less than significant.*

Permanent Ambient Noise from Stationary Noise Sources

Operational sources of noise would be expected to increase incrementally over the planning horizon for the proposed Housing Element Update as a result of new residential development.

Table 3.8-10 Roadway Noise Levels Compared with Anticipated Future Ambient Noise Levels

Corridor	Roadway Segment	Future (2030) No Project ADT	CNEL at 100 feet	Future (2030) With Project ADT	CNEL at 100 feet	Change in CNEL	Significant?
Ocean	Ocean Ave N of Colorado Ave	22,000	62.2	21,400	62.1	-0.1	No
2nd Street	2nd St N of Santa Monica Blvd	6,000	56.6	6,200	56.7	0.1	No
Colorado	Colorado Ave W of 4th St	5,800	56.4	5,000	55.8	-0.6	No
4th Street	4th St N of I-10 WB Off-Ramp	37,700	64.5	36,100	64.3	-0.2	No
4th Street	4th St S of Pico Blvd	11,000	59.2	11,500	59.4	0.2	No
5th Street	5th St S of Santa Monica Blvd	8,400	58.0	9,300	58.5	0.4	No
Montana	Montana Ave E of 7th St	8,100	57.8	7,100	57.2	-0.6	No
Wilshire	Wilshire Blvd W of Lincoln Blvd	23,500	62.5	24,500	62.6	0.2	No
Santa Monica	Santa Monica Blvd W of Lincoln Blvd	12,500	59.7	12,900	59.9	0.1	No
Lincoln	Lincoln Blvd N of I-10 WB Off-Ramp	46,100	65.4	45,600	65.4	0.0	No
Pico	Pico Blvd E of Lincoln Blvd	13,900	60.2	13,600	60.1	-0.1	No
Ocean Park	Ocean Park Blvd E of Lincoln Blvd	11,000	59.1	11,200	59.2	0.1	No
20th Street	20th St N of Wilshire Blvd	8,300	57.9	7,000	57.2	-0.7	No
20th Street	20th St N of Pico Blvd	5,200	55.8	5,300	55.9	0.1	No
Ocean Park	Ocean Park Blvd E of 23rd St	23,300	62.4	22,500	62.3	-0.2	No
Olympic	Olympic Blvd W of Cloverfield Blvd	33,900	66.9	37,700	67.4	0.5	No
26th Street	26th St S of San Vicente Blvd	7,900	57.7	6,500	56.8	-0.8	No
San Vicente	San Vicente Blvd W of 26th St	18,700	61.9	18,300	61.8	-0.1	No
Montana	Montana Ave W of 26th St	16,200	60.8	13,600	60.1	-0.8	No
Santa Monica	Santa Monica Blvd E of 26th St	26,700	63.0	25,200	62.8	-0.3	No
Olympic	Olympic Blvd E of 26th St	24,500	65.5	27,200	66.0	0.5	No

Note:
ADT = Average Daily Traffic; CNEL = Community Noise Equivalent Level
Please refer to the methodology discussion under Section 3.8.4, *Impact Assessment and Methodology*, and to the Transportation Study in Appendix F for more information regarding calculations.

Deliveries and Trashing Hauling

New residential development planned for under the proposed Housing Element Update would generate an incremental increase in ambient noise within the City due to the routine delivery of goods and weekly trash hauling, which are typical in the urban noise environment. Delivery and trashing hauling operations would generate noise from diesel engines and the backup beeper alarm that sounds when a truck is put in reverse, as required and regulated by the California Division of Occupational Safety and Health (Cal-OSHA). The noise generated by idling diesel engines typically ranges between 64 dBA L_{eq} and 66 dBA L_{eq} at 75 feet (City of Santa Monica 2020). This noise would be temporary in nature, typically lasting no more than 5 minutes.[3] Backup beepers are required by Cal-OSHA to be at least 5 dBA above ambient noise levels. These devices are highly directional in nature, and when in reverse the truck and beeper alarms would be directed towards the loading area and driveway/garage frontages of residential structures. Given the existing noise environment in the City, potential noise from hauling and deliveries would be similar to existing sources at individual project sites and would not permanently increase ambient noise. Therefore, this impact would be *less than significant.*

Mechanical Equipment

Mechanical equipment, such as HVAC systems or ventilation fans, would potentially be installed on the rooftops of new residential buildings associated with the proposed Housing Element Update. Large HVAC systems associated with new development can result in noise levels that average between 50 dBA L_{eq} and 65 dBA L_{eq} at a distance of 50 feet from the equipment. However, potential noise from mechanical equipment would be subject to SMMC Section 4.12.060 (Exterior Noise Standards), which requires that all mechanical equipment comply with the City's requirements to minimize exterior noise. Individual residential development projects would also be subject to SMMC Section 4.12.130, which requires a noise analysis for the mechanical equipment to demonstrate compliance with SMMC Section 4.12.60 (Exterior Noise Standards) prior to the issuance of a building permit. SMMC Section 4.12.130 also prohibits locating such stationary equipment adjacent to residential uses unless it complies with the exterior noise standards. Compliance with the SMMC would also include shielding and/or other noise reduction techniques when installing these mechanical systems. Therefore, mechanical equipment noise associated with future development under the proposed Housing Element Update would comply with the standards established in the City's Noise Ordinance (SMMC Chapter 4.12) and impacts would be *less than significant.*

Parking Garages

New parking garages that could potentially be constructed under the proposed Housing Element Update could also increase nuisance noise within the City. Parking garages can generate L_{eq} noise levels of between 49 dBA L_{eq} (tire squeals) and 74 dBA L_{eq} (car alarms) at a distance of 50 feet from the source (City of Santa Monica 2020). Vehicles would be the primary source of noise, which would be generated in several ways, including vehicle engine start-ups, acceleration, tire squeals, car alarms, and periodic

[3] California State law prohibits heavy-duty diesel vehicles with a Gross Vehicle Weight Rating of 10,000 pounds or more from idling for longer than 5 minutes.

honking. While this would present an additional source of noise in the City, new parking would be located within a subterranean parking garage or enclosed within an above ground parking structure, further reducing audibility at street level. Therefore, vehicle noise from garages would be negligible due to the noise level of surrounding streets and relative infrequency of excessive noise events. Similar to the HVAC systems discussed above, the ventilation fans required to remove exhaust from subterranean parking garages would be required to comply with SMMC Section 4.12.130. As a result, normal parking garage noise would be similar to surrounding ambient noise levels. Therefore, noise impacts relating to parking operations under the proposed Housing Element Update would be *less than significant.*

Temporary and Periodic Ambient Noise from Operation of Land Uses

Land use changes anticipated to occur under the proposed Housing Element Update would incrementally increase residential uses within or adjacent to commercial uses. Generally, the mixing of residential and/or mixed uses with more commercially oriented uses in a vibrant urban environment could potentially expose future residents to periodic, intermittent, and sleep-disturbing noise in the early morning and late at night. In the morning hours, future residents could be exposed to nuisance noise from nearby or potentially on-site businesses that open early such as cafés and restaurants that serve breakfast. During the evening hours, operation of late-night businesses such as bars, restaurants, and nightclubs could expose residents and visitors to nuisance noise including live music, loud late-night conversations, etc. However, the proposed Housing Element Update would not be anticipated to facilitate a substantial increase in the number of small-scale special events (e.g., roof-top gatherings) or other temporary activities that would cause an increase in ambient noise levels. Prior to any special event conducted within the City, applicants would be required to obtain a permit from the City's Special Events Office, which takes into account the hours of operation of the proposed event in order to minimize the potential impact to nearby sensitive receptors. In addition, these types of events already occur under existing conditions in areas of the City such as the Downtown. As such, temporary or periodic noise impacts to on-site or off-site receptors may occur due to operation of some ground floor commercial uses that may be included within new residential developments, but such noise would be consistent with existing operations within the City's urban environments and require a permit issued by the City's Special Events Office.

The temporary and periodic sources of ambient noise described above would not constitute long-term or extensive, high-level exposures involving potential health impacts; however, the potential for increased peak noise levels in the early morning and late at night could result in sleep disturbance for residents. General administrative practice of the City includes striving for an 8-hour period of downtime regarding noise generation for businesses, which would help to mitigate the generation of nuisance noise in these areas. In addition, SMMC Sections 4.12.140 and 4.12.170 include requirements for nighttime noise reduction and a review process for new residential developments. Therefore, the City's Noise Ordinance, in conjunction with project development review and approval process, would reduce impacts relating to temporary or periodic noise increases to on- or off-site sensitive uses. Impacts would be *less than significant.*

Would the proposed project result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Impact Description (NOI-3)

NOI-3 **Construction of new residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would potentially expose adjacent persons or structures to temporary, excessive ground-borne vibration levels that would exceed thresholds. Impacts on sensitive receptors from construction vibration would be potentially *significant and unavoidable*.**

Construction-Generated Ground Vibration

Construction activities for new residential development planned for under the proposed Housing Element Update would require the use of heavy equipment, generators, power tools, and other sources of vibration noise. The degree and amplitude of ground-borne vibration would vary, depending on the soil type, ground profile, distance to the receptor building, and the construction characteristics of the receptor building. Table 3.8-11 identifies anticipated vibration velocity levels (in/sec) for standard types of construction equipment based on distance from the receptor.

Table 3.8-11 Vibration Source Levels for Construction Equipment

Construction Equipment	Vibration Level (in/sec) at 25 feet	Vibration Level (in/sec) at 50 feet	Vibration Level (in/sec) at 100 feet
Caisson Drilling	0.089	0.042	0.019
Loaded Trucks	0.076	0.035	0.017
Jackhammer	0.035	0.016	0.008
Small Bulldozer	0.003	0.001	0.001

Source: Caltrans 2020.

Generally, vibration levels at nearby off-site receptors would be the highest during the excavation, shoring, and foundation phases, in the first months of construction. The building phase typically involves the use of smaller equipment which produces similar vibration levels to small bulldozers (refer to Table 3.8-11). The use of pile driving would generate the highest vibration levels.

Construction-related ground-borne vibration could result in short-term impacts on noise sensitive receptors within the City, depending on the location of the individual construction site. Construction-related vibration would have the greatest potential to impact sensitive uses which are located adjacent to or in close proximity to the construction site. For typical construction activities occurring within 25 feet of sensitive receptors, caisson drilling could generate vibration levels reaching 0.089 in/sec at the receptors. If construction occurs within 25 feet or immediately adjacent to sensitive receptors, vibration levels could potentially exceed the threshold of 0.1 in/sec. Further, the use of pile driving would have the potential to generate significant vibration levels exceeding 0.1 in/sec at nearby sensitive receptors. Therefore, construction ground-borne vibration impacts are conservatively concluded to be potentially *significant and unavoidable*.

Further off-site, ground-borne vibration also would be generated from the use of heavy-duty trucks traveling to and from individual construction sites. Construction activities associated with heavy-duty trucks could include the export of demolition debris or soil, the delivery of construction materials, and concrete pouring. Operation of loaded heavy-duty trucks at project sites and along haul routes could generate vibration levels of 0.076 in/sec at 25 feet (refer to Table 3.8-11). Heavy-duty trucks associated with individual residential developments under the proposed Housing Element Update would be required to follow designated haul truck routes to avoid impacts to noise-sensitive land uses (e.g., residences) to the maximum extent feasible (see Section 3.12, *Transportation*). Additionally, SMMC Section 4.12.070 (Vibration) of the City's Noise Ordinance states that vibration caused by construction activity and moving vehicles shall be exempt from the restrictions set forth in the SMMC.

Human Annoyance

SMMC Section 4.12.070 exempts vibration caused by construction activity from the requirements of SMMC Section 4.12.070 (i.e., the vibration threshold for human perception of more than 0.05 in/sec root mean square velocity). Further, construction activity work hours would generally occur during non-sensitive times of the day in accordance with SMMC Section 4.12.110(a)(3), Section 4.12.110(a)(4), and Section 4.12.110(e). Therefore, annoyance vibration impacts during construction activities would be *less than significant*.

Land Use Generated Operational Ground Vibration

Daily operation of residential land uses anticipated to occur in the City is not anticipated to generate excessive levels of ground-borne vibration. The proposed Housing Element Update does not plan for any changes related to industrial or commercial uses (e.g., airports, waste facilities, etc.) that would generate ongoing ground-borne vibration. Occasionally, vibration could occur as a result of large truck travel to and from individual residential developments for periodic deliveries and garbage pick-up. However, such incidences would be temporary in nature and would not be expected to exceed the threshold of 0.1 in/sec. Therefore, operational ground-borne vibration impacts would be *less than significant*. It should also be noted that operational vibration impacts of the Metro E (Expo) LRT line have already been assessed as part of the Exposition Corridor Transit Project Phase 2 EIR (Exposition Metro Line Construction Authority 2009).

Mitigation Measures

Future construction-related vibration has the potential to result in a significant vibration impact to on-site and off-site structures located adjacent to or near future residential project sites during use of heavy construction equipment. MM NOI-1 would protect nearby vibration sensitive land uses, from excessive vibration impacts:

MM NOI-1 ***Measures to Reduce Ground-borne Vibration.*** *To reduce the potential for construction-related vibration effects to structures, prior to the issuance of a building permit, the project applicant shall perform an inventory of the structural condition of any structures that are listed in the Historic Resources Inventory (HRI) or that are more than 40 years of age and located within 350 feet of the construction site. Based on a survey of*

the building's structural condition, a vibration specialist will determine the appropriate Caltrans vibration structural damage potential criteria, and for each piece of equipment, assess a standoff distance from the building. The construction contractor(s) shall restrict the use of vibration-generating equipment, within the minimum applicable standoff distances to not exceed the building's applicable structural damage criteria. If the vibration-generating construction equipment is required to be used within these minimum applicable distances, the construction contractor(s) shall implement one of the following measures:

Restrict the use of large bulldozers and other similarly large vibration-generating equipment, so that the vibration-generating portion of the equipment (i.e., the motor, engine, power plant, or similar) remains at the minimum standoff distances unless it can be demonstrated to the satisfaction of the City based on in-situ measurements (prior to initiation of full-scale construction activities) that vibration levels can be kept below the applicable structural damage potential criteria, as determined by the vibration specialist, through any combination of revised setbacks, alternative equipment and methods, alternative sequencing of activities, or other vibration-reducing techniques.

Install and maintain at least one continuously operational automated vibrational monitor on the side of the building facing the construction activity and capable of being programmed with two predetermined vibratory velocities levels: a first-level alarm equivalent to 0.05 in/sec peak particle velocity (PPV) less than the appropriate Caltrans vibration structural damage potential criteria and a regulatory alarm level equivalent to the Caltrans vibration structural damage potential criteria. The monitoring system must produce real-time specific alarms (via text message and/or e-mail to on-site personnel) when velocities exceed either of the predetermined levels. In the event of a first-level alarm, feasible steps to reduce vibratory levels shall be undertaken, including but not limited to halting/staggering concurrent activities and utilizing lower-vibratory techniques. In the event of an exceedance of the regulatory level, work in the vicinity of the affected building shall be halted and the building visually inspected for damage. Results of the inspection must be logged. In the event damage occurs, such damage shall be repaired. Such repairs shall be conducted in consultation with a qualified preservation consultant and, if warranted, in a manner that meets The Secretary of the Interior's Professional Qualification Standards.

Residual Impacts

MM NOI-1 would protect nearby vibration sensitive land uses from excessive vibration impacts. However, given that construction vibration levels could exceed the threshold of 0.1 in/sec at nearby sensitive receptors even with implementation of MM NOI-1 residual impacts are assumed to be *significant and unavoidable*.

Would the project expose people residing or working in the project area to excessive noise levels for a project located within 2 miles of an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport?

Impact Description (NOI-4)

NOI-4 **New residential development planned for under the proposed 6th 2021-2029 Cycle Housing Element Update would potentially be located within 2 miles of the Santa Monica Municipal Airport (SMO). However, the proposed Housing Element Update would not make changes to existing zoning for properties located within the Los Angeles County Airport Land Use Plan (ALUP) boundaries or properties located within the SMO Community Noise Equivalent Level (CNEL) noise contours. Further, the eventual closure of SMO in 2028 would ensure that people residing or working in the vicinity of the airport are not exposed to excessive noise levels. Therefore, this impact is *less than significant.***

As described in Section 2.0, *Project Description*, the proposed Housing Element Update plans for the construction of up to 8,895 to approximately 11,000 new dwellings units. The precise location of future individual residential development projects cannot be accurately predicted at this time; however, the proposed Housing Element Update includes the Suitable Sites Inventory, which provides an identification of sites that could potentially accommodate housing. Some of the potential housing sites identified within the Suitable Sites Inventory are within a 2-mile radius of the SMO boundary.

SMO is subject to noise restrictions by the SMMC and the Los Angeles County ALUC guidelines, which are intended to provide for reasonable, safe, and efficient use of the airport as a public transportation facility and as a base for aviation and aviation-related operations. The ALUC's guidelines are intended to protect the City's urban environment from the effects of aircraft noise. Potential land use development is deemed to be compatible with the SMO based on the criteria set forth in the ALUC Procedural Policies contained in the Los Angeles County ALUP. However, the proposed Housing Element Update is not anticipated to expose people residing or working within 2 miles of SMO to excessive noise levels. The proposed Housing Element Update would not make changes to existing zoning for properties located within the Los Angeles County ALUP or properties located within the SMO CNEL noise contours. According to the Calendar Year 2019 CNEL Contours for SMO, the 60 dBA CNEL contour is almost entirely located within the SMO property boundary, except for a small portion along the airport's northwestern boundary that is adjacent to a commercial business park (City of Santa Monica 2020b). Further, average existing noise levels measured adjacent to SMO in 2016 varied from approximately 57.7 dBA L_{eq} to 67.0 dBA L_{eq} due to a combination of airport operations and roadway traffic (City of Santa Monica 2018a). As the proposed Housing Element Update would not re-zone properties within the SMO CNEL noise contours and given that all of the potential housing sites identified Suitable Sites Inventory are located outside the AIA planning boundary, new residential developments would be consistent with the City's Noise Ordinance and Noise Element. In addition, the proposed Housing Element Update would not result in the expansion of the airport boundary as SMO is scheduled to close and cease all airport operations by December 31, 2028. As such, implementation of the proposed Housing Element Update

would not expose people residing or working within the vicinity of SMO to excessive noise levels and impacts would be *less than significant.*

3.8.6 Cumulative Impacts

Cumulative noise impacts would occur if individual residential development projects planned for under the proposed Housing Element Update and cumulative development in the City could affect the same noise environment.

Construction Noise

While it is not possible to estimate the construction noise levels or provide the construction schedule of individual residential development projects, it is reasonably foreseeable that construction projects in the City could occur proximate to one another with sometimes concurrent or overlapping schedules, temporarily elevating noise levels in the immediate area. For example, construction noise from construction activities associated with one project could combine with nearby construction projects in the City to create noise impacts on nearby residential neighborhoods. However, noise is not strictly additive, and a doubling of noise sources would not cause a doubling of noise levels, but rather could result in a perceptible noise increase over a single source. Compliance with the City's Noise Ordinance would reduce construction-related noise impacts. Therefore, the proposed Housing Element Update would not result in a substantial contribution to cumulatively considerable construction noise impacts.

Construction Ground-borne Vibration

As discussed in Impact NOI-1, construction activities anticipated to occur under the proposed Housing Element Update would involve the use of construction equipment that could produce temporary vibration levels. Depending on the individual residential development project and its location, construction projects occurring concurrently (e.g., within the Downtown) could generate construction ground-borne vibration that could cumulatively affect the same sensitive receptors. For typical construction activities occurring within 25 feet of sensitive receptors, caisson drilling could generate vibration levels reaching 0.089 in/sec at the receptors. If construction occurs closer within 25 feet or immediately adjacent to sensitive receptors, vibration levels could potentially exceed the threshold of 0.1 in/sec. Further, the use of pile driving would have the potential to generate significant vibration levels exceeding 0.1 in/sec at nearby sensitive receptors. Therefore, even with the implementation of MM NOI-1 the proposed Housing Element Update would potentially result in a substantial contribution to cumulatively considerable construction-related vibration impacts.

Operational Noise and Vibration

Operational noise would be generated from a number and variety of stationary sources. A major stationary source includes structural mechanical equipment such as HVAC systems. While there is a potential for an increase in stationary noise sources to produce a cumulative increase in noise within the City, all operational sources of noise would be subject to the requirements of the City's Noise Ordinance. For example, as mentioned in Impact NOI-2, stationary mechanical equipment such as an HVAC system is subject to shielding and other noise-reduction measures meant to avoid substantial noise impacts.

Furthermore, new residential development projects planned for under the proposed Housing Element Update are not anticipated to result in substantial operational noise or ground-borne vibration generators, such as helipads, airports, or heavy industrial areas. Therefore, cumulative impacts to operational noise within the City (with the exception of vehicular noise, which is discussed below) would be subject to all applicable local regulations and therefore, would be *less than significant*.

Ambient Noise from Traffic

Cumulative ambient noise impacts would occur primarily as a result of incremental increases in traffic volumes on local roadways and regional travel corridors (e.g., I-10). For example, the RHNA for the Greater Los Angeles Area is 812,060 dwelling units, which would contribute a substantial number of regional vehicle trips (see Section 3.12, *Transportation*). However, it is anticipated that cumulative land use changes in the City would not result in substantial increases in overall traffic volumes due to the mixed-use nature of the City, existing traffic volume levels on nearby streets, and the prevalence of multi-modal transit opportunities throughout the City. For example, new residential development in the Downtown would be located along or near existing boulevards as well as the Metro E (Expo) LRT line, Big Blue Bus, bicycle lanes, pedestrian linkages, and other multi-modal transit opportunities. As discussed under Impact NOI-2, new residential development planned for under the proposed Housing Element Update would not result in a perceptible increase in roadway traffic noise (e.g., 3 dBA), and would even result in decreases in traffic volumes along many arterial roadways by 2030 relative to the existing conditions described for the LUCE. For instance, implementation of the proposed Housing Element is anticipated to result in 16.1 percent and 17.7 percent decreases in traffic volumes on Montana Avenue (west of 26th Street) and 26th Street (south of San Vicente Boulevard), respectively. Therefore, the proposed Housing Element Update would not substantially contribute to a cumulatively considerable impact with regard to City-wide traffic volumes or noise.

Ambient Noise from Aircraft Operations

Under the proposed Housing Element Update, new residential development could be constructed within 2 miles of SMO. However, implementation of the proposed Housing Element Update in combination with other cumulative projects is not anticipated to expose people to excessive noise levels associated with airport operations. As discussed in Section 3.8.2, *Environmental Setting,* the SMO is subject to noise regulations under the SMMC and is governed by the Los Angeles County ALUC guidelines, which are intended to provide for reasonable, safe, and efficient use of the airport as a public transportation facility and as a base for aviation and aviation-related operations. In addition, SMO is subject to the Santa Monica Airport Noise Management Program, which monitors airport noise exposure and noise violations, and works with the Los Angeles County ALUC to reduce noise associated with airport operations. New development, including that associated with the proposed Housing Element Update, would be evaluated by the Los Angeles County ALUC for compatibility, using the criteria set forth in the ALUC Procedural Policies contained in the Los Angeles County ALUP. These policies would ensure that any development within the vicinity of the Airport would be subject to review and additional project design criteria, as applicable, to reduce potential impacts due to airport operations. When combined with the eventual closure of SMO by December 31, 2028, the proposed Housing Element Update would not substantially contribute to a cumulatively considerable noise impact related to airport operations.

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3.0 Environmental Impact Analysis and Mitigation

3.9 Population, Housing, and Employment

The proposed 6th Cycle 2021-2029 Housing Element Update serves as the City's housing plan to preserve existing housing for the City's residents and increase housing opportunities for people of all income, races, sex, age, and abilities. Consistent with State law and regional direction, the proposed Housing Element Update outlines the City's housing policies and programs to meet housing need and demonstrates that the City has adequate sites to meet its Regional Housing Needs Allocation of 8,895 dwelling units, of which 69 percent must be affordable, through 2029. New housing would help meet the unmet demand for housing and contribute to alleviating the State-wide housing crisis and would not induce substantial growth, but rather would accommodate this projected growth and would not displace substantial housing or population.

This section of the Environmental Impact Report (EIR) provides existing population, housing, and employment estimates and analyzes the potential effects of the proposed Housing Element Update related to population, housing, and employment. To provide regional context, this section analyzes the estimated population, housing, and employment effects anticipated to occur under the proposed 6th Cycle Housing Element Update (Housing Element Update) relative to the County, the State, and the Nation. Additionally, this section analyzes the potential for the proposed Housing Element Update to result in any substantial growth inducement or to displace existing housing or residents in the City.

Population growth, in and of itself, does not constitute a physical impact on the environment. However, population growth is relevant in that it may generate secondary environmental impacts as defined under the California Environmental Quality Act (CEQA), such as increased demands for public services (see Section 3.10, *Public Services*), surpassing of infrastructure capacities (see Section 3.11, *Utilities*), or increased vehicle trips resulting in criteria air pollutant emissions (refer to Section 3.3, *Air Quality*) and greenhouse gas (GHG) emissions (refer to Section 3.8, *Greenhouse Gas Emissions and Climate Change*). These indirect environmental effects related to population growth are addressed in the applicable sections of this EIR. Further, housing growth relates to sustainable community development issues that may be of concern, such as providing affordable and workforce housing to maintain social and economic diversity; integrating housing with transit to minimize vehicle miles traveled (VMT) as well as associated energy demand and GHG emissions (refer to Section 3.5, *Energy* and Section 3.8, *Greenhouse Gas Emissions and Climate Change*) and creating a housing supply that aids in alleviating the State's housing crisis.

3.9.1 Environmental Setting

The City is a highly urbanized supporting a diverse mix of retail, restaurant, hotel, office/creative office, entertainment, and residential uses. Historically, the City began as a commercial seaside resort (refer to Section 3.4, *Cultural Resources*). However, since World War II, the City experienced a growth in residential neighborhoods. The City continues to be a popular mixed-use community with as many jobs as residents.

The following discusses describes the existing residential population, housing units, employment, and daytime visitor populations for the City in comparison to the Los Angeles County and the State.

3.9.1.1 Demographics

The U.S. Census Bureau and American Community Survey (ACS)[1] and the California Department of Finance, provide population estimates and demographic data for the City and the Greater Los Angeles Area.

Population

Since the onset of the coronavirus (COVID-19) pandemic within the last year, there has been anecdotal evidence of the migration of residents out of urban cities and into the suburbs. This temporary phenomenon is believed to be attributed to the geographic mobility that is now possible as a result of employer "work from home" policies and a general desire to escape the density and high cost of living in the Nation's major metropolitan areas. However, even before the pandemic, there were indicators that growth in urban areas were slowing (CalMatters 2011). The slowdown in growth is likely attributed to declining birth rate, migration out of the State that is partly driven by a lack and high cost of housing, as well as a decrease in immigration. Population data for the City since the onset of the coronavirus (COVID-19) pandemic are not yet available, and the long-term effects of the pandemic on population growth will be uncertain for some time. However, many demographers predict that the pandemic has accelerated the slowdown in growth.

Relative to the County and other cities in the Greater Los Angeles Area, the City's population growth has been modest since 1970. According to the U.S. Census and ACS, the City has grown at a slower rate than Los Angeles County over the last 30 years (see Table 3.9-1). In 2018, the City's population was 92,078, accounting for approximately 0.91 percent of the 10,098,052 of the County-wide population. The City experienced a 0.03 percent increase between 1970 and 1980, a 4.26 percent increase between 1980 and 2018; growing by approximately 3,764 residents. This period of population growth includes two decades where the population declined by 1.6 percent from 1980 to 1990, and by 3.2 percent from 1990 to 2000, followed by one decade of population growth of 6.7 percent from 2000 to 2010, and a growth of 2.92 percent from 2010 to 2020.

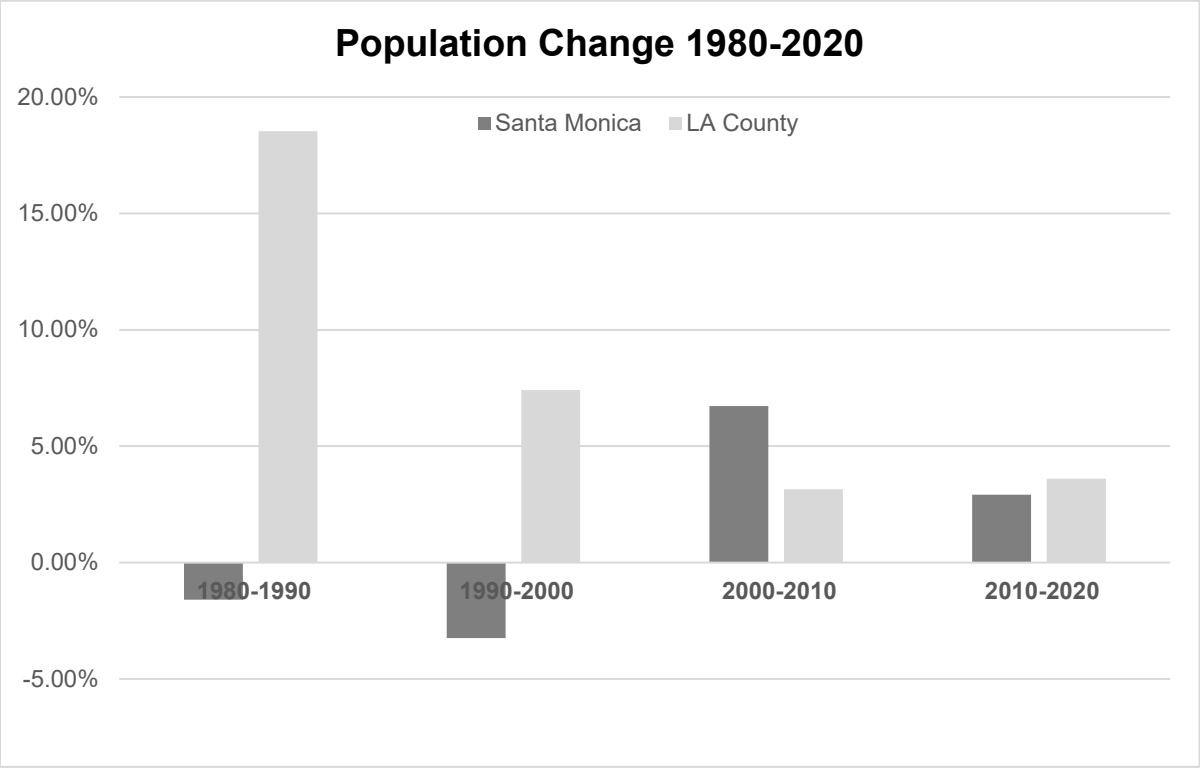
[1] The U.S. Census Bureau publishes population and housing statistics based on the U.S. Census and the American Community Survey (ACS). The U.S. Census is taken and published every 10 years and includes population and housing data for the entire country. U.S. Census data represents the official count of the entire U.S. population and is used as the baseline from which most demographic projections are calculated. the ACS is conducted every year for a sample of the population to provide current information about various detailed social and economic characteristics of communities, including housing, education, jobs, and more. The ACS includes statistics that are not included as part of the U.S. Census. Since the ACS is conducted every year, rather than every 10 years, it provides more current data throughout the decade The most recent decennial census (2010 U.S. Census) was published in 2010 and the most recent ACS data available is for 2018.

Table 3.9-1 Total Population in 1970-2020

City of Santa Monica	**Population**	88,289	88,314	86,905	84,084	89,736	92,357
	Growth previous 10 years	-	0.03%	-1.6%	-3.2%	6.7%	2.9%
Los Angeles County	**Population**	7,032,075	7,477,503	8,863,052	9,519,338	9,818,605	10,172,951
	Growth in previous 10 years	-	6.3%	18.5%	7.4%	3.1%	3.6%

Source: U.S. Census data for decennial data; Department of Finance Population data for 2020 population estimate.

Although the City is located within Los Angeles County, growth patterns in the City tend to be independent from the County. During the total 40-year period from 1970 to 2010, the County population has consistently grown in larger percentages than the City, due in large part to new development occurring in the outlying areas of the San Fernando Valley and the Antelope Valley. The largest population increase in the County occurred from 1980 to 1990 which saw a 18.5-percent increase in growth. Since 1990, however, growth in the County has slowed with a 7.4-percent increase from 1990 to 2000, and a 3.1-percent increase from 2000 to 2010. While there was a relatively small 3.6-percent population increase in the County from 2010 to 2020, population data from the California Department of Finance for the past 2 years have shown an overall drop in population (California Department of Finance 2020). The decrease in population growth is likely attributed to declining birthrate, migration out of the State that is partly driven by a lack and high cost of housing, and a decrease in immigration. This more recent data may be indicative of a downward population trend in the County and State as a whole.



Age

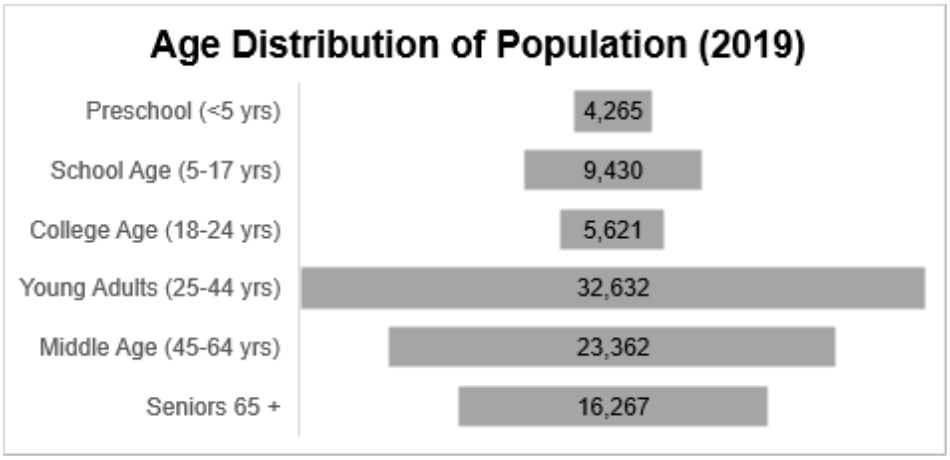
The changing age distribution of a population is an important consideration in assessing the housing needs of a community (Southern California Association of Governments [SCAG] 2021b). For example, if a community has an aging population, it may become important to provide more senior housing and supportive services for seniors. Similarly, if a community has an increasingly younger population of persons below age 18, it may signal the demand for more or larger-sized dwelling units (i.e., providing 2 or more bedrooms).

Young adults between the ages of 25 and 44 are the largest representative age group in the City, comprising 38 percent of the total population. However, this age group has also experienced the greatest decrease from 1990 to 2019. As shown in Table 3.9-2, the number of young adults have declined by 10.4 percent. (This could be due in part to an aging population, as the numbers of middle-aged adults have increased by 38.3 percent during the same time period.) The senior population has increased also, though at a more modest rate – increasing by 6.8 percent since 1990. The City has a relatively low percentage (i.e., 6.2 percent) of preschool/school age population (see Section 3.10, *Public Services*) – likely due in part to falling birth rates as well as the City's relatively low stock of larger-sized dwelling units.

Table 3.9-2 City Population by Age in 1980-2019

Age	1990	2000	2010	2019	Percent Change 1990-2019
Preschool (<5 years)	4,048	3,448	3,696	4,265	4.91%
School Age (5-17 years)	7,929	8,866	8,884	9,430	10.85%
College Age (18-24 years)	6,238	5,114	6,442	5,621	6.47%
Young Adults (25-44 years)	37,175	33,704	35,552	32,632	37.55%
Middle Age (45-64 years)	17,164	20,874	24,746	23,362	26.88%
Seniors (65+ years)	14,351	12,078	13,416	16,267	18.72%

Race/Ethnicity

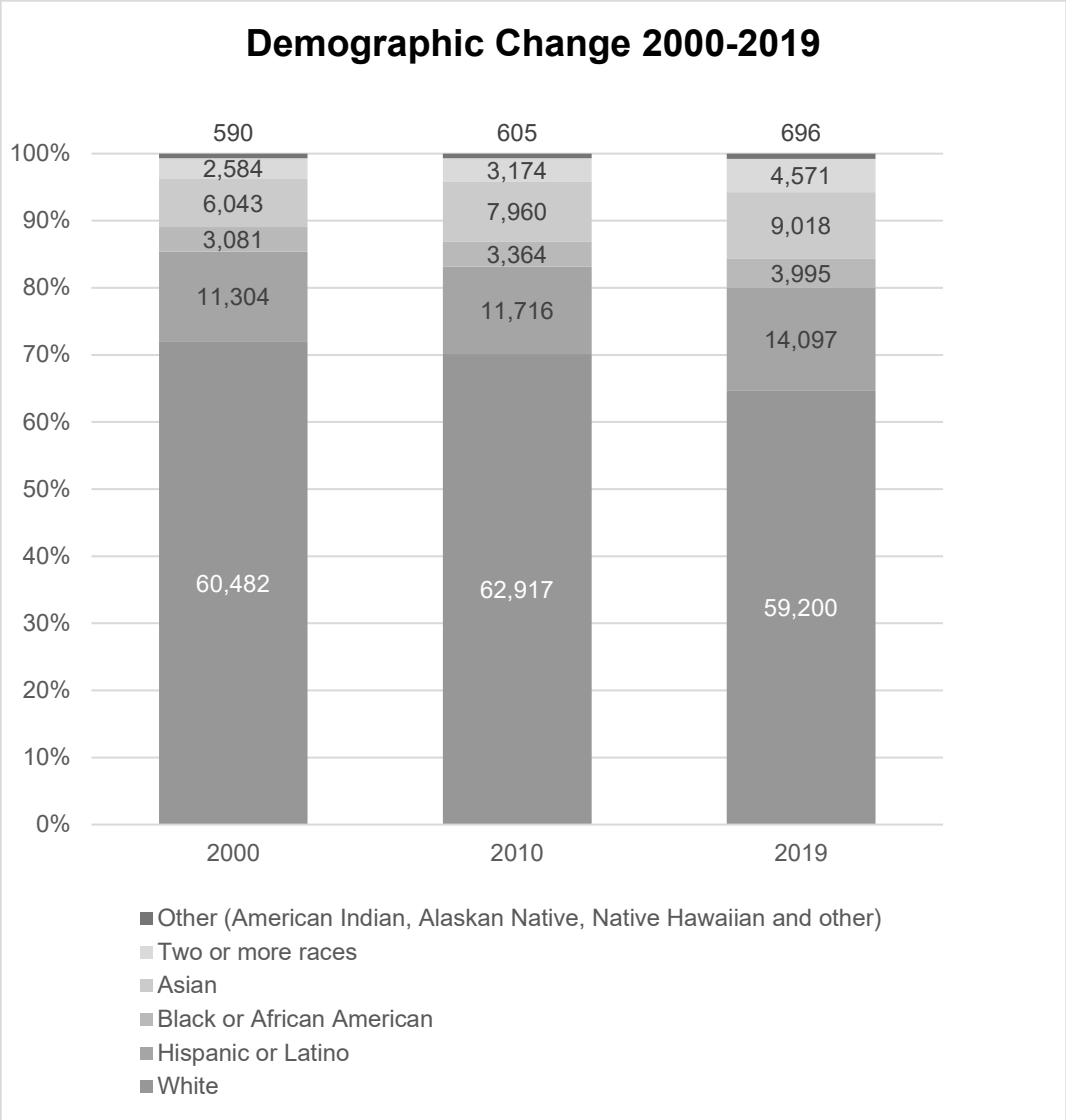


Unlike the neighboring City of Los Angeles, White people still make up the majority of the City of Santa Monica's population. However, census data shows that the City's racial makeup is becoming more diverse. From 2000 to 2010, the percentage of White people dropped from 72 percent to 70 percent, and

from 2010 to 2018, dropped further to 64 percent. In the same approximately 18-year period, non-White people have increased in small percentages, including Latinx who now make up approximately 15.9 percent (an increase of 2.5 percent since 2000) and Asian people who now make up 9.8 percent of the population (an increase of 2.6 percent). The number of Black people only slightly increased relative to the proportion of the population by 0.6 percent.

Table 3.9.3 City Population by Race 2000-2019

Category	2000	Percent	2010	Percent	2019	Percent
White	60,482	71.9%	62,917	70.1%	59,200	64.3%
Hispanic or Latino	11,304	13.4%	11,716	13.1%	14,097	15.3%
Black or African American	3,081	3.7%	3,364	3.7%	3,995	4.3%
Asian	6,043	7.2%	7,960	8.9%	9,018	9.8%
Two or more races	2,584	3.1%	3,174	3.5%	4,571	5.0%
Other (American Indian, Alaskan Native, Native Hawaiian and other)	590	0.7%	605	0.7%	696	0.8%
Total	84,084	-	89,736	-	91,577	-



One of the likely barriers to geographic mobility for non-White people is the high cost of housing. As described in Section 3.9.1.2, *Housing Stock*, Latinx and Black households have the lowest median income in the City and County as a whole, and as a result, are often priced out of potential living opportunities in the City.

3.9.1.2 Housing Stock

The U.S. Census Bureau, ACS, and the California Department of Finance, provide housing data for the City and the Greater Los Angeles Area. In addition, the City's building permit database tracks the development of housing units.

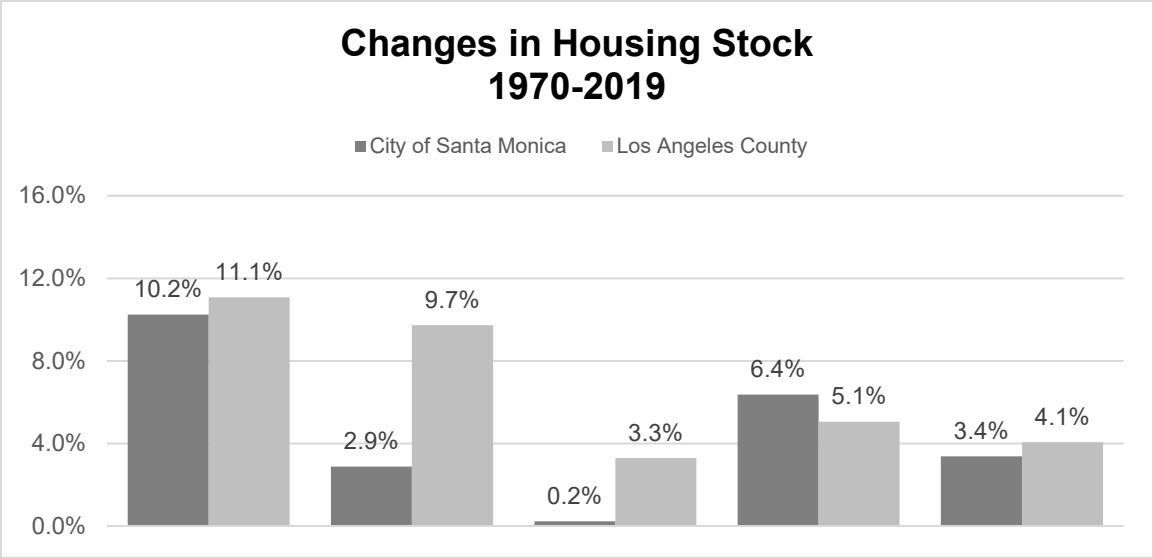
Housing Growth

The City's residential neighborhoods have been largely built out since the 1970s, when the rate of new residential development started to slow. From 1970 to 1980, the rate of housing growth was approximately 10.2 percent, with the housing stock increasing from 42,106 dwelling units to 46,418 dwelling units. In the following decade, the rate of new housing dropped drastically to 2.9 percent between 1980 to 1990. By the early 1990s, the onset of the economic recession grounded housing construction almost to a halt resulting in only a 0.2-percent increase in new dwelling units from 1990 to 2000. After 2000, as the economy became stronger, new residential construction increased. Most of this new housing growth occurred in the City's commercial zones and consisted of multi-family and mixed-use urban infill development. By 2010, the City had a total City housing stock of 50,912 units (see Table 3.9-3). The increase in housing units in the City between 2000 and 2010 (3,049 net new dwelling units representing a 6.4-percent increase) accounts for the comparable amount of population growth (approximately 6.7 percent) that occurred in the City during this time, while the limited number of dwelling units (i.e., 110 dwelling units) added to the City's housing stock between 1990 and 2000 is consistent with the decline in population growth (approximately -3.2 percent) the City experienced during that same time period. Since 2010, the City's housing supply has increased to 52,629 by January 1, 2020, a 3.4-percent increase. Most of this increase occurred in the City's Downtown.

Additionally, based on the City's permit database, there are approximately 999 dwelling units under construction and 814 dwelling units that have been approved and are in building permit plan check (i.e., anticipated to be under construction by June 30, 2021). These dwelling units would count towards the prior 5th Cycle Housing Element, and therefore, are not considered to be part of this proposed 6th Cycle Housing Element, but are accounted for in the future projections used in this EIR.

Table 3.9-3 Total Housing Stock in 1970-2020

	City of Santa Monica	Percent Change in past 10 years	Los Angeles County	Percent Change in past 10 years
1970	42,106	-	2,538,910	-
1980	46,418	10.2%	2,855,506	11.1%
1990	47,753	2.9%	3,163,343	9.7%
2000	47,863	0.2%	3,270,909	3.3%
2010	50,912	6.4%	3,445,076	5.1%
2020	52,589	3.3%	3,590,574	4.1%

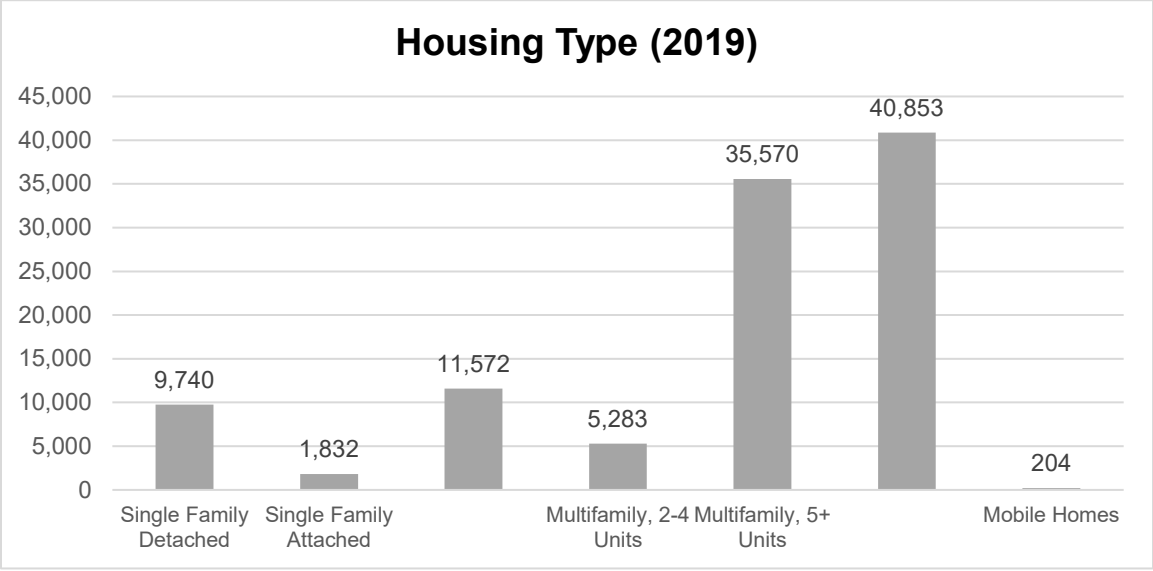


Source: U.S. Census for decennial estimates; 2020 estimate using the California Department of Finance January 1, 2019 estimate and adding in a net new of 60 units constructed in 2019 per the City's building permit database.

Table 3.9-5 Housing Units Under Construction, Approved, and Pending

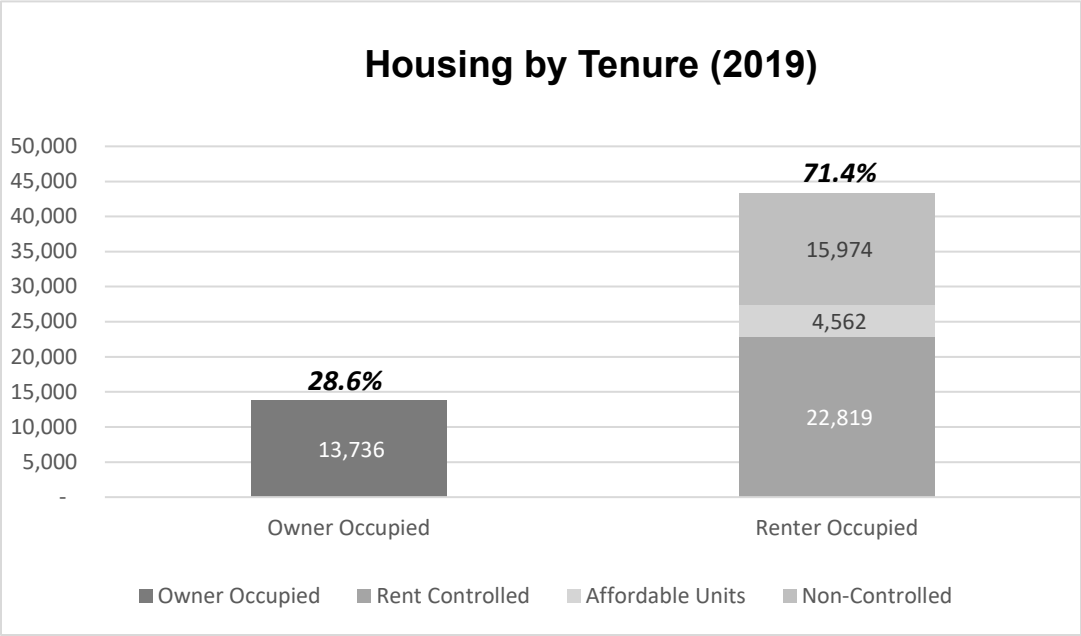
	Under Construction	Approved in Plan Check	Total Counted Towards 5th Cycle RHNA	Approved[1]	Pending[1]	Total Counted Towards 6th Cycle RHNA
Units	999	814	1,813	1,530	680	2,210

Source: City of Santa Monica, Building Permit database as of May 2021
1 A 10% discount factor was approved to the current number of approved and pending projects to allow for the possibility that some projects may never proceed to construction.



Tenure

The City's residential population is comprised primarily of renters. The highest concentrations of renter-occupied housing are located in the census tracts within the Downtown and east of Lincoln Boulevard along the Pico Boulevard Corridor and the highest concentration of owner-occupied housing is located north of Montana Avenue and the eastern portion of the city north of Wilshire Boulevard, as well as certain census tracts in Sunset Park. See Figure 3.9-1 for a map of renter households by U.S. Census tracts.

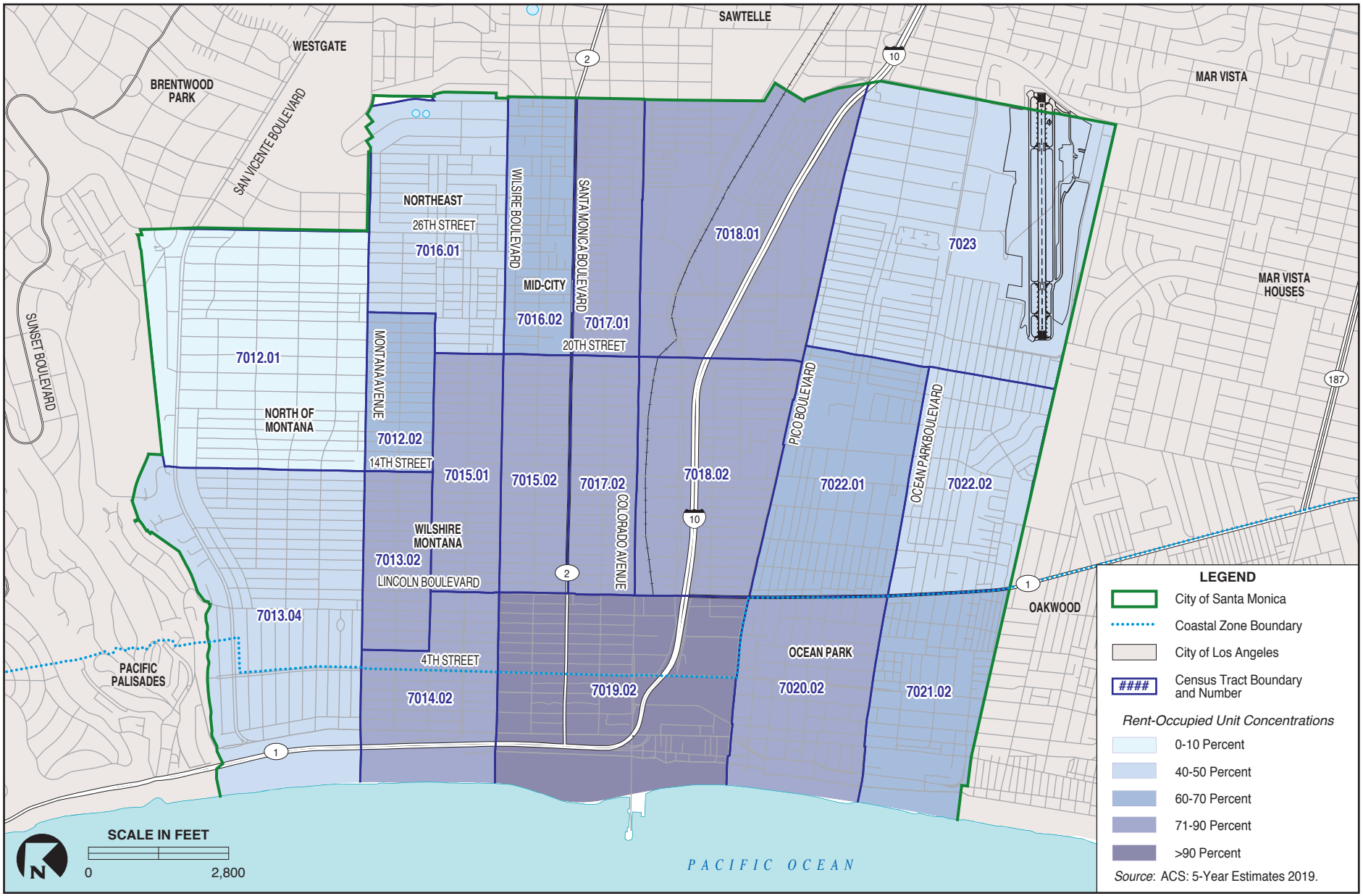


The proportion of owner-occupied housing in 1970 and 1980 stayed relatively consistent at around 22 percent with renter-occupied housing comprising 77 percent of the total occupied housing units. In 1990, owner occupied units increased to 27.5 percent, and in 2000 increased to 29.8 percent. However, since that time, home ownership opportunities have become even more limited. In 2010, the proportion of owner-occupied units was at 28.4 percent. By 2018, renter-occupied units made up 71.4 percent of the total occupied housing units while owner occupied units comprised only 28.6 percent. When compared with other major cities, the home ownership rate in the City is amongst the lowest in the Nation.

Table 3.9-5 Housing Units by Tenure

Year	Owner-Occupied	%	Renter-Occupied	%	Total
1970	9,119	22.9%	30,785	77.1%	39,904
1980	9,718	22.1%	34,194	77.9%	43,912
1990	12,340	27.5%	32,520	72.5%	44,860
2000	13,277	29.8%	31,220	70.2%	44,497
2010	13,315	28.4%	33,602	71.6%	46,917
2019	12,991	28.6%	32,496	71.4%	45,487

Sources: U.S. Census Bureau and ACS 5-year estimates.



wood.

City of Santa Monica
Renter Households by Census Tracts

FIGURE 3.9-1

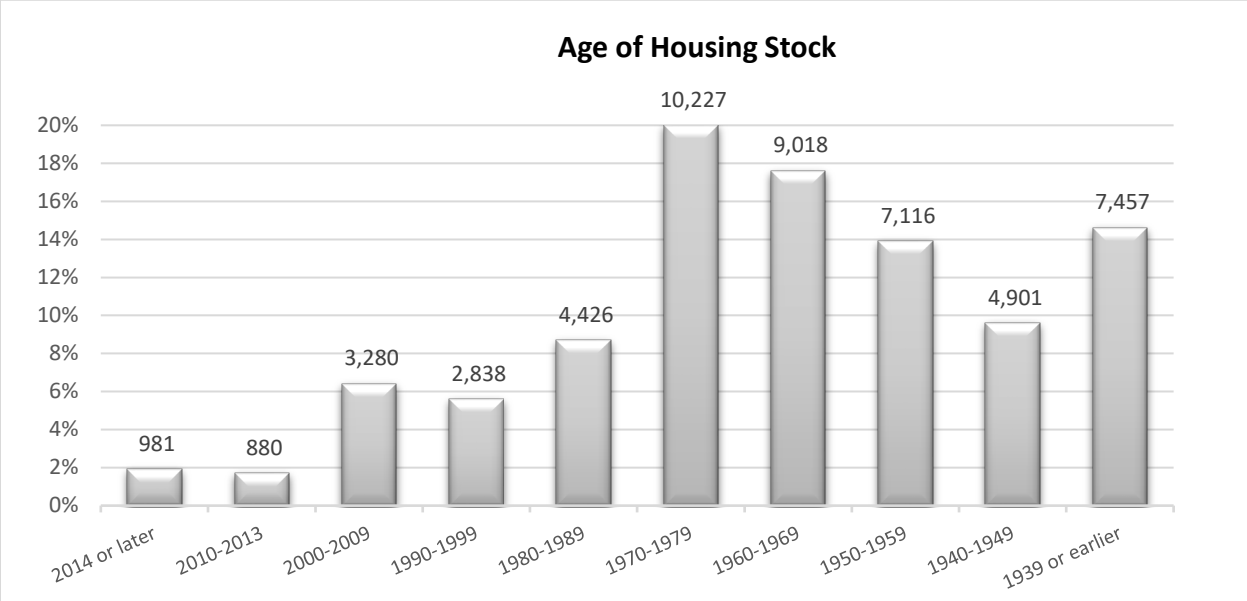
Table 3.9-6 Home Ownership Rates – Santa Monica versus Other Cities

	2018 Home Ownership Rates
Santa Monica	28.6%
Los Angeles	36.8%
San Francisco	37.6%
Newport Beach	56.5%
Huntington Beach	57.8%
New York	32.7%
Seattle	46.1%

Source: 2018 ACS 5-Year estimates

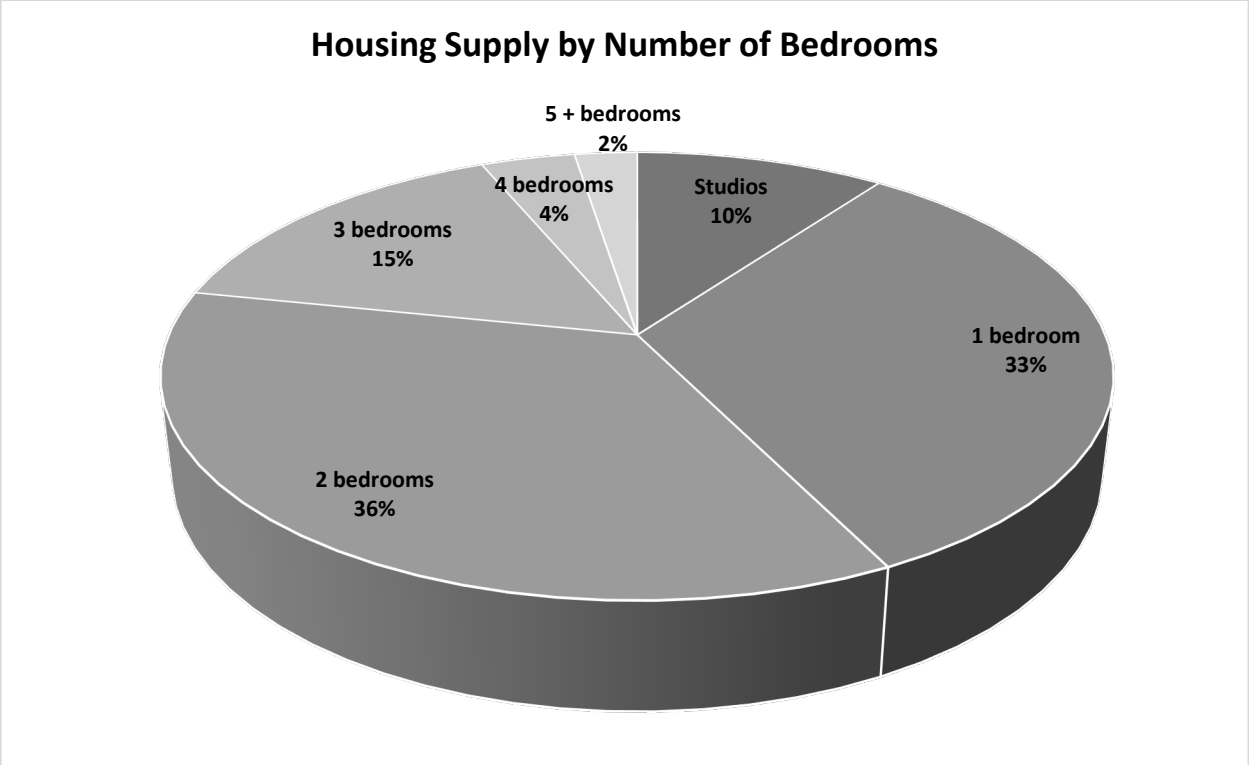
Age and Size

The City's residential neighborhoods have been largely built out since the 1970s. After this time period, housing construction slowed significantly as evidenced by the age of the City's housing stock.



Approximately 75 percent of the City's housing stock was built before 1980, and as such, many of these older rental units are subject to the City's Rent Control Law, which controls most residential rental buildings constructed prior to April 10, 1979. Rent controlled units are subject to maximum annual rent increases authorized by the Rent Control Board, and as such, are valuable assets to the City's housing market. These rent control units account for slightly more than one-half of all housing in the City and just over two-thirds of multi-family housing. The number of rent controlled units have decreased over time as a result of temporary use exemptions (e.g., owner-occupancy exemptions on properties of three-or-removal permits, or units being withdrawn from the rental housing market pursuant to the Ellis Act). In 2019, the number of rent controlled units in the City was 27,381.

As a City with mostly multi-family rental housing, it is not surprising that one- and two-bedroom units make up 32 and 37 percent of the housing supply. Larger sized units generally consist of single-units that are located in the City's R1 zones.



Households

The U.S. Census Bureau also tracks the number of households, which is different from the number of housing units which counts both occupied and vacant units. A household is defined by the U.S. Census as a group of people who occupy a housing unit. Table 3.9-7 shows housing and household characteristics for the City for the years 1970,1980, 1990, 2000, 2010, and 2019.

Table 3.9-7 City of Santa Monica Housing and Households

Year	Households (Occupied Housing Units)	Owner Occupied Units	%	Renter Occupied Units	%	Average Household Size
1970	39,904	9,119	22.9%	30,785	77.1%	-
1980	43,912	9,718	22.1%	34,194	77.9%	-
1990	44,860	12,340	27.5%	32,520	72.5%	1.88
2000	44,497	13,277	29.8%	31,220	702%	1.83
2010	46,917	13,315	28.4%	33,602	71.6%	1.87
2019	45,309	13,138	29%	32,171	71%	1.88

Source: U.S. Decennial Census and American Community Survey 2019 ACS 5 -year estimates

As shown in Table 3.9-7, the U.S. Census reported that the City had 46,917 total households (occupied dwelling units) in 2010. This represents an increase of 2,420 households or 5.4 percent from 2000. The number of households in the City is directly related to the number of vacant housing units. The City's vacancy rate in 2010 was 7.8 percent for all dwelling units, with homeownership vacancy rate at 1.1 percent and rental vacancy rate at 5.1 percent.[2] In 2000 the City's vacancy rate was slightly lower at 7.0 percent and 6.0 percent in 1990. In 2010, the City had an average household size of approximately 1.87 persons per household (pph). The average household size in 2010 remained nearly unchanged compared to the average household size of 1.83 pph in 2000 and 1.87 pph in 1990, and continues to be substantially lower than the 2.98 pph average for Los Angeles County.

3.9.1.3 Employment

The City has a diverse economy comprised of various industry sectors. The Information and Profession/Scientific/Technical Industries comprises over 30 percent of the City's economy. Additionally, the City is also a popular tourist and visitor hub, with almost 25 percent of the workforce working in the Food and Accommodation and Retail Trade sectors. The City's tourism industry draws over 7.3 million people to the City each year from outside of Los Angeles County for pleasure, vacation, or business; the City also attracts millions of single-day visitors. The tourism industry supports nearly 12,000 jobs within the City. The City's 36 hotels have more than 3,500 rooms – including 1,290 hotel rooms in the Downtown. Hotels in the City typically operate with an occupancy rate of ranging from approximately 70 to 80 percent annually, with occupancy rates of 80 to 90 percent for the 680 hotel rooms in the Downtown.

Table 3.9-8 lists the top 20 principal employers in the City and the total number of jobs that they provide. The 23,321 jobs generated by these employers accounted for approximately 25 percent of the City's total estimated jobs in 2019.

Housing and Santa Monica Workers

In an ideal world, employees can choose to live close to their place of employment in a neighborhood that offers abundant retail, services, open space, and good schools. However, in reality, many of employees cannot afford to live close to their work since most of their jobs are located in metropolitan areas where housing costs tend to be much higher. This is especially true in the City of Santa Monica where only 9 percent of the approximately 91,000 employees live within the City. The remaining 91 percent commute from areas outside of the City, with the majority commuting from the Greater Los Angeles Area. Many of these employees are working in the Food and Accommodation and Retail Trade sectors and generally earn lower wages. Because their wages are not enough to afford the high housing cost in the City, lower-wage workers are commuting 2 to 4 hours daily to live in more affordable areas. In 2019, there were 35,046 out-of-town commuters making less than $40,000 out of 84,186 total out-of-town commuters (approximately 41.6 percent). In February 2021, the City's Mobility Division launched a survey to better understand the effects of housing on the mobility patterns of workers in the City. Approximately 2,600 people took the survey, with 1,700 respondents identified as employees within the City. When

[2] The 7.8 percent vacancy rate includes 2.2 percent of housing units that are for seasonal, recreation, or occasional use.

respondents were asked what is the major barrier to living in the City, housing cost was cited as the number one factor, followed by the desire to purchase a single-family home (see Appendix I).

Table 3.9-8 Top Employers in Santa Monica

Employer	Industry	Number of Jobs Provided
Providence St. John's Medical Center	Health Services	3,310
Santa Monica-UCLA Medical Center	Health Services	2,879
City of Santa Monica	Government	2,298
Santa Monica-Malibu Unified School District	Education	1,962
Santa Monica College	Education	1,800
Snap, Inc	Media + Entertainment	1,460
Activision Blizzard Inc.	Media + Entertainment	1,231
RAND Corporation	Research	891
Hulu	Media + Entertainment	882
Lionsgate Entertainment Corp	Media + Entertainment	819
Cornerstone on Demand	Media + Entertainment	700
Rubin Postaer and Associates	Advertising	630
Amazon	Media + Entertainment	629
Oracle	Information/Technology	607
ET Whitehall Santa Monica Partners LP	Hospitality	579
Kite Pharma	Research	562
True Car	Information/Technology	546
Bird	Information/Technology	517
Redbull North America Inc	Media + Entertainment	513
Beach Body LLC	Media + Entertainment	506
Total		**23,321**

Source: City of Santa Monica Housing and Economic Development Department, Employer Reported Employment Levels (2019)

3.9.2 Regulatory Setting

3.9.2.1 State Regulations

Senate Bill 330

The Housing Crisis Act (HCA), Senate Bill (SB) 330, was signed into law by California State Governor Gavin Newsom on October 9, 2019 and became effective January 1, 2020. The HCA establishes a State-wide housing emergency to be in effect until January 1, 2025 (i.e., during the "housing emergency period"). The HCA is designed to speed up housing construction in California during the next half-decade by expediting permit processing for housing projects, limiting fee increases on housing applications, prohibiting land use plan changes or development standards that result in a reduction of residential density, creating incentives for affordable housing and establishing a no net loss requirement for replacement housing projects. With the No Net Loss requirement, the HCA generally prohibits the City from approving a housing project that would demolish existing residential units and would not replace, at a minimum, the same number of residential units. For example, SB 330 prohibits the City from approving a project that would demolish four existing residential units and replacing it with three new residential units, since there would be a net loss of one unit.

Housing Accountability Act

The Housing Accountability Act (HAA), California Government Code Section 65589.5, is a State law that restricts the City's ability to deny, reduce the density of, or make infeasible any housing development project that complies with objective general plan, zoning, and subdivision standards and criteria (collectively referred to as "Objective Standards"), in effect at the time that the housing development's application is determined to be complete. The HAA has been in effect since 1982 and has undergone several amendments to further reinforce the State legislature's intent to increase the supply of residential housing stock. In essence, the HAA precludes a jurisdiction from denying or imposing any conditions upon any housing project (including residential units only or mixed-use projects with at least two-thirds of square footage designated for residential use) unless specific findings are made. If a jurisdiction desires to either disapprove or impose a condition that a housing development be developed at a lower density or with any other conditions that would adversely impact feasibility of the proposed project, the jurisdiction must make the following findings:

A. *"The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density."* As used in this paragraph, a "specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

B. There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified, other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density.

Senate Bill 35

SB 35 was signed into law by former California State Governor Edmund Gerry "Jerry" Brown on September 29, 2017, and became effective January 1, 2018. SB 35 amends California Government Code Section 65913.4 to require local entities to streamline the approval of certain housing projects by providing a ministerial approval process. It applies in cities that are not meeting their Regional Housing Needs Allocation (RHNA) goal for construction of above-moderate income housing and/or housing for households below 80 percent Average Median Income (AMI). SB 35 creates an opt-in program for developers that allows a streamlined approval process provided that the development is on an infill site and complies with existing residential and mixed-use zoning. Participating developments must provide at least 10 percent of units for lower-income families in cities that have not met their above-moderate income RHNA goals, or 50 percent of units for lower-income families in cities that have not met their lower-income housing RHNA goals. All projects over 10 units must be prevailing wage and larger projects must provide skilled and trained labor.

3.9.2.2 Regional Policies and Regulations

SCAG Regional Housing Needs Assessment

The SCAG is the regional planning agency for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The SCAG serves as the regional council of governments for Southern California and is responsible for issues the RHNA for the six counties and 191 cities within the region, including the City of Santa Monica.

The purpose of the RHNA is to plan for population growth, so that the region and subregion will collectively produce sufficient housing to meet population needs and address social equity, with each jurisdiction providing its fair share housing needs. The RHNA identifies the housing needs for very low income, low income, moderate income, and above moderate income groups. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate projected growth and address existing need, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation and housing, and not adversely impact the environment (SCAG 2021a).

As part of the RHNA process, SCAG must develop a final RHNA methodology, which is used to determine each jurisdiction's RHNA as a share of the regional determination (SCAG 2020). In prior cycles, factors such as household growth and household income distribution were the primary factors considered in determining a jurisdiction's RHNA. For the 6th Cycle RHNA, SCAG considered other factors in addition to household growth. These factors included transit accessibility, job accessibility, and indicators that influence a community's environmental, educational, and economic resource accessibility.

On March 4, 2020, the SCAG approved the Final RHNA methodology for determining each jurisdiction's RHNA within the region. The methodology utilized a three-step process:

1. *Determine the jurisdiction's projected housing need using regional projected household growth and calculate a future vacancy need by applying a healthy vacancy rate to owner and renter households. Assign a replacement need based on local survey results.*
2. *Determine the jurisdiction's existing housing need based on a jurisdiction's proximity to transit and jobs.*
3. *Add the projected and existing housing need together to get a total and apply social equity adjustment factors to determine the four RHNA income categories.*

The final 6th Cycle RHNA for all jurisdictions within the SCAG region was adopted by the SCAG Regional Council on March 4, 2021. This allocation identifies housing needs for the planning period between January 2021 and October 2029. As described in Section 2.0, *Project Description*, based on SCAG's adopted RHNA methodology, the City of Santa Monica's 6th Cycle RHNA is 8,895 dwelling units, of which 69 percent must be affordable. As part of the proposed Housing Element Update, the City must demonstrate to the State that it has the policies and regulations in place as well as zoned land capacity to meet its targeted RHNA.

SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

As the regional planning agency for the Southern California regions, SCAG is responsible for maintaining a continuing, cooperative and comprehensive transportation planning process, which involves the preparation and updating of a Regional Transportation Plan (RTP) every 4 years. SCAG is also responsible for preparing, adopting, and updating every four years the Sustainable Communities Strategy (SCS) pursuant to California Government Code Section 65080. The SCS is a component of the RTP document that demonstrates how the region will meet its greenhouse gas reduction targets as determined by the California Air Resources Board (CARB).

On September 3, 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS (Connect SoCal). Connect SoCal s a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal includes a regional growth forecast that was developed by working with local jurisdictions using the most recent land use plans, policies, and assumptions. Connect SoCal's growth projects are utilized by SCAG for regional modeling purposes and were not adopted as part of Connect SoCal. The growth forecasts do not affect a local jurisdiction's authority or decision on future development projects or plans. When adopting Connect SoCal, SCAG recognized that cities and counties will foreseeably update their housing elements as part of General Plans and amend zoning designations to accommodate the 6th Cycle RHNA. For many cities and counties, SCAG acknowledged that the required RHNA and Housing Element may need to accommodate more housing units than reflected in the Connect SoCal's household and population growth projections for the jurisdictions.

3.9.2.3 Local Policies and Regulations

Santa Monica Municipal Code Chapter 9.64, Affordable Housing Production Program

The City's Affordable Housing Production Program, Santa Monica Municipal Code (SMMC) Chapter 9.64, requires developers of market rate multi-family developments to contribute to affordable housing production and thereby help the City meet its affordable housing need. All multi-family projects must comply with affordable housing obligations identified in SMMC Section 9.64.040. Multi-family project applicants must provide affordable housing units on- or off-site, pay an affordable housing fee, or acquire land for affordable housing. If providing affordable housing on-site the multi-family project applicant agrees to designate at least: (1) 5 percent of the total units of the project for 30 percent income household for projects with an application for a ministerial or discretionary planning approval that is determined complete on or before March 26, 2019 or after February 28, 2022; (2) 10 percent of the total units of the project for 50 percent income households; (3) 20 percent of the total units of the project for 80 percent income households; or (4) 100 percent of the total units of a project for moderate-income households in an Industrial/Commercial District. No building permit or occupancy permit shall be issued or any development approval granted for a project that is not exempt and does not meet the requirement of the Affordable Housing Production Program. All affordable housing units shall be rented or owned in accordance with the chapter.

Santa Monica Charter Article XVIII, Rent Control Law

The City's Rent Control Law (Article XVII of the City Charter) was adopted by the voters in 1979 to alleviate housing shortage by establishing a Rent Control Board empowered to regulate rentals in the City so that rents will not be increased unreasonably.

The City's Rent Control Law provides that any landlord who desires to remove a controlled rental unit from the rental housing market by demolition, conversion or other means is required to obtain a permit from the Rent Control Board prior to such removal from the rental housing market in accordance with rules and regulations promulgated by the Rent Control Board. In order to approve such a permit pursuant to Charter Section 1803(t)(i), the Rent Control Board is required to make a finding that the landlord cannot make a fair return by retaining the controlled rental unit.

In addition, under Charter Section 1083(t)(ii), the Rent Control Board may approve such a permit:

i. If the Board finds that the controlled rental unit is uninhabitable and is incapable of being made habitable in an economically feasible manner, or

ii. If the permit is being sought so that the property may be developed with multi-unit dwellings and the permit applicant agrees as a condition of approval, that the units will not be exempt from the provisions of this Article pursuant to Section 1801(c) and that at least 15 percent of the controlled rental units to be built on the site will be at rents affordable by persons of low income.

Santa Monica Municipal Code Chapter 4.36, Tenant Relocation Assistance

SMMC Chapter 4.36 requires both permanent and temporary relocation assistance to tenants under certain circumstances. Relocation fees are required from a landlord who terminates or causes the termination of a tenancy for any of the following reasons: (1) the landlord seeks to withdraw all rental housing units from the rental housing market; (2) seeks to recover possession of a rental housing unit; or (3) seeks to recover possession to demolish or otherwise withdraw a rental housing unit from residential rental housing use after having obtained all proper permits from the City, if any such permits are required. In lieu of the fee required, a landlord may prepare a Displacement Plan which must be approved by the City prior to service of a notice to terminate tenancy. The Displacement Plan shall identify the special needs of the displaced tenants, identify the types of assistance that will be provided and include a commitment to pay for any such assistance. Additionally, in lieu of the fee, the landlord may, at the landlord's option, relocate the displaced tenant into a comparable replacement housing unit satisfactory to the tenant, in which event the landlord shall be liable only for the actual costs of relocating the tenant.

In addition, landlords are required to provide temporary relocation benefits, including temporary housing and moving costs, to tenants when: (1) the landlord is required to temporarily recover possession of a rental housing unit in order to comply with housing, health, building, fire or safety laws of the State of California or the City of Santa Monica; (2) a rental housing unit has been rendered uninhabitable, necessitating the tenant(s) of the housing unit to no longer dwell within that unit; or (3) a tenant is required to vacate a rental housing unit upon the order of any government officer or agency. Landlords are required to provide temporary relocation benefits until no longer required by State law, such as when legal tenancy is terminated or the tenant is returned to his/her dwelling unit which has been made habitable.

3.9.3 Impact Assessment Methodology

3.9.3.1 Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on population and housing if it would:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

3.9.3.2 Methodology

This analysis reviews potential land use changes anticipated to occur under the proposed Housing Element Update and considers whether these changes would result in substantial population, household, and employment growth, particularly in relation to anticipated State or regional projections. The EIR also considers potential for changes in population of displacement of existing housing or residents.

As required by the CEQA Guidelines, an EIR must include a discussion of the ways in which the proposed project could directly or indirectly foster economic development or population growth, or the construction of additional housing and how that growth would, in turn, affect the surrounding environment (CEQA Guidelines Section 15126.2[d]). Growth can be induced in a number of ways, including the elimination of obstacles to growth. In general, a project may foster substantial growth in a geographic area if it meets any one of the criteria identified below:

- The project removes an impediment to growth (e.g., the provision of new roads to an area that would otherwise be unreachable);
- The project results in the urbanization of land in a remote location (urban sprawl);
- The project establishes a precedent-setting action that would significantly intensify growth in an otherwise undeveloped area (e.g., a change in zoning or general plan amendment approval for agricultural land); or
- Significant economic expansion or growth occurs in an area in response to the project (e.g., establishment of employment centers, etc.).

Generally, growth inducing projects are either located in isolated, undeveloped, or rural areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth.

As previously described, population growth in and of itself does not constitute a physical impact on the environment, which is of concern under CEQA. Rather, it is how that growth may generate secondary environmental impacts, such as increased demands for public services, surpassing of infrastructure capacities, or increased traffic congestion and resulting air pollutant emissions. The environmental

impacts of anticipated population, housing, and employment growth on other issues such as public services, transportation, utilities, and other issues are addressed throughout this EIR.

3.9.4 Project Impacts and Mitigation Measures

Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Description (POP-1)

POP-1 **The proposed 6th Cycle 2021-2029 Housing Element Update plans for, but does not directly propose the construction of new residential development. The proposed Housing Element Update would provide the goals, policies, and programs to guide new residential over the next 8 years. Planning for the increase in housing is necessary to accommodate for unmet housing demand and to comply with the State-mandated 6th Cycle Regional Housing Needs Allocation (RHNA) of 8,895 dwelling units. The proposed Housing Element Update would not induce substantial growth, but rather would accommodate already projected growth in the region. Therefore, this impact would be *less than significant*.**

As previously described, the Housing Element Update is a component of the Santa Monica General Plan, which provides the long range, comprehensive vision for future growth and development patterns in the City. The proposed Housing Element Update describes the strategic plan for residential development to meet the City's State-mandated housing needs, including accommodating a variety of housing types and densities. Individual residential development projects would be proposed and implemented incrementally over the next 8 years, based on various factors and planning considerations.

Accounting for residential development projects that are under construction or in plan check (which are counted towards the prior 5th Cycle Housing Element) and anticipated demolition, the proposed Housing Element Update would result in a projected housing stock in the City in 2030 of 61,484 to 63,686 dwelling units and a projected City population of 110,1147 to 116,698 persons. If all of this planned housing is developed, this would result in an increase of approximately 19 to 23 percent in dwelling units and 21 to 26 percent increase in population. Table 3.9-9 shows the projected housing and population projections.

Table 3.9-9 Housing and Population Projections

	Housing Units	Population
2020 Baseline	52,589	92,357
Under Construction/Approved in Plan Check	1,381	2,761
6th Cycle RHNA Housing Element	8,895 – 11,000 (with buffer)*	17,790 – 22,000 (with buffer)*
Demolition of Units from Approved/Pending Projects	-210	-420
Future 2030	62,655 – 64,760 (with buffer)*	112,488 – 116,698 (with buffer)*
Percent Increase from 2020 Baseline	19 – 23% (with buffer)*	21 – 26% (with buffer)*

Notes: *To ensure that sufficient capacity exists in the housing element to accommodate the RHNA throughout the planning period, California Department of Housing and Community Development (HCD) recommends that a jurisdiction create a buffer in the housing element inventory of at least 15 to 30 percent more capacity than required, especially for capacity to accommodate the lower income RHNA. Therefore, this EIR analyzes buildout range of up to 8,895 (the RHNA) to approximately 11,000 dwelling units (which represents a buffer of 24 percent).

The projected increases in residential development and associated population growth would be greater than the projections anticipated in SCAG's Connect SoCal. However, as previously described, when adopting Connect SoCal, SCAG recognized that cities and counties will foreseeably update their housing elements as part of general plans and amend zoning designations to accommodate the 6th Cycle RHNA. For many cities and counties, SCAG acknowledged that the required RHNA and Housing Element may need to accommodate more housing units than reflected in the Connect SoCal's household and population growth projections for the jurisdictions. Therefore, it is anticipated that the next update of the RTP/SCS will incorporate the latest population and housing growth projections from the 6th Cycle RHNA and the Housing Elements of cities and counties within the region. Further, neither SCAG nor Connect SoCal precludes a local jurisdiction from planning and approving growth that is different in terms of total units or geographic extent.

Although the proposed Housing Element Update itself does not directly propose the construction of new residential development, it would amend development standards and enact new programs to enable and facilitate the construction of housing, particularly affordable housing. State law requires that the City provide the capacity and the regulatory framework to accommodate its RHNA "fair share" of the region's housing needs, which cannot be achieved without the proposed revisions to existing development standards and new programs to support housing. SCAG has also indicated that the RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth and address existing need, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation and housing, and minimize or avoid potential adverse impacts on the physical environment (SCAG 2021a). In this regard, the proposed Housing Element Update would not induce growth, but rather would accommodate growth, particularly anticipated regional growth that may otherwise occur in locations well removed from the City's high concentration of jobs. The methodology to calculate the City's 6th Cycle RHNA demonstrates this fact as it based on a projected housing need using household growth for jurisdictions between the RHNA projection period between January 2021 and July 2029, in addition to a calculated future vacancy need and replacement need.

Additionally, as previously described in Section 3.9.1, *Environmental Setting*, the City has a daytime workforce population of approximately 91,000 people. More than 90 percent of this workforce live outside the City boundaries and commute in for their jobs. These employees within the City, especially low and moderate income employees in the retail, food service, and entertainment industries, tend to reside in

less expensive inland communities often with relatively long commutes. These longer commutes increase VMT, energy use, air pollutant and GHG emissions with associated environmental impacts. The production of new affordable housing planned for under the proposed Housing Element Update would create housing opportunities for many of the employees within the City, potentially reducing the environmental impacts associated with long distance commutes. By allowing employees within the City to live closer to their place of employment, the proposed Housing Element Update would foster uses of walking, bicycling, and the use of public transit, limiting growth in VMT and associated adverse impacts to the physical environment. Therefore, employees who make up the City's daytime population may in turn, become part of the City's residential population as well, with associated environmental benefits. In this manner, the proposed Housing Element Update would not induce growth but rather would accommodate the housing needs of the existing daytime population within the City. Therefore, this impact is considered *less than significant*.

Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

Impact Description (POP-2)

POP-2 **Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update would increase the number of dwelling units within the City and would not displace substantial numbers of existing housing or people. Therefore, this impact is *less than significant*.**

New residential development planned for under the proposed Housing Element Update would occur primarily on underutilized land with existing commercial uses or on surface parking lots. Almost all the sites identified in the Suitable Sites Inventory (SSI) associated with the proposed Housing Element Update are located on commercially zoned parcels that are developed with commercial uses and residentially zoned parcels developed with parking lots. Loss of residential units (estimated at approximately 210 units) would occur on a small handful of site listed on the SSI, primarily on sites with approved or pending entitlements.

With the City being almost entirely built out (i.e., having little to no vacant land), it is anticipated that new residential development planned for under the proposed Housing Element could create changes in existing neighborhoods. The potential for gentrification (a term primarily used to describe the trend of increased investment and housing prices, improved amenities, cultural and demographic shifts, and an increase in residents of higher socioeconomic status) or the displacement of lower-income residents would occur if new development brings higher-income residents into a neighborhood. Indirect displacement of people is a great concern region-wide, even where no changes to land use designations or zoning are planned. For example, displacement could occur due to the rising cost of housing, which affects the mobility of existing residents potentially driving them to move out of the City to more affordable locations.

One of the overarching goals of the proposed Housing Element Update is to preserve the City's existing housing stock and to prevent displacement of existing tenants. The proposed Housing Element Update

would continue to operate existing programs to protect existing housing and residents from displacement, and to strengthen these programs when additional funding sources become available. The programs addressing the protection of housing and displacement of existing residents include:

- *Program 3.A - Restrict The Removal Of Existing Rental Units For Site Redevelopment And Require That Protected Units Are Replaced:* The City shall consider amending the SMMC to adopt local requirements that make permanent and potentially expand upon the anti-displacement requirements of SB 330 to ensure that protected units proposed to be demolished in order to construct a new housing development project are replaced.

- *Program 3.B. - Develop Programs To Address State And Federal Legislative Mandates:* The City shall continue to implement programs, including tenant and landlord education/outreach, that strive to protect tenants against landlord discrimination and cancellation of existing Section 8 contracts (including City and/or private foundation-funded subsidy) to enable tenants to remain and pay the maximum allowable rent (MAR). The City will continue to fund the acquisition and rehabilitation of existing rental units and continue to investigate new, innovative ways to increase the affordability of housing in light of the loss of formerly affordable units due to vacancy de-control and Ellis Act withdrawals.

- P*rogram 3.C. Facilitate The Conservation Of Restricted And Non-Restricted At-Risk Housing:* There are approximately 770 affordable, deed-restricted units that are at-risk of conversion to market rate in the next 10 years. The City will continue to monitor the status of at-risk projects within the City, advise tenants in advance of potential conversion dates, and assist in answering questions from residents of at-risk housing. The City will consider exercising its right of first refusal to purchase properties if necessary and financially feasible to ensure the continued availability of affordable housing units. Additionally, the City shall explore strategies on conserving non-covenant residential units such as rent-controlled units and naturally occurring affordable units. The City may consider incentives to multi-unit property owners to encourage the rehabilitation of existing housing stock.

- *Program 3.D. Maintain An Acquisition And Rehabilitation Program:* As resources are available, the City shall continue to provide loan assistance to nonprofit affordable housing providers and work with providers to identify new funding sources. As outlined in Program 2.B, the City shall explore a Right of First Offer Ordinance that would provide nonprofit affordable housing providers the right of first offer to acquire existing multi-unit residential properties as they become available for purchase.

- *Program 3.E Maintain A Low Income Residential Repair Program:* The City shall support and fund the rehabilitation of 38 multi-units and provide 20 minor home repairs.

- *Program 3.F Enhance Code Enforcement Response To Housing-Related Violations:* The City shall continue to respond to residential building code violation complaints. Code Enforcement and Building and Safety Divisions will coordinate with the Housing and Human Services Division to provide information on available rehabilitation assistance to correct code deficiencies.

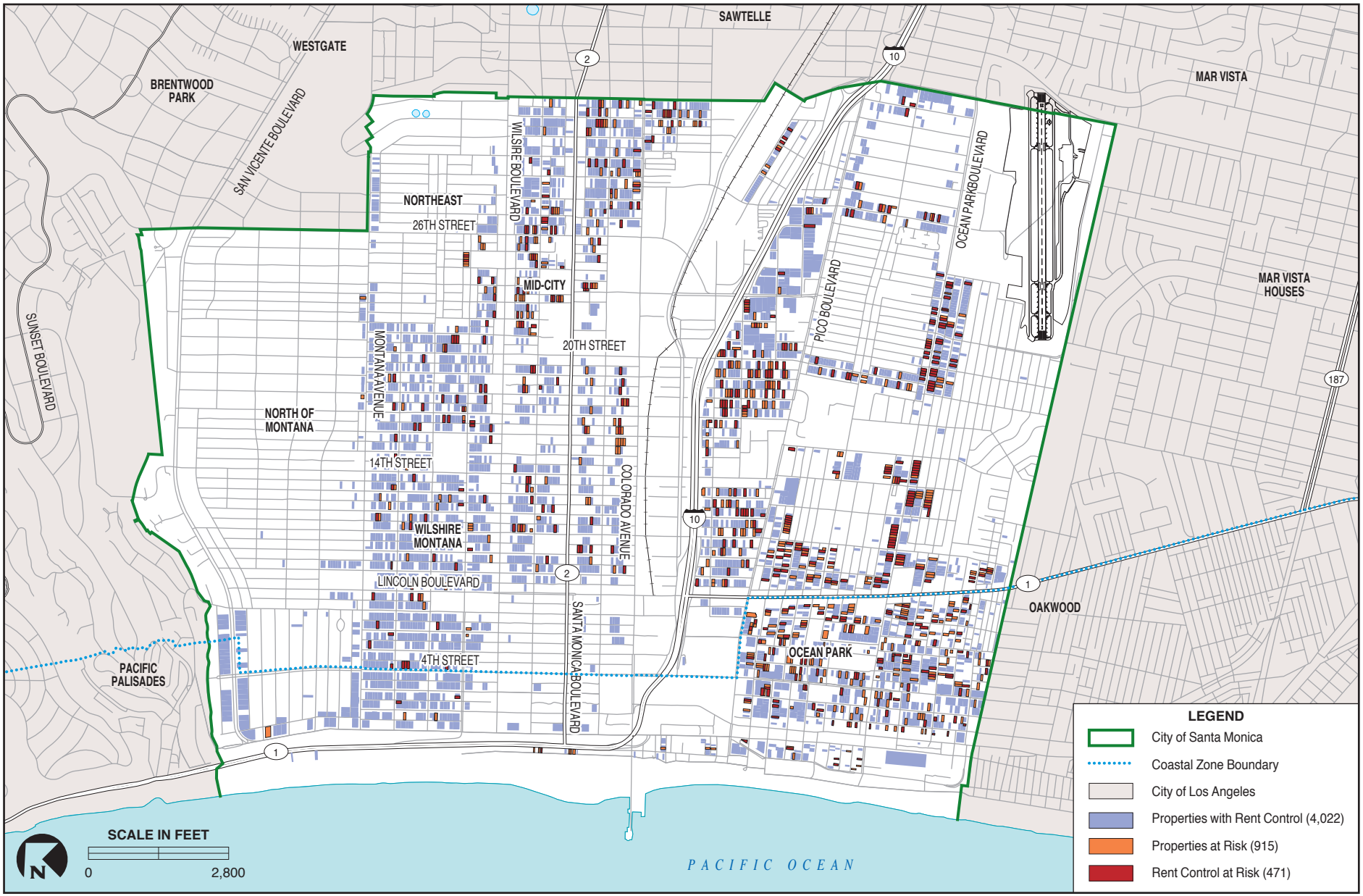
- *Program 3.G Maintain A Mandatory Seismic Retrofit Program:* The City shall continue to implement the Seismic Retrofit Program pursuant to the City's Seismic Retrofit Ordinance.

- *Program 3.H. Information And Outreach For Property Owners Regarding Rehabilitation And Maintenance Of Housing Units:* The City shall provide additional education and outreach to multi-unit property owners on available City programs and encourage continued rehabilitation, maintenance, repairs, and upgrades of their housing units.

Notwithstanding all of these policies and programs for tenant protections, some residential development projects may result in the demolition of existing residential units in order to develop an increased number of new housing units. An assessment was conducted to determine multi-family rental housing units at risk of conversion or demolition. The assessment was conducted by filtering out buildings newer than 1980 and then comparing the number of existing units on the site to its underlying maximum density. If a site was "underdeveloped" to its density, then it was flagged as "at risk." Based on this methodology, 915 properties were identified as "high-risk," of which 471 properties are subject to the City's Rent Control Law. Figure 3.9-2 depicts the potential high-risk properties. In general, these "at-risk units" are located within census tracts that have proportions of non-White populations and have lower median household incomes, as shown in Figures 3.9-3 and 3.9-4.

The "at-risk" units were mapped with the sensitive communities map from the Urban Displacement Project (UDP) (University of California, Berkeley 2020). The UDP is a research initiative of UC Berkeley that conducts research related to potential gentrification and displacement risks in various cities, including the City of Los Angeles. Risks are based on a number of factors, such as income levels of households, diversity of neighborhoods, and changing housing costs. Table 3.9-10 shows the number of high-risk properties by Census tract and the displacement assessment of the census tract. When reviewing these "at-risk" units with data from the UDP, Census Tract 701802 is the most vulnerable to displacement, with up to 274 units considered "at-risk."

Some of the City's existing housing stock will be protected as a result of the SB 330, which requires that a new residential development project proposing the demolition of existing residential units must replace, at a minimum, the same number of residential units. This will address existing, smaller multi-family buildings or multi-unit properties with five dwelling units or less, which are particularly vulnerable to redevelopment and replacement. Additionally, the new allowance for Accessory Dwelling Units (ADUs; also known as "granny flats") on existing multi-unit properties not only creates more housing opportunities but also may also encourage property owners to retain their rental properties. However, there remains existing multi-unit properties in the City that have fewer units than maximum allowable density, and, as such, could be at risk for demolition and redevelopment by a residential development project that proposes a higher number of new units, an unknown number of which would be affordable or market rate. Projects which redevelop existing low or moderate income housing sites with a high proportion of marketed rate housing would have the greatest potential for displacement.



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City of Santa Monica
Rental Units at Risk

FIGURE 3.9-2

Table 3.9-10 Multi-unit Properties at Risk of Displacement

Census Tract	Displacement Assessment1	Total At-Risk Units
702102	Becoming Exclusive	275
701402	At Risk of Becoming Exclusive	36
702002	At Risk of Becoming Exclusive	310
701902	Stable Moderate/Mixed Income	21
701304	Stable/Advanced Exclusive	0
701701	At Risk of Becoming Exclusive	146
701302	At Risk of Becoming Exclusive	53
701202	Stable/Advanced Exclusive	34
701601	Stable/Advanced Exclusive	55
701801	**Vulnerable**	157
701602	Becoming Exclusive	150
701502	Stable Moderate/Mixed Income	66
701501	At Risk of Becoming Exclusive	77
701702	**Vulnerable**	95
702202	Stable/Advanced Exclusive	170
701802	**Vulnerable**	274
702300	Stable Moderate/Mixed Income	153
702201	Becoming Exclusive	272
701201	Stable/Advanced Exclusive	6

Notes: [1] Sensitive Communities in California – In-depth Methodology of How Displacement Risk is Determined is available at: https://www.sensitivecommunities.org/wp-content/uploads/2020/01/UDP_SC_Methodology.pdRf. This document provides complete definitions for the displacement assessment.

On a City-wide scale, it would be too difficult and speculative to determine which existing multi-unit properties may be redeveloped into new housing and the extent of displacement impacts. Various factors influence whether a property owner would choose to redevelop including but not limited to owner interest/intent, market conditions, tenancy lease terms, building conditions, rent levels, etc. Should an existing owner of multi-unit property choose to redevelop, such a decision would be beyond the control of the City. Displacement impacts would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with existing State and local requirements.

Since the SSI associated with the proposed Housing Element Update's primarily identifies parcels that do not have existing residential uses, it is not anticipated that substantial numbers of existing housing or people would be displaced. Further, the majority of identified at-risk units are located within the multi-family residential zones (e.g., R2, R3 R4, OP2, OP3, OP4, etc.), where existing development standards would remain unchanged under the proposed Housing Element Update. Additionally, the proposed Housing Element Update includes Program 3.A, which would consider restricting the removal of existing rental units for site redevelopment and requiring that units are replaced. This program would consider amending the SMMC to adopt local requirements that make permanent and potentially expand upon the anti-displacement requirements of SB 330, which sunsets in 2025.[3] The City would continue to monitor the status of at-risk projects within the City, advise tenants in advance of potential conversion dates, and assist in answering questions from residents of at-risk housing. Additionally, the City would consider

[3] In public policy, a sunset provision or sunset clause is a measure within a statute, regulation or other law that provides that the law shall cease to have effect after a specific date, unless further legislative action is taken to extend the law.

exercising its right of first refusal to purchase properties, if necessary and financially feasible, to ensure the continued availability of affordable housing. Further, under the proposed Housing Element Update, the City would focus on conserving non-covenant residential units such as rent controlled units and naturally occurring affordable units. The City would also consider incentives to multi-unit property owners to encourage/incentivize the rehabilitation of existing housing stock.

Therefore, with the proposed programs addressing housing stability, the proposed Housing Element would not substantially contribute to or facilitate the displacement of housing or people. Impacts would be *less than significant*.

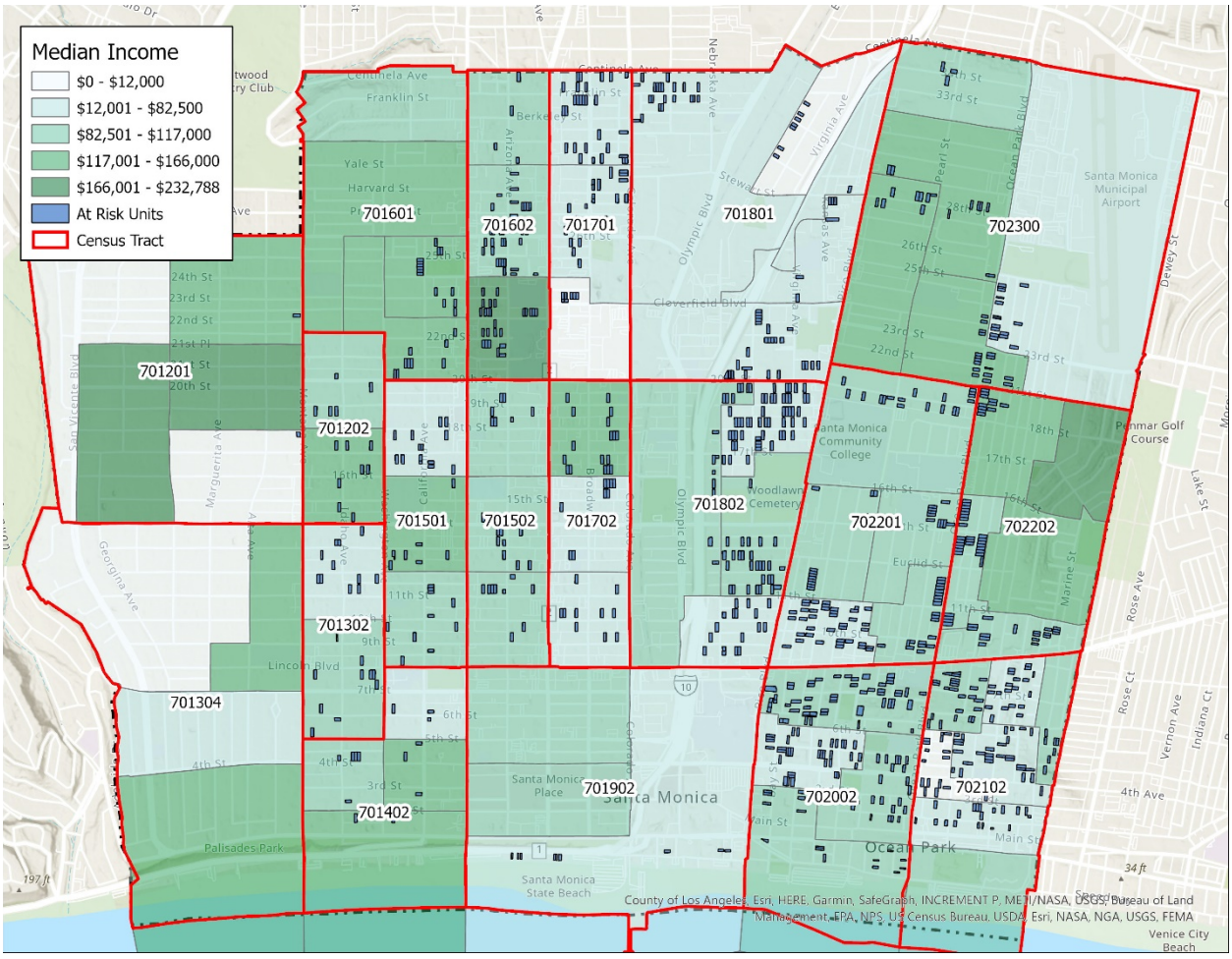


Figure 3.9-3 Rental Units at Risk by Census Tract and Median Income Levels

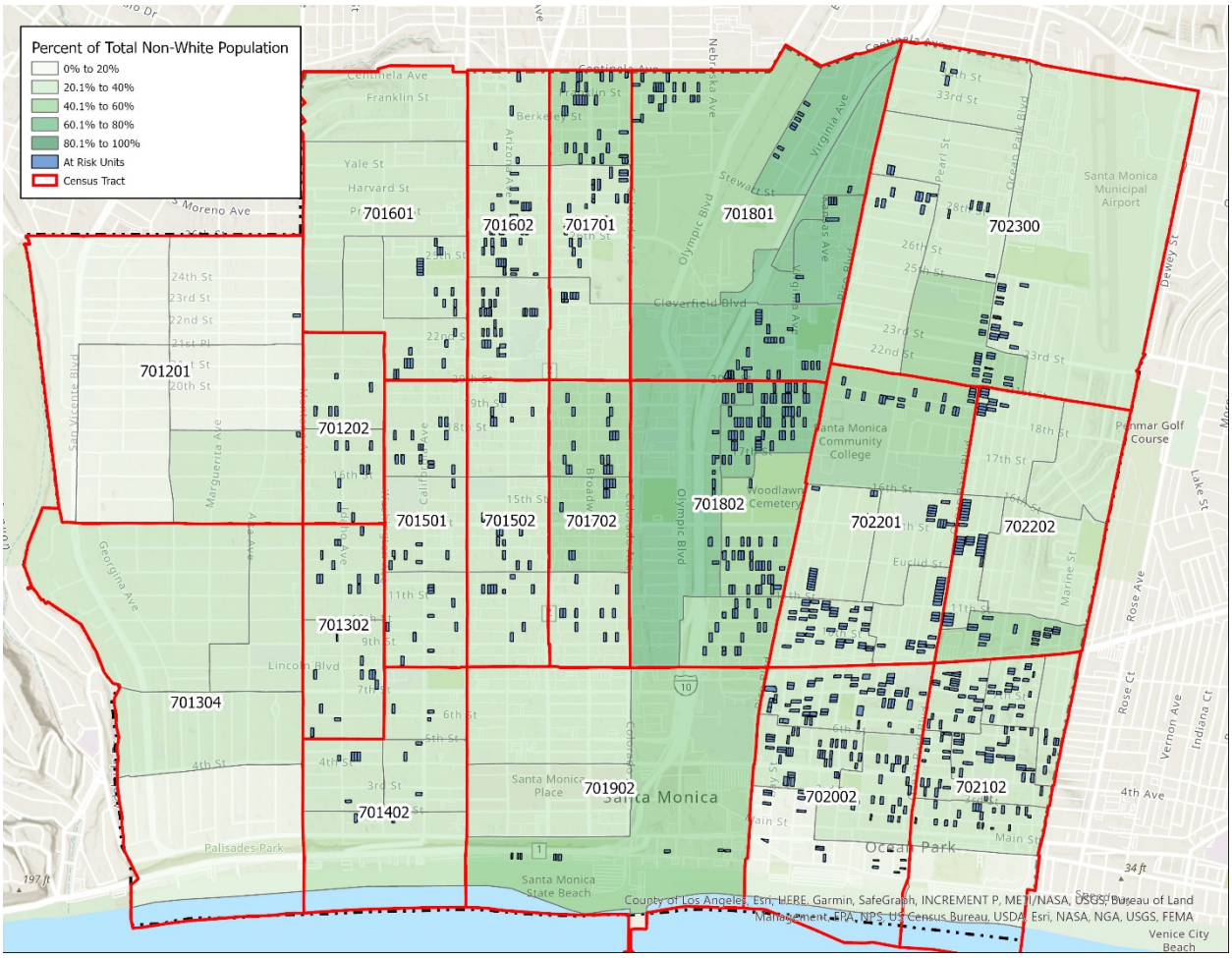


Figure 3.9-4 Rental Units at Risk by Census Tract and Proportion of Non-White Population

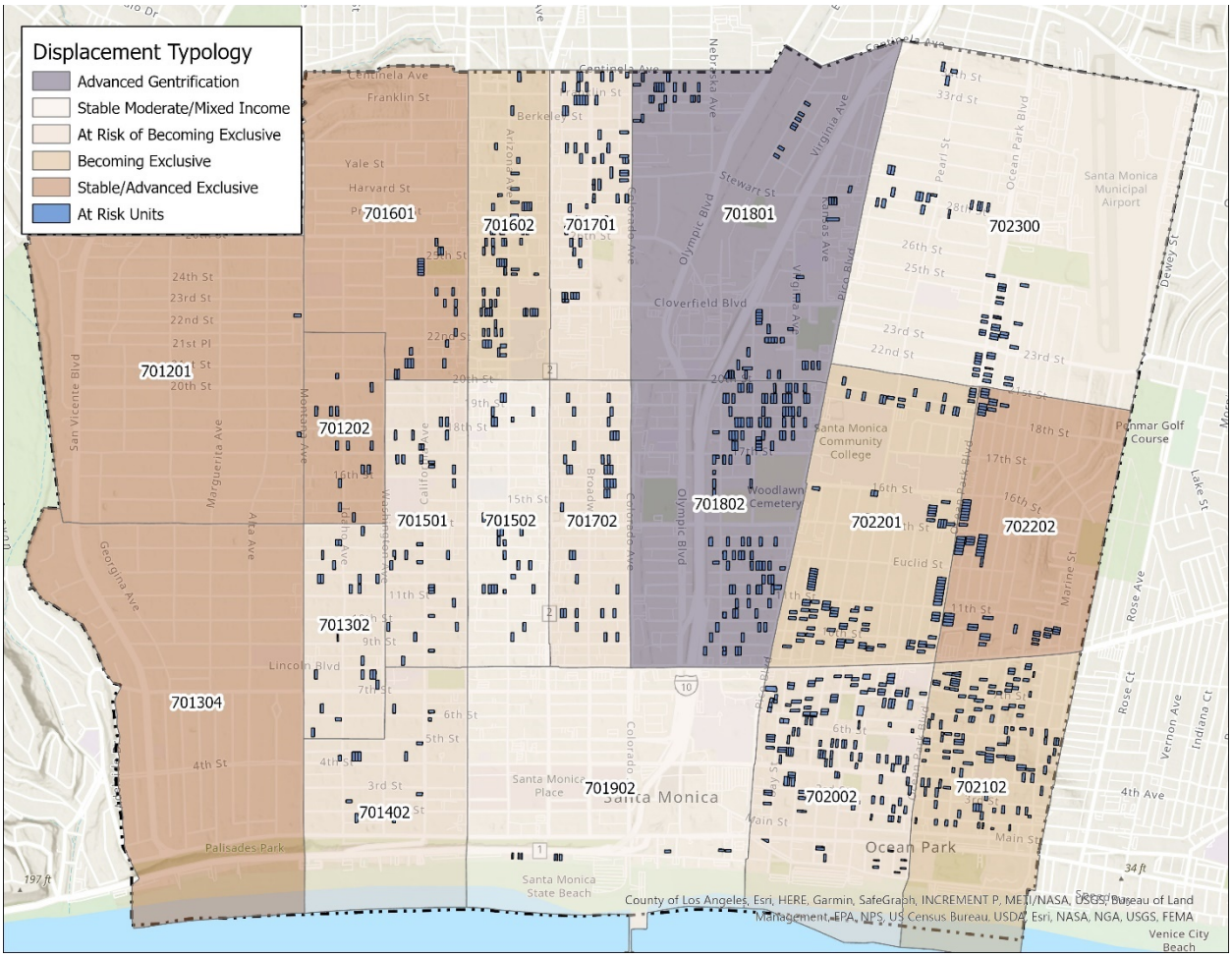


Figure 3.9-5 Displacement Assessment

MODIFIED TYPES	CRITERIA
LOW-INCOME/SUSCEPTIBLE TO DISPLACEMENT	• Low or mixed low-income tract in 2018
ONGOING DISPLACEMENT OF LOW-INCOME HOUSEHOLDS	• Low or mixed low-income tract in 2018 • Absolute loss of low-income households, 2000-2018
AT RISK OF GENTRIFICATION	• Low-income or mixed low-income tract in 2018 • Housing affordable to low or mixed low-income households in 2018 • Didn't gentrify 1990-2000 OR 2000-2018 • Marginal change in housing costs OR Zillow home or rental value increases in the 90th percentile between 2012-2018 • Local and nearby increases in rent were greater than the regional median between 2012-2018 OR the 2018 rent gap is greater than the regional median rent gap
EARLY/ONGOING GENTRIFICATION	• Low-income or mixed low-income tract in 2018 • Housing affordable to moderate or mixed moderate-income households in 2018 • Increase or rapid increase in housing costs OR above regional median change in Zillow home or rental values between 2012-2018 • Gentrified in 1990-2000 or 2000-2018
ADVANCED GENTRIFICATION	• Moderate, mixed moderate, mixed high, or high-income tract in 2018 • Housing affordable to middle, high, mixed moderate, and mixed high-income households in 2018 • Marginal change, increase, or rapid increase in housing costs • Gentrified in 1990-2000 or 2000-2018
STABLE MODERATE/MIXED INCOME	• Moderate, mixed moderate, mixed high, or high-income tract in 2018
AT RISK OF BECOMING EXCLUSIVE	• Moderate, mixed moderate, mixed high, or high-income tract in 2018 • Housing affordable to middle, high, mixed moderate, and mixed high-income households in 2018 • Marginal change or increase in housing costs
BECOMING EXCLUSIVE	• Moderate, mixed moderate, mixed high, or high-income tract in 2018 • Housing affordable to middle, high, mixed moderate, and mixed high-income households in 2018 • Rapid increase in housing costs • Absolute loss of low-income households, 2000-2018 • Declining low-income in-migration rate, 2012-2018 • Median income higher in 2018 than in 2000
STABLE/ADVANCED EXCLUSIVE	• High-income tract in 2000 and 2018 • Affordable to high or mixed high-income households in 2018 • Marginal change, increase, or rapid increase in housing costs

3.9.5 Cumulative Impacts

The City's 6th Cycle RHNA is 8,895 dwelling units, making up approximately 1 percent of the County's allocation of 812,060 dwelling units. Comparatively, the City of Los Angles was issued a RHNA of 456,643 dwelling, which is more than 50 times the RHNA for the City. As such, while residential development planned for under the proposed Housing Element Update would have any effect on the regional distribution of housing as well as the accommodation of projected population growth, this contribution would be minor as compared to the cities of Los Angeles (456,643 new dwelling units), Glendale (13,425 new dwelling units), and Long Beach (26,502 new dwelling units) as well as unincorporated areas of Los Angeles County (90,052 new dwelling units).

As previously described, the proposed Housing Element Update would provide for a planned increase in the City's housing capacity to meet the State-mandated 6th Cycle RHNA. The proposed Housing Element Update does not propose any residential development directly. Instead, the proposed Housing Element Update identifies a series of implementation actions to facilitate future residential development, as necessary to meet the City's housing obligations pursuant to State Housing Law. The SCAG describes that RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promotes transportation mobility, and addresses social equity and fair share housing needs (SCAG 2021b).

As described in Impact POP-1, the production of new affordable housing planned for under the proposed Housing Element Update would create housing opportunities for many of the employees within the City, potentially reducing the environmental impacts associated with long distance commutes. By allowing employees within the City to live closer to their place of employment, the proposed Housing Element Update would foster uses of walking, bicycling, and the use of public transit, limiting growth in VMT and associated adverse impacts to the physical environment. In this manner, the proposed Housing Element Update would not substantially contribute to regional growth within the Greater Los Angeles Area, but would rather accommodate the housing needs of the existing daytime population within the City.

As described in Impact POP-2, indirect displacement of people is a great concern region-wide, even where no changes to land use designations or zoning are planned. However, the proposed Housing Element Update would continue to implement existing programs to protect existing housing and residents from displacement, and to strengthen these programs when additional funding sources become available. With the continued implementation of these programs, the proposed Housing Element Update would not contribute to the regional displacement of people.

Overall, the proposed Housing Element Update would not substantially contribute to cumulatively considerable impacts to population, housing, or employment.

3.0 Environmental Impact Analysis and Mitigation

3.10 Public Services

Residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would increase resident and daytime populations within the City. This increase in population would result in associated increases in demand for public services, including fire protection, law enforcement, public schools, libraries, and recreational facilities (e.g., local parks), with potential demand for construction of additional facilities and the potential for associated environmental impacts. Existing funding sources (e.g., established development fees) would help to fund the provision of additional resources to meet the increased demand. However, a need for expanded fire protection services was recently identified as a part of the City's Community Risk Assessment (2020). Additionally, there may be similar need for additional school and recreational facilities to serve new City residents. Due to ongoing budget uncertainties during the recovery from the coronavirus (COVID-19) pandemic, it is unknown if funding for this identified need will be available in the immediate future.

This section of the Environmental Impact Report (EIR) describes existing public services provided within City of Santa Monica (City) and analyzes the potential impacts on public services that could result from implementation (i.e., buildout) of the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update). The following agencies provide public services for the City:

Table 3.10-1 Public Services within the City of Santa Monica

Public Service	Provider
Fire Protection	City of Santa Monica Fire Department (SMFD)
Law Enforcement	City of Santa Monica Police Department (SMPD)
Public Schools	Santa Monica-Malibu Unified School District (SMMUSD)
Libraries	Santa Monica Public Library (SMPL)
Parks and Recreation	City of Santa Monica Community and Cultural Services Department; City of Santa Monica Public Works Department

For information regarding public utilities, such as water infrastructure and supply, wastewater infrastructure and treatment, and solid waste management, see Section 3.11, *Utilities;* for energy services, refer to Section 3.5, *Energy*; and for public transportation and parking services, see to Section 3.12, *Transportation*.

3.10.1 Fire Protection

3.10.1.1 Environmental Setting – Fire Protection

Fire Stations, Staffing, and Equipment

The Santa Monica Fire Department (SMFD) provides fire protection services as well as emergency medical (i.e., paramedic) services for the City. The SMFD employs approximately 134 total personnel,

including 14 administrative, 105 Suppression and Rescue, 12 fire prevention, and 3 training staff (City of Santa Monica 2020; SMFD 2021).

The SMFD is headquartered in the Public Safety Facility building at 333 Olympic Drive adjacent to City Hall (refer to Figure 3.10-1). The SMFD provides services from five fire stations with a minimum year-round continuous staffing of 35 personnel operating from these five fire stations. This deployment model meets the minimum staffing standards for building fires as recommended by National Fire Protection Association (NFPA) 1710 and provides sufficient personnel for serious fire incidents or other emergencies requiring a multiple-unit response to effectively resolve, with additional response capacity for simultaneous incidents. According to the City's Community Risk Assessment (2020), SMFD's response capabilities are sufficient to protect against the hazards likely to impact the City, with sufficient equipment at each of the City's fire stations (see Table 3.10-2; City of Santa Monica 2020). SMFD's daily staffing per unit provides a minimum Effective Response Force (ERF) sufficient for a single emerging or serious fire and at least two other single-unit emergency responses (City of Santa Monica 2020).

Station No. 1 was relocated from 1444 7th Street to 1337 7th Street. The new SMFD Fire Station No. 1 was open for operation in July 2020. The new station provides expanded space to support existing operations. (The relocation did not expand staffing or the number of assts at Station No. 1.)

The SMFD maintains four permanent fire stations and one temporary station (i.e., Station No. 7) in the City (see Table 3.10-2). Backup and mutual assistance between stations is provided by other City fire stations as well as the City of Los Angeles Fire Department, if necessary. Station No. 1, which is located within the Downtown, was relocated from 1444 7th Street to 1337-45 7th Street in the summer of 2020 to replace the original Station No. 1, which was built in 1955 and had surpassed its useful life span. The relocation of Station No.1 provides additional space for expanded staff and equipment as well as improved amenities for the SMFD and the public.

It is anticipated that Station No. 7 will be made permanent as funding allows. This facility may provide a collocated opportunity with several of the homeless outreach providers in the City (SMFD 2021).

wood.

City of Santa Monica
Existing Public Services Facilities

FIGURE 3.10-1

Table 3.10-2 Existing Santa Monica Fire Stations and Equipment

Station	Location	Resources
Fire Station No. 1	1337 7th Street, between Santa Monica Boulevard and Arizona	• One Paramedic Engine Company (Engine 1) with a crew of four • One Paramedic Engine Company (Engine 6) with a crew of two • One 100-foot ladder Truck (Truck 1) with a crew of five • One Air/Light/Rescue Unit (RU 1) – part of Truck 1 • One Command Vehicle with a Battalion Chief and Emergency Incident Technician (Battalion 1) • One Medical Cart – Beach Response Vehicle • One Reserve Command Vehicle (Battalion 2) • One Utility Vehicle • One Reserve Ambulance
Fire Station No. 2	222 Hollister Avenue	• One Paramedic Engine Company (Engine 2) with a crew of four • One Urban Search & Rescue Vehicle (USAR 2) • One Reserve Engine • One Reserve Rescue Ambulance • One Utility Vehicle
Fire Station No. 3	1302 19th Street	• Two Paramedic Engine (Engine 3 and 4) Companies, each with a crew of four • One Hazardous Materials Response Vehicle (Haz Mat 4, with Utility 4) • Two Reserve Engines
Fire Station No.5	2450 Ashland Avenue	• One Paramedic Engine Company (Engine 5) with a crew of four • One Hazardous Materials Response Vehicle (Haz Mat 5, with Hazmat Utility 5) • One Aircraft Rescue Fire Fighting Utility
Fire Station No. 7	1100 Pacific Coast Highway	• One Paramedic Engine Company (Engine 7) with a crew of four • Two Medical Carts • One Utility Truck

Sources: City of Santa Monica 2020, 2021a; SMFD 2021.

Staffing levels at the SMFD remain consistent throughout the day, although demand for fire and emergency services fluctuates based on the time of day. Peak activity for service demands spans mid-morning through late evening hours. SMFD has begun to address additional demand for emergency services with the establishment of a Community Response Unit in July 2021. The Community Response Unit will be staffed 40 hours per week with one Firefighter Paramedic and one Firefighter Emergency Medical Technician. The goal of the unit will be to respond to incidents involving the City's most vulnerable population, which amounts to over 20 percent of the total call volume. The unit will also assist

in connecting the individual needing assistance and available social services. This will help free up the fire department Advanced Life Support Engines (SMFD 2021).

Response Times

The adequacy of fire protection services is often determined based on average response times to incidents. Total response time to emergency incidents includes three separate components: (1) 9-1-1 call processing/dispatch time; (2) crew turnout time; and (3) travel time. According to the NFPA Code 1710 (Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Services [EMS], and Special Operations to the Public by Career Fire Departments), dispatch time for fire suppression, medical response, and special operations should be less than or equal to 60 seconds 90 percent of the time. Turnout time should be 60 seconds for EMS responses and 80 seconds for fire responses. The NFPA also requires fire stations to establish an objective of 240 seconds (i.e., 4 minutes) or less of travel time for the first arriving engine company at a fire suppression incident or the first responder with an automatic defibrillator or higher-level capacity at an emergency medical incident. The NFPA standards require that these objectives be met for at least 90 percent of incidents. The most recently released 2020 NFPA standards were also revised to include a requirement for fire stations to establish an objective of a second properly staffed four-person unit to arrive within 360 seconds (i.e., 6 minutes) or less (NFPA 2020). SMFD response times are measured against these NFPA standards. The SMFD goal response time is 7:30 minutes from 9-1-1 notification to arrival of initial units and 11:30 minutes for multiple-unit ERF for 90 percent of emergency calls. In particular, SMFD's response performance goals are based on recommended best practices for first-due and multiple-unit ERF responses in urban areas, which consist of 1:30 minutes for dispatch time, 2:00 minutes for turnout, and 4:00 minutes (initial units) to 8:00 minutes (multiple-unit ERF) for travel time. SMFD's response performance goals do not, address multiple-unit response goals as recommended by NFPA or risk-specific response performance as recommended by the Commission on Fire Accreditation International (CFAI).

According to the City's Community Risk Assessment (2020), the SMFD responded to a total of 17,051 incidents in 2019, a nearly 6.5-percent increase from 2016 to 2019 (City of Santa Monica 2020). Of these calls, 12,389 (approximately 73 percent) were medical incidents, 220 (approximately 1.3 percent) were active fire incidents, and 4,442 (approximately 26 percent) were other incident types (e.g., removal of a victim[s] from stalled elevator, unintentional/accidental alarm activation, water or steam leak, etc.). EMS demand increased nearly 20 percent over the 4-year study period, while the number of fire incidents decreased slightly more than 5 percent over the same period (City of Santa Monica 2020). In 2019, the 90th percentile Department-wide dispatch time was 2:36 minutes, as compared to the NFPA's recommendation of 1:00 minute and the City's goal time of 1:30 minutes. The 90th percentile Department-wide turnout time was 2:50 minutes, as compared to the NFPA's recommendation of 1:00 to 1:30 minutes and the City's goal time of 2:00 minutes. The 90th percentile first-unit travel time was 5:19 minutes, as compared to the NFPA's and the City's 4:00-minute goal time.

Table 3.10-3 Santa Monica Fire Department 90th Percentile Response Performance (2019)

Station	Dispatch	Turnout	First-Unit Travel Time
Station 1	02:57	02:51	05:04
Station 2	02:43	02:39	04:51
Station 3	02:25	02:47	04:45
Station 4*	02:38	02:50	06:07
Station 5	02:22	02:53	06:17
Station 6	02:30	03:04	05:25
Department-Wide	**02:36**	**02:50**	**05:19**
Goal Time	**01:30**	**02:00**	**04:00**

Note: *Station No. 4, which is no longer in operation, was a temporary fire station in operation during the preparation of the City's Community Response Assessment (2020). Station No. 7 is another temporary fire station that was not in operation during the preparation of the Community Response Assessment.
Source: City of Santa Monica 2020.

Fire unit travel time is the most difficult response component to improve due to the existing density of development, street/surface parking design, and traffic congestion (City of Santa Monica 2020). Another constraint to fire unit travel times is the clustering of the fire stations, with two of the five stations (Station Nos. 1 and 3) housing two engine companies each instead of those two additional engines being more spaced across the northern areas of the City. A large volume of EMS incidents occur at the Santa Monica Pier and oceanfront areas due their popular use as outdoor recreation locations, along with an increasing homeless population. The predominate clinical EMS calls for service to the homeless are clustered in the City's Downtown and oceanfront areas, generally consisting of valid medical issues, but not typically 9-1-1 emergencies. As such, the City is continuing to explore utilizing non-traditional EMS response strategies such as bicycle medics and street medical carts unit at targeted times of the day. Implementation of such strategies is expected to reduce emergency response times (City of Santa Monica 2020).

In terms of emergency incident workload per unit, no single fire unit or station area is approaching workload capacity; however, during peak hours of the day, there is a high simultaneous incident rate, which means that units are crossing sections of the City to cover another unit's call, which creates longer response times (City of Santa Monica 2020). Other strategies to improve response times, as identified by the City's Community Risk Assessment (2020), include the relocation of an engine company as to distribute units to provide timelier first responder service to all major neighborhood areas, including the northern areas of the City and at the Santa Monica Pier/oceanfront areas (City of Santa Monica 2020).

Insurance Service Office (ISO) Rating

The Insurance Service Office (ISO) provides rating and statistical information for the insurance industry in the U.S. In determining its community rating, the ISO evaluates a community's fire protection needs and services. It then assigns each community a Public Protection Classification (PPC) rating. The rating is derived from a cumulative point scoring system, which grades the community's fire-suppression delivery system, including fire dispatch (i.e., operators, alarm dispatch circuits, telephone lines available), fire department (i.e., equipment available, personnel, training, distribution of companies, etc.), and water supply (i.e., adequacy, condition, number and installation of fire hydrants). Insurance companies use the

ISO information to help establish fair premiums for fire insurance – generally offering lower premiums in communities with better protection. The ratings range in descending rank from Class 1 to Class 10. Class 1 generally represents superior property fire protection, and Class 10 indicates that the area's fire-suppression program does not meet ISO's minimum criteria. In 2017, the City was awarded a Class 1 rating by the ISO (City of Santa Monica 2017).

Fire Prevention Division

The SMFD Fire Prevention Division is dedicated to maintaining the City's comprehensive and active Fire Prevention program. This division regulates and enforces the City Fire Code for all public facilities and private properties within the City. The SMFD is one of several City departments that provide project review and comments for new project proposals; however, the SMFD is also responsible for enforcement of the City Fire Code through plan check and structural inspections prior to building occupancy. As part of the existing development review process, the SMFD reviews project plans to ensure that projects are designed City Fire Code standards including provisions for adequate emergency access. The SMFD then reviews building plans for all new structures prior to issuance of Certificate of Occupancy to ensure that the required fire protection safety features are implemented in accordance with City Fire Code and SMFD requirements (see Section 3.10.1.2, *Regulatory Setting – Fire Protection*). The current City Fire Code standards and SMFD requirements are intended to provide for the maximum protection of life and property to the extent feasible, and include stringent requirements addressing fire prevention and fire suppression for new buildings. Requirements include but are not limited to the installation of fire alarms, fire sprinklers, and fire communication systems; the use of more fire-resistant building materials; and the provision of adequate emergency access, fire hydrants, visible address signage, and minimum fire flow rates for water mains. After construction, the regulation of fire and life safety is regularly enforced through annual building inspections conducted by the Fire Prevention Division.

The SMFD is also the City's Certified Unified Protection Agency (CUPA), providing hazardous materials response and remediation. The Fire Prevention Division of the SMFD has oversight responsible for hazardous waste, underground storage tanks, above ground storage tanks, hazardous materials, community right-to-know, and accidental release prevention programs. The division conducts other hazardous materials site inspections through the CUPA Administrator and the City's CUPA program.

As an additional fire prevention effort, the City's Office of Emergency Management offers free emergency preparedness and response training to residents over the age of 18 through their Community Emergency Response Team (CERT) program. CERT encourages community volunteers to complete a federally recognized training course taught by local Public Safety Personnel and First Responders. Students learn how to prepare for emergencies and be ready to respond in order to assist the community immediately following incidents of all sizes. The CERT program includes a range of emergency preparedness and response topics, including training on disaster preparedness and fire safety. This program both trains local residents to aid in a disaster as well as educates these community members in fire safety planning and helping to reduce the need for fire services in the City.

Mutual Aid Agreements

The foundation of California's emergency planning and response is a State-wide mutual aid system, which is designed to ensure that adequate resources, facilities, and other support is provided to jurisdictions whenever their own resources are inadequate to cope with a given situation. The California Emergency Services Act mandates the use of the California Disaster and Civil Defense Master Mutual Aid Agreement (MMAA) as the standard form of agreement between jurisdictions. The MMAA creates a formal structure wherein each local jurisdiction retains control of its own facilities, personnel, and resources but may also receive or render assistance to/from other jurisdictions within the State (County of Los Angeles 2012). State government is obligated to provide available resources to assist the local jurisdictions in emergencies. However, responsibility for the negotiation and preparation of mutual aid agreements rests with the local jurisdictions.

The California Office of Emergency Services (Cal OES) has three administrative regions: Inland, Coastal, and Southern. The State Emergency Response Commission appointed a Local Emergency Planning Committee (LEPC) for each planning district, known as regions, and supervises and coordinates their activities. Santa Monica is located in LEPC Region I of the Southern Region (Cal OES 2021). The SMFD has an Automatic Aid agreement with the City of Los Angeles Fire Department (City of Santa Monica 2020). This agreement authorizes the exchange of resources on an as-needed basis.

The SMFD can also call on other agencies for support. These include local law enforcement and State and Federal agencies involved in fire hazard mitigation, response, and recovery, including the Cal OES; the U.S. Fish and Wildlife Service (USFWS); National Park Service (NPS); U.S. Forest Service (USFS); Office of Aviation Services; National Weather Service; National Association of State Foresters; the U.S. Department of Agriculture (USDA); the Department of the Interior (DoI); and, in extreme cases, the Department of Defense (DoD).

3.10.1.2 Regulatory Setting – Fire Protection

Federal Policies and Regulations

International Fire Code

The International Fire Code includes specialized technical fire and life safety regulations which apply to the construction and maintenance of buildings and land uses. Topics addressed in the International Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings.

National Fire Protection Association

The NFPA is a global self-funded nonprofit organization, established in 1896, devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards. The NFPA provides

codes and standards (including the National Electrical Code), research, trainings, and education for fire protection. The NFPA publishes more than 300 codes and standards intended to minimize the possibility and effects of fire and other risks.

State Policies and Regulations

California Fire Code (Title 24, Part 9, California Code of Regulations)

The California Fire Code (Title 24, Part 9, California Code of Regulations), which is also referred to as the California Building Standards Code (CBSC), combines the International Fire Code with amendments necessary to address California's unique needs. The CBSC includes regulations which are consistent with nationally recognized standards of good practice, intended to facilitate protection of life and property. Among other things, its regulations address the mitigation of the hazards of fire explosion, management and control of the storage, handling and use of hazardous materials and devices, mitigation of conditions considered hazardous to life or property in the use or occupancy of buildings and provisions to assist emergency response personnel.

California Health and Safety Code

State fire regulations set forth in California Health and Safety Code Sections 13000 et seq., address building standards, fire protection and notification systems, provision of fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with the Title 8, California Code of Regulations Section 1270, *Fire Prevention*, and Section 6773, *Fire Protection and Fire Fighting Equipment*, the California Occupational Safety and Health Administration (CalOSHA) has established minimum standards for fire suppression and EMS. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

Regional Policies and Regulations

Westside Council of Governments Emergency Preparedness/Mutual Aid Plan

A plan was developed and adopted by the Westside Council of Governments (WCOG) for the purpose of protecting the cities of Santa Monica, Beverly Hills, Culver City, and West Hollywood from disasters related to homeland security and terrorism. The key component of the plan encourages and establishes inter-agency cooperation. It also sets forth coordinated disaster training and preparedness activities.

Local Policies and Regulations

Santa Monica Municipal Code Chapter 8.40 and 8.44 – Fire Code

Santa Monica Municipal Code (SMMC) Section 8.40.010 adopts Title 24, Part 9, California Code of Regulations, known as the California Fire Code, 2019 Edition, as the City Fire Code. The City provides local amendments to the California Fire Code to include additional requirements related to temporary sales lots, submission of complaint reports, address numbers, fire watch, possession and seizure of fireworks. The current City Fire Code standards and SMFD requirements listed in SMMC Section 8.44.010 are intended to provide for the maximum protection of life and property to the maximum extent feasible, and include stringent requirements addressing fire prevention and fire suppression for new buildings and existing buildings. City Fire Code requirements play an important role in minimizing the risk of fires and preventing property loss, injury, and death. Minimum requirements as required by the City Fire Code include, but are not limited to: installation of fire alarms, fire sprinklers, and fire communication systems; the use of more fire resistant building materials; and the provision of adequate emergency access, fire hydrants, visible address signage, and minimum fire flow rates for water.

City of Santa Monica General Plan Safety Element

The Safety Element identifies specific policies associated with fire protection services, including the following:

Goal 4: Reduce threats to public safety and minimize property damage from urban fire hazards commensurate with the risk of post-earthquake fires and fires driven by Santa Ana winds.

Policy 4.1.	The City shall develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features by strengthening performance review and code enforcement programs.
Policy 4.2.	The City shall reduce existing developments to tolerable levels of risk and strengthen the City fire fighting capability to respond to multiple fire incidents caused by an earthquake, Santa Ana winds, or other extraordinary circumstances.
Policy 4.3.	Conduct and implement long-range fire safety planning to cope with increasing urban density caused by new development, redevelopment, and property infilling, including development of stringent Building or Fire Municipal Code standards, improved infrastructure, and improved mutual aid agreements with the private and public sector.

3.10.1.3 Impact Assessment Methodology – Fire Protection

Thresholds for Determining Significance

The following threshold of significance is based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a Lead Agency may use the questions set forth in the Appendix G to assess the significance of a project's

environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on fire protection services if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

Methodology

This section (1) evaluates the availability and level of existing fire protection services in the City as provided by the SMFD; (2) reviews any planned improvements or changes to these services; (3) analyzes the potential increases in demand for fire protection services as a result of population growth anticipated to occur under the proposed Housing Element Update; and (4) determines the adequacy of existing and planned fire facilities to meet future demand and whether the proposed Housing Element Update would increase the demand for fire protection services such that there would be a need for new or physically altered fire facilities, the construction of which could cause significant environmental impacts. Information used to prepare this section was obtained through SMFD's website, communications with SMFD, and review of the City's Community Risk Assessment (2020).

This analysis utilizes the anticipated increase in the City resident population through the planning horizon of 2030 (refer to Section 3.9, *Population, Housing, and Employment*) to assess increased residential demand for fire protection services. Increases in non-resident/visitor populations are more difficult to quantify, and as such, are assessed more programmatically. For example, while the number of new residents can be estimated, quantifying day-time visitor population or increases in tourism are more difficult as these numbers fluctuate greatly depending on season (e.g., summer versus winter), day of the week, weather, events, variable economic conditions or unique conditions such as the coronavirus (COVID-19) pandemic.

The potential impacts of the proposed Housing Element Update on fire protection services are considered in the context of existing fire protection facilities and resources and currently pending or planned improvements to such facilities and resources. Factors that were considered in the analysis of potential impacts on fire protection services include SMFD staffing levels and equipment adequacy, response times, and fire safety features (e.g., compliance with the City Fire Code and the City's emergency preparedness plans).

3.10.1.4 Project Impacts and Mitigation Measures – Fire Protection

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?

Impact Description (PS-1)

PS-1 **Increases in the City's residential population anticipated to occur under the proposed 6th Cycle 2021-2029 Housing Element Update would increase the demand for fire protection services and would generate the need for new or physically altered fire protection facilities, the construction of which may have result in significant environmental impacts. Planning for such a facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of Santa Monica Fire Department (SMFD) facilities and staff. This impact would be potentially *significant and unavoidable.***

The proposed Housing Element Update would plan for up to 8,895 to approximately 11,000 new dwelling units and associated potential ground-floor commercial space within the City through the planning horizon of 2030. This would increase the population by up to 18,000 to approximately 22,000 residents within the City through the planning horizon of 2030. This increase would strain fire protection services in some areas of the City and exacerbate delays in emergency responses beyond accepted standards.

Multiple State and City programs and policies are in place to reduce potential fire safety impacts associated with new residential development. For instance, current standards in the City Fire Code (SMMC Chapter 8.40) are intended to provide for the maximum protection of life and property to the extent feasible, and include stringent requirements addressing fire prevention and fire suppression for new buildings. Requirements include but are not limited to the installation of fire alarms, fire sprinklers, and fire communication systems; the use of more fire-resistant building materials; and the provision of adequate emergency access, fire hydrants, visible address signage, and minimum fire flow rates for water mains. Additionally, buildings over 55 feet within the City, are classified as high-rises and are subject to more stringent and protective life safety features. Further, as part of the City's plan check process, the SMFD provides initial project plan review and comments to ensure that individual projects are designed to meet minimum site requirements relating to adequate emergency access. As another step in the fire prevention review process, SMFD reviews detailed building plans for all new structures prior to issuance of Certificate of Occupancy to ensure that the required fire protection safety features in the City Fire Code are implemented to reduce overall demand for fire protection services, including building sprinklers, fire alarm, water supply, and emergency access.

Older buildings occurring throughout the City may not meet current City Fire Code requirements and may lack adequate fire prevention and suppression systems, such as fire sprinklers. New residential development projects planned for under the proposed Housing Element Update would facilitate the

redevelopment of existing structures or construction of new buildings that meet the most current and stringent City Fire Code requirements, thus reducing the level of potential fire risk on sites within the City, as compared to existing conditions. Proper engineering of buildings to meet City Fire Code and SMFD requirements as well as the installation of fire sprinkler systems would substantially reduce the risk exposure for both building occupants and firefighters.

As an additional fire prevention effort, the City offers free emergency preparedness and response training to residents over the age of 18 through their CERT program. CERT encourages community volunteers to complete a federally recognized training course taught by local Public Safety Personnel and First Responders. The CERT program includes a range of emergency preparedness and response topics, including training on disaster preparedness and fire safety. This program both trains local residents to aid in a disaster as well as educates these community members in fire safety planning, helping to reduce the need for fire services in the City.

Notwithstanding these existing City regulations and programs that are intended to substantially reduce fire risks and hazards, increases in the residential and non-residential/visitor populations in the City would increase the demand for SMFD services, potentially affecting calls for service and response times, as discussed in further detail below.

Calls for Service

Based on the City's average household size, development of up to 8,895 to approximately 11,000 new dwelling units planned for under the proposed Housing Element Update is anticipated generate a population increase of up to 18,000 to approximately 22,000 through the planning horizon of 2030 (refer to Section 3.9, *Population, Housing, and Employment*). Associated increases in the residential population and associated increases in call volume for SMFD services would occur over an extended period of time and would incrementally increase SMFD facility demands through the planning horizon for the proposed Housing Element Update.

Response Times

As described in Section 3.10.1.1, *Environmental Setting – Fire Protection*, SMFD's total Department-wide 90th percentile response time is 10:45 minutes, as compared to the goal time of 7:30 minutes (City of Santa Monica 2020). In terms of emergency incident workload per unit, no single fire unit or station area is approaching workload capacity; however, during peak hours of the day, there is a high simultaneous incident rate that means fire protection units are crossing sections of the City to cover other units' calls, which creates longer response times. The City's Community Risk Assessment (2020) identified three factors contributing to fire unit travel time constraints: (1) land use and circulation (i.e., zoning density, street/surface parking design, and traffic congestion); and (2) outdoor calls for service, especially those along the oceanfront and pier areas, are problematic to process and difficult to find; and (3) the clustering of fire stations. With the proposed Housing Element Update and anticipated increase in residential population, response times would be adversely affected (SMFD 2021). This would likely require at least one replacement facility and one newly sited facility for the Fire Department in the next 10 years (SMFD 2021).

The City's Community Risk Assessment (2020) recommends the following strategies to reduce SMFD response times:

- **Recommendation #1:** Use existing resources to improve incident data capture and lower 9-1-1 dispatch and fire crew turnout times to best practices levels.
- **Recommendation #2:** Deploy at least one four-firefighter engine company in a station in the northern 25 percent of the City. Absent being able to do so, deploy a two-firefighter/Paramedic Fast Response Unit (FRU) from a smaller, commercial location in the northern 25 percent of the City.
- **Recommendation #3:** Given the longer response travel times to the pier and beach areas, the Department should continue to provide at least a small FRU located in the immediate area. With the expected establishment of Station No. 7 as a permanent location, as funding allows, this recommendation is anticipated to be fulfilled in the near-term.
- **Recommendation #4:** Develop a program that includes non-Department stakeholders to deploy an outdoor medical specialty response team of firefighter/Paramedics and allied health care personnel to meet the needs of the patients presenting in Santa Monica. The Community Response Unit is an example of an effort to meet this recommendation.
- **Recommendation #5:** Conduct follow-ups on calls that take longer than 3 minutes to process, to identify reason for delays and mitigation strategies.
- **Recommendation #6:** Given the high volume of outdoor emergencies overall, in addition to the pier and beach areas, the City should adopt a two-tier dispatch measure: one for in-building EMS events and another for outdoor, oceanfront, and freeway emergencies.
- **Recommendation #7:** Adopt updated deployment policies.

Development of a new station in northern 25 percent of the City or implementation of a two-firefighter/Paramedic FRU (Recommendation #2) would require the provision of new or physically altered fire protection facilities, the construction of which may have result in significant environmental impacts. Further, an outdoor medical specialty response team program (Recommendation #4) may require expansion of existing SMFD staff. The SMFD would continue to evaluate the need for improvements and increased staffing levels on an ongoing basis as part of its annual budgeting process, with budgets increasing, as necessary, to keep up with City demand. Specifically, funds are allocated as necessary towards the Capital Improvements Program (CIP) for the purchase of new equipment and/expanded facilities and towards SMFD's operating budget for new staff. Sales tax, property tax, transient occupancy tax, and other taxes associated with new residential development planned for under the proposed Housing Element Update as well as other development projects within the City could also generate funding for the above outlined recommendations. However, the City budget has been affected by the coronavirus (COVID-19) pandemic. Budgetary response to the pandemic remains uncertain at this time. As a consequence of these circumstances, the City cannot commit to reserving funds for the replacement of an existing fire station, development a new fire station, or employment of a FRU at a commercial property in the near-term foreseeable future.

In summary, the proposed Housing Element Update would contribute to the need for the construction of new or expanded fire protection facilities, the construction of which may have result in significant environmental impacts. Any such development with the potential to create impacts to the physical environment would be subject to environmental review under the CEQA process to ensure impacts would

be mitigated to the greatest extent feasible. However, planning for such a facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of SMFD facilities and staff. As such, impacts to fire protection services associated with proposed Housing Element Update would be *significant and unavoidable*.

3.10.1.5 Cumulative Impacts – Fire Protection

Cumulative impacts to public services are largely related to City-wide population growth and to a lesser extent regional growth. (Refer to Section 3.9, *Population, Housing, and Employment* for a detailed growth forecast for the City and the Greater Los Angeles Area.) Residential development under the proposed Housing Element Update would contribute to cumulative City-wide population growth through 2030 and incrementally add to regional growth with added demand for mutual aid between agencies. For example, as previously described, SMFD has an Automatic Aid agreement with the City of Los Angeles Fire Department (City of Santa Monica 2020). The City of Los Angeles received a 6th Cycle RHNA of 456,643 dwelling units, which would likely increase the demand for fire services and place strains on the City of Los Angeles Fire Department's response times and their ability to provide aid to neighboring cities.

Population growth associated with the proposed Housing Element Update and other future development within the City and surrounding the City such as that along the west side of the City of Los Angeles would be anticipated to slowly increase the demand for fire protection services. New development would contribute to cumulative City-wide and regional population growth and associated increases in demand for fire protection services provided by the SMFD from the City's five existing fire stations as well as neighboring fire protection agencies. As previously described, the SMFD is funded through general fund revenues generated by property, sales and transient occupancy taxes, all of which are expected to increase in proportion to new development within the City. Such increased revenues would be available to hire additional fire fighters, if needed, and purchase equipment to maintain or improve SMFD service levels over time to meet changing demands. Development of new fire protection facilities with the potential to create impacts to the physical environment would be subject to environmental review under the CEQA process to ensure impacts would be mitigated to the greatest extent feasible. However, planning for any such facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of SMFD facilities and staff. Therefore, implementation of the proposed Housing Element Update would substantially contribute to cumulatively considerable impacts to fire protection services, which could also be exacerbated by regional growth trends within the Greater Los Angeles Area.

3.10.2 Law Enforcement and Police Protection

3.10.2.1 Environmental Setting – Law Enforcement and Police Protection

Police Headquarters, Staffing, and Level of Service

Police protection services within the City are provided by the Santa Monica Police Department (SMPD) headquartered adjacent to City Hall within the City's Civic Center district (refer to Figure 3.10-1). All of the

SMPD operations (with the exception of the Santa Monica Jail) operate from the Public Safety Facility building at 333 Olympic Drive. There is also one SMPD substation located on the Santa Monica Pier.

The SMPD provides police protection services to the City and maintains mutual assistance programs with the Los Angeles County Sheriff's Department and the City of Los Angeles Police Department. The SMPD contains three police divisions: Operations, Strategic Services, and Criminal Investigations. These three divisions are further divided into sections and units which include Traffic Services, Public Services Officers, the Animal Control, and the Harbor Unit, among others. The SMPD is staffed with approximately 211 sworn law enforcement positions and 254 non-sworn administrative and support personnel (SMPD 2018). As of October 26, 2020, the SMPD is managed by Interim Chief of Police, Jacqueline Seabrooks. Management staff also includes a Captain for each division and several Lieutenants and Sergeants (City of Santa Monica 2014).

The SMPD currently maintains a ratio of 2.3 sworn officers per 1,000 residents. The SMPD does not utilize a standard personnel-to-population ratio to determine optimum staffing levels as there is a significant disparity between actual resident population (approximately 93,000 residents) and the City's daytime population (approximately 250,000 people). The SMPD determines staffing needs based on both the total number of calls and types of service required, identification of district-specific law enforcement demands, such as traffic control or special enforcement, and community input. Other primary indicators of effectiveness include:

The SMPD provides 24-hour patrol for the safety of City residents.

- Volume of calls for service;
- Number of officers available at any given time; and
- Number of Part I crimes (described further below).

The SMPD divides the City into four beats and operates these beats on a 24-hour basis. Almost half of the calls in the City come from the Downtown, located in Beat 1; therefore, officers from other beats are deployed as needed to answer calls in this area. Patrols are the primary first responder to calls for service and proactive policing.

As with all municipal police departments in Los Angeles County, the SMPD participates in the Mutual Aid Operations Plan for Los Angeles County. Further, policing in the City is facilitated through numerous community outreach programs, such as Neighborhood Watch and Business Watch. These programs involve community and officer interaction and encourage residents or members of the business community to become acquainted with one another and to form watch groups. Coordination is maintained through the Community Relations Unit and a Crime Prevention Coordinator.

The SMPD maintains a 5-year staffing plan to structure increases in staff, consistent with requirements and overall City budget priorities. Equipment enhancement programs exist and are also considered in the context of the City budget process, available grants, etc. Plans do not currently exist to expand staffing or improve existing facilities.

Calls for Service and Response Times

The main indicator of SMPD effectiveness is its response time to emergency calls. A public records request was submitted to the SMPD in April 2021 regarding current SMPD response times. SMPD responded that there are no records on the Department's emergency response times during 2020 (Wand 2021). However, the Department's average emergency response time between 2015 and 2019 was 5:42 minutes (City of Santa Monica 2021b; Moss Adams LLP, 2018).

Table 3.10-4 Santa Monica Police Department Calls for Service

Year	Calls For Service	Sworn Officers	Calls Per Officer
2015	131,071	201	652.1
2016	127,847	204	626.7
2017	129,560	206	628.9
2018	130,015	209	622.1
2019	123,491	220	561.3
2020	N/A	211	N/A

Sources: City of Santa Monica 2021b; Renaud 2020; Moss Adams LLP, 2018.

Crime Statistics

In 2019, the SMPD handled 123,491 calls for service and made 3,840 arrests (Renaud 2020). Another indicator of police service levels is the number of "Part I" crimes, which are reported in two categories: violent and property crimes.[1] In terms of the number of annual calls, the City experienced 4,243 Part I crimes in 2015, 4,481 crimes in 2016, and 5,007 crimes in 2017 for an average ratio of 49.6 Part I calls per 1,000 residents from 2015 to 2017 (Renaud 2020).[2] Part I crimes totaled 5,439 crimes in 2018, and 4,585 crimes in 2019. Based on the number of residents, the Part I crime rate decreased from 59.1 in 2018 to 50.1 in 2019. SMPD attributes this decrease to changes in workforce and approach to crime (Renaud 2020).

[1] Aggravated assault, forcible rape, murder, and robbery are classified as violent. Arson, burglary, larceny-theft, and motor vehicle theft are classified as property crimes.

[2] This weighted average was calculated based on the population and crime rate of 92,169 residents and 4,243 crimes in 2015, 92,247 residents and 4,481 crimes in 2016, 92,495 residents and 5,007 crimes in 2017. Population estimates are from the U.S. Census Bureau's 2015, 2016, and 2017 American Community Survey (ACS) 1-year estimates.

3.10.2.2 Regulatory Setting – Law Enforcement and Police Protection

Local Policies and Regulations

Santa Monica Municipal Chapter Section 3.68 – Crime Prevention Program

SMMC Section 3.68.020 adopts a Comprehensive Crime Prevention Program for the City, including teams for crime impact, domestic violence, arson, and other units, to provide law enforcements services, subject to annual review.

3.10.2.3 Impact Assessment Methodology – Law Enforcement and Police Protection

Thresholds for Determining Significance

The following threshold of significance is based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on law enforcement and police protection services if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection.

Methodology

This section (1) evaluates the availability and level of existing police services in the City as provided by the SMPD; (2) reviews any planned improvements or changes to these services; (3) analyzes the potential increases in demand for police services as a result of residential population growth under the proposed Housing Element Update; and (4) determines the adequacy of existing and planned police facilities to meet future demand and whether the proposed Housing Element Update would increase the demand for police protection services such that there would be a need for new or physically altered police facilities, the construction of which could cause significant environmental impacts. Information used to prepare this section was derived from review of information made publicly available through the SMPD website, public information messages provided by the SMPD Chief of Police, and public records requests with the SMPD.

This analysis utilizes the anticipated growth in the City's resident population identified in Section 3.9, *Population, Housing, and Employment* to assess increased residential demand for law enforcement and police protection services. The potential impacts of the proposed Housing Element Update on law enforcement and police protection services are considered in the context of existing police protection facilities and resources and currently pending or planned improvements to such facilities and resources. Factors that were considered in the analysis of potential impacts on law enforcement and police protection services include SMPD staffing levels, response times, and police safety features. Within this context, impacts to law enforcement and police protection services are considered potentially significant if

the proposed Housing Element Update would increase the demand for police services such that there would be a need for new or physically altered police facilities, the construction of which could cause significant environmental impacts.

3.10.2.4 Project Impacts and Mitigation Measures – Law Enforcement and Police Protection

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?

Impact Description (PS-2)

PS-2 **New residential development as planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in an increase in resident population, which would increase the demand for police protection services. Such population increases would not result in the exceedance of City service standards or the need for new or physically altered police facilities. This impact would be *less than significant.***

As previously described, based on the City's average household size, development of up to 8,895 to 11,000 new residential units is anticipated to generate a population increase of up to 18,000 to approximately 22,000 residents through the planning horizon of 2030. New residential development projects planned for under the proposed Housing Element Update would be required to comply with existing building and site development standards, including improvements such as open space, building frontage, and streetscape features. These features may include access control to buildings, secured parking facilities, walls/fences with key systems, and well-illuminated public, semi-public, and private spaces (e.g., courtyards or other private gathering spaces) designed with a minimum of dead space to eliminate areas of concealment. Applicants for individual projects would also be required to provide the local Commanding Officer with access routes and other information that might facilitate police response, as requested by the SMPD. These measures would help reduce impacts on police services by deterring criminal activity at new housing sites.

Notwithstanding the existing City requirements and programs that are in place to reduce crimes and safety risks, such as a Comprehensive Crime Prevention Program for the City (SMMC Chapter 3.68) and a Neighborhood Watch Program that partners the SMPD and interested neighborhoods, increased resident populations associated with the proposed Housing Element Update would incrementally increase the demand for police protection services, potentially affecting staffing levels, calls for service, response times, equipment needs, and the potential need for new facilities, as discussed below.

Calls for Service

As discussed further in Section 3.9, *Population, Housing*, *and Employment* implementation of the proposed Housing Element Update would increase the City-wide residential population by up to 18,000 to approximately 22,000 residents. Visitor-serving commercial development would also contribute to the non-residential/visitor populations, particularly on weekends and during the summer, increasing demands on law enforcement and police protection services. Because increases in the residential and non-residential/visitor population would take place over an extended period of time (through the planning horizon of 2030), potential increase in call volumes for SMPD services would be expected to occur incrementally over the planning horizon for the proposed Housing Element Update.

As previously indicated, in 2019, there were 123,491 calls for service, a nearly 6-percent decrease in the number of calls since 2015. Population growth associated with residential development occurring under the proposed Housing Element Update is anticipated to increase the number of calls for police protection services within the City. As described in Section 3.10.2.1, *Environmental Setting – Law Enforcement and Police Protection*, Part I calls to the SMPD totaled 5,439 crimes in 2018 and 4,585 in 2019, representing a Part I crime rate decrease from approximately 59.1 in 2018 to 50.1 Part I calls per 1,000 City residents. Using the City's 2019 ratio of 50.1 Part I calls per 1,000 City residents, implementation of the proposed Housing Element Update is expected to increase annual Part I calls for service by up to a maximum of 1,197 (an additional 3 to 4 calls per day), based on an anticipated population increase of 22,000 under the proposed Housing Element Update. However, Part I call statistics are not subdivided based on where the calls originated from (e.g., residential property, commercial property, etc.). Given the large proportion of employees, visitors, and tourists that make up the daytime population within the City, it is likely that the annual increase in Part I calls for service associated with the residential development under the proposed Housing Element Update would be much less than this potential maximum.

Response Times

The main indicator of SMPD effectiveness is its response time to emergency calls. The SMPD's average emergency response time from 2015 to 2019 was 5:42 minutes (City of Santa Monica 2021b; Moss Adams LLP 2018). As described above, population growth associated with implementation of the proposed Housing Element Update would result in additional calls for service, creating higher demand for existing law enforcement and police protection services and potentially causing an associated increase in the SMPD's average response time.

Staffing, Equipment, and Facility Needs

For long-term staffing planning, the SMPD prepares a 5-year Staffing Plan approved by the City Council which addresses departmental budget, staffing, and equipment needs. This 5-year plan allows for SMPD to determine any increases in police resources and equipment, if needed. The SMPD is funded through general fund revenues and pier fund revenues generated by property, sales and transient occupancy taxes, all of which are expected to increase in proportion to the new residential development planned for under the proposed Housing Element Update. Such revenues would be used by the SMPD to hire additional officers and purchase equipment to maintain or improve SMPD service levels over time to meet

changing demands. However, the need for additional facilities (e.g., new or expanded police stations) would not be necessary, given that the population increase associated with the proposed Housing Element Update would result in a maximum of 3 to 4 additional calls per day and any increases in necessary SMPD staffing would operate from the main City police headquarters. (As previously described, it is likely that the annual increase in Part I calls for service associated with the residential development under the proposed Housing Element Update would be much less than this potential maximum.) However, unlike fire protection services, the construction of new facilities is not anticipated to be necessary to address a potential future increase in call volumes and required response. Therefore, overall impacts associated with the proposed Housing Element Update would be *less than significant*.

3.10.2.5 Cumulative Impacts – Law Enforcement and Police Protection

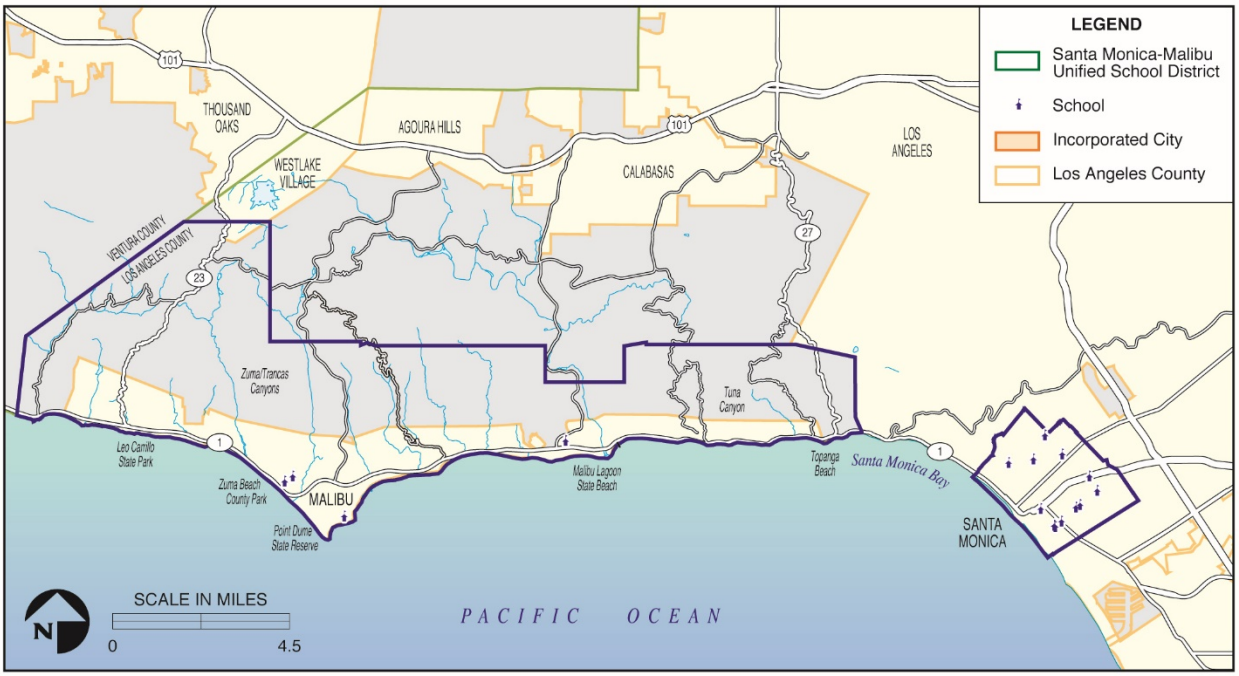
Cumulative impacts to public services are largely related to City-wide population growth. Please refer to Section 3.9, *Population, Housing, and Employment* for a detailed growth forecast for the City and the Greater Los Angeles Area.

New residential development planned for under the proposed Housing Element would contribute to cumulative City-wide population growth through 2030. The proposed Housing Element Update, in combination with cumulative development within the City and regional population growth such as that within the western portions of the City of Los Angeles, would result in additional population that would increase calls for police protection services provided by SMPD. This could result in a need for additional SMPD staffing and equipment. The SMPD evaluates the need for improvements and additional staff on an ongoing basis as part of its budgeting process, allocating funds as necessary towards the CIP and operating budget. As described above, the SMPD is funded through general fund revenues and pier fund revenue generated by property, sales and transient occupancy taxes, all of which are expected to increase as a result of new development. Such increased revenues would be available to hire additional officers if needed and purchase equipment to maintain or improve SMPD service levels over time to meet changing demands. Therefore, the implementation of the proposed Housing Element Update, in combination with regional growth, would not contribute to cumulatively considerable impacts to law enforcement and police protection services or exceed the capacity of mutual aid agreements.

3.10.3 Public Schools

3.10.3.1 Environmental Setting – Public Schools

The Santa Monica-Malibu Union School District (SMMUSD) provides Kindergarten through 12th Grade (K-12) public school services and adult education services for the coastal communities of Santa Monica and Malibu (see SMMUSD boundaries in Figure 3.10-2). The SMMUSD operates 15 public K-12 schools in Santa Monica including: seven elementary schools, two middle schools, one elementary and middle school, and two high schools (including an alternative high school). SMMUSD also operates seven preschools and an Adult Education Center in Santa Monica. In addition, SMMUSD operates four K-12 schools in Malibu including: two elementary schools, one middle school, and one high school, along with one preschool. The SMMUSD main office is located at 1651 16th Street in the City of Santa Monica (refer to Figure 3.10-1).



wood. Santa Monica-Malibu Unified School District

FIGURE 3.10-2

SMMUSD School Enrollment

Past and present enrollment in the SMMUSD is tracked by the California Department of Education, while future enrollment is periodically projected by SMMUSD. Based on the latest available before the onset of the coronavirus (COVID-19) pandemic enrollment data from the 2019-2020 school year, the total K-12 enrollment for public schools in SMMUSD is approximately 10,350 students, a decline of 1,373 students from a peak enrollment of 11,723 students in the 2009-2010 school year (California Department of Education 2010, 2021).[3]

The SMMUSD operates public schools in the cities of Santa Monica and Malibu including K-12 schools and an adult education center.

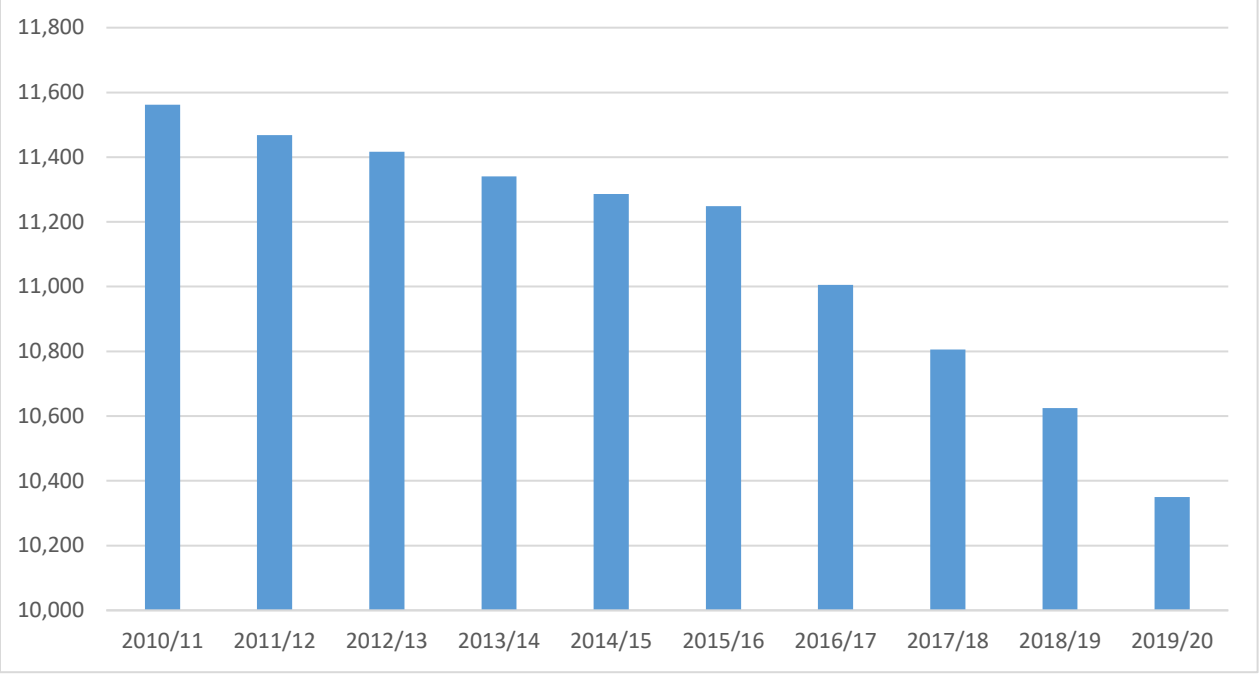
During the preparation of the Land Use and Circulation Element (LUCE) Program EIR, DecisionInsite, a demographics firm contracted by SMMUSD, projected substantial increases in enrollment as early as 2015. SMMUSD was expected to experience a

[3] This enrollment data from the California Department of Education generally tracks with the latest projections from DecisionInsite, a demographics firm contracted by SMMUSD. Decision Insite projected a total enrollment of 10,285 for the 2019-2020 school year.

4.3-percent increase in the number of enrolled students in 2015 and a similar increase in 2016. This projected increase in enrollment was anticipated to bring the total number of students to nearly 12,500, approximately 1,100 more students than the SMMUSD served at the time. The majority of this increase (approximately 1,000 students) was anticipated to occur in the Santa Monica (Santa Monica Daily Press 2013). However, as shown in Chart 3.10-1 enrollment has continued to decrease over time, even with development occurring under the LUCE. The Santa Monica area enrollment declined by 9,540 students (2009-2010 school year) to 8,944 (2019-2020 school) – a loss of 600 students or 12 percent. In the same period, the Malibu area enrollment declined by 2,183 students (2009-2010 school year) to 1,406 (2019-2020 school year) – a loss of 777 students or 47 percent.

In 2015, DecisionInsite, identified that 81 students enrolled in kindergarten for every 100 graduating seniors in the SMMUSD with the majority of losses in the Malibu area (e.g., 90 kindergartners to 100 high school graduates in the Santa Monica area as compared to 75 kindergartners to 100 high school graduates in the Malibu area). This trend resulted from unexpected drops in the numbers of kindergartners living in the areas served by Franklin, Grant, McKinley, Rogers and Roosevelt elementary schools. Updated forecasts showed that the City's population was expected to increase over the following years but that the number of families with school-age children is not growing as quickly compared to previous years. As a result, District-wide enrollment was expected to hold relatively steady despite the recent decline at the kindergarten level (Santa Monica Daily Press 2015). As show in Chart 3.10-1 the downward trend in enrollment has continued through the 2019-2020 school year. SMMUSD has balanced its enrollment by permitting students from outside of the District boundaries to attend the schools (Upton 2021).

Chart 3.10-1 Public School Enrollment (K-12) in the Santa Monica-Malibu Unified School District



Source: California Department of Education 2021b.

Total K-12 enrollment during the 2019-2020 school year for public schools within Santa Monica specifically is approximately 8,926 students (California Department of Education 2021a). This represents a decrease of approximately 5.3 percent since the 2015-2016 school year (see Table 3.10-5). Only Edison Elementary, John Muir Elementary, and Lincoln Middle School experienced modest increases in enrollment during this time period. Each of the other public schools within the City of Santa Monica experienced a decrease in enrollment.

In the future, DecisionInsite, has projected a continued decline in total enrollment throughout SMMUSD year-on-year (ranging from a 3.2-percent decline in 2022 to a 1.3-percent decline in 2025). By 2030, DecisionInsite has projected that total enrollment throughout SMUSD would reach a low of 7,974 students.

Table 3.10-5 Previous Enrollment at Santa Monica Public Schools

School	Grades/ Ages	2015-2016 Enrollment	2016-2017 Enrollment	2017-2018 Enrollment	2018-2019 Enrollment	2019-2020 Enrollment	Percent Change
Edison Elementary	K-5	433	448	447	439	439	1.4%
Franklin Elementary	K-5	831	808	782	744	727	-12.5%
Grant Elementary	K-5	628	625	606	573	582	-7.3%
John Muir Elementary	K-5	265	284	295	276	270	1.9%
Mckinley Elementary	K-5	512	537	488	475	450	-12.1%
Roosevelt Elementary	K-5	798	794	788	763	755	-5.4%
Will Rogers Elementary	K-5	563	537	525	510	491	-12.8%
Santa Monica Alternative (SMASH)	K-8	227	228	224	225	227	0.0%
John Adams Middle	6-8	1,065	1,065	1,063	1,022	1,006	-5.5%
Lincoln Middle	6-8	1,067	1,069	1,077	1,102	1,116	4.6%
Michelle and Barack Obama Center for Inquiry and Exploration[1]	9-12	91	78	50	44	47	-48.4%
Santa Monica High	9-12	2,950	2,824	2.826	2,857	2,816	-4.5%
Total	-	9,430	9,297	9,171	9,030	8,926	-5.3%

Notes:
[1] Michelle and Barack Obama Center for Inquiry and Exploration was formally known as Olympic High School (Continuation)
[2] Enrollment data is not available for the Adult Education Center or Child Development Services.
Source: California Department of Education 2021; Ed Data 2021.

Short- and Long-term School Capacity

SMMUSD went through a Campus Assessment process that reviewed each school and identified needs based on current and projected capacity. SMMUSD is designing new buildings based on this publicly vetted assessment process (Upton 2021).

School capacity is determined by the SMMUSD on a project-by-project basis with consideration given to physical variables (e.g., building size, support facilities, amenities), operational variables (e.g., utilization rates, staffing, space management, budgets), and programmatic variables (e.g., class sizes, schedules, partnerships, educational program offerings). As previously described, overall SMMUSD enrollment has been steadily declining over the last decade; however, some schools still face enrollment and class size constraints. California Education Code Sections 41376 and 41378 prescribe the maximum class sizes and penalties for districts with any classes that exceed these limits. Additionally, SMMUSD has entered into a collective bargaining agreement regarding classroom capacity with the Santa Monica-Malibu Classroom Teachers' Association. The District-wide Educational Specifications accepted by the Board of Education in April 2019 focused on the need for additional learning space for students and larger classrooms to teach in the 21st century. Together this collective bargaining agreement and the District-wide Educational Specifications further reduce the enrollment capacity of each school from the minimums established by the California Education Code (Upton 2021).

Increases in enrollments can create demand for additional space that may not be available. The enrollments at Franklin Elementary School and Roosevelt Elementary School have already exceeded the optimal acreage and square footage per student and programs. The primary constraint is acreage of the school sites, which are below the average area per enrollment. Expansion of the schools' footprints in the densely developed City would be cost prohibitive and politically challenging. Santa Monica High School is also undersized, which has led to planning for taller and denser buildings. Portable units have been used as a temporary solution at the primary and secondary schools in the past when existing facilities were insufficient for meeting demand. While not currently projected, in the event of substantial increases in enrollment rates, students could be temporarily accommodated by neighboring schools within SMMUSD and would have the right to return when there is once again available capacity. However, temporarily moving students from their home schools is very difficult. In the event that increased enrollment rates persist throughout SMMUSD, then long-term solutions to provide additional capacity would need to be investigated (Upton 2021).

Consistent with applicable legislation, the SMMUSD currently requires all new residential and commercial development to pay developer fees to offset potential impacts of increased enrollment on City facilities through improvements to school facilities (California Government Code Section 65996). The SMMUSD currently collects developer fees as authorized by Senate Bill (SB) 50 to mitigate increased demand for school facilities.

Table 3.10-6 Future Projected Enrollment at Santa Monica Public Schools

School	Grades/ Ages	Projected 2021-2022 Enrollment	Projected 2022-2023 Enrollment	Projected 2023-2024 Enrollment	Projected 2024-2025 Enrollment	Projected 2025-2026 Enrollment	Projected 2026-2027 Enrollment	Projected 2027-2028 Enrollment	Projected 2028-2029 Enrollment	Projected 2029-2030 Enrollment	Projected 2030-2031 Enrollment	Projected Percent Change
Edison Elementary	K-5	448	448	442	438	436	434	431	428	427	423	-5.6%
Franklin Elementary	K-5	655	639	610	576	561	564	556	550	545	538	-17.9%
Grant Elementary	K-5	604	584	568	554	532	514	502	492	489	483	-20.0%
John Muir Elementary	K-5	271	262	264	253	256	246	240	238	235	232	-14.4%
Mckinley Elementary	K-5	371	354	338	323	339	364	367	366	365	362	-2.4%
Roosevelt Elementary	K-5	709	665	647	687	718	717	706	699	692	688	-3.0%
Will Rogers Elementary	K-5	451	444	434	437	438	421	418	416	413	409	-9.3%
Santa Monica Alternative (SMASH)	K-8	244	243	245	250	249	250	249	245	242	240	-1.6%
John Adams Middle	6-8	931	898	922	894	874	851	801	773	732	719	-22.8%
Lincoln Middle	6-8	980	937	938	922	928	904	869	837	840	831	-15.2%
Michelle and Barack Obama Center for Inquiry and Exploration[1]	9-12	46	36	32	33	30	30	31	30	29	28	-39.1%
Santa Monica High	9-12	2,801	2,768	2,669	2,670	2,621	2,555	2,553	2,450	2,373	2288	-18.3%
Total	-	8,511	8,278	8,109	8,037	7,982	7,850	7,723	7,524	7,382	7,241	-14.9%

Notes:
[1] Michelle and Barack Obama Center for Inquiry and Exploration was formally known as Olympic High School (Continuation)
[2] Enrollment data is not available for the Adult Education Center or Child Development Services.
Source: DecisionInstitute 2021; Upton 2021.
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Bond Measures for Facility Improvements

The SMMUSD uses money from general obligation bond measures approved by the voters to fund facility improvements. The Facility Improvement Projects (FIP) Department of SMMUSD provides construction and program management services for the District with the goal of modernizing school facilites through school bonds. In 2006, Santa Monica-Malibu voters passed Measure BB, a $268 million bond, to increase funding for public schools; this bond has been fully issued. These funds were used for improvements, including safety and technology upgrades, at five elementary schools, three middle schools, and two high schools in Santa Monica. As an example, Measure BB funds were used to fully replace Edison Elementary. The Lincoln Middle School Project included the construciton of a new library and classroom building and the modernization of the classrooms and scince labs. The John Adams Middle School Project replaced nine classrooms, created a new entrance, and modernized the art studio and administration building (Upton 2021). Measure BB funds were also used at Santa Monica High School for the replacement of the Science and Technology Buildings with a new building housing 15 science labs and classrooms equipped with state-of-the-art equipment. Measure BB also funded a new classroom building and library/classroom/administrative building at Malibu High School.

Measure ES, a $385 million bond, passed in 2012. SMMUSD projects funded by Measure ES are either completed or are under construction in Malibu and Santa Monica. Measure ES included the development of a Long-Term Campus Facilities Master Plan for Santa Monica High School, and the construction of the Phases 1 and 2 building, a 35 classrooom/cafeteria/pool building. Measure ES spearheaded modernization and heating, ventilation and air conditioning improvements at all elementary schools. John Adams Middle School is receiving a new performing arts center in partnership with Santa Monica College. (SMMUSD 2021a).

In November 2018, the Santa Monica and Malibu voters overwhelmingly approved two separate general obligation bonds, Measure M, $195 million, specifically for Malibu schools, and Measure SMS, $485 million, specifically for Santa Monica schools. These bonds were approved by creating two separate School Facility Improvement Districts. New projects funded through these latest bonds are still in planning phases. These projects feature the next phases of the Samohi Campus Plan and the master planning of the new Malibu Middle and High School campus. Measure SMS funds completed the planned modernization and heating, ventilation, and air conditioning (HVAC) improvements at the elementary and middle schools. The remaining Measure SMS funds have been allocated to construct classroom buildings at McKinley Elementary, Roosevelt Elementary, Will Rodgers Learning Community, SMASH Alternative School, John Adams Middle School, Franklin Elementary, and Roosevelt Elementary Schools (SMMUSD 2021a, 2021b, 2021c, 2021d, 2021e, 2021f, 2021g). Planned improvements include upgrades to air conditioning, doors, floors, paint, accessibility security (i.e, cameras, electronic locks, etc.) and safety (i.e., fire alarms and earthquake valves).

Several school facilities have been recently upgraded as a result of bond monies, but facilities have not necessarily been expanded by SMMUSD to accommodate additional students. Measure BB and Measure ES funds have been nearly fully spent. Additionally, Measure SMS in Santa Monica and Measure M in Malibu are both fully allocated. If the population increase resulting from the proposed Housing Element

Update requires added capacity, additional bond measures may be required to fund construciton and modernization (Upton 2021; see Section 3.10.3.4, *Project Impacts and Mitigation Measures*).

2020-2021 SMMUSD Budget

SMMUSD presented its 2020-2021 Third Budget Revision in May 2021. As of 2019 SMMUSD was deficit spending between $7 million and $8 million. When SMMUSD adopted its 2020-2021 budget in July 2020, it was projected that SMMUSD would be forced into deficit spending for the foreseeable future. However, the latest budget revision predicts SMMUSD will receive $5.2 million in redevelopment agency funds and $4.4 million in COVID-19 relief funds that will offset an expected $1.9 million decrease in property tax revenues and bolster reserves. The recommended budget meets all of the obligations in this year and the next two fiscal years, while reducing the deficit spending from $5.5 million to $741,000 (Santa Monica Daily Press 2021).

Potential Formation of Separate Malibu Unified School District

Local school families and community groups in Malibu have expressed the desire to separate from SMMUSD to form a separate Malibu Unified School District. This direction has been discussed for over 40 years. In response to recent community efforts to advance separation, the Malibu City Council adopted Resolution 15-60 authorizing the transmission of a petition for unification of the Malibu Unified School District to the Los Angeles County Superintendent of Schools. In April 2018, the Malibu City Council asked the Los Angeles County Committee on School Separation to accept and temporarily suspend the City of Malibu's petition pending negotiations with SMMUSD regarding separation.

On October 12, 2020, the Malibu City Council voted unanimously to reinstate the petition for unification with the Los Angeles County Office of Education (LACOE) Committee on School District Organization. On October 28, 2020, SMMUSD Superintendent Dr. Ben Drati sent a letter to the City of Malibu expressing disagreement with the methodology for revenue allocations proposed by the City of Malibu petition. The SMMUSD letter cited financial concerns saying that a separation following the plan shared at the Malibu City Council meeting would create disproportionate funding for the two proposed districts greatly favoring the Malibu area.

The City of Malibu and SMMUSD presented several hours of testimony during a virtual preliminary hearing on April 17, 2021. The Committee on School District Organization ultimately decided to continue the hearing to September 2021. SMMUSD agrees that the two communities should separate school districts; however, SMMUSD's position is that it must be done in a way that: (1) is fair and equitable for both jurisdictions; and (2) will not harm any students in the process.

3.10.3.2 Regulatory Setting – Public Schools

State Policies and Regulations

Senate Bill 50 and Proposition 1A School Funding

SB 50, or the Leroy F. Greene School Facilities Act of 1998, provided comprehensive school facilities financing and reform program by authorizing a $9.2 billion State bond measure and imposing new limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development. SB 50 amends California Education Code Section 17620 to authorize school districts to levy statutory developer fees at levels that may be significantly higher than those previously permitted, but also provides new and stricter standards for school districts to follow when levying fees. School Districts would continue to be authorized to charge developer fees (also known as Level 1 fees) of $1.93 per square foot (sf) on residential buildings and $0.31 per sf on commercial or industrial buildings. However, pursuant to California Government Code Sections 65995.5 and 65995.7, SB 50 authorizes school districts to charge additional Level 2 developer fees to match 50 percent of school construction costs of state funds, and Level 3 developer fees to fund 100 percent of school construction costs if state funds are not available. At this time such funding is dwindling and until a new State school bond is approved, the availability of future funding is uncertain. Also, SMMUSD has limited new construction or modernization eligibility remaining (Upton 2021).

School Mitigation Fee (California Government Code Section 65996)

California Government Code Section 65996 designates California Education Code Section 17620 (i.e., the mitigation fees authorized by SB 50) and California Government Code Section 65970 to be the exclusive method for considering and mitigating development impacts on school facilities.

Local Policies and Regulations

SMMUSD Developer Fees

In 1992, the SMMUSD prepared a School Facility Fee Report to evaluate the impact of commercial/industrial and residential development on the facilities needs of the District. Since that time, subsequent school facility fee studies have been prepared by SMMUSD to evaluate the need to increase the level of school facility fees assessed on new development within the school district. The developer fees are currently assessed by SMMUSD on new development at $2.63 per sf of new residential space and $0.42 per sf of new commercial/industrial space. SMMUSD is currently working with consultants to reconsider the Developer Fee Report that will be presented for Board approval in Fall 2021. The challenge is that even if the maximum allowable rate of developer fees are charged, the funds would not compensate for adding additional school facilities or the replacement of existing facilities that have completed their useful life. As an example, a new 1,500-sf unit would pay $3,945 in developer fees. The unit might house two students. A new 1,000-sf classroom currently costs between $750,000 and $1,000,000 to construct in Santa Monica, not include land purchase costs (Upton 2021).

3.10.3.3 Impact Assessment Methodology – Public Schools

Thresholds for Determining Significance

The following threshold of significance is based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Housing Element may have a significant adverse impact on schools if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools.

Methodology

This section analyzes increased student enrollment due to the increase in new residential development planned for under the proposed Housing Element Update and determines the adequacy of existing and planned SMMUSD facilities to meet future demand. The analysis identifies the potential need for new or physically altered SMMUSD facilities, the construction of which could cause significant environmental impacts. Information used to prepare this analysis was derived through publicly available enrollment data, demographic data, and coordination with the SMMUSD. The potential impacts of the proposed Housing Element Update on public schools in Santa Monica are considered in the context of existing schools and currently pending or planned improvements to such facilities within the City. For individual development projects, pursuant to SB 50, impacts are generally considered to be less than significant with the payment of developer fees. However, the payment of developer fees for residential development planned for under the proposed Housing Element Update, may not fully provide adequate funding for the construction of new school facilities, improvements, and expansion.

3.10.3.4 Project Impacts and Mitigation Measures – Public Schools

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or other performance objectives for schools?

Impact Description (PS-3)

PS-3 **New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in expected increases in student enrollment, which would increase the demand on existing school facilities. Notwithstanding Senate Bill (SB) 50, the payment of developer fees to the Santa Monica-Malibu Union School District (SMMUSD) and the previously allocated bond funding measures for facilities improvements would not ensure a reduction in impacts. Therefore, the impacts could be potentially *significant and unavoidable*.**

Annual enrollment at SMMUSD has been steadily declining over the past decade (refer to Chart 3.10-1). Of the public schools within the Santa Monica only Edison Elementary, John Muir Elementary, and Lincoln Middle School had modest increases in enrollment since the 2015-2016 school year. Each of the other public schools within Santa Monica experienced a decrease in enrollment during this time period (refer to Table 3.10-5). Under implementation of the proposed Housing Element Update, up to 8,895 to approximately 11,000 new dwelling units could be developed through the planning horizon of 2030. Based on the anticipated 0.18 school-aged students per household,[4] buildout under the proposed Housing Element Update would result in approximately 2,179 new school-aged children, a 21-percent increase above the exiting 2019-2020 SMMUSD enrollment.[5] While enrollment has been declining, with this projected 21-percent increase, the total enrollment within SMMUSD would reach approximately 10,153 students by 2030. This total enrollment would remain slightly less than the peak enrollment of 11,723 students in the 2009-2010 school year (California Department of Education 2010). Assuming that each of these students are enrolled in the public schools within the Santa Monica, the total enrollment for these schools would be increased by approximately 24-percent from approximately 7,241 students to 8,926 students to 9,420 students.

Assuming that approximately 1,221 new dwelling units are constructed per year, there would be an increase in enrollment of approximately 220 students across the public schools in Santa Monica each year, an approximately 2-percent annual increase. Over the short-term, SMMUSD would need to employ strategies to increase capacity. Many of the tools SMMUSD has are limited or problematic including, but not limited to: providing additional classroom space using portable facilities, which are a temporary solution and require funding and available land; adjusting classroom size, which is limited due to the collective bargaining agreement with the Santa Monica-Malibu Classroom Teachers' Association; increasing staffing levels, which would be difficult due to the ongoing budget deficit to sustain current operations; and transferring teachers from one campus to another to accommodate fluctuating student enrollment (Upton 2021). Another option would be redrawing the District boundaries, which would transfer students from an overcrowded school to another neighboring school with available capacity. Changing boundaries is a very unpopular tactic and would not easily be enacted (Upton 2021). Over the long-term, permanent increases in capacity (e.g., construction of new buildings, satellite schools, or new schools) may become necessary. Infrastructure improvements could be partially funded through existing developer fees required by the SMMUSD for new development. Pursuant to SB 50, individual residential and mixed-use development projects under the proposed Housing Element would be required to pay SMMUSD developer fees for both residential and non-residential uses, which could be used for expansion or upgrading of school facilities as needed to accommodate increases in school enrollment over time. Pursuant to California Government Code Section 65995.5, payment of developer fees constitutes full mitigation on impacts to school. However, the caps places on developer fees by the State would limit this mitigation. Since existing bond measures, such as Measures BB, ES, and SMS are already mostly spent and fully allocated, the need for permanent increases in capacity might require for additional bond measures be brought to the community to approve (Upton 2021).

[4] This factor is based on 9,311 school-aged children (i.e., 5-18) from the 2019 American Community Survey (ACS)-Survey and 52,529 households from the 2020 California Department of Finance data.
[5] This calculation conservatively assumes each new dwelling unit would be occupied (i.e., 1 new dwelling unit = 1 new household).

In summary, the proposed Housing Element Update may contribute to the need for the construction of new or expanded public school facilities, the construction of which may have result in significant environmental impacts. Any such development with the potential to create impacts to the physical environment would be subject to environmental review under the CEQA process to ensure impacts would be mitigated to the greatest extent feasible. Given the limited revenue available through developer fees for school facilities and the lack of availability of bond funds for facility improvement through Measures BB, ES, and SMS, impacts on school facilities associated with the proposed Housing Element would be potentially *significant and unavoidable*.

3.10.3.5 Cumulative Impacts – Public Schools

SMMUSD has developed a District-wide Educational Specifications that is a long-range plan that directs how educational facilities should adapt and expand to meet the needs of educating the students in the 21st Century. SMMUSD has completed the Samohi Campus Plan, and Malibu Middle and High School Campus Plan and is in the process of completing campus plans for all of the other Santa Monica schools. These campus plans should be completed by the end of 2021. These campus plans match the educational specifications goals while maintaining the enrollment at most schools and allowing for some declining enrollment in the schools that are already oversubscribed. Despite District-wide trends showing a decreasing annual enrollment, cumulative demand within SMMUSD is anticipated to increase as a result of implementation of the proposed Housing Element Update and the continued implementation of the General Plans for the City of Santa Monica and the City of Malibu. Based on the Southern California Association of Governments (SCAG) growth projections, the population of Malibu is anticipated to increase by approximately 500 households between 2020 and 2035, which would correlate to an increase in K-12 student population of approximately 36 students. Coupled with the anticipated growth under the proposed Housing Element Update, more than 2,200 additional students would be placed into SMMUSD facilities as a result of the anticipated growth within Santa Monica and Malibu. Over the long-term, permanent increases in capacity (e.g., construction of new buildings, satellite schools, or new schools) and/or redrawing District enrollment boundaries may become necessary.

Over the long-term, permanent increases in capacity (e.g., construction of new buildings, satellite schools, or new schools) and/or redrawing District enrollment boundaries may become necessary. However, depending on the decision by the LACOE Committee on School District Organization, the formation of a separate Malibu Unified School District could reduce the tax base and funding per student within the City of Santa Monica, thereby making it more difficult to accomodate a long-term increase in enrollment as a result of the proposed Housing Element Update.

Therefore, implementation of the proposed Housing Element Update could substantially contribute to a cumulatively considerable impacts.

3.10.4 Library Services

3.10.4.1 Environmental Setting – Library Services

The Santa Monica Public Library consist of five branches that offer a variety of resources and services, including an extensive book catalog, public computers, and meeting facilities.

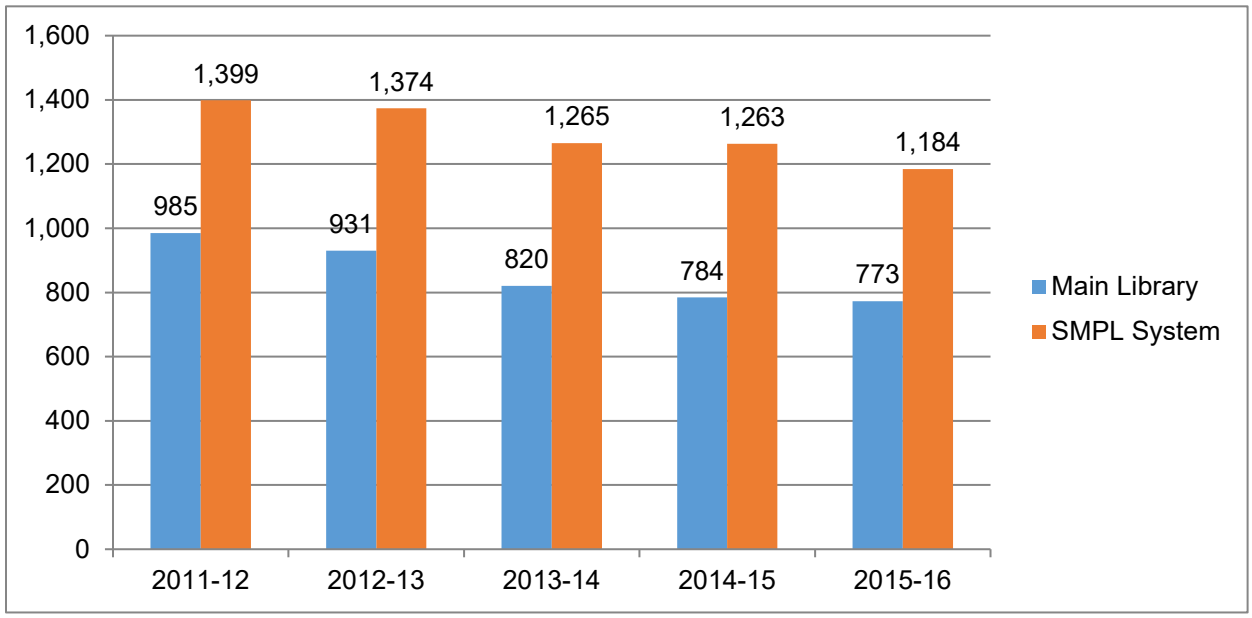
Five Santa Monica Public Library (SMPL) locations currently serve the City: the Main Library, the Montana Avenue Branch, the Fairview Branch, the Ocean Park Branch, and the newest location, the Pico Branch Library which opened in Spring 2014. Of these, the Main Library located at 601 Santa Monica Boulevard within the Downtown receives the most visitors annually. This Main Library Branch is a 104,000-sf facility that opened to the public in January 2006. The SMPL maintains quality core services, collections, research support, local history resources, and literacy. The SMPL provides a wide array of free programs, classes, and services, and embraces the City's commitment to building a community of readers. The SMPL's collection includes materials in Amharic, Chinese, English, Farsi, French, German, Italian, Japanese, Korean, Russian, and Spanish. In addition to an extensive book catalog, the SMPL features a large array of public computer facilities, including public access internet stations and free City Wi-Fi and meeting facilities. The SMPL recorded 740,009 annual visitors, 1,141,689 physical items checked out, and 214,608 circulations of electronic media for the 2019-2020 fiscal year (Angel 2021). However, it should be noted that the SMPL operates on a July 1 – June 30 fiscal year and due to the coronavirus (COVID-19) pandemic, the SMPL experienced library closures during the fourth quarter of the 2019-2020 fiscal year. In comparison, the SMPL recorded 1,131, 524 annual visitors, 1,182,812 physical item check outs, and 170, 428 circulations of electric media (Angel 2021).Variation between these two years shows that while annual in-person visitor attendance decreased by 34.6 percent, circulation of electronic media increased by 25.9 percent.

Possession of a SMPL card is necessary to check out materials, place a hold on items, use the public internet stations, check out study rooms, and access the SMPL's subscription databases. City residents may obtain a library card for free. In 2013, the City approved a $25 fee for non-resident borrowers to purchase a library card to access the same SMPL materials and services as residents. Total revenue from fines and fees was $165,118 in 2019 (Angel 2021). These fees contribute to SMPL's annual revenue and ensure efficient operation even as demand for library services expands outside of the City's projected population.

As seen in the number of annual visits to the SMPL, the most recent publicly available data shows annual visits to SMPL libraries has been declining since 2011[6] (SMPL 2015). Annual visits to SMPL has declined from 1,184,000 in 2015 to 1,131,000 in 2019 (SMPL 2015; Angel 2021).

[6] The most recently available data extends through 2016.

Chart 3.10-2 Annual Visitors to the Santa Monica Public Library (in thousands)



Source: SMPL 2015.

3.10.4.2 Regulatory Setting – Library Services

Local Policies and Regulations

City of Santa Monica Land Use and Circulation Element

The LUCE, adopted in 2010, provides a set of goals, policies, and standards to guide land use and transportation decisions in the City through 2030. The following policy in the LUCE relates to libraries:

Policy CE16.4	Continue to improve library facilities, including the planning and development of a library in the Pico Neighborhood area.

3.10.4.3 Impact Assessment Methodology – Library Services

Thresholds for Determining Significance

The following threshold of significance is based on Appendix G of the 2021 CEQA Guidelines. For purposes of this EIR, implementation of the proposed Housing Element may have a significant adverse impact on libraries if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or other performance objectives for libraries.

Methodology

This section (1) evaluates the availability and level of existing library services in the City; (2) reviews any planned improvements or changes to these services; and (3) analyzes the potential increases in demand for libraries associated with new residential uses in the City; and (4) determines the adequacy of existing and planned libraries to meet future demand and whether the proposed Housing Element Update would increase the demand for libraries such that there would be a need for new or physically altered libraries, the construction of which could cause significant environmental impacts. Information used to prepare this section was derived from data made publicly available by the SMPL.

This analysis utilizes the anticipated growth in the City resident population under the proposed Housing Element as identified in Section 3.9, *Population, Housing, and Employment* to assess potential increased residential demand for library services.

The potential impacts of the proposed Housing Element Update on libraries are considered in the context of existing libraries and currently pending or planned improvements to such facilities/resources. Within this context, impacts on libraries are considered potentially significant if the anticipated residential population growth has the potential to increase demand for libraries such that there would be a need for new or physically altered libraries facilities, the construction of which could cause significant environmental impacts.

3.10.4.4 Project Impacts and Mitigation Measures – Library Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or other performance objectives for libraries?

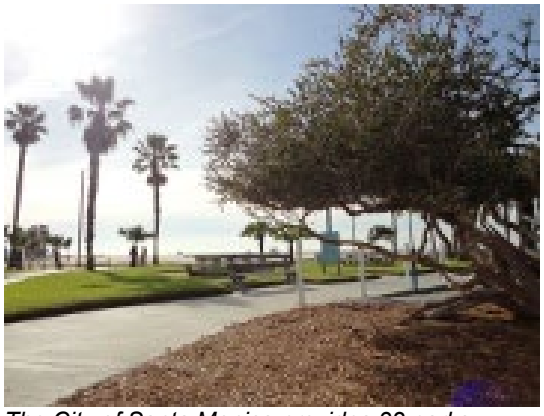
Impact Description (PS-4)

PS-4 **The increase in residential population anticipated to occur under the proposed 6th Cycle 2021-2029 Housing Element Update would the increase demand for libraries; however, due to the growing use of electronic resources this impact would be *less than significant*.**

The City is served by five SMPL libraries: Main Library, the Montana Avenue Branch, the Fairview Branch, the Ocean Park Branch and the Pico Branch Library. Based on the number of annual visits per resident ratio of 12.5 during 2019, the projected net increase in population associated with implementation of the proposed Housing Element Update, could increase annual visits to the SMPL by approximately 306,225.

Due to the growing use of electronic and digital media, library service standards (e.g., a certain number of volumes per thousand residents) are no longer appropriate when assessing the needs of a municipal library. Therefore, new residential uses in the City that would be developed under the proposed Housing

Element Update would not immediately equate to an increase in total volumes or sf of library space. The projected increase of up to 18,000 to approximately 22,000 residents under the proposed Housing Element Update would incrementally increase demand for library services and resources. Although library use and demand for resources would be expected to increase under implementation of the proposed Housing Element Update due to resident population growth, it is not anticipated that the construction of new library facilities would be necessitated under the proposed Housing Element Update. Any necessary increases in staffing and resources could be accommodated within existing facilities, particularly given anticipated increases in on-line digital media, drop-off / pick-up services, etc. It should be noted that the City's annual budgeting also address maintenance of existing library facilities to ensure that the deterioration of existing libraries does not occur. As a result, impacts to library services associated with implementation of the Housing Element Update would be *less than significant*.



The City of Santa Monica provides 32 parks available for public enjoyment.

3.10.4.5 Cumulative Impacts – Library Services

Future development projects within the City are expected to expand residential land uses and contribute to additional population increases, thereby increasing demand for the City's library services. (Libraries in the City are generally locally serving and are not impacted by population increases in the Greater Los Angeles Area.) Further, the City's annual budgeting addresses maintenance of existing library facilities to ensure that the deterioration of existing libraries does not occur. City public service maintenance, including library services is funded through general fund revenues generated by property, sales and transient occupancy taxes, all of which are expected to increase in proportion to future development. Such increased revenues would be available to maintain and improve library facilities over time to meet changing demands. In addition, future individual projects with potential to impact public services would be subject to environmental review by the City and would be required to mitigate environmental impacts to the maximum extent feasible, as appropriate.

Based on the above, the proposed Housing Element Update would not contribute to significant cumulative impacts related to library facilities. Therefore, the proposed Housing Element Update would not substantially contribute to a cumulatively considerable deterioration of these facilities or service levels.

3.10.5 Parks and Recreation

3.10.5.1 Environmental Setting – Parks and Recreation

The City of Santa Monica Community and Cultural Services Department (CCSD) is responsible for overseeing park programming and general operations of the City's parks, open space, and recreational facilities. In addition to the Santa Monica State Beach along the entire western edge of Santa Monica, the

City provides numerous recreation and park facilities, including those at public schools, at which access is provided under a Master Facilities Agreement between the City and SMMUSD. The City's Public Landscape Division of the Public Works Department is responsible for providing park maintenance for the City's 32 public parks, as well as sport fields, playgrounds, and water features encompassing more than 130 acres. The Public Landscape Division is also responsible for the landscaping and irrigation in nearly 300 medians and other open space encompassing an additional 100 acres (City of Santa Monica 2021b). In addition, the Public Landscape Division is responsible for managing and maintaining the City's urban forest, which has an inventory of over 32,000 street and park trees.

Local Recreational Facilities

The City's parks contain a variety of recreational facilities including multi-use athletic fields for soccer, baseball, and football, and courts for tennis, volleyball, and basketball. Other recreational opportunities in the City include swimming polls, a skate park, a lawn bowling facility, gymnasiums, off-leash dog areas, a course with exercise stations, and a variety of children's playgrounds, including water play areas. Additionally, benches, picnic tables, and barbeques are available at several City parks for informal recreational activities. In addition to the City's public recreational facilities, the City has a variety of private recreational facilities, which are offered to members, guests, or students only. Examples include private gyms, swimming pools, and basketball and volleyball courts. Recreation facilities within private multi-family developments also provide a variety of active and passive recreational opportunities. In addition to the City's formal system of recreational facilities, there is the informal or improvised recreational network present in any community. Public streets and hillside areas provide for jogging, bicycling, and unstructured children's play. These areas include the San Vicente Boulevard median as well as Ocean Front Walk, which are heavily used by walkers and runners.

Within the Downtown, open space is more characterized by plazas, wide public sidewalks with street furniture (e.g., benches), outdoor dining areas, parklets, and other hardscaped places, most notably including the Third Street Promenade/Santa Monica Place. The Third Street Promenade acts as a defacto open space promenade with some central play areas, seating amenities, and active storefronts. Palisades Park which extends for almost 1 mile along Ocean Avenue and the Palisades bluffs provides lawn, walking paths and seating areas with sweeping views over the City's waterfront, Pier and the Pacific Ocean, A smaller but highly utilized public space in the eastern section of Downtown is the Main Library courtyard, which provides an inner courtyard with seating areas and a café. The corner of 4th Street and Colorado Avenue in the Downtown also hosts a seasonal ice-skating rink. Additionally, the Transit Plaza at the Downtown Station provides a new open space area that has become an important meeting place and waiting area for transit riders.

Regional Parks and Recreation Areas

The Downtown is a destination for many regional visitors due, in part, to the Third Street Promenade as well as the nearby Santa Monica Pier, Santa Monica State Beach, and the beach bicycle path. The Santa Monica Pier is an internationally recognizable landmark which attracts over 4 million visitors annually. Santa Monica State Beach consists of 245 acres of coastline. The sandy beach includes volleyball courts,

concession stands, restrooms and showers, adjacent playgrounds, picnic and barbeque areas, the Annenberg Community Beach House (a publicly accessible beach club), and public parking.

Table 3.10-7 Existing City of Santa Monica Parks and Open Space

Name	Acres	Facilities and Services
Airport Park	4.0	Off-leash dog area with separate small and large dog areas Playground Synthetic turf sports field with lights 17 picnic tables with 6 BBQ grills .6-mile walking loop 118 parking spaces and bicycle racks Free City Wi-Fi
Ashland Park	0.4	Open grass area Paved walkway Shade trees
Barnard Way Linear Park	3.2	22 benches Walking path
Beach Green	0.6	Grass area Enclosed asphalt are
Beach Park 1	4.6	12 picnic tables Children's playground Beach restroom 2 public art pieces 2 parking lots (fee)
Chess Park	0.3	14 large tables with 4 chess boards per table 10 small tables with 1 chess board per table Large chess board with large chess pieces
Civic Center Parks	7	Two public park spaces: Tongva Park, 6-acres, and Ken Genser Square, 1-acre, completed in 2013.
Colorado Center Park	3.5	2 tennis courts Half-court basketball court Children's playground Volleyball court 5-station fitness course
Crescent Bay Park	2.3	Gazebo (upper level) Grass lawn with benches and ocean view (upper level) Pergola (lower level) Grass area (lower level) Beach parking lot (fee)
Douglas Park	4.5	Clubhouse Lawn bowling green 3 reflecting pools fly fishing area picnic tables and benches children's playground 2 tennis courts with lights 1 restroom building

Table 3.10-7 Existing City of Santa Monica Parks and Open Space (Continued)

Name	Acres	Facilities and Services
Euclid Park	0.3	Children's play area with swings 2 community meeting rooms Free wi-fi access 10 community garden plots (2 accessible) and garden class area (Info) 3 birdhouse sculptures
Ganadra Park	3.8	Children's playground Area with children's swings Youth baseball field Soccer field Basketball court Restroom building Old concession building (used for league storage) 32 off-street parking spaces
Goose Egg Park	0.7	A small pocket park
Hotchkiss Park	2.1	Benches Public art Restroom building Walking path
Ishiara Park	2.4	Outdoor "garden rooms" or areas for exercise, discovery play and group gatherings Accessible play and exercise equipment (playground includes swing, teeter-totter, merry-go-round, sand area and sculptural boulder) The Learning Garden, a communal spot to learn and acquire gardening skills, and grow citrus, herbs and vegetables. Communal gardening programs available. BBQ grills and picnic tables Bike track and natural log play for kids Free City Wi-Fi
Joslyn Park	2.5	Community center with auditorium, kitchen and craft room Herb Katz Dog Park, with separate small dog and large dog sections 1 basketball court Picnic tables and benches 1 children's playground 6 off-street parking spaces
Los Amigos Park	3.1	Youth soccer field Basketball courts (1 full and 3 half-courts) with lights 2 tennis courts (1 with lights) 4 handball courts with lights Children's playground Restroom building Concession building Park storage building
Marine Park	7	2 baseball fields with lights 1 soccer field with lights 2 basketball courts with lights 1 handball court 3 tennis courts with lights Birthday pavilion Picnic tables and BBQs

Table 3.10-7 Existing City of Santa Monica Parks and Open Space (Continued)

Name	Acres	Facilities and Services
		Reservable area includes 4 picnic tables and 3 BBQ grills 1 children's playground 64 off-street parking spaces 1 restroom building
Memorial Park	10.4	Memorial Park Gym and Fitness Room Police Activities League Community meeting rooms 2 youth baseball fields with concession stand 1 adult baseball field 3 softball infields 1 children's playground 4 tennis courts with lights 1 off-leash dog run The Cove skatepark 63 off-street parking spaces 1 restroom building
Ocean View Park	5.7	Basketball court (no lights) 6 tennis courts (no lights) Grass areas Benches atop grass mound Court reservations
Ozone Park	0.7	2 playgrounds Grass area with shade trees
Palisades Park	26.4	1450 Ocean Craft Center Beacon Overlook Benches Pergola Pétanque Courts Picnic areas Restrooms Rose garden Totem Pole Visitors Center Kiosk A City of Santa Monica Landmark
Park Drive Park	0.3	38 community garden plots Grass area
Reed Park	5.3	Miles Memorial Playhouse 2 basketball courts 1 fenced children's playground 6 tennis courts with lights Public restrooms Free City Wi-Fi Multipurpose Room (90 person capacity)
Schader Park	0.2	Grass area Shade trees Bench
South Beach Park	1.8	Children's playground Picnic tables Grass area

Table 3.10-7 Existing City of Santa Monica Parks and Open Space (Continued)

Name	Acres	Facilities and Services
		Beach parking lot
Virginia Avenue Park	9.5	Park Center, Teen Center and Thelma Terry Building: House park staff, programs, and meeting rooms available to rent The Patio The Splash Pad Pico Branch Library and Annex Two lit regulation-size basketball courts Large lawn area with walking path Two playgrounds Picnic tables and outdoor barbeque Onsite parking Room Rental at Virginia Avenue Park

Source: City of Santa Monica 2019.

School Recreational Facilities with Joint-Use Agreements

When not being used by SMMUSD, some recreation facilities at the public schools are open to the public, under a Master Facilities Agreement between the City and SMMUSD.

School facilities are operated and maintained by the SMMUSD. The City, local nonprofit groups, and community members sponsor afterschool programs for City residents at school sites. The CCSD provides the general public access to recreational facilities at six elementary schools in the City on the weekends year-round and on weekdays during school breaks through the Playground Partnership Project. Facilities accessed include play fields, play structures, exercise paths, handball courts, basketball courts, general-purpose hardscape, restrooms, and parking lots. The City operates the Childcare, Recreation, Enrichment, and Sports Together (CREST) afterschool program at seven elementary schools offering childcare, recreation, enrichment, and sports to participants. The CREST program at each site uses one classroom, access to school computers, libraries, and a secondary space for homework activities, as well as the playground and grass areas. The Playground Access program at these school sites provides unstructured recreational play afterschool on the school playgrounds to youths who register.

Local public schools, such as Santa Monica High School, are utilized for several City sports programs. For example, the play field and track are used by Westside Special Olympics (WSO), as well as the swimming pool and changing room. The tennis courts are used year-round on Saturdays, Sundays, and school breaks from 8:00 A.M. until dusk for drop-in play by the general public, as well as private and semi-private permitted lessons and for City tennis camps. The south gymnasium is also used for the City's adult sports leagues. Additionally, the City of Santa Monica Community Aquatics is community-serving program at Santa Monica College that serves that offers learn-to-swim classes, training programs, water aerobics classes, lap swim, and fun events for community members of all ages. Additionally, the track at Santa Monica College is also available for public use.

Local Recreational Standards

In 2019, the City had a resident population of approximately 93,000, bringing the park land acreage per 1,000 residents to approximately 4.1 (City of Santa Monica 2019). However, when excluding the Santa Monica State Beach, the City's park inventory currently provides 1.5 acres of parkland per 1,000 residents, well below the Los Angeles County average of 3.3 acres per 1,000 residents, as determined by the Los Angeles County Comprehensive Parks Needs Assessment completed in May 2016 (City of Santa Monica 2017).[7]

In 2018, the City had kicked off the process to update the 1997 PRMP. Preparation of an updated PRMP would assess current parks, recreation, and open space needs and plan for future need. The Parks and Recreation Master Plan Update effort went through various community engagement events and the updated plan was set to release in early 2020. However, with the budget cuts brought on by the coronavirus (COVID-19) pandemic, the update efforts were put on pause. It is anticipated that as City funding becomes available, the update of the PRMP will resume in the near future and be updated to address updated needs and conditions.

As described further below in Section 3.10.5.2, *Regulatory Setting – Parks and Recreation*, the City began the process to update the 1997 Parks and Recreation Master Plan (PRMP). This included the preparation of the 2019 Santa Monica Parks and Recreation Needs Assessment Report, which assessed current parks, recreation, and open space and provided initial strategic actions to help guide the development of the PRMP. The needs assessment determined that approximately 72 percent of the population lived within a 10-minute walk of a park or beach compared to the County-wide average of 49 percent. Many studies have demonstrated that proximity to a park has a substantial impact on the frequency of park use. Additionally, the needs assessment determined that the City of Santa Monica provides more playgrounds per capita than any of its six peer cities. For example, the City of Santa Monica provides 3.0 playgrounds per 10,000 residents while the City of Los Angeles provides 1.1 playgrounds per 10,000 residents.

Initial strategic actions from the 2019 Santa Monica Parks and Recreation Needs Assessment Report included the following:

- Improving connections across the park system;
- Implementing shared streets and green alleys with a focus on the bicyclist and pedestrian experience;
- Incorporating recreation and park uses into the public right-of-way with parklets, gardens, and other green spaces;
- Create new neighborhood parks and gathering spaces;
- Explore opportunities to create parks in Downtown inclusive of private-public partnerships; and
- Complete planned parks projects at Memorial Park, Civic Center, and Airport Park.

[7] City Council Staff Report, Award of Contract for Parks and Recreation Master Plan Update, http://santamonicacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=2774&highlightTerms=parks%20and%20recreation%20master%20plan.

3.10.5.2 Regulatory Setting – Parks and Recreation

State Policies and Regulations

Quimby Act (California Government Code Section 66477)

The Quimby Act authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act specifies that parkland dedications may not exceed 3 acres of parkland per 1,000 persons residing within a subdivision, unless the amount of existing neighborhood and community park area exceeds that limit, in which case the City may adopt a higher standard not to exceed 5 acres per 1,000 residents. The Quimby Act also specifies acceptable uses and expenditures of such funds.

Local Policies and Regulations

Santa Monica General Plan Open Space Element

The Open Space Element identifies specific policies associated with recreation and parks. The policies applicable to the proposed Housing Element are stated below:

Policy 1.1	Preserve existing public open space.
Policy 1.3	Acquire and develop new public open space throughout the City, giving priority to accessible locations within the geographic heart of the community.
Policy 1.4	Provide opportunities for the enjoyment of open space within every Santa Monica neighborhood.
Policy 1.5	Expand public gathering places within the City.
Policy 2.4	Encourage open space and recreational use of alleys and street ends.
Policy 2.5	Transform surface parking lots.
Policy 4.2	Utilize streets to form open space linkages within the City.
Policy 9.1	Increase physical access to parks and open spaces, in particular for youth and persons with disabilities.
Policy 9.2	Increase the visibility of the parks.
Policy 10.3	Provide open space venues for small, informal cultural events.

Santa Monica General Plan Land Use and Circulation Element

The LUCE identifies specific policies that address recreation and parks, which are stated below:

Policy LU4.6	Open Space. Provide open space and green connections near residences that are part of an expanding and comprehensive system of passive and active open space and complete street design emphasizing interconnectivity, recreation, and gathering spaces.
Policy LU17.1	New Facilities. Encourage new ground-level open space including, but not limited to landscaped areas, gathering spaces and play areas in new development.
Policy LU17.5	Access for All Residents. Encourage access to open space for all residents through expansion of the larger open space system with the ultimate goal of

	providing open and recreational spaces within a 0.25-mile radius of all residences in the City.
Policy D20.3	Provide active recreation, gathering places and passive open space in the form of new parks, plazas and ground-level landscaped open spaces.
Policy CE1.1	Incentivize or require new development above the base throughout the City and particularly in activity centers along the boulevards and near the new transit stations, to include outdoor gathering places such as plazas, paseos and outdoor dining areas.
Policy CE1.7	Strive for a geographic distribution of parks, open spaces and recreational facilities throughout the City such that most resident are within walking distance of a park or recreational area.

Santa Monica Parks and Recreation Master Plan

The PRMP was first adopted in 1997 and set forth strategies, goals, and a vision for Santa Monica's park and recreation system. The PRMP intended to guide improvement of the City's park facilities for 20 years (i.e., through 2017). Many of the plan's strategies were accomplished, but the remaining initiatives in combination with the growing need for open space necessitate a comprehensive update of the PRMP. In 2018, the City had kicked off the process to update the 1997 PRMP. Preparation of an updated PRMP would assess current parks, recreation, and open space needs and plan for future need. The effort to update the PRMP went through various community engagement events and the updated plan was set to release in early 2020. However, with the budget cuts brought on by the coronavirus (COVID-19) pandemic, the update effort was temporarily put on hold. It is anticipated that as City funding becomes available, the update of the PRMP will resume in the near future and be updated to address updated needs and conditions.

Santa Monica Municipal Code

The City of Santa Monica does not impose a Quimby Act fee. Rather, the City has established a Park and Recreation Facilities tax and imposes an in-lieu fee on office development, which is deposited into a Parks Mitigation Fund.

SMMC Chapter 4.55 is the Park Maintenance Code, and it authorizes the Department of Community and Cultural Services to regulate parks within the City. In addition, SMMC Chapter 6.80 requires project developers to pay a Park and Recreation Facilities tax for each new dwelling unit constructed in the City. All revenues collected from this tax are deposited into a Park and Recreation Facilities Fund to be used solely for the acquisition, improvement and expansion of public park, playground and/or recreation facilities.

Part 9.04.10.12 requires office development in excess of 15,000 sf of new construction or 10,000 sf of additions to existing development, to pay an in-lieu fee to the City. A minimum of 45 percent of the in-lieu fee is deposited into a Parks Mitigation Fund to be used for the acquisition and development of new parks or for significant capital improvements which increase the recreational opportunities of existing parks. The fee requirement may also be satisfied by providing low- and moderate-income housing or developing new park space, on or off of the project site, if mutually agreed upon by the developer and the City. The City Council adopted a new Parks and Recreation Development Impact Fee Program on October 14, 2014,

which has been codified as SMMC Chapter 9.67, which requires new projects to pay a parks and recreations development impact fee. Projects that comply with SMMC Chapter 9.67 are not required to pay the Parks and Recreation Facilities Tax required by SMMC Chapter 6.80 or the Housing and Parks in-lieu fee (1988 Zoning Ordinance Part 9.04.10.12).

3.10.5.3 Impact Assessment Methodology – Parks and Recreation

Thresholds for Determining Significance

The following threshold of significance is based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on parks and recreation services if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for parks.

b) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

c) Include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

Methodology

This section utilizes data from the Santa Monica Parks and Recreation Needs Assessment Report 2019 and through information made publicly available through the CCSD. Based on these resources, the methodology used in this assessment (1) evaluates the availability of parks and recreational facilities in the City; (2) reviews any planned improvements or changes to these services; (3) analyzes increases in demand for parks that would generate the need for new and expanded park facilities under implementation of the Housing Element; and (4) determines whether the construction of such open space would cause significant environmental impacts.

This analysis utilizes the anticipated change in the resident population as identified in Section 3.9, *Population, Housing, and Employment* to assess increased park usage. Increases in non-resident and visitor populations are more difficult to quantify, and as such, are assessed more programmatically. For example, while the number of new residents can be estimated, quantifying visitors and tourists are more difficult as these numbers fluctuate greatly based on economic conditions, time of year (e.g., summer versus winter), day of the week, and time of day.

The potential impacts of the proposed Housing Element Update on parks are considered in the context of existing parks and recreational facilities and currently pending or planned improvements to such facilities/resources.

3.10.5.4 Project Impacts and Mitigation Measures – Parks and Recreation

Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Would the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Impact Description (PS-5)

PS-5 **Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update is anticipated to increase the use of existing neighborhood and regional parks, which could cause the acceleration of substantial physical deterioration of these facilities. Although the City would continue to maintain existing parks and develop new parks consistent with the vision of the Santa Monica General Plan Land Use and Circulation Element (LUCE) and other City goals, implementation of the proposed Housing Element Update would require the construction or expansion of recreational facilities that might have potentially significant adverse physical effect on the environment. Therefore, impacts would be *significant and unavoidable*.**

As previously described in Section 3.10.5.1, *Environmental Setting – Parks and Recreation*, the City currently has more than 375 acres of available recreational space (including 245 acres of beach), which exceeds the Quimby Act parkland standard (i.e., 3 acres per 1,000 residents). The proposed Housing Element Update would plan for up to 8,895 to 11,000 new dwelling units, potentially generating an increase in population of approximately 18,000 to 22,000 people. If no additional parkland were created in the City by 2030, the parkland ratio would decrease from over 4 acres per 1,000 residents to 3.22 acres per 1,000 residents (including beach) under proposed Housing Element Update. When factoring out the regional beach and open space areas, the proposed Housing Element Update would cause the existing parkland ratio for local park space would decrease from 3.22 acres per 1,000 residents to 1.12 acres per resident.

Individual housing developers would pay a Park and Recreation Development Impact Fee as required in SMMC Section 9.67. All revenues collected from this tax would be deposited into a Park and Recreation Facilities Fund to be used for the acquisition, improvement and expansion of public park, playground and/or recreation facilities. New residential development projects would also be required to provide private open and gathering spaces in accordance with the requirements of adopted plans (such as Downtown Community Plan [DCP]) and the Zoning Ordinance, which would alleviate demand on the City's public facilities. Even so, with anticipated increase in City population growth, the proposed Housing Element Update would increase the demand on the City's existing parks and recreational facilities.

The City strives to ensure that every resident is within a 10-minute walk of a park or beach, consistent with the goals of the Urban Land Institute and the National recreation and Park Association (City of Santa Monica 2019). Currently, most of the City's parks and recreational areas are located in the western edge

of the City. As indicated in the Suitable Sites Inventory, the proposed Housing Element Update could increase the number of dwelling units in the City's "park-poor" areas and therefore, would cause or accelerate the deterioration of parks and recreational facilities if no new parks or recreational facilities are added.

Prior to the coronavirus (COVID-19) pandemic, the City was in the process of expanding local park space and implementing recreational/open space improvements such as the Memorial Park Master Plan, the Airport Park Expansion Project, and other projects that had been anticipated in the update to the PRMP. However, budgetary cuts from the economic effects of the pandemic has left the future of these parks and open space projects uncertain. Therefore, without addition of new local park or recreational facilities, this impact would be *significant and unavoidable*.

Mitigation Measures

MM PS-1 ***Parks and Recreation Master Plan (PRMP) Update.*** *The City shall resume the update of the PRMP, as soon as funding permits. The PRMP shall incorporate policies that support the development of new parks in park poor areas in an effort to achieve the Urban Land Institute and the National recreation and Park Association goal of ever resident being located within a 10-minute walk of a park or beach.*

MM PS-2 ***Parks and Recreation Development Impact Fee Update.*** *The City shall ensure adequate financing for funding of parks and recreation improvements through and update to the parks and recreation development impact fee. The fees shall be used to fund parks and recreation capital facilities, including land acquisition, parks improvements, and facilities in an effort to achieve the Urban Land Institute and the National recreation and Park Association goal of ever resident being located within a 10-minute walk of a park or beach.*

Residual Impacts

MM PS-1 and -2 require future the City to resume the update to the PRMP to develop and guide parks and recreation improvements, intended to increase the availability and accessibility of parks. Additionally, potential revisions to the Parks and Recreation Development Impact Fee. Consistent with the City's on-going long-range planning efforts, it is anticipated that the City would implement the recommendations of the PRMP, as practicable given City-funding limitations. Nevertheless, it is unknown at this time what specific parks and recreation improvements would be implemented therefore, this impact would remain *significant and unavoidable*.

3.10.5.5 Cumulative Impacts – Parks and Recreation

Future development within the City and the Greater Los Angeles Area are expected to contribute to increasing demand for the City's parks and open space areas. As described for the proposed Housing Element Update, individual developers would be required to pay a Park and Recreation Development

Impact Fee as required in SMMC Section 9.67. All revenues collected from this fee would be deposited into a Park and Recreation Facilities Fund to be used for the acquisition, improvement and expansion of public park, playground and/or recreation facilities. LUCE policies and regular budgeting also address maintenance of existing park and recreational facilities to ensure that the deterioration of existing recreational opportunities does not occur. In addition, SMMC Chapter 6.80 requires project developers to pay a Park and Recreation Facilities tax for each new dwelling unit constructed in the City. All revenues collected from this tax are deposited into a Park and Recreation Facilities Fund to be used solely for the acquisition, improvement and expansion of public park, playground and/or recreation facilities. Any future individual developments involving the creation of open space would be subject to environmental review by the City and would be required to mitigate environmental impacts to the maximum extent feasible, as appropriate. Based on the above, the proposed Housing Element Update would not substantially contribute to cumulatively considerable impacts related to parks and open space areas

The west side of Los Angeles County is well supplied with recreational facilities, parks, and open spaces. While the SCAG's 6th Cycle Regional Housing Needs Allocation (RHNA) would increase growth throughout Los Angeles County (i.e., by approximately 812,060 units), development in municipalities throughout the region would be required to comply with the Quimby Act ratio of 3 acres of parkland for every 1,000 residents.

Santa Monica State Beach would continue to be an attractive destination for locals and tourists alike. The beach is owned by the California State Department of Parks and Recreation and operated by the City of Santa Monica, pursuant to an Operating Agreement with the State of California. Despite the large size of the County, not everyone within that population goes to the beach each year, and not all chose to go to Santa Monica State Beach. If the increase in County population did cause a substantial increase in use and deterioration at Santa Monica State Beach, the population increase under the proposed Housing Element Update would only count for approximately 1 percent, which would not be considered a substantial contribution to a cumulatively considerable impact.

3.0 Environmental Impact Analysis and Mitigation

3.11 Utilities

The City Public Works Department provides domestic water, wastewater (i.e., sewer), and solid waste services and infrastructure within the City. Implementation (i.e., buildout) of the proposed 6th 2021-2029 Cycle Housing Element Update would increase the demand for these services and may increase the strain on or reduce the capacity of the existing infrastructure. Individual development under the proposed Housing Element Update would be required to individually evaluate and address potential impacts on the capacity of the existing infrastructure (e.g., domestic water supply infrastructure and sewer infrastructure) and contribute fair-shared funding for upgrades, as necessary. Adequate water supply would be available; however, residential development planned for under the proposed Housing Element Update would delay and possibly inhibit the City's ability to meet its water self-sufficiency goals outlined in the Sustainable Water Master Plan.

This section of the Environmental Impact Report (EIR) describes the existing and planned utilities serving the City of Santa Monica (City) and analyzes the potential impacts that could result from the implementation (i.e., buildout) of the 6th Cycle 2021-2029 Housing Element Update. Utilities necessary to meet future demands under the proposed Housing Element Update include service provided by the City including domestic water, wastewater (i.e., sewer), and solid waste management services. Energy services (e.g., electricity and natural gas) are provided by private utilities. This utilities analysis is divided into three subsections: (1) water infrastructure and supply; (2) wastewater collection, conveyance, and treatment; and (3) solid waste management. Energy services – including electricity and natural gas – are addressed in Section 3.5, *Energy*.

The analysis was prepared, in part, based on information obtained from utility service providers. The City is currently served by the utilities and service providers listed in Table 3.11-1.

Table 3.11-1 Utilities Serving the City of Santa Monica

Utility	Service Provider
Water Infrastructure / Supply	City of Santa Monica Public Works Department, Water Resources Division
Wastewater (Sewer) Infrastructure	City of Santa Monica Public Works Department, Water Resources Division
Solid Waste Management	City of Santa Monica Public Works Department, Resource Recovery and Recycling Division

3.11.1 Water Infrastructure and Supply

3.11.1.1 Environmental Setting – Water Infrastructure and Supply

Water Service

The City of Santa Monica Department of Public Works, Water Resources Division (Water Resources Division) is a retail water agency that provides potable and non-potable water throughout the City for single- and multi-family residential, commercial, and industrial uses, as well as landscaping irrigation and fire protection. The City is largely built-out, therefore, the domestic water supply infrastructure is already in

place and generally fixed in nature (City of Santa Monica 2010). The age of individual water lines in the City varies because upgrades to portions of the distribution system occur incrementally. According to the 2015 Urban Water Management Plan (UWMP), approximately 25 percent of the system was constructed before 1950 and is therefore in excess of 65 years old. Approximately 4 percent of the system is approximately 100 years old and has reached the end of its useful life (City of Santa Monica 2016). The City currently targets replacement of aging water pipes on a 100-year replacement cycle, where improvements are typically funded on an annual basis as part of the City's Capital Improvement Program (CIP). Water lines are also upgraded as a part of new development, if necessary, to increase capacity to serve the individual sites. Water lines must be sized sufficiently to accommodate for fire flow needs, which are significantly higher than domestic water needs. Upgrades to water lines are generally triggered by the age of each individual line or as a part of new development where additional capacity is needed. For example, the City upgraded/relocated the 12-inch water mains that run along Colorado Avenue during construction of the Metro E (Expo) Light Rail Transit (LRT) line in 2016 to better serve this corridor and improve water flow in the Downtown Santa Monica area.

Capital Improvement Program *The Capital Improvement Program (CIP) budget process is a 5-year planning cycle, updated biennially, and facilitated by a CIP Committee comprised of the City Manager, Assistant City Manager and Department Heads. The Fiscal Year (FY) 2019-20 CIP budget includes $3.4 million in net increased budget for water, wastewater, and stormwater runoff projects necessary to maintain or improve infrastructure that delivers water and wastewater services to City households and businesses, including the Water Main Replacement project, the Hyperion Capital Payment, the Hansen 8 Software Upgrade and the Citywide Municipal Drinking Water Wells.*

The City distributes water to approximately 18,400 metered service connections through a 250-mile network of water lines ranging from 6 to 36 inches in diameter (City of Santa Monica 2018, 2021a) (see Figure 3.11-1). These connections provide service to an existing population of approximately 92,357 residents and thousands of commercial and industrial uses that support a fluctuating population of employees, visitors, and tourists.

Pressure Zones

The City has three pressure zones that provide sufficient water pressure to customers and maintain adequate pressure for sufficient fire flows to fire hydrants (City of Santa Monica 2021a). These pressure zones include: the 250-, 350-, and 500-foot zones. Each zone designation corresponds to the elevation of the high water level in the water tank supplying the zone. The 500-foot pressure zone (500 zone) doesn't have a tank but the pressure in this zone is equivalent to that which would be supplied if there was a tank with an overflow elevation of 500 feet. Each zone has its own primary sources of supply and facilities and is also hydraulically connected to the zone below it.

500-Foot Pressure Zone

The 500 zone is located at the northern most edge of the City and is the City's smallest pressure zone. The 500 zone serves primarily single-family, low-density residential land uses. Since the 500 zone is both the smallest and lowest density zone in the system, it also serves the smallest demand of three zones. The 500 zone is entirely developed, and due to the prohibitively high cost of acquiring land, storage was

never built to serve this zone. To compensate for this condition, the 500 zone is served by both a direct connection to the Metropolitan Water District of Southern California (MWD), which directly feeds the 500 zone, and the San Vicente Booster Station, which provides additional flow and pressure, when conditions warrant. A new booster pump station us being planned for at the Arcadia Water Treatment Plant (WTP) to directly serve the 500-foot pressure zone and provide operational flexibility.

350 Foot Pressure Zone

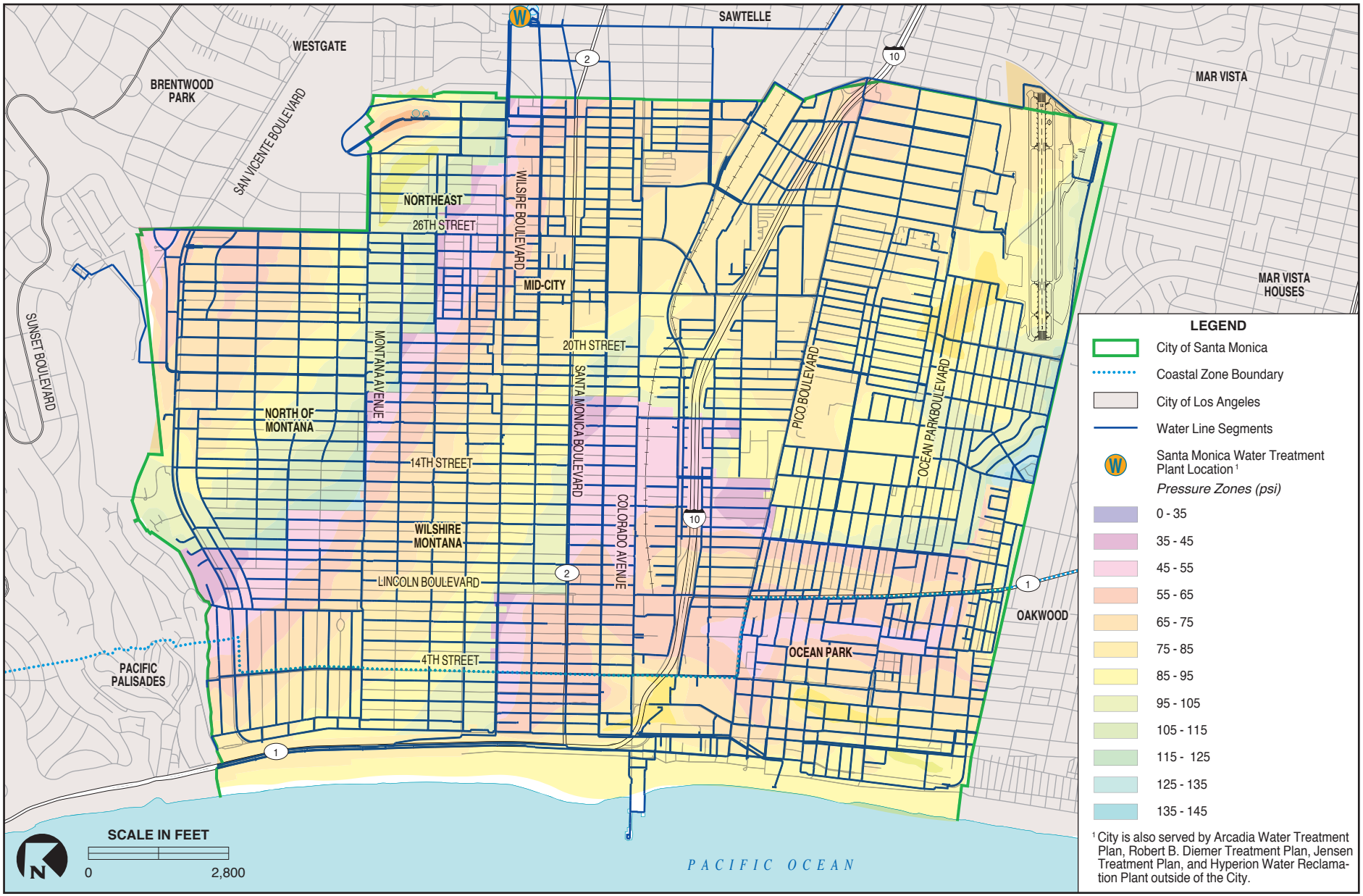
The 350-foot pressure zone (350 zone) is the largest of the three zones in the City and spans from the eastern most point in the City to the western most point. This zone serves low- and high-density single-family dwellings, commercial, industrial, and educational customers, and the Santa Monica Airport. It encompasses 57 percent of the City's total land area and is supplied its water primarily from the Arcadia WTP. Treated water from the Arcadia WTP is delivered to the Arcadia Booster Pump Station for final distribution to the customers in this zone. The 350 zone has four storage reservoirs which provide 40 million gallons (MG) of storage capacity. In order of descending size, the 350 zone is served by the Riviera, San Vicente, Mt. Olivette, and Arcadia Reservoirs, which have 25-, 5-, 5-and 5-MG capacities, respectively.

250 Foot Pressure Zone

The 250-foot pressure zone (250 zone) spans the length of the coastline within the City boundary and occupies the majority of the southwest corner of the City. Similar to the 350 zone, the 250 zone contains a variety of land uses, most notably the Downtown and the Santa Monica Pier. Given the characteristics of the customers in this zone (e.g., high-rise multi-family residential development and visitor serving uses), this zone exhibits the largest ratio of water consumption per acre of land in the City. The 250 zone is served primarily by a direct connection to the Arcadia WTP. The 250 zone is also served by two pressure relief/sustaining valves from the 350 zone, one each at the north and south ends of the zone. These valves supply the 250 zone if pressure in the 350 zone becomes too high and are used to sustain the pressure in the 250 zone should it drop too low. As with the 500 zone, the 250 zone does not include direct storage. It does, however, have indirect access to the storage in the 350 zone by way of the two pressure sustaining valves which connect the two zones.

Water Supply

The City's potable water supply consists of local groundwater from the Santa Monica Groundwater Basin (SMGB), with water drawn from three separate subbasins, and water purchased from the MWD, which is imported from the Colorado River or the State Water Project (SWP). Additionally, non-potable treated urban runoff water is produced by the Santa Monica Urban Runoff Recycling Facility (SMURRF) for landscaping irrigation and other approved non-potable water uses (see *Urban Treated Runoff [Recycled Water]* below). Local groundwater makes up approximately 60 to 70 percent of existing water supply; MWD imported water makes up approximately 30 to 40 percent of the existing water supply; and non-potable water from the SMURFF makes up approximately 1 percent of the existing water supply (City of Santa Monica 2021a).



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City of Santa Monica
Existing Domestic Water Supply Infrastructure

FIGURE 3.11-1

Table 3.11-2 Summary of Existing City Water Supplies

Local Groundwater Basins	**Charnock, Arcadia, and Olympic Sub-basins** Major sources of local groundwater is provided through 10 groundwater wells. Five groundwater wells at the Charnock Well Field (Charnock 13, 16, 18, 19 and 20), three groundwater wells in the Arcadia Well Field (Arcadia 4, Arcadia 5, and Santa Monica 1), and two groundwater wells in the Olympic Well Field (Santa Monica 3 and Santa Monica 4). The local groundwater treatment facilities currently consist of: **Charnock Treatment Unit** Provides biological granular activated carbon treatment for contaminated wells, followed by additional treatment at Arcadia WTP. **Arcadia WTP** Provides greensand filtration and reverse osmosis treatment to soften the City's groundwater supply. **Other Sub-basins** The Coastal sub-basin will be maintained as a water supply reliability reserve. Initial exploration and investigation efforts to quantify water quality and yield for the Coastal Sub-basin is being conducted. **Key Considerations** From 1997 to 2010, the City's largest groundwater well field, Charnock Well Field, was shut down due to third-party contamination. An agreement with the responsible parties provided settlement funds, which to date have funded an upgrade to the Arcadia WTP and new treatment facility at Charnock. Production from the Olympic Sub-basin is currently limited due to contamination by a third-party and efforts to restore the Olympic Sub-basin to full production capacity are underway.
Imported Water	**MWD Connections** The City receives imported water at two connections with MWD, turnouts capable of delivering up to 100 percent of the City's local water needs. **Key Considerations** Imported surface water supply from MWD is used to supplement the City's local water supplies in order to meet overall water demands in the City. The current Tier 1 allotment for the City is approximately 7,406 acre-feet per year (AFY). The City's long term goal is to move to 100 percent local water supplies, while retaining MWD as a reserve source of water.
Conservation	**Local Conservation Efforts** In response to State-wide drought conditions in 2015, the City implemented various water conservation measures that resulted in a permanent water demand reduction of approximately 18 percent or approximately 2,500 AFY. The average annual water consumption was reduced from 140 gallons per capita per day (gpcd) to 110 gpcd.
Recycled Water	**Recycled Water (Alternative Water Supply)** The City currently captures and treats dry weather urban runoff at the SMURRF to produce non-potable water that is used for irrigation and toilet flushing to offset potable water demand.

Source: City of Santa Monica 2021a.

In recent years, groundwater usage has also been limited by aging infrastructure, particularly groundwater production wells operating beyond the typical useful life. To help address these issues, the City conducts extensive groundwater monitoring programs and is working to proactively replace aging infrastructure (City of Santa Monica 2021a).

Existing and future water supplies are analyzed in the City's UWMP, which is updated every 5 years. For the 2020 UWMP Update, the City used the time period between 2010 and 2020 to establish the Normal, Single Dry, and 5-Consecutive Year Drought for available treated water supply. This time period accounted for the 2012-2017 drought, one of the most severe on record, and is more representative of the City's water supply reliability and drought risk going forward. The year 2010 also established the new baseline for local water supplies when the City restored its major groundwater well field back to full production.[1]

[1] For reference, this time period includes one of the single worst drought years in recorded history in 2014 where it registered as the hottest year in California in 1,200 years according to the National Weather Service (City of Santa Monica 2021a).

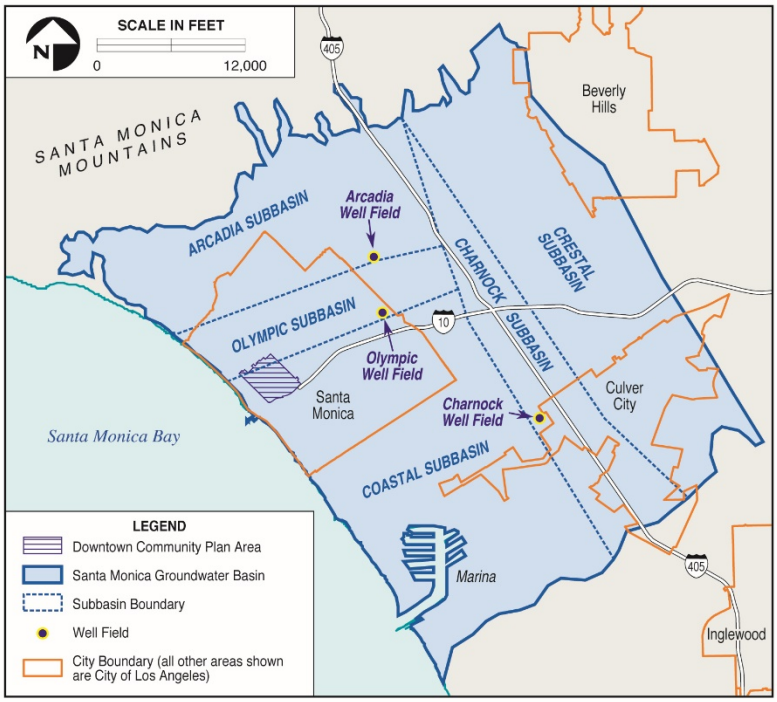
Table 3.11-3 Summary of Treated Water Supply Availability for Each Water Supply

Source	Normal Year1	Single Dry Year	Average 5-Year Consecutive Drought
Local Groundwater[2]	7,121 AFY	5,181 AFY	7,203 AFY
Imported Water Supply[3]	7,406 AFY[2]	7,406 AFY[2]	7,406 AFY[2]
Total	14,527 AFY	12,587 AFY	14,609 AFY

Notes:
AFY = acre-feet per year
[1] The normal year is estimated using the average of the total water supply available from 2010 through 2020.
[2] Groundwater supplies values are slightly lower than those presented in Table 3.11-4 because Table 3.11-4 accounts for the period between 2016 and 2020, which has greater groundwater pumping availability than 2010 to 2015 due to the State-wide drought.
[3] The lowest MWD Tier 1 allotment was assumed for imported water supply.
Source: City of Santa Monica 2021a.

Groundwater

Local groundwater from the SMGB is the primary source of water supply for the City (City of Santa Monica 2021a). The SMGB has a surface area of 50.2 square miles and underlies the entire City, as well as Culver City, Beverly Hills, and portions of western Los Angeles. The SMGB is bounded by impermeable rocks of the Santa Monica Mountains to the north, the Ballona Escarpment to the south, the Newport-Inglewood fault to the east, and the Pacific Ocean to the west. Extensive faulting within the SMGB separates it into five sub-basins: Arcadia Sub-basin, Charnock Sub-basin, South Santa Monica or Coastal Sub-basin, Crestal Sub-basin, and Olympic Sub-basin (City of Santa Monica 2018). Groundwater in the SMGB is replenished by percolation from rainfall and by surface runoff from the Santa Monica Mountains. The SMGB has a maximum storage capacity of approximately 1.1 million acre-feet (AF) (City of Santa Monica 2010, 2017b).



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Santa Monica Basin and Subbasins

FIGURE 3.11-2

The SMGB is unadjudicated and the City is currently the only municipality with a history of pumping significant volumes of water from the SMGB (City of Santa Monica 2018, 2021a).[2] The City currently operates 10 active wells in the Charnock, Arcadia, and Olympic Sub-basins of the SMGB (City of Santa Monica 2018). (Detailed descriptions of each of these sub-basins are provided in the 2020 UWMP

[2] The only other existing groundwater withdrawals are from one privately-owned residential irrigation well, and irrigation wells at three golf courses, namely the Brentwood Country Club, the Riviera Country Club, and the Los Angeles Country Club.

Update.) The 10 wells have a combined capacity of approximately 7,980 gallons per minute (GPM); however, due to the close proximity of these wells within the sub-basins, they cannot be pumped at full capacity simultaneously (City of Santa Monica 2018).

The Coastal Sub-basin is not currently utilized by the City for its water supply and the available supply here is a part of the City's groundwater resiliency reserves. The City completed an exploratory water supply well in the Coastal Sub-basin at the Santa Monica Airport (Airport 1). The estimated production rate of this well is approximately 300 GPM. The exploratory well is not yet equipped for production and is undergoing water quality investigations and feasibility analysis. The City currently does not have a timeline to develop this sub-basin (City of Santa Monica 2021a). There are currently no plans to explore the Crestal Sub-basin as it lies entirely outside of City limits, and the City does not have ownership or access to any potential well locations in this sub-basin (City of Santa Monica 2021a).

Table 3.11-4 Summary of Groundwater Volume Pumped (Acre-Feet)[1]

Groundwater Sub-Basin	2016	2017	2018	2019	2020
Arcadia	698	708	514	697	366
Charnock	8,331	7,585	7,993	7,882	5,442
Olympic	1,992	1,720	1,487	1,463	568
Total	**11,021**	**10,013**	**9,994**	**10,042**	**6,376**[2]

Notes:
[1] The summary of groundwater volume pumped describes raw groundwater extracted for treatment at the City's water treatment facility, which has a recovery of 75 to 80 precent of treated water.
[2] Local groundwater production in 2020 was impacted by unforeseen outages in four groundwater wells that accounted for approximately 40 percent of the total capacity and supply chain issues as a result of the coronavirus (COVID-19) pandemic.
Source: City of Santa Monica 2021a.

The City currently owns and operates two groundwater treatment facilities, the Charnock Treatment Unit and the Arcadia WTP. The Charnock Treatment Unit, which was completed in 2010 to remove contaminants caused by a third-party, uses greensand filtration and granular activated carbon to treat water from the contaminated groundwater wells. This treated water is blended with the two non-contaminated groundwater wells in the Charnock Well Field, which is then pumped to the Arcadia WTP for further treatment.

The Arcadia WTP is located at 1228 S. Bundy Drive in the City of Los Angeles and is designed to treat water from all of the City's well fields to drinking water quality standards prior to distribution to residents. Water drawn from the well fields is combined and delivered to the Arcadia WTP where it undergoes a five-step process to eliminate/reduce any remaining contaminants and achieve drinking water quality standards. The Arcadia WTP has a treatment capacity of 10 million gallons per day (MGD) and has a production efficiency of approximately 80 percent, producing roughly 8 MGD of drinking water.

The Arcadia Water Treatment Plant treats groundwater drawn from the SMGB to supply potable water to the City's customers.

The sustainable yield from the SMGB is a critical component to ensure overall groundwater production remains within sustainable limits of the basin. Prior to 2014, there have been several scientific literature reviews performed to assess potential groundwater sustainable yield levels. In 2018, an Updated Preliminary Study of the Sustainable Yield of the Groundwater Sub-basins (Richard C. Slade & Associates LLC, June 2018) was performed utilizing additional data obtained from recently constructed wells and exploratory borings completed by the City (City of Santa Monica 2021a). The study estimated the sustainable yield of the SMGB to be between 11,800 AFY and 14,725 AFY (City of Santa Monica 2021a). As shown in Table 3.11-4, the groundwater volume pumped is well within the Lower Limit and Upper Limit 2018 Sustainable Yield Estimate.

Table 3.11-5 2018 Sustainable Yield Estimate

Groundwater Sub-Basin	Lower Limit (AFY)	Upper Limit (AFY)	Previous Studies (AFY)
Arcadia	870	920	2,000
Charnock	6,410	8,080	4,420 to 8,200
Olympic	2,360	3,145	3,275
Coastal	1,160	1,450	4,225
Crestal	N/A	N/A	2,000
Subtotals:	**10,800**	**13,595**	**15,920 to 19,700**
ICF Recharge Factor:	1,000	1,130	N/A
Total:	**11,800**	**14,725**	**15,920 to 19,700**

Source: City of Santa Monica 2021a.

To comply with the Sustainable Groundwater Management Act (SGMA) (see Section 3.11.1.2, *Regulatory Setting – Water Infrastructure and Supply*), the City along with the City of Beverly Hills, Culver City, City of Los Angeles, and Los Angeles County formed the Santa Monica Basin Groundwater Sustainability Agency (SMBGSA) to develop a Groundwater Sustainability Plan (GSP) to manage the SMGB (City of Santa Monica 2021a). The GSP will be the first comprehensive groundwater assessment and management plan specific to the SMGB, which has been identified as a medium-priority groundwater basin by the California Department of Water Resources (DWR). The SMBGSA is required to provide a description of the sustainable management criteria that will be used for the basin. As part of the GSP development, sustainable management criteria (e.g., sustainable yield) and interfaces with neighboring groundwater basins (e.g., West Coast Basin and Central Basin) for the SMGB will be assessed. The GSP will provide the City with a road map to refine sustainable management practices and identify future studies for the SMGB. The SMBGSA must submit its GSP to the DWR by January 31, 2022 (City of Santa Monica 2021a).

Even before the GSP effort began, the City realized the importance of having a strategy to provide a sustainable water supply. The City Council directed the development of a Sustainable Water Master Plan (SWMP) in 2011 and completed in 2014. The SWMP was recently updated in 2018 and refined the pathway for the City to achieve water self-sufficiency by leveraging conservation, alternative water supplies, and local groundwater supplies in a sustainable manner (see Section 3.11.1.2, *Regulatory Setting – Water Infrastructure and Supply*). The City is in the process of implementing various water supply projects identified in the 2018 SWMP Update that would provide additional local water supply through a combination of alternative water resources and advanced treatment technologies (City of Santa Monica 2021a).

Imported Water

MWD was formed in 1928 to supplement the water supplies of its local governments – including the City, as a founding member agency – with imported water from the Sacramento-San Joaquin River Delta (Delta) via the SWP's California Aqueduct and from the Colorado River via the Colorado River Aqueduct. The SWP is a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants. The SWP is owned by the State of California and operated by the DWR. SWP transports water from the Feather River stored in and released from Orville Dam as well as unregulated flows diverted directly from the San Francisco Bay/Sacramento San Joaquin River Delta via four delivery points near the northern and eastern boundaries of the MWD's service area (City of Santa Monica 2017b). As a wholesale agency, MWD pipelines and facilities treat and transport water from the SWP and Colorado River Aqueduct to contracted water purveyors.

The City currently purchases imported water from MWD to supplement its local water supplies (City of Santa Monica 2021a). The City is contracted to receive a Tier 1 allocation of 7,406 AFY from MWD, which is the amount of water that the City is entitled to purchase annually at the Tier 1 rate.[3] The City is typically allowed to purchase Tier 2 water; however, the Tier 2 rate is higher. During drought periods, the amount of Tier 2 water available for purchase is generally reduced (City of Santa Monica 2018). The City's use of imported water has been declining since 2005 as groundwater production from the SMGB has been increasing (City of Santa Monica 2018). For example, during 2019, the City imported 3,020 AFY (City of Santa Monica 2021a).

Imported water from MWD is treated prior to delivery to the City. MWD operates and maintains five water treatment facilities, two of which serve the City: the Robert B. Diemer (Diemer) Treatment Plant in Yorba Linda; and the Joseph Jensen (Jensen) Treatment Plant at the northwest end of San Fernando Valley. These treatment facilities have a combined capacity of up to 1,270 million gallons per day (MGD). The City's Tier 1 allocation of 7,406 AFY from MWD amounts to less than 1 percent of the available treatment plant capacity (City of Santa Monica 2018).

The City's imported water supply is delivered via two 24-inch connections. SM-1, located at the Santa Monica Water Treatment Facility, has a 21,720 AFY capacity and SM-2, located at the Charnock Well Field, has a 18,100 AFY capacity.

MWD anticipates the ability to reliably serve all of its customers under the single driest year and multiple dry year scenarios through 2040 (MWD 2016). Since 1991, MWD has taken numerous actions to increase the reliability of the region's water supply, including investments in water storage as well as conservation and recycling efforts. Although supplies from the SWP and Colorado River vary, MWD has a large storage capacity with nine reservoirs and access to other supplies to help smooth out variability to meet demand of member agencies, including the City. However, recent drought conditions have substantially impacted MWD water storage supplies.

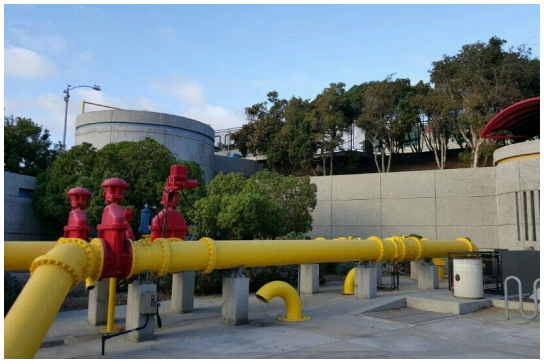
[3] The MWD Tier 1 Allotment was 11,407 AF for 2010-2012, 11,110 AFY for 2013-2014, and 7,406 AFY for 2016-2020.

Sustainable Water Master Plan
The City of Santa Monica recently completed an update to the City's Sustainable Water Master Plan to achieve water self-sufficiency by 2023. The pathway to achieve water self-sufficiency consists of three key components: (1) increasing water conservation efforts to permanently reduce water demand; (2) developing sustainable and drought resilient alternative water supplies; and (3) expanding local groundwater production within sustainable yield limits. The benefits of becoming water self-sufficient include: long-term cost benefits for water ratepayers, establishment of a diverse, sustainable, and drought resilient local water supply, and reduction of the City's water supply energy footprint.

As previously described, the City has adopted the SWMP to help the City achieve water self-sufficiency (i.e., no imported water from MWD) by 2023, after which imported water will be maintained at the minimum amount possible (170 AFY) for emergency purposes (City of Santa Monica 2018).[4] Although the original SWMP planning process aimed for the City to be completely self-sufficient by 2020, further analysis was conducted during the December 2018 revision and the achievement goal was extended to 2023 (City of Santa Monica 2018). Several factors contributed to this, including new State drinking water regulations, the timeline for recharging local groundwater basins, and the need to confirm and refine preliminary sustainable yield estimates of the SMGB (see Section 3.11.1.2, *Regulatory Setting – Water Infrastructure and Supply*). The recent update to the SWMP provides a comprehensive review of the City's water supply using recent planning information and the newly developed distribution system hydraulic model to assess the City's water infrastructure needs. The SWMP includes an evaluation of expanded water demand management measures and a variety of water supply alternatives including recycled water, groundwater injection, stormwater collection and treatment, rainwater harvesting, gray-water applications, and other water rights and exchange opportunities.

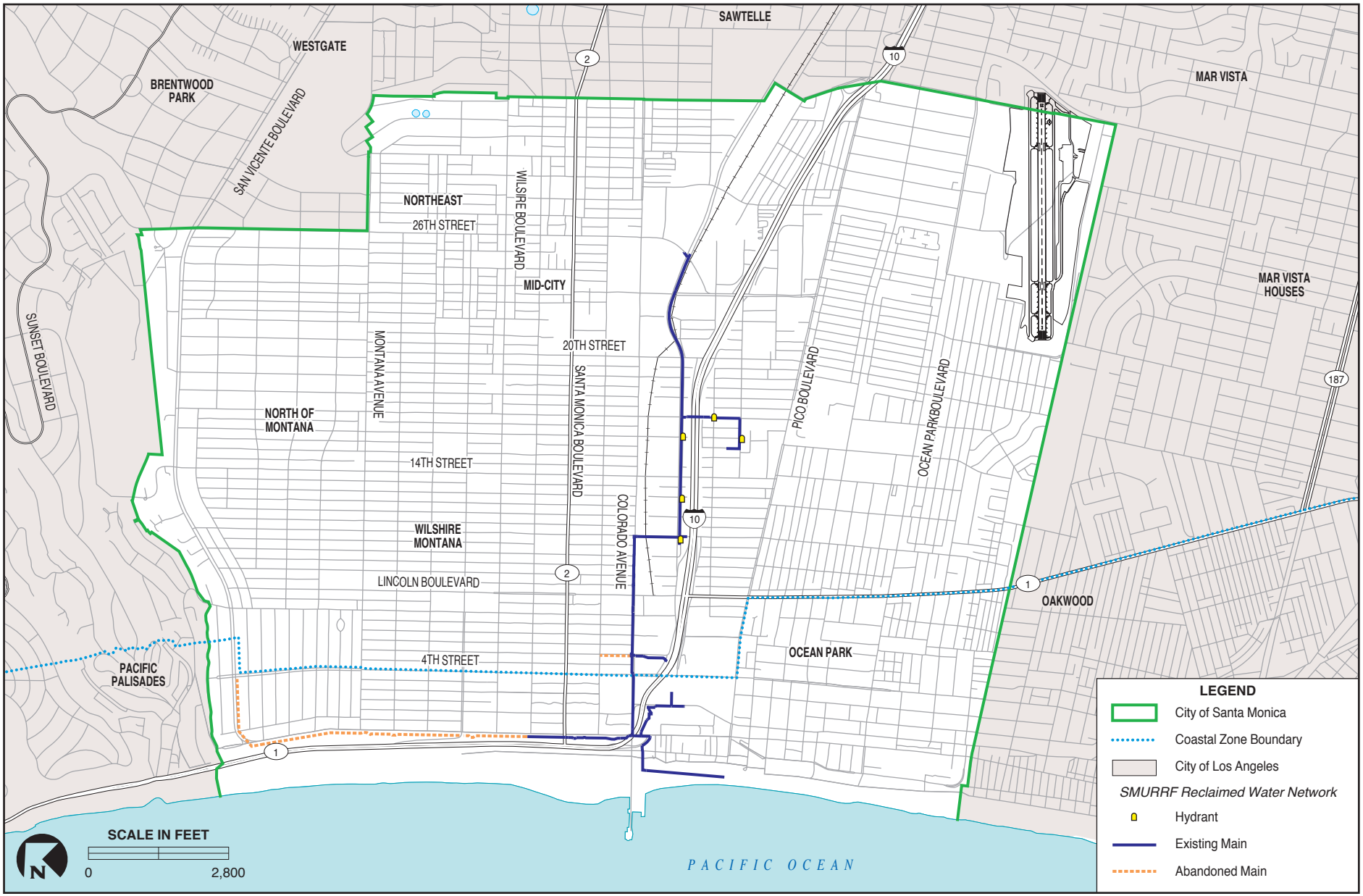
Urban Treated Runoff (Recycled Water)

The City captures and treats dry weather urban runoff at the SMURRF to produce recycled water for City industrial, commercial, and residential units to offset potable water demand. The SMURRF has a maximum production capacity of 560 AFY (City of Santa Monica 2018). However, the City's most recent conservation efforts have significantly reduced the dry weather runoff reaching the SMURRF. Not all buildings are currently recipients of the recycled water from the SMURRF as the distribution lines for recycled water – commonly referred to as purple pipe – do not underlie the whole City (see Figure 3.11-3). The SMURFF main distribution line runs from the intersection of Colorado Avenue and Ocean Avenue to Olympic Boulevard and 26th Street.



The SMURRF has the capacity to capture and treat approximately 0.5 MGD of urban runoff, contributing an average of 154 AFY of recycled water for non-potable use in the City.

[4] The City must purchase 170 AFY to maintain MWD connections in good condition. These MWD connections must be maintained in the event the City must import water from MWD for emergency purposes.



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City of Santa Monica
Existing Recycled Water Infrastructure

FIGURE 3.11-3

The SMURRF generates the City's supply of urban treated runoff water through removal of pollutants, including sediment, oil, grease, and pathogens, prior to reuse or release to the Santa Monica Bay. The SMURRF treats dry weather urban runoff from the City's Pico-Kenter and Santa Monica Pier drainage areas. The SMURRF is designed to effectively treat up to 0.5 MGD of urban runoff. The City's existing non-potable water distribution system consists of approximately 2.5 miles of recycled water pipeline, which varies from 4 to 12 inches in size (City of Santa Monica 2021a). Treated urban runoff from the SMURRF is currently the City's only source of non-potable water. The treated water is pumped through a reclaimed water distribution system to serve the City's non-potable water needs, including irrigation of parks, landscaped medians, City-owned properties (e.g., Woodlawn Cemetery), and in dual-plumbed buildings. In addition, there are four locations used as fill stations for street sweepers, pressure washers, and sewer jetting trucks, which are only available for City Operation staff use (City of Santa Monica 2021a).

The SMURRF ensures urban contaminants are removed and influent water (i.e., water that flows into the facility) is treated to comply with State standards for recycled water. Urban treated runoff water from the SMURRF accounts for approximately 1 percent of the City's overall water supply. The SMURRF has a maximum production capacity of 560 AFY, although it currently operates at approximately 98 AFY (i.e., 17.5 percent of capacity). The City's most recent conservation efforts have significantly reduced the dry weather runoff reaching the SMURRF and has had to supplement runoff influent with potable water to meet third-party contracts for SMURRF water and keep equipment operational (City of Santa Monica 2018).

As described further below, the non-potable water distribution will be expanded in the future once the Sustainable Water Infrastructure Project (SWIP) is completed and more recycled water customers could be added as the SWIP will be operating under a Los Angeles Regional Water Quality Control Board (RWQCB) Permit for Waste Discharge and Water Reclamation. At which point, the advanced treated recycled water and diluent water from SMURRF will be used for non-potable and potable reuse – groundwater augmentation via direct injection.

Sustainable Water Infrastructure Project

In 2020, the City began construction of the SWIP at the Civic Center parking lot. The SWIP has three basic elements all designed to function as a cohesive and integrated system for the harvesting, treatment, and conjunctive reuse of alternative water resources available to the City including stormwater, brackish groundwater, and municipal wastewater (City of Santa Monica 2021a). The SWIP includes three elements:

- **Element 1: Brackish/Saline Impaired Groundwater Treatment and Reuse.** This element would upgrade the above-mentioned SMURRF with a reverse osmosis unit capable of treating both captured stormwater and brackish groundwater from the Clean Beaches Initiative Project Stormwater Tank for non-potable and future potable reuse (diluent water per Title 22 Groundwater Replenishment Reuse Project requirements).
- **Element 2: Recycled Municipal Wastewater Treatment and Conjunctive Reuse.** This element would be a new below ground 1 MGD Advanced Water Treatment Facility (AWTF). The SWIP AWTF would treat municipal wastewater and urban runoff, when available. Treatment will include

membrane bioreactors, cartridge filtration, reverse osmosis, ultraviolet advanced oxidation process with chlorine, and chlorine disinfection.

- **Element 3: Stormwater Harvesting, Treatment, and Reuse.** This element would be a 1.5 MG stormwater harvesting tank located below ground adjacent to the SWIP AWTF. The tank would capture both dry-weather and stormwater runoff from up to an 85th-percentile rain event. Captured runoff which would then be blended with wastewater for treatment at the SWIP AWTF (Element 2).

The SWIP AWTF will be the City's first wastewater treatment facility and will be able to produce up to 1 MGD of advanced treated recycled water on average (approximately 10 percent of the City's total wastewater flow). The SWIP AWTF would be a scalping plant that would treat, on average, 1.5 MGD of wastewater to produce advanced treated recycled water. The capacity of the SWIP AWTF is limited by available night-time wastewater flows to maintain production, which could fall under 1 MGD at times (City of Santa Monica 2021a).

The SWIP is anticipated to begin initial operations toward the end of 2022. Initially, advanced treated recycled water would be used to meet non-potable reuse demands. Ultimately the advanced treated recycled water would also be used to augment the groundwater aquifer at the Olympic Well Field, providing up to 1,100 AFY of recharge capability to the City's groundwater supply. A summary of the City's plans to expand recycled water use is provided in Table 3.11-6. The City is also exploring the potential for direct potable reuse in the future when regulatory guidelines are available in 2023 (City of Santa Monica 2021a).

Table 3.11-6 Methods to Expand Future Recycled Water Use in City

Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
New Construction	Construction of a new 1 MGD SWIP AWTF	2022	1,100 AFY
Facility Upgrade	Upgrade to the existing SMURRF	2022	450 AFY[1]
Total	**-**	**-**	**1,550 AFY**

Notes: [1] The upgrades at SMURRF will provide a reliable raw water supply for consistent production at the facility's original design capacity.

Historical Water Demand

Average water demand within urban areas can fluctuate based on weather, drought, available supply, growth and development, the economy, and effectiveness of conservation programs. While the extent of these effects may vary based on local conditions, there is a general increase in demands with increased economic activity and hotter, drier weather conditions. The demand for potable water in the City has fluctuated over time. As shown in Chart 3.11-1 the City's demand decreased from 13,036 AFY to 11,352 AFY from 2014 to 2015 and has remained relatively steady with the lowest recorded water demand at 10,514 AFY in 2020. From 2016 to 2020 water use continued to stay below 2015 levels, and the community continued to conserve even with the improving economy, suggesting a sustained behavioral change in the City with regards to water conservation (City of Santa Monica 2021a). Overall, the City has seen an approximate 19.3 percent reduction in per capita water use from 2014 to 2020. This decline is generally attributable to ongoing and growing water conservation programs, such as the SWMP

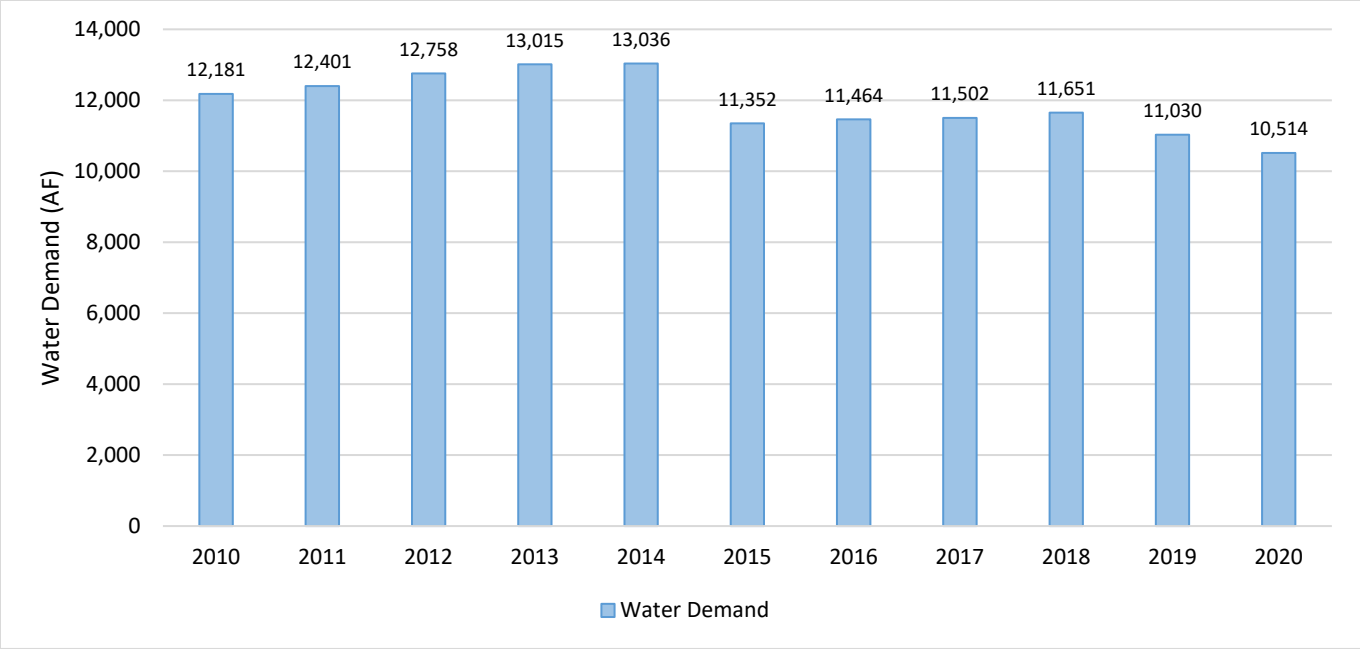
and Water Net Neutrality Ordinance, which was adopted in 2017 as part of the City's strategy to achieve water self-sufficiency (City of Santa Monica 2021a).

The relationship between water use and economic activity is also illustrated by considering the effect of the coronavirus (COVID-19) pandemic. In 2020 unemployment reached 11 percent due to the pandemic. Overall water used in 2020 was 10,513 AFY, the lowest of the years analyzed (2010 to 2020) despite lower than average rainfall and above average temperature and population compared to 2015 through 2019. Under normal circumstances, these factors would typically result in higher water usage. Instead, water use dropped by approximately 8 percent when compared to the previous 5-year average (2015-2019) indicating the decrease was likely due to economic impacts of the pandemic (City of Santa Monica 2021a).

Water Conservation

The City has actively worked to conserve water for decades. The City passed the “No Water Waste” Ordinance in 1993. The City’s Water Efficient Landscape and Irrigation Standards were established in 2008 and continue to be updated. The City’s Water Shortage Response Plan was adopted in 2009 and was instrumental in responding to the most recent drought (see Section 3.11.1.2, *Regulatory Setting – Water Infrastructure and Supply*). The City declared a Stage 2 Water Supply Shortage August 12, 2014, that required all residents to reduce water use by 20 percent and also enforced other water savings. These mandatory water demand reductions remain in place.

Chart 3.11-1 Annual Citywide Water Demand



Source: City of Santa Monica 2021a.

The City has also been a signatory to the California Water Efficiency Partnership (formerly the California Urban Water Conservation Council) Memorandum of Understanding (MOU) since 1991. The City has

actively implemented the organization's best management practices (BMPs) for more than 27 years, including the current BMPs:

- **BMP 1:** Utility Operations
- **BMP 2:** Public Education & Outreach
- **BMP 3:** Residential Programs
- **BMP 4:** Commercial, Institutional, and Industrial Programs
- **BMP 5:** Landscape Programs

More recent efforts include creation of the Water Conservation Unit (WCU), a Cash for Grass Rebate Program, Spray to Drip Rebate Program, and Rain Harvest Rebate Program. The WCU was launched in 2015 to manage key water conservation programs and policies. The WCU has implemented several new programs, including Water Use Allowances (WUAs), WUA Exceedance Citations, Enhanced Water Waste Patrols, Water School, Water Use Consultations and specialized trainings, enhanced rebate programs, and customer outreach. Public outreach continues to be a focus of the City and WCU, including regular publication of "The Water Issue" in collaboration with the Santa Monica Daily Press. This publication provides information about the City's water infrastructure, efficient landscaping, and the importance of water conservation.

The Cash for Grass Rebate Program was launched in an effort to reduce turf grass use in the City and replace with climate appropriate plants and mulch. This program improves native planting and decreases water demand. This rebate is available for single-family, multi-family, and commercial properties (City of Santa Monica 2021b).

The Spray to Drip Rebate Program incentivizes replacement of operational sprinklers in planter beds and hedges with drip irrigation. To qualify, residents must own a single-family, multi-family, or commercial property, receive water utility services from the City, use the water only on planters and hedges (not grass/lawn area), must have a working sprinkler system, and cannot use this rebate as a part of new construction, development, or major remodeling. Applicants also cannot combine the Cash for Grass and Spray to Drip rebates for the same converted area (City of Santa Monica 2021b).

The Rain Harvest Rebate Program provides a rebate to property owners or renters who wish to retrofit their building to collect rainwater for onsite uses, such as irrigation, flushing, or landscape infiltration. This can be achieved through a variety of systems including but not limited to rain barrels, large storage tanks, or a rain/rock garden. Specific rebate rates vary depending on what system is selected (e.g., a rain/rock garden may receive up to $1,000). Similar to the Spray to Drip Rebate Program, this program requires that participants receive water utility services from the City, not install the project combined with new construction, development, or major remodels, and have not received previous rebates for rain harvesting on the same roof area (City of Santa Monica 2021b).

As further described in Section 3.11.1.2, *Regulatory Setting – Water Infrastructure and Supply*, the Water Neutrality Ordinance became effective in July 2017 and limits water use for new developments to the average 5-year historical use for the parcel. Exceedances of this value must be offset through onsite or offsite development that reduces water demand at a ratio of 1:1, or payment of in-lieu fees.

Future Water Demand

In an effort to meet its water self-sufficiency goals and eliminate its reliance on imported water, the City has projected future annual potable water use needs for planning years 2025, 2030, 2035, and 2040. These projections reflect the City's estimated water use by sector, including population growth projections, and historical water demand unit rates.

As previously described, the City's implementation of the water conservation programs and policies from 2015 through 2020 has resulted in a significant reduction in potable water use, even with increases in residential population. While it is possible that the City's currently estimated per capita water use could be reduced further through additional focused conservation messaging and new water conservation programs, for planning purposes of the City's 2018 SWMP Update and 2020 UWMP Update it is assumed that the City's future water usage will be similar to 2015 to 2020 demand (refer to Chart 3.11-1) (City of Santa Monica 2021a). As shown in Table 3.11-8 and 3.11-9 below, while projected water demand would remain consistent in dry and normal years, available supply would be substantially lower during dry years.

Table 3.11-7 Summary of Projected Water Demand for the City

	2025	**2030**	**2035**	**2040**
Population	100,305	109,243	109,573	109,903
Single-Family Residential	2,646	2,646	2,646	2,646
Multi-Family Residential	5,333	6,261	6,288	6,324
Commercial and Industrial	2,992	3,036	3,081	3,126
Institutional and Governmental	409	409	409	409
Landscape	446	446	446	446
Other (Fire)	3	3	3	3
Subtotal	12,029	12,802	12,874	12,954
Distribution Loss	601	640	644	648
Total (AFY)	**12,631**	**13,442**	**13,517**	**13,602**
Total with Additional Conservations (AFY)	**11,867**	**11,809**	**11,711**	**11,650**

Source: City of Santa Monica 2021a.

Future Water Supply

As previously described, the City has historically met its water demand through a combination of local groundwater supplies and imported MWD water, supplemented to a lesser extent by treated urban runoff water for non-potable water demands. The 2020 UWMP Update estimates a total projected water supply availability of approximately 18,066 AF during a normal year, consisting of 10,660 AF of local groundwater from the SMGB and 7,406 AF of imported MWD water.[5] Projected water supply during a

[5] Projected groundwater supply includes water loss due to treatment process (i.e., reverse osmosis).

single dry year would be approximately 15,508 AF, consisting of 8,102 AF of local groundwater from the SMGB and 7,406 AF of imported MWD water.

Table 3.11-8 Projected Water Supply and Demand for Normal Year

Water Supply	Additional Detail on Water Supply	2025 Reasonably Available Volume	2030 Reasonably Available Volume	2035 Reasonably Available Volume	2040 Reasonably Available Volume
Groundwater (not desalinated)	SM-1	400	400	400	400
Desalinated Water - Groundwater	Arcadia, Charnock, Olympic	10,260	10,260	10,260	10,260
Purchased Imported Water	MWD	7,406	7,406	7,406	7,406
Potable Water Supply Total	-	**18,066**	**18,066**	**18,066**	**18,066**
Potable Water Demand Total	-	**12,631**	**13,442**	**13,517**	**13,602**
Difference (AFY)	-	**5,435**	**4,624**	**4,549**	**4,464**

Source: City of Santa Monica 2021a.

Table 3.11-9 Projected Water Supply and Demand for Single Dry Year

	2025	2030	2035	2040
Potable Water Supply Total[1]	15,508	15,508	15,508	15,508
Potable Water Demand Total	12,631	13,442	13,517	13,602
Difference (AFY)	**2,877**	**2,066**	**1,991**	**1,906**

Notes: [1] Based on the calculations provided in the 2020 UWMP Update, potable water supply during a Single Dry Year is estimated to be 76% of the water supply during a Normal Year.
Source: City of Santa Monica 2021a.

The 2018 SWMP Update explores strategies to address existing shortfalls in local water supply, such as alternative water supplies, additional groundwater extraction, and expanded conservation efforts (City of Santa Monica 2018). In June 2019, the City selected a consultant to design, engineer, and construct the Olympic and Charnock Water Transmission Mains Project. This project will include capacity expansion of the Arcadia WTP, production efficiency enhancements, and drilling or acquisition of additional groundwater supply wells to enhance resiliency. Additionally, conservation efforts could contribute over 1,550 AFY to the City's water supply portfolio by 2023 (refer to 3.11-6; City of Santa Monica 2018).

3.11.1.2 Regulatory Setting – Water Infrastructure and Supply

State Policies and Regulations

Sustainable Groundwater Management Act 2014

California enacted landmark legislation in 2014 known as SGMA, which is composed of Assembly Bill (AB) 1739, Senate Bill (SB) 1168, and SB 1319. The legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention only if necessary to protect the resource. The SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping

and recharge. Basins must reach sustainability within 20 years of implementing the sustainability plans. The SGMA requires the formation of local groundwater sustainability agencies that must assess conditions in their local water basins and adopt locally-based management plans. The SMGB is a medium priority groundwater basin, so the SMBGSA was formed in 2017 in accordance with SGMA. As previously described, SMBGSA is developing a GSP and will submit to the DWR by January 2022.

California Water Plan 2018 Update

The California Water Plan (California Water Code Section 10005[a]) provides a collaborative framework for water managers, legislators, and the public to consider options and make decisions regarding the State's water future. The plan is updated every 5 years and outlines actions that bring reliability, restoration, and resilience to California water resources. The plan reinforces the value of integrated water management and examining policies that allow water managers to combine flood management, environmental stewardship, and surface water and groundwater supply. The California Water Plan Update 2018 was released for public review on December 21, 2018 and the final plan was released in June 2019.

California Governors Drought Declarations

As a result of prolonged drought, former California State Governor Edmund Gerry "Jerry" Brown, Jr. proclaimed a State of Emergency on January 17, 2014 and directed State officials to take all necessary actions to make water immediately available. Seven subsequent proclamations built upon and provided further guidance regarding the original order. Notably, Executive Order (EO) B-29-15, adopted on April 1, 2015, ordered the State Water Resources Control Board (SWRCB) to impose restrictions necessary to achieve a 25 percent reduction in potable urban water usage through February 28, 2016. The EO directed DWR to lead a State-wide initiative, in partnership with local agencies, to collectively replace 50 square feet (sf) of lawns and ornamental turf with drought tolerant landscapes. The most recent proclamation, EO B-37-16 on May 9, 2016, directed the SWRCB and DWR to set new water reduction targets, building upon SB 7 (California Water Conservation Act). Among other provisions, it also provides guidance for new water use prohibitions and updated requirements for Water Shortage Contingency Plans.

On February 8, 2017, the SWRCB extended water conservation regulations, continuing the prohibition of wasteful practices and conservation mandates. While heavy rains in 2016 and 2017 had reduced drought conditions in some portions of the State, the SWRCB concluded: (1) drought continues to exist in portions of the State, and snowpack and reservoir conditions for the end of the water year remain subject to significant change; (2) the drought conditions may persist or continue locally through the end of the water year; and (3) additional action by both the SWRCB and local water suppliers will likely be necessary to prevent waste and unreasonable use of water and to further promote conservation.

On April 7, 2017 the Governor declared an end to California's drought emergency in EO B-40-17 for most counties, including Los Angeles County. However, the EO notes that *"…the next drought could be around the corner,"* and *"Conservation must remain a way of life."* Accordingly, conservation actions taken in EO B-37-16 remain in effect.

Governor Gavin Newsom signed a proclamation on April 21, 2021 that declared a targeted drought emergency in Sonoma and Mendocino counties and the Russian River watershed to address the acute conditions in the region north of San Francisco. On May 10, 2021, the Governor expanded the drought emergency declaration to include the 39 counties that encompass the Klamath River, Sacramento-San Joaquin Delta and Tulare Lake watersheds due to an acute water supply shortage in the northern and central parts of the State. While the drought emergency declaration does not include Los Angeles County, the declaration could affect imported water from the Sacramento-San Joaquin River Delta (Delta) via the SWP's California Aqueduct and from the Colorado River via the Colorado River Aqueduct.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMPA) (California Water Code Division 6, Part 2.6, Sections 10610 et seq.) was developed to address concerns over potential water supply shortages throughout California. The UWMPA requires information on water supply reliability and water use efficiency measures. As part of the UWMPA, municipal water suppliers that serve over 3,000 customers or provide more than 3,000 AFY are required to develop and implement UWMPs to describe water supply, service area demand, population trends, and efforts to promote efficient use and management of water resources. An UWMP is intended to serve as a water supply and demand planning document that is updated every 5 years to reflect changes in the water supplier's service area, including water supply trends as well as conservation and water use efficiency policies.

Senate Bill 610

SB 610 and SB 221 became effective January 1, 2002. SB 610, codified in California Water Code Division 6, Part 2.6, Sections 10910 et seq., describes requirements for water supply assessments (WSAs) and UWMPs applicable to the California Environmental Quality Act (CEQA) process. SB 610 requires that water suppliers must prepare a WSA for projects that are subject to CEQA and exceed a specified minimum size to determine whether the projected water demand associated with the project is included as part of the most recently adopted UWMP. The size requirement is specified according to development type but generally includes developments with water consumption that would be equivalent to or greater than the amount of water required by a 500 dwelling unit project.

Water Conservation Act (2009)

The Water Conservation Act mandates new water conservation goals for UWMPs, requiring urban water suppliers to achieve a 20 percent per capita water consumption reduction State-wide by 2020, as described in the 20 x 2020 State Water Conservation Plan (SWRCB 2010). UWMP updates must incorporate a description of how the water supplier will achieve this reduction, in addition to SB 610 requirements.

Urban water retailers can achieve the Act's water reduction goals using one of four specified methods:

- **Option 1:** 80 percent of baseline use (reduction of 20 percent)
- **Option 2:** Sum of specified performance standards

- **Option 3:** 95 percent of DWR Hydrologic Region target from the draft 20 x 2020 State Water Conservation Plan
- **Option 4:** A flexible alternative designed to adjust to local circumstances

Urban retail water suppliers must monitor and report compliance on an individual or regional basis. Individual urban retail water suppliers are not required to achieve a reduction in urban per capita water use greater than 20 percent. Compliance with the water reduction target is required for continued State water grants and loan eligibility. After 2021, failure of urban retail water suppliers to meet their targets establishes a violation of law for administrative or judicial proceedings.

The City has achieved its water use reduction target and the UWMP Update provides the Verification of Compliance forms demonstrating the agency's compliance with SBX7-7 (City of Santa Monica 2021a).

California Code of Regulations, Title 20

California Code of Regulations, Title 20, Sections 1605.1(h) and 1605.1(i) establishes efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads, lavatory faucets, and flush toilets. Amongst these standards, the maximum flow rate is 1.2 GPM at 60 pounds per square inch (PSI) for residential lavatory faucets and aerators, 1.8 GPM with optional temporary flow of 2.2 GPM at 60 PSI for kitchen faucets and aerators, 0.5 GPM at 60 PSI for public lavatory faucets, and 1.8 gallons per flush for flush toilets, effective January 1, 2016. Additionally, Section 1605.3(h) establishes State efficiency standards for non-federally regulated plumbing fittings, including commercial pre-rinse spray valves.

California Green Building Standard Code (CALGreen)

CALGreen builds on standards established under California Code of Regulations, Title 20 and sets forth water efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures. Updates to CALGreen were published July 1, 2019 and became effective January 1, 2020. Mandatory standards for water use are shown in Table 3.11-10.

Table 3.11-10 CALGreen Mandatory Maximum Flow Rates

Fixture Type	Maximum Allowable Flow Rate – Residential	Maximum Allowable Flow Rate – Nonresidential
Showerheads	1.8 GPM at 80 PSI	2.0 GPM at 80 PSI
Lavatory Faucet	1.2 GPM at 60 PSI	0.5 GPM at 60 PSI
Kitchen Faucet	1.8 GPM at 60 PSI	1.8 GPM at 60 PSI
Water Closets	1.28 gallons per flush	1.28 gallons per flush
Floor-mounted Urinals	0.5 gallons per flush	0.5 gallons per flush
Wall-mounted Urinals	0.125 gallons per flush	0.125 gallons per flush

Source: CALGreen Building Standards Code Section 4.303.

California Fire Code

The 2019 California Fire Code is one of 12 parts of an official compilation referred to as the California Building Standards Code. The purpose of the California Fire Code is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety,

and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations. The California Fire Code includes standards for water supply and pressure to adequately support firefighting capabilities, including appendix standards for automatic fire sprinkler systems that reduce water demands to a building for firefighting by up to 75 percent with a minimum required fire-flow of 1,500 GPM. The latest California Fire Code published by the California Building Standards Commission were adopted in 2016 and became effective January 1, 2017.

Regional Policies and Regulations

Metropolitan Water District of Southern California

MWD is composed of 26 member agencies who have preferential rights to purchase water and is the largest water wholesaler for domestic and municipal uses in Southern California. MWD meets water demand through assessments of projected supply and demand through 2040 that are presented in MWD's Regional UWMP. These assessments consider projections for average year conditions, single dry year conditions, and multiple dry year conditions. The 2020 Regional UWMP shows that MWD can provide reliable water supplies under all conditions through 2045 (MWD 2021).

MWD also prepares an Integrated Water Resources Plan (IWRP) that provides a water management framework that includes plans and programs for meeting future water needs. The IWRP addresses issues that can affect future water supply such as water quality, climate change, and regulatory and operational changes. The most recent IWRP was adopted in January 2016 and establishes a water supply reliability mission of providing its service area with adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way (Los Angeles Department of Public Works [LADPW] et al. 2016). The IWRP also includes a number of strategies to meet future water demand.

Local Policies and Regulations

Santa Monica General Plan Land Use and Circulation Element

The Santa Monica General Plan Land Use and Circulation Element (LUCE) guides land use and development within the City with design guidelines, policies, programs, recommended improvements, including policies for water conservation and sustainability:

Policy S6.1.	Ensure sufficient water supplies for new development.
Policy S6.2.	Implement the recommendations of the 2005 Santa Monica UWMP, including increasing water supply and conservation measures such as the City's no waste ordinance, landscape ordinance, wastewater control ordinance, and low-flow ordinance, and complete an assessment of the viability of additional urban run-off recycling.
Policy S6.3.	Implement landscape water conservation requirements for new construction projects.
Policy S6.4.	Continue to remediate the City's own contaminated groundwater supply.

Policy S6.5.	Continue the City's water-using appliances retrofit upon resale ordinance to encourage water conservation.
Policy S6.6.	Continue to explore and expand additional potential water conservation measures for the community, such as expanding reclaimed water access and availability.
Policy S6.7.	Increase the use of groundwater consistent with the safe yield of the SMGB and reduce reliance on imported surface water supplies from the MWD. As necessary, implement conservation measures as identified in the City's Water Shortage Response Plan (WSRP) to ensure that adequate water supplies are available to the City.
Policy S6.8.	Prepare a Citywide Groundwater Management Plan, and as part of that effort, conduct groundwater studies to confirm or adjust as necessary the safe yields of the Arcadia and Olympic Sub-basins.

Santa Monica Municipal Code

The Santa Monica Municipal Code (SMMC) establishes conservation measures, provides the framework for water conservation planning, and establishes water consumption limits and fees for new development. Conservation measures include, but are not limited to, such items as watering hours, restrictions on watering pavement or washing surfaces, and development standards for water features to ensure resource efficiency and reduced waste.

- *Section 7.16 – Water Conservation.* Requires water conservation measures, including limited watering hours, restriction on watering pavement or washing surfaces, and development standards for water features to ensure resource efficiency and reduced waste. Additionally, this section establishes water consumption limits and fees for new development.
- *Section 8.44.050 – Requirements for Automatic Fire Extinguishing and Protection Sprinkler Systems.* Requires automatic sprinklers installed in all newly constructed buildings except detached one-story or two-car residential garages.
- *Section 7.16.050 – Water Neutrality Ordinance.* The City adopted a Water Neutrality Ordinance on May 23, 2017. Under this ordinance, new development must offset all increases in water demand at a ratio of 1:1, except for 100 percent affordable housing projects, which must offset water demand at a ratio of 0.5:1. These water offsets must be achieved with onsite water efficiency measures. However, if onsite efficiency measures cannot be reasonably achieved, the applicant may achieve requirements by payment of in-lieu fees or performing/undertaking the requirements at an offsite location. In lieu fees are determined by City Council resolution on a case-by-case basis and must fund City efforts to reduce new water demand.
- *Section 8.106 – Green Building Ordinance.* The City adopted a Green Building Ordinance in 2008, with updates in December 2016. This ordinance requires the use of highly efficient plumbing fixtures, irrigation, and landscaping for new construction, major remodels, and new or remolded landscapes. Additionally, overhead spray irrigation is banned for all new developments and for new landscape on existing developments, and turf grass is banned on new commercial developments and is limited to 20 percent of landscaped area for new residential developments. Landscape plans are required for all new developments (major remodels and new construction) and at least two inspections must be performed prior to approval and Certificate of Occupancy.
- *Section 1.475 – Sustainability Rights Ordinance.* The Sustainability Rights Ordinance codifies the City's commitment to sustainability, including:

1. Restoring, protecting and preserving the City's natural environment and all of its components and communities including, but not limited to the air, water, soil, and climate upon which all living things depend;
2. Creating and promoting sustainable systems of food production and distribution, energy production and distribution, transportation, waste disposal, and water supply; and
3. To the full extent legally possible, subordinating the short term, private, financial interests of corporations and others to the common, long-term interest of achieving environmental and economic sustainability.

To effectuate these rights, this ordinance allows City residents to bring actions to protect groundwater aquifers, atmospheric systems, marine waters, and native species within the boundaries of the City.

Sustainable Water Master Plan

The SWMP was initially adopted in December 2014 to provide an up-to-date, comprehensive evaluation of the City's water system using available planning information to assess the City's water system infrastructure needs. The SWMP included an evaluation of expanded demand management measures and a variety of water supply alternatives including recycled water, storm water collection and treatment, rainwater harvesting, gray-water applications, and other water rights, supply and exchange opportunities to align with the City's goal of water self-sufficiency (i.e., meeting 100 percent of City's water demand through local sources by 2020).

The City initiated a comprehensive update of the SWMP in 2017 to incorporate new information regarding local groundwater resources and to integrate new water conservation programs and alternative water supply opportunities. On January 9, 2018, City staff reported to City Council that further analysis was needed to assess whether the City could meet its water self-sufficiency goal by 2020. An update to the SWMP was prepared by the Water Resources Division and presented to City Council on November 27, 2018. The SWMP update incorporated additional information (i.e., treatment feasibility study findings for the Olympic Well Field and production efficiency enhancements for the Arcadia WTP) to refine the pathway to achieve water self-sufficiency. The updated SWMP confirmed that achieving water self-sufficiency in the future is practical and cost effective, but the projected date of reaching that goal would be 2023. The delay from the original date is due to new State drinking water requirements implemented in 2018, permitting requirements for alternative water supply projects, and results of recently completed feasibility studies which resulted in longer timelines for project completion relative to previous estimates (City of Santa Monica 2018).

Urban Water Management Plan

The UWMP reflects the City's supply, demand, and reliability of City available water supplies along with an updated presentation of future supplies, demand forecasts, and measures to monitor and control future demand. The UWMP is prepared in compliance with the UWMPA and is updated every 5 years to reflect changes in the water supplier's service area and conservation and water use efficiency policies. The UWMP is consistent with SB 7 water conservation goals that require urban water suppliers to achieve a 20 percent per capita water consumption reduction by year 2020 State-wide.

Water Shortage Contingency Plan

Pursuant to SMMC Section 7.16.030 and California Water Code Section 10632, the Santa Monica City Council adopted a Water Shortage Contingency Plan in June 2015 (also known as the Water Shortage Response Plan). The Water Shortage Contingency Plan (WSCP) is intended as an action plan and is designed to reduce water demand during water shortages. As part of the 2020 UWMP process, the City also updated its WSCP in accordance with legislative changes to the California Water Code. The updated WSCP establishes six stages of water shortage severity based on predicted or actual water supply reductions. Each stage establishes voluntary or required water use reductions ranging from 10 percent to greater than 50 percent. Penalties and remedies for violations of required water use reductions are contained in the WSCP and other provisions of the SMMC.

3.11.1.3 Impact Assessment Methodology – Water Infrastructure and Supply

Thresholds for Determining Significance

Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a Lead Agency may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts.

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on water supply and infrastructure if:

a) The project would require or result in the construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects; and/or
b) The project would not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Methodology

This section: (1) evaluates the availability and level of existing water facilities and water supply in the City; (2) reviews any planned improvements or changes to these facilities and supply; (3) analyzes the potential increases in demand for water as a result of land use changes and projected new residential development planned for under the proposed Housing Element Update; and (4) determines the adequacy of existing and planned water facilities and future water supply to meet future demand and whether residential development planned for under the proposed Housing Element Update would increase the water demand such that there would be a need for new or physically altered facilities or whether new or expansion of water supply resources would be needed.

This section utilizes data information from the 2018 SWMP Update, 2020 UWMP, and communications with the City of Santa Monica Department of Public Works, including the Engineering and Water Resources Divisions. Based on these resources, this analysis provides a planning-level assessment of

the adequacy of water infrastructure and water supplies to serve projected increases in demand associated with future land uses alterations – including residential development planned for under the proposed Housing Element Update.

The increase in water demand anticipated to occur under the proposed Housing Element Update has been estimated using water demand factors from the LUCE Program EIR (State Clearinghouse [SCH] No. 2009041117) (City of Santa Monica 2010). Impacts to water infrastructure or water supplies are considered significant if future water demand in the City would not be adequately met by existing or planned future water infrastructure or water supplies.

3.11.1.4 Project Impacts and Mitigation Measures – Water Infrastructure and Supply

Would the project require or result in the construction of new or expanded water facilities, the construction of which could cause significant environmental effects?

Impact Description (UT-1)

UT-1 **New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would require or result in the construction of new water facilities (e.g., laterals) and potentially replacement/expansion of existing water facilities (e.g., water mains). The construction or replacement/expansion of these facilities could potentially result in significant environmental effects such disturbance of buried cultural resources and short-term temporary impacts related to criteria air pollutant emissions, noise, and disruption of the local transportation network; however, these impacts would be reduced to *less than significant with mitigation*.**

Water Distribution System

New residential development planned for under the proposed Housing Element Update would tie into the existing network of water lines throughout the City, characterized by various sizes and ages. With the increase in water demand at a given location, individual projects may trigger the need for construction of new laterals and/or the replacement/expansion of existing water mains, necessary to provide adequate water supply and water pressure. As previously described in Section 3.11.1.1, *Environmental Setting – Water Infrastructure and Supply*, the 2018 SWMP Update provides an up-to-date, comprehensive review of the City's water infrastructure needs. With the implementation of project-specific upgrades (e.g., the construction of laterals to tie into the existing domestic water supply infrastructure) and the assurance of adequate funds under MM UT-1 to finance the CIP projects (e.g., replacement/expansion of water mains), as necessary, potential impacts to the water delivery infrastructure would be reduced to *less than significant with mitigation*.

As previously described in Section 3.11.1.1, *Environmental Setting – Water Infrastructure and Supply,* the water delivery system currently has three zones of static water pressure. There is potential for areas to

have deficiency due to water pressure falling below 50 PSI, particularly following the proposed buildout of up to 8,895 to approximately 11,000 new dwelling units. Although the City currently considers these areas to have sufficient pressure, they may be considered deficient for providing fire flow to new taller housing buildings that may be constructed under the proposed Housing Element Update – particularly in the Downtown. However, the California Fire Code and California Plumbing Code, require that developers demonstrate that there is adequate water flow and pressure for both domestic supply and fire protection to serve the property. If pressure to the property is low, individual project developers would need to provide pumps on the property of the new development or pay for the City to install a loop line to ensure adequate pressure. Therefore, with existing regulations, water pressure for future development in the City would be adequate and impacts to static water pressure associated with development performed under the proposed Housing Element Update would be *less than significant*. (Refer to Section 3.10, *Public Services* for a detailed assessment of potential impacts on fire protection services.)

However, the construction of laterals, and to a larger extent, the potential replacement and/or expansion of water mains in the City may also create secondary short-term periodic construction impacts through 2030. Construction would require excavation, removal of aging and/or undersized water lines, and installation of the new lines located within existing paved streets and public rights-of-way. This would involve potential disturbance of previously unknown buried cultural resources as well as typical short-term construction impacts, such as criteria air pollutant emissions, noise, and potential disruption of the local transportation network flows. While construction of individual facilities is unlikely to cause significant effects, construction of new laterals and/or installation/replace of new water mains sufficient to serve up to up to 8,895 to approximately 11,000 new dwelling units and potential ground-floor commercial space as planned for under the proposed Housing Element Update may have the potential to create potentially significant impacts as discussed further in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.12, *Transportation*, and Section 3.13, *Tribal Cultural Resources*, respectively.

Water Production and Treatment Capacity

As described further in Impact UT-2, the City has sufficient water supplies available from a combination of the SMGB and MWD imported water sources to meet water demand – including the projected growth of up to 8,895 to approximately 11,000 new dwelling units and potential ground-floor commercial space under the proposed Housing Element Update. According to the Updated Preliminary Study of the Sustainable Yield of the Groundwater Sub-basins (Richard C. Slade & Associates LLC, June 2018) provided in the 2020 UWMP Update, the sustainable yield for the SMGB is 11,800 to 14,725 AFY (refer to Table 3.11-5). Additionally, the City receives a MWD Tier 1 water allocation of 7,406 AFY (refer to Table 3.11-8). Therefore, no additional major infrastructure improvements (e.g., production, treatment, or storage facilities) would be required to enhance the City's water production and treatment capacity in order to meet the future demand – including the projected growth under the proposed Housing Element Update – and impacts would be *less than significant*. However, the projected growth with the Housing Element Update would impact the City's goal of achieving water self-sufficiency (e.g., 100 percent local water resources) where the City would likely still need to purchase between 10 and 20 percent of its domestic water supply from the MWD.

Mitigation Measures

MM UT-1 ***Financing Program.*** *In addition to required improvements to the water delivery system for individual projects under the Housing Element Update, as needed, the City shall ensure adequate financing for funding of infrastructure improvements to serve the City either through the City's Capital Improvement Program (CIP) or alternatively through a Public Infrastructure Financing Program, including preparation of an Assembly Bill (AB) 1600 fee justification study. If pursued, the Public Infrastructure Financing Program shall be completed within 2 years of adoption of the proposed Housing Element Update. All new residential development under the proposed Housing Element Update shall be conditioned to be subject to payment of its fair share of any impact fees identified under this program. The program shall determine the costs of and establish a funding program for the following capital improvements to upgrade water delivery as needed to serve the demands of new land uses anticipated to occur under the proposed Housing Element Update.*

The Public Financing Plan shall:

a) Identify the cost of improvements to or replacement of undersized lines within the City.

b) Clearly apportion existing and projected demand on these facilities and costs between existing users, the City, and proposed future development.

c) Identify potential funding mechanisms for water line construction, including the equitable sharing of costs between new development, the City, and existing users, including development impact fees, grants, assessments, etc.

d) Identify development impact fees for all residential development to ensure that development pays its fair share of public infrastructure costs.

e) Include a regular fee update schedule, consistent with the City's CIP.

f) Require the first update of the Public Financing Plan within 5 years following adoption of the proposed Housing Element Update.

In addition to MM UT-1, each of the applicable State and local regulations referenced in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.12, *Transportation*, and Section 3.13, *Tribal Cultural Resources* as well as MM AQ-1, MM CUL-1a and -1b, MM NOI-1, and MM TCR-1 would also apply and would reduce construction-related impacts to *less than significant with mitigation*.

Residual Impacts

The City continually conducts evaluations to ensure its water conveyance system is adequate to meet existing and future service needs (e.g., 2018 SWMP Update). Construction of new or expanded water facilities would be implemented, as needed, as part of the City's CIP or a Public Infrastructure Financing Program and as required by MM UT-1. In addition, the applicable State and local regulations referenced in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.12, *Transportation*, and Section 3.13, *Tribal Cultural Resources* as well as MM AQ-1, MM CUL-1a and -1b, MM NOI-1, and MM TCR-1 would also apply and would reduce construction-related impacts to *less than significant*.

Impact Description (UT-2)

UT-2 **The City's existing and projected water supply would be adequate to meet the increased water demand from the proposed 6th Cycle 2021-2029 Housing Element Update and the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. However, the increase in residential development planned for by the proposed Housing Element Update would create substantial increases in water demand which would delay or inhibit the City's ability to achieve water self-sufficiency by 2023, a key City policy goal, which could create inconsistencies with City policy, a potentially *significant impact*.**

The projected increase in residential development planned for under the proposed Housing Element Update would substantially increase City-wide water demand. However, as shown in Table 3.11-7, the 2020 UWMP Update has accounted for projected population growth through 2040 – including population growth as a result of the 6th Cycle RNHA of 8,895 units, assuming a population of 2.0 persons per household (pph). As shown in Table 3.11-8 and Table 3.11-9, the 2020 UWMP Update demonstrates that with the use of MWD Tier 1 allotment, there is an adequate water supply to meet the projected water demand in 2030 and through to 2040. During a Normal Year, there would be a buffer of approximately 4,624 AF and during a Single Dry Year there would be a buffer of 2,066 AF.

The growth projections in the 2020 UWMP Update assume achievement of the 6th Cycle RHNA of 8,895 units in the next 8 years as required by California Department of Housing and Community Development (HCD). Should there be an overproduction of units beyond this number as provided for in Suitable Sites Inventory (SSI) buffer for the proposed Housing Element Update, additional future revisions to the 2020 UWMP Update may be required, in particular to meet City goals for water self-sufficiency.

Table 3.11-11 Increased Water Demand under the Proposed Housing Element Update

Land Use	Increase above 2020 UWMP Update Growth Projections[1]	Water Demand Factor[2]	Demand Increase[2]
Residential	2,099 units	124 gal/unit/day	260,276 gal/day (292 AFY)

Notes:
[1] The 2020 UWMP projected an increase of 8,895 dwelling units. Additionally, the City has planned for up to 10,994 dwelling units necessary to meet the affordability mix and buffer required by State law. Therefore, the *increase above the 2020 UWMP Update Growth Projections* could be as much as 3,421 units.
[2] The estimated increase in water demand was calculated using demand factors from the LUCE Program EIR (SCH No. 2009041117), which do not take into account water conservation factors.
Source: City of Santa Monica 2010.

In 2011, the City adopted a policy to become self-sufficient using SMGB local groundwater (i.e., using imported water supplies as a backup source only). In 2018 the SWMP Update incorporated additional information (i.e., treatment feasibility study findings for the Olympic Well Field and production efficiency enhancements for the Arcadia WTP) to refine the pathway to achieve water self-sufficiency. These projects are anticipated to be completed in 2023. As described in Section 3.11.1.1, *Environmental Setting – Water Infrastructure and Supply,* the City is also currently pursuing the SWIP which involves several projects several of which may include major construction efforts (e.g., underground treatment and storage facilities), including brackish/saline impaired groundwater treatment and reuse, recycled

municipal wastewater treatment, and conjunctive reuse and stormwater harvesting, treatment, and reuse. The 2018 SWMP Update confirmed that achieving water self-sufficiency in the future is practical and cost effective, but the projected date of reaching that goal would be 2023 (City of Santa Monica 2021a).

The water self-sufficiency projects outlined in the 2018 SWMP would increase local water supply to replace current imported water purchase from MWD, which would ensure the City's ability to meet its self-sufficiency goals (approximately 35 percent of the City's existing water supply; refer to Table 3.11-6). The implementation of the SWIP, which involves several projects that include major construction efforts (e.g., underground treatment and storage facilities), is anticipated to begin initial operations toward the end of 2022, and would support the City's efforts to achieve water self-sufficiency. While the City can continue to rely upon the Tier 1 water allocation of 7,406 AFY from MWD to supplement local water supplies, the development of up to 8,895 to approximately 11,000 new dwelling units would delay or inhibit the City's ability to achieve the goal of water self-sufficiency by 2023 if no new water conservation measures or programs are implemented. Therefore, while the City would have sufficient supplies to meet projected future demand during normal, dry, and multiple dry years, this potential conflict with adopted City water self-sufficiency goals would be considered a potentially *significant impact*.

3.11.1.5 Cumulative Impacts – Water Infrastructure and Supply

Cumulative impacts to the water conveyance system are considered on a City-wide basis. As discussed in Impact UT-1 above, individual residential development planned under the proposed Housing Element Update would contribute to potential impacts; however, the construction of new or expanded water facilities would be implemented, as needed, as part of the City's CIP or a Public Infrastructure Financing Program and as required by MM UT-1. In addition, the applicable State and local regulations referenced in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, and Section 3.13, *Tribal Cultural Resources* as well as MM AQ-1, MM CUL-2a and -2b, MM NOI-1, and MM TCR-1 would also apply would also apply and would reduce construction-related impacts to *less than significant with mitigation*. Therefore, the implementation of the proposed Housing Element Update would not substantially contribute to a cumulatively considerable impact.

Cumulative impacts to the water supply are also considered on a City-wide and regional basis through the year 2030, particularly as they may impact the SMGB. As discussed under Impact UT-2 above, the City's water supply, including well fields, treatment facilities, and connections to regional water sources are adequate to meet cumulative City-wide demands in 2030 and through to 2040. The City is currently in the process of implementing various water supply projects identified in the 2018 SWMP Update (refer to Section 3.11.1.1, *Environmental Setting – Water Infrastructure*) that would provide additional water supply through a combination of alternative water resources and advanced treatment technologies, including but not limited to production efficiency enhancements to the Arcadia WTP. Additionally, in 2020, the City began construction of the SWIP, which is anticipated to begin initial operations toward the end of 2022.

There are no known pending or proposed projects from other agencies or entities that withdraw water from the SMGB that would cause the sustainable yield of the SMGB to be exceeded. As discussed in the 2020 UWMP Update, adequate supplies from this source would remain available to the City for the reasonably foreseeable future (e.g., through 2040). In addition, the City is coordinating with other

agencies and entities that utilize water from the SMGB through a SMBGSA which is developing a GSP pursuant to SGMA to ensure that long-term sustainable yield of water from this source would continue to be available to the City. Therefore, sufficient supplies to meet projected future demand in the City during normal, dry, and multiple dry years through 2040 would be available and cumulative physical impacts to water supply would be less than significant. However, as discussed in Impact UT-2, implementation of the proposed Housing Element Update would cause the City to continue to rely upon MWD imported water to supplement local groundwater supplies. The City may not be able meet its goal of achieving water self-sufficiency by 2023 if no new water conservation measures or programs are implemented. Therefore, the implementation of the proposed Housing Element Update would result in a *significant and unavoidable* impact and would substantially contribute to a cumulatively considerable impact.

3.11.2 Wastewater Collection, Conveyance, and Treatment

3.11.2.1 Environmental Setting – Wastewater Collection, Conveyance, and Treatment

City-wide Wastewater Management

The City's Water Resources Division is responsible for all facilities that support the collection and conveyance of wastewater and stormwater runoff necessary to protect the community from sewer overflows, reduce the potential for local flooding, and promote overall water quality in the Santa Monica Bay. The City is currently applying innovative approaches to wastewater infrastructure City-wide including but not limited to below grade construction of critical treatment facilities to allow for alternative uses for surface areas (e.g., underground wastewater treatment and water storage facilities) (City of Santa Monica 2021a).

The City's wastewater collection system is divided into ten primary service areas or drainage basins to collect and convey sewage towards the ocean for final collection and discharge to the City of Los Angeles Hyperion Water Reclamation Plant (HWRP) for wastewater treatment and disposal. Wastewater within the City is generally collected and conveyed to the west via the sewer mains along Colorado Avenue and Broadway, and then conveyed to the south via the sewer main within the Ocean/Main Corridor. This sewer main ties into the City's 72-inch diameter Coastal Interceptor Sewer (CIS) connection, which ultimately conveys wastewater to the HWRP located in Playa del Rey approximately 4 miles southeast of the City (City of Santa Monica 2015).

The City's sewer system, including the City's CIS connection, consists of approximately 210 miles of sewer pipelines ranging from 6 inches to 72 inches in diameter, approximately 2,800 maintenance holes, two flow monitoring and sampling stations, and a 26-MGD Moss Avenue Pump Station (MAPS) at Ocean Boulevard (City of Santa Monica 2017a, 2021a). The City's sewer lines are composed of various materials, including but not limited to vitrified clay, plastics, and reinforced concrete. Vitrified clay pipes have a life expectancy of approximately 100 years, but they can last well beyond their expected life (National Clay Pipe Institute 2015). However, as clay pipes age, they are often subject to damage from root systems and to infiltration of groundwater or rainwater through cracks, joints, and aging gaskets. Exact dates for the construction of the City's sewer system are not available; however, given that the City has never constructed its own lift station, the sewer system was likely constructed shortly after the

HWRP, which was constructed in 1925. Therefore, it is estimated that the City's vitrified clay pipes were mostly installed sometime between 1925 and 1950; however, 55 of the 151 pipe segments composed of vitrified clay in the Downtown were lined with plastic in 1999, following the 1994 Northridge Earthquake. The City's plastic pipes were installed starting in 1995 (City of Santa Monica 2017b; Arden 2014).

The CIS is a 9.4-mile-long pipeline that ranges in diameter from 24 to 72 inches and serves the entire coastal area of the Santa Monica Bay north of the HWRP to Topanga State Beach near Malibu. The CIS conveys wastewater directly to the HWRP from Pacific Palisades, Venice, Mar Vista, the City of Santa Monica, and adjacent areas served by the Los Angeles County Sanitation District (e.g., Marina Del Rey). In addition to providing sewer services to City customers, the City's CIS connection collects pass through wastewater from the City of Los Angeles to the north (e.g., Pacific Palisades), which is conveyed to and metered through the monitoring station located at 415 Pacific Coast Highway. This City's wastewater is combined with this flow and conveyed to the MAPS, through the monitoring station located at 3000 Main Street, and into the 60-inch CIS owned by the City of Los Angeles (City of Santa Monica 2017a).

wood.

Regional Sewer System

FIGURE 3.11-4

The CIS system was designed to a sunset year of 2090 using wet weather flows estimated at full build-out at current zoning. The CIS system is designed for 51.7 MGD at its terminus at the southern City boundary with the City of Los Angeles. The City's net sewer flows average 12 MGD with total flow (including City of Los Angeles pass through) averaging 15 MGD (City of Santa Monica 2021a).

Black & Veatch (2011) assisted the City with the development of an initial hydraulic model of the City's wastewater collection system. The intent of this model was to assess the hydraulic impact of a proposed 1.65 MGD brine discharge from the Arcadia WTP from the reverse osmosis treatment process, on the

City's wastewater collection system. The hydraulic model was based on City GIS, as-built plans, operations and maintenance records, and supplemental field survey data. The inventory information, such as diameter and length of individual sewer pipelines, was obtained directly from the City-provided GIS and slope and elevation was obtained from as-built plans, operations and maintenance records, and supplemental field survey data. Model calibration was completed using the flow and rainfall data collected during the monitoring period. The calibrated model produced flow patterns that closely match the flow records at each of the monitoring sites, under dry weather and wet weather conditions. The model was calibrated to match the average dry weather flow recorded at each of the meter locations under weekday and weekend conditions. The hydraulic model determined that the City's overall collection system performs well under current wastewater loadings. The collection system experiences only limited flow increases under wet weather conditions. However, a number of locations – including locations along the Colorado Avenue and Broadway sewer mains – experienced conditions that exceeded the City's designed standards, which require sewer lines to be sized such that the depth of the Peak Dry Weather Flow (PDWF) is no more than 50 percent of the pipe diameter (d/D = 0.5 where d = depth of flow and D = pipe diameter).[6]

During the preparation of the Downtown Community Plan (DCP) Program EIR, V&A Consulting Engineers (2015) assessed the existing flows of the City's wastewater system by conducting flow monitoring of 25 manholes that receive wastewater flows from the Downtown. The results of the flow monitoring demonstrated that in 2015 during dry weather, four sewer monitoring locations had peak d/D ratios greater than 0.5. One of these locations (i.e., 11-363A at Ocean Avenue and Moomat Ahiko Way) captures flows into the inverted siphon at the Colorado Ocean Relief. In order for this section of sewer line to operate properly, it is designed to be maintained in a surcharged condition (i.e., d/D ratio greater than 0.5); therefore, the surcharged condition does not indicate a deficiency in this particular section of the sewer lines. V&A Consulting Engineers also identified 10 additional sewer main locations in the Downtown that would near the design screening criteria of 0.5 d/D (i.e., operating at ≥ 0.3 d/D). Additional flows anticipated from land use changes under the DCP were expected to raise the d/D ratio such that these sewer segments may approach or exceed the operational criteria of d/D of 0.5 or greater (see Table 3.11-12). Therefore, preliminary analysis indicated that at minimum, 13 total sewer locations would require future expansion or replacement to accommodate future wastewater generation from the DCP.

[6] Sewer lines have a flow capacity based on the diameter and slope of the pipe. To ensure that wastewater flows would be adequately accommodated, the City reviews sewer lines based on the guidelines for sewer design and operations from the Los Angeles Bureau of Engineering Manual – Part F. According to this guidance, sewer lines should be sized so the depth of the Peak Dry Weather Flow (PDWF), projected for the design period, shall be no more than 50 percent of the pipe diameter (d/D = 0.5 where d = depth of flow and D = pipe diameter).

Table 3.11-12 Existing Sewer Locations with d/D Greater Than or Approaching 0.5

Manhole ID	Measured Pipe Diameter (inches)	d/D Ratio	Locations
d/D Ratio Exceeding 0.5			
11-330 (N)	27	0.52	2nd Street at Broadway
11-330 (S)	10	0.54	2nd Street at Broadway
11-363A	36	0.59	Ocean Avenue at Moomat Ahiko Way[1]
17-707	12	0.54	Broadway at Lincoln Court
d/D Ratio Approaching 0.5			
5-70	54	0.36	Ocean Avenue at Acadia Terrace
7-165A	54	0.44	Main Street between Pier Avenue and Marine Street
10-233	12	0.38	2nd Street, South of Wilshire Boulevard
10-269	8	0.36	Wilshire Boulevard at 5th Court
11-311	24	0.45	Broadway at 4th Court
11-328 (West)	15.5	0.30	Broadway at 2nd Street
11-328 (North)	8	0.41	Broadway at 2nd Street
11-347	27	0.41	Colorado Avenue, east of Ocean Avenue
16-647	8	0.34	Wilshire Boulevard at 7th Court
17-711	29	0.39	Colorado Avenue at Lincoln Court, North Lane

Notes:
[1] This manhole location measures from the Colorado Ocean Relief Sewer. Consequently, this location is expected to consistent operation at a d/D ≥ 0.5 and is not considered deficient.
Source: V&A Consulting Engineers 2015; City of Santa Monica 2017b.

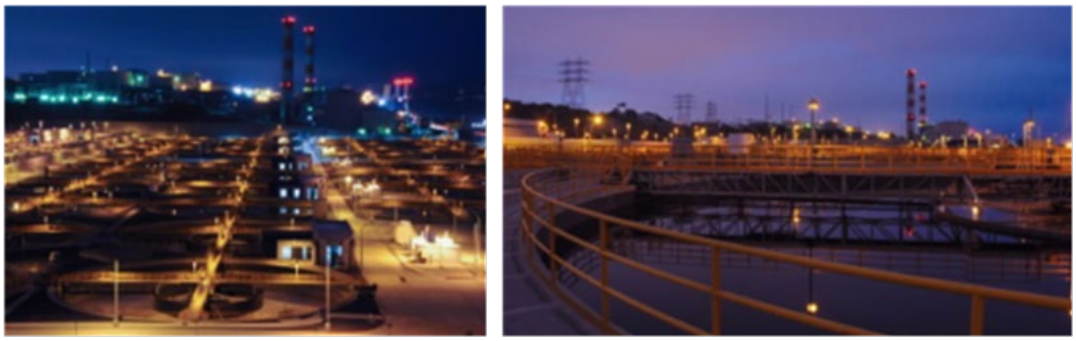
The 2017 Sanitary Sewer System Master Plan (SSSMP) was prepared to reflect current growth in the City and anticipated future developments, and to provide the City with a tool for planning improvements needed for sanitary sewer collection system infrastructure. These improvements are necessary to accommodate growth within the City and will be implemented within the City's CIP. The 2017 SSSMP involved a comprehensive review of the 2011 model configuration and operation as well as the incorporated modifications to reflect changes that have taken place in the system or system operations since the last master plan. The updated and calibrated sanitary sewer system hydraulic model was used to perform a comprehensive capacity analysis of the current sewer system. In summary, the analysis found the City's sanitary sewer system performs exceedingly well and there are very limited areas where the hydraulic capacity of the existing sewer system may fall short of the applicable evaluation criteria for both depth of flow in the pipeline or level of flow surcharging in a sewer maintenance hole. Under existing conditions, approximately 1 percent of the system may experience a capacity shortfall. In utilizing the model to simulate future build out conditions, the City's sewer system continues to perform well. In fact, under future conditions, including buildout under the LUCE and the DCP, only 3 percent of the modeled pipelines exceeded the evaluation depth of flow criteria. (However, it should be noted that the 2017 SSSMP did not address the up to 8,895 to approximately 11,000 dwelling units and potential associated ground-floor commercial development planned for under the proposed Housing Element Update.) The 2017 SSSMP provided recommended improvement projects, including existing conditions capacity projects; field facility information verification; flow verification; and future capacity projects.

In addition to the capacity improvement recommendations, the City maintains an ongoing asset management program to facilitate the programmatic assessment of facility condition and replacement. Through this program, the City has identified a number of pipeline segments that warrant additional attention or are in need of replacement. As an element of the City's Pipeline (Main) Replacement Program, these City-identified pipelines are flagged with a higher risk of failure, and should receive priority funding under the sewer main replacement program activity. Discussions with City staff suggest these improvements could be phased in over the next 12 years.

City-wide Wastewater Treatment

As previously described, wastewater from the City is collected by the City's sewer system and is treated at the HWRP. The HWRP is owned and operated by LADPW. Santa Monica is a contracting entity to the City of Los Angeles Amalgamated Sewerage System, which includes the HWRP (City of Santa Monica 2021a). The treatment process at HWRP consists of preliminary, primary, and secondary treatment.[7] HWRP has a dry weather capacity of approximately 450 MGD processed through full secondary treatment and a wet weather capacity of approximately 850 MGD (LADWP and City of Los Angeles Bureau of Sanitation [LASAN] 2018). The wet weather capacity is greater because some surface water runoff flows into the sewer system through sewer maintenance holes. In 2020, 11,064 AF of wastewater was collected in the service area and treated at HWRP (City of Santa Monica 2021a).

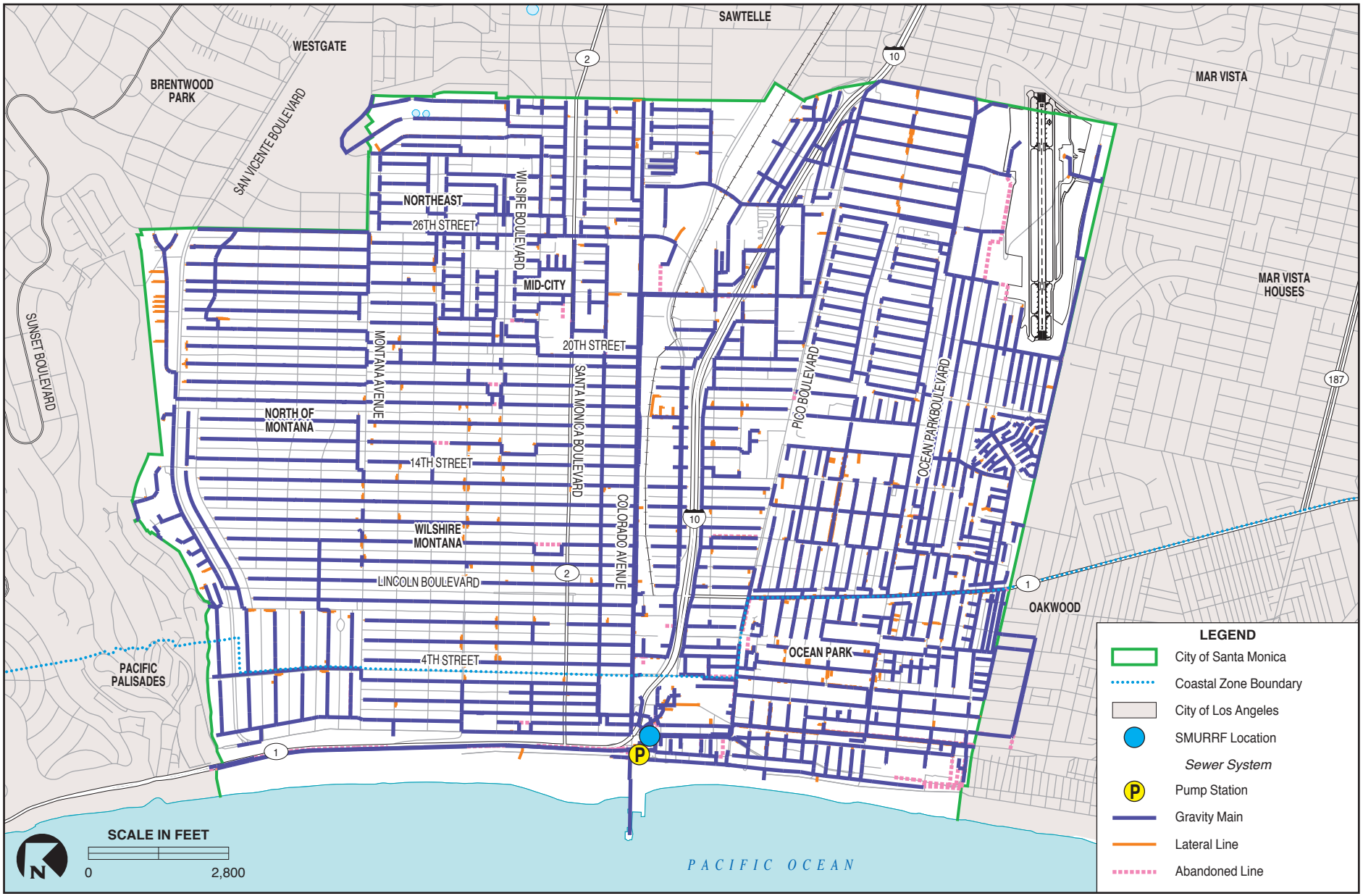
The wastewater treatment system at the HWRP consists of primary sedimentation and high-purity oxygen secondary treatment and is operated by LASAN. A small tertiary treatment system is available at the HWRP that provides reuse water for in-plant use. The City of Los Angeles is currently working on upgrading the HWRP to recycle 100 percent of treated water by 2035 (City of Santa Monica 2021a).



The HWRP, located south of the Los Angeles International Airport, is the City of Los Angeles's oldest and largest wastewater treatment facility, in operation since 1894. The plant has been expanded and improved numerous times over the last 100+ years.

Following the secondary treatment of wastewater, the majority of effluent from HWRP is discharged into the Santa Monica Bay located approximately 1,100 feet west of the HWRP. After treatment, a majority of the effluent from HWRP is discharged to the Santa Monica Bay via a 5-mile outfall pipe, which terminates at a depth of 200 feet and has a 12-foot diameter. The remaining effluent is pumped to the West Basin Municipal Water District (WBMWD) for additional treatment dependent upon reuse demand (LADWP and LASAN 2018). Remaining flows are conveyed to the West Basin Water Reclamation Plant of the WBMWD in Carson, California, for tertiary treatment before reuse as reclaimed water.

[7] Preliminary treatment is the first step in wastewater treatment and consists of a screening process to remove large solids, such as branches, plastics, and rags, as well as smaller solids like sand and grit. During primary treatment, wastewater is held for two hours to allow heavy solids to settle to the bottom of the tanks while oil and grease can float to the top. The heavy solids are removed and transported to the solids handling area of the plant for further processing. Secondary treatment involves reactor tanks with bacteria living in the wastewater and consuming most of the remaining organic solids. These "plumped up" bacteria settle to the bottom of the tanks where they are sent to the clarifiers for final settling and collection (LASAN 2019).



wood.

City of Santa Monica
Sewer System

FIGURE 3.11-5

Effluent from the HWRP is required to meet the Los Angeles RWQCB's requirements for a recreational beneficial use at Santa Monica Bay. The Los Angeles RWQCB imposes performance standards on water quality that are more stringent than the standards of the National Pollution Discharge Elimination System (NPDES) permit required under the Clean Water Act. Accordingly, HWRP effluent to the Santa Monica Bay is continually monitored by the City of Los Angeles Environmental Monitoring Division (EMD) to ensure that it meets or exceeds prescribed standards. The Los Angeles County Department of Health Services also monitors flows into the Santa Monica Bay. Additionally, the Los Angeles Division of Drinking Water (DDW) and the Los Angeles RWQCB establish treatment and water quality requirements for various qualities of recycled water, depending on the intended use (LADWP and LASAN 2018).

Future services of the HWRP are planned under the City of Los Angeles' adopted 2018 Wastewater Facilities Plan (WWFP), which is included as Volume 2 of the One Water LA 2040 Plan and implemented by the LADWP and LASAN (LADWP and LASAN 2018). The WWFP describes the City of Los Angeles' existing wastewater collection and water reclamation plants and recommends improvements to meet future conditions. The WWFP is a guide for future system improvements to LASAN's wastewater collection and treatment facilities. The WWFP extends the planning horizon of LASAN's 2006 Water Integrated Resources Plan Facilities Plan (IRP Facilities Plan) and incorporates expansion, updates, and enhancements made since 2006, as well as LADWP's UWMP. It is anticipated that the WWFP will be updated within the next 10 years to incorporate system modifications as well as changes in flow conditions, regulatory framework, and overall vision for sewer system operations and water reuse. Projected average annual wastewater flows for the HWRP are 256 MGD in 2020, 275 MGD in 2030, and 283 MGD in 2040 (LADWP and LASAN 2018).

3.11.2.2 Regulatory Setting – Wastewater Collection, Conveyance, and Treatment

Federal Policies and Regulations

Federal Water Pollution Control Act of 1948

The Federal Water Pollution Control Act, which was expanded in 1972 and now commonly known as the Clean Water Act, is a comprehensive statute aimed at restoring and maintaining the chemical, physical, and biological integrity of the nation's waters, including discharge waters of wastewater treatment processes. The Clean Water Act, in combination with other Federal environmental laws, regulates the location, type, planning, and funding of wastewater treatment facilities.

National Pollutant Discharge Elimination System

As authorized by the Clean Water Act, the NPDES program regulates point sources that discharge pollutants into waters of the U.S. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. The NPDES permit system is authorized and implemented by states and local water boards.

State Policies and Regulations

Operation of City of Los Angeles HWRP is subject to regulations set forth by the California Department of Public Health and the SWRCB.

Local Policies and Regulations

Santa Monica Municipal Code

The SMMC includes several provisions regarding the City's sewer system and wastewater.

- *Section 7.04.460 – Wastewater Capital Facility Fee.* Requires developers to pay the City a wastewater capital fee prior to obtaining a building permit or a Certificate of Occupancy.
- *Section 7.16.050 – Wastewater Collection and Treatment.* Provides guidance regarding allowable discharges into the City's wastewater collection system. This section addresses the need to preserve hydraulic capacity and to preserve the health, safety, and general welfare of the public through the continued maintenance and provision of an adequate wastewater collection system. This section also describes permitting requirements, such as industrial wastewater permits, that would be required for various uses within the City.

3.11.2.3 Impact Assessment Methodology – Wastewater Collection, Conveyance, and Treatment

Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines and local City sustainability policies. For the purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on wastewater infrastructure if:

a) The project would require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects; and/or
b) The project would result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Methodology

This section also relies on the best available wastewater data included from the 2017 SSSMP, One Water LA Plan, and through communication with the City of Santa Monica Department of Public Works, including the Civil Engineering and Water Resources Divisions. Based on these resources, this section assesses the adequacy of wastewater infrastructure to serve projected increases in demand associated with land use changes in the City and residential unit growth under the proposed Housing Element Update. The potential increase in wastewater generation has been estimated using wastewater generation factors from the City's Civil Engineering Report (KPFF 2014). Impacts to wastewater infrastructure are considered significant if the proposed Housing Element Update would result in sewer line or treatment plant system deficiencies.

3.11.2.4 Project Impacts and Mitigation Measures – Wastewater Collection, Conveyance, and Treatment

Would the project require or result in the construction of new wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Impact Description (UT-3)

UT-3 **New residential development as planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would require or result in the construction of new wastewater facilities or expansion of existing facilities. The construction or replacement/expansion of these facilities could potentially result in significant environmental effects such disturbance of buried cultural resources and short-term temporary impacts related to criteria air pollutant emissions, noise, and disruption of the local transportation network; however, these impacts would be reduced to *less than significant with mitigation*.**

New residential development as planned for under the proposed Housing Element Update would generate increased wastewater flows within the existing sewer system; therefore, increasing demand on the sewer system. The proposed Housing Element Update would increase the amount of wastewater transported by the sewer system in the City by up to 1,927,614 GPD (1.93 MGD) and approximately 6 percent increase over existing flows (see Table 3.11-13). Given that the City's existing wastewater flows average 12 MGD (refer to Section 3.11.2.1, *Environmental Setting – Wastewater Collection, Conveyance, and Treatment*), this would increase total flows from the City to 13.93 MGD under the proposed Housing Element Update. As previously described, the CIS has a capacity of 51.7 MGD. The CIS would have a remaining capacity of 37.77 MGD under the proposed Housing Element Update, with sufficient capacity for maximum peak instantaneous flows. Therefore, individual residential planned for under the proposed Housing Element Update would not exceed CIS or HWRP capacity and the change in CIS capacity would be nominal from existing use (approximately 3.2 percent).

Table 3.11-13 Wastewater Generation under the Proposed Housing Element Update

Projected Increase	Wastewater Generation Factor[1]	Estimated Flow
10,994 units	150 gal/unit/day	1,649,100 gal/day
405,246 sf	0.20 gal/sf/day[2]	81,051 gal/day
Total Increase in Wastewater Flow	-	**1,730,151 gal/day**

Notes:
[1] The estimated wastewater flow was calculated using wastewater generation factors from the City's Civil Engineering Report (KPFF 2014). These factors are based on residential land use for the proposed Housing Element Update.
[2] The commercial wastewater generation demand has been estimated using the office water demand factor from the LUCE Program EIR, which is more conservative than other commercial uses (e.g., retail 0.10 gals/sf/day).

Because the City's existing wastewater collection system is largely adequate to meet projected demand as a result, development of land uses under the proposed Housing Element Update would likely require only limited need for expansion or replacement of individual sewer line segments to meet increased residential wastewater demand by 2030. The City anticipates projected impacts (i.e., exceedance of d/D)

to sewer pipe segments would occur to segments in the City with a d/D greater than or nearing 0.5 as depicted in the SSSMP. Some possible locations where local improvements are needed, include:

- 33-inch sewer pipe at Pacific Coast Highway and Ocean Avenue;
- 8-inch sewer pipe in 3rd Court., from Arizona Avenue to Broadway;
- 15-inch sewer pipe in Rose Avenue from Hampton Drive to 6th Avenue
- 15-inch sewer pipe in 6th Avenue from Rose Avenue to Dewey Street; and
- 12-inch sewer pipe in Colorado Avenue from Cloverfield Boulevard. to 26th Street.

However, because the precise location and intensity of new development can only be generally forecast, the precise location and length of sewer pipes impacted cannot be completely identified at this time. The assurance of adequate funds under MM UT-2 to finance the CIP projects (e.g., replacement/expansion of sewer mains), as necessary, impacts to the sewer system would be reduced to *less than significant with mitigation*.

Replacement of sewer mains and lines for residential construction could create secondary short-term periodic construction impacts through 2030. Construction of new sewer pipes or mains or replacement of existing facilities would require excavation, removal of older mains, removal of existing manholes, and installation of the new manholes and lines located within existing paved roads and public rights-of-way. This would involve potential disturbance of previously unknown buried cultural resources as well as typical short-term construction impacts, such as criteria air pollutant emissions, noise, and potential disruption of the local transportation network flows. While construction of individual facilities is unlikely to cause significant effects, construction of new laterals and/or installation/replace of new sewer mains sufficient to serve new residential development as planned for under the proposed 6th Cycle Housing Element Update may have the potential to create potentially significant impacts as discussed further in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.12, *Transportation*, and Section 3.13, *Tribal Cultural Resources*, respectively.

Mitigation Measures

MM UT-2 ***Public Infrastructure Financing Program.*** *In addition to required improvements to the domestic water supply system for projects, as needed under the proposed Housing Element Update, the City shall ensure adequate financing for funding of wastewater infrastructure improvements to serve the City either through the City's Capital Improvement Program (CIP) or alternatively through a Public Infrastructure Financing Program. All new development under the Housing Element Update shall be conditioned to be subject to payment of its fair share for any impact fees identified under this program. The program shall determine the costs of and establish a funding program for the capital improvements to upgrade wastewater collection as needed to serve the demands of new land uses anticipated to occur under the proposed Housing Element Update.*

In addition to MM UT-1, each of the applicable State and local regulations referenced in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.12, *Transportation*, and Section 3.13, *Tribal Cultural Resources* as well as MM AQ-1, MM CUL-2a and -2b, MM NOI-1, and MM TCR-1 would also apply and would reduce construction-related impacts to *less than significant with mitigation*.

Residual Impacts

Implementation of MM UT-2 and planning under the 2017 SSSMP as well as compliance with existing local regulations related to development in the City would ensure the funding of necessary improvements to the sewer system to serve land use changes anticipated to occur under the proposed Housing Element Update. The applicable State and local regulations referenced in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.12, *Transportation*, and Section 3.13, *Tribal Cultural Resources* as well as MM AQ-1, MM CUL-2a and -2b, MM NOI-1, and MM TCR-1 would also apply and would reduce construction-related impacts to *less than significant*.

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Description (UT-4)

UT-4 **New residential development as planned by the proposed 6th Cycle 2021-2029 Housing Element Update would result in an increase in wastewater generation; but such increase would not exceed the wastewater treatment provider's capacity. Impacts would be *less than significant*.**

As discussed under Impact UT-3 above, wastewater flows from the City are treated at the HWRP, which has a dry weather capacity of approximately 450 MGD processed through full secondary treatment and an 850 MGD wet weather capacity. Currently this facility receives and treats 340 MGD of wastewater, 12 MGD (3.5 percent) of which is wastewater from the City. Development of up to 8,895 dwelling units to approximately 11,000 dwelling units and associated potential ground-floor commercial development planned for under the proposed Housing Element Update would add up to 1.73 MGD (0.20 percent of dry weather capacity and 0.38 percent of wet weather capacity). The increased wastewater flow from implementation of the proposed Housing Element Update would be a *de minimis* incremental increase, the HWRP would have sufficient capacity to serve the projected increase in demand associated with the proposed Housing Element Update in addition to the provider's existing commitments and this impact would be *less than significant*.

3.11.2.5 Cumulative Impacts – Wastewater Collection, Conveyance, and Treatment

A cumulative impact related to wastewater infrastructure would result if the potential impacts associated with the proposed Housing Element Update, when combined with cumulative development, would require construction of new or expanded wastewater infrastructure, the construction of which infrastructure would cause significant environmental effects, or if there is inadequate capacity to serve the projected demand in addition to the wastewater treatment provider's existing commitments.

Wastewater Conveyance System

As described in Impact UT-3, the implementation of the proposed Housing Element Update would result in an increase in existing wastewater system flows by 1.73 MGD. Proposed residential development planned for under the proposed Housing Element Update may require capacity or extension upgrades to a number of sewer line segments (particularly to segments with a d/D ratio of greater than 0.5). The location of specific upgrades would be determined prior to the implementation of individual residential developments under the proposed Housing Element Update, as necessary to maintain adequate service capacity to the City and utility service users. As described in MM UT-2, the City is responsible for ensuring adequate financing for funding of infrastructure improvements to serve the City through the City's CIP or alternatively through a Public Infrastructure Financing Program. All new development in the City, including under the proposed Housing Element Update shall be conditioned to be subject to payment of its fair share of any impact fees identified in this program. In addition, the applicable State and local regulations referenced in Section 3.3, *Air Quality*, Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.12, *Transportation*, and Section 3.13, *Tribal Cultural Resources* as well as MM AQ-1, MM CUL-2a and -2b, MM NOI-1, and MM TCR-1 would also apply and would reduce construction-related impacts to *less than significant with mitigation*. Therefore, the implementation of the proposed Housing Element Update would not substantially contribute to a cumulatively considerable impact.

As described in Section 3.11.2.1, the CIS is a 9.4-mile-long pipeline that ranges in diameter from 24 to 72 inches and serves the entire coastal area of the Santa Monica Bay north of the HWRP to Topanga State Beach near Malibu. The CIS conveys wastewater directly to the HWRP from Pacific Palisades, Venice, Mar Vista, the City of Santa Monica, and adjacent areas served by the Los Angeles County Sanitation District (e.g., Marina Del Rey). Approximately half of the City of Los Angeles and adjacent unincorporated coastal areas served by the Los Angeles County Sanitation District (Marina Del Rey) contribute wastewater to the CIS. The SCAG issued a RHNA of 79 dwelling units to the City of Malibu; however, the City of Los Angeles was issued a RHNA of 456,643 dwelling units. The City of Los Angeles has not released its Draft Housing Element Update; however, assuming that approximately half of these dwelling units are served by the CIS, they could contribute up to 34.25 MGD of wastewater, which would approach the capacity of the CIS. As such, residential development within the Greater Los Angeles Area could potentially result an environmental impact with regard to the capacity of the CIS; however, the wastewater generated by residential development planned for under the proposed Housing Element Update would amount to an incremental contribution and would not substantially contribute to this potential cumulative impact.

Hyperion Water Reclamation Plant

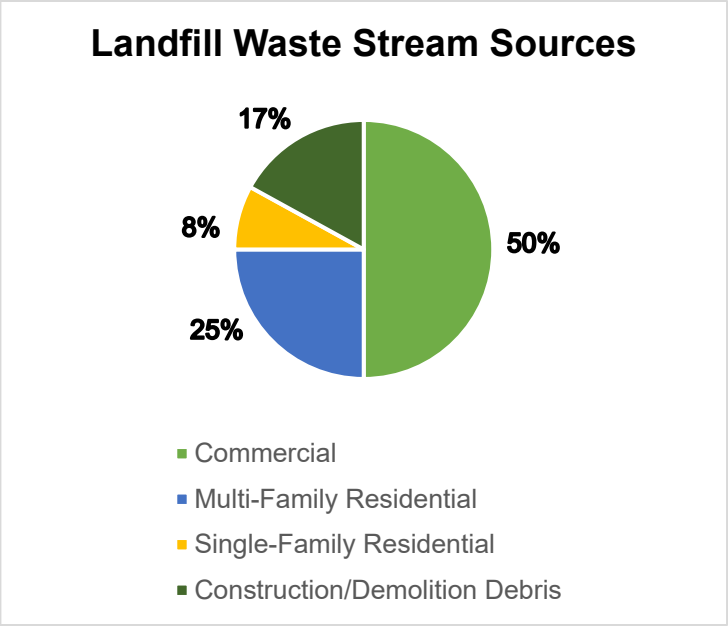
LASAN manages the HWRP, which serves much of Los Angeles and 29 contracting cities, including the City of Santa Monica. LASAN's IWRP addresses wastewater disposal in the service area, including the City, through the year 2020 (City of Los Angeles 2012). The IWRP and the long-range plans for LASAN have found that the HWRP has capacity to treat wastewater generated by cumulative new development within its service area through 2030 (City of Los Angeles 2012). However, the 6th Cycle RHNA for Los Angeles and the 29 contracting cities could potentially result an environmental impact with regard to the capacity of the HWRP. For example, the RHNA for Los Angeles County is 812,060 dwelling units, which

could contribute up to approximately 122 MGD. The City of Los Angeles alone could contribute approximately 68.5 MGD. As such, residential development within the Greater Los Angeles Area could potentially result an environmental impact with regard to the capacity of the HWRP; however, the wastewater generated by residential development in the City of Santa Monica planned for under the proposed Housing Element Update would amount to an incremental contribution and would not substantially contribute to this potential cumulative impact.

3.11.3 Solid Waste Management Services

3.11.3.1 Environmental Setting – Solid Waste Management Services

Solid Waste Management System



The City Department of Public Works Resource Recovery & Recycling Division (Resource Recovery & Recycling Division) provides solid waste management and collection services to all City residents and approximately 50 percent of commercial and industrial establishments (City of Santa Monica 2017b). The City collects, transfers, and disposes of trash, processes green waste and food scraps for compost, recycles single-stream commingled recyclables, and provides a state-authorized e-waste and hazardous materials collection facility. The City sorts and sends disposed items to reuse and recycling facilities instead of landfills whenever possible, which is a solid waste management approach known as diversion (see Table 3.11-14). The City's 2014 Zero Waste Strategic Operations Plan provides a roadmap to achieve 95 percent diversion from landfill by 2030, or a per capita disposal rate of 1.1 pounds per person per day (City of Santa Monica 2013). Additionally, the City adopted the 2019 Zero Waste Plan Update to strengthen current zero waste programs and identify new actions to achieve zero waste goals. As identified in the City's Zero Waste Strategic Operations Plan, the City's landfill waste stream is comprised of approximately 50 percent commercial waste, 25 percent multi-family residential waste, 8 percent single-family residential waste, and 17 percent self-haul construction and demolition debris and additional materials disposed by private companies or individuals. Single-family residents divert approximately 61 percent, multi-family residents divert approximately 11 percent, and commercial businesses divert approximately 22 percent of their waste from landfill (City of Santa Monica 2019a).

Table 3.11-14 Solid Waste Facilities Serving the City

Solid Waste Facility[1]	Remaining Life (years)	Remaining Capacity (million tons)	Maximum Permitted Daily Capacity (tons per day)	2019 Average Daily Disposal (tons per day)	2019 Total City Contribution (tons)
Antelope Valley Public Landfill	18	10.9	3,600	2,113	1,721
Azusa Land Reclamation Co. Landfill	28[2]	58.8	8,000	1,038	593
Chiquita Canyon Sanitary Landfill	28	57.0	12,000	5,525	46,256
El Sobrante Landfill	39	142	16,054	10,960	1,506
Frank Bowerman Sanitary Landfill	34	102	11,500	7,832	706
Lancaster Landfill and Recycling Center	22	9.9	3,000	363	80
Mid-Valley Sanitary Landfill	31	36	7,500	3,575	230
Olinda Alpha Sanitary Landfill	2	14	8,000	7,089	1,770
Prima Deshecha Sanitary Landfill	83	80	4,000	1,879	23
San Timoteo Sanitary Landfill	23	6	2,000	880	0
Simi Valley Landfill & Recycling Center	42	48	9,250	4,663	2,123
Southeast Resource Recovery Facility	N/A	N/A	2,240	1,235	1,543
Sunshine Canyon City/County Landfill	18	55.1	12,100	6,387	17,452
Victorville Sanitary Landfill[2]	22	29	3,000	931	1
Total		**648.7**	**102,244**	**54,470**	**70,004**
Total Tons Disposed in Landfill					**68,461**
Total Tons Converted to Energy					**1,543***

Notes:
* Consists of the Southeast Resource Recovery Facility's total City contribution. This facility is permitted to destroy solid waste through incineration, so they are not subject to remaining capacity or lifetime limits. The Commerce Refuse-To-Energy Facility was permanently closed on June 26, 2018, so this facility has been removed from solid waste assessment (Los Angeles County 2019).
[1] The County of Los Angeles currently utilizes the Burbank Landfill, Calabasas Landfill, Pebbly Beach Landfill, Savage Canyon Landfill, and Scholl Canyon Landfill. The City does not currently utilize these listed landfills for solid waste disposal and given the remaining capacity of these facilities estimated at less than 10 million tons, the City does not project future use; therefore, these are excluded from solid waste facility analysis.
[2] Azusa Land Reclamation Co. Landfill did not provide an estimated remaining life (years) for the facility in 2019. The most recent data is from 2016, which is provided above (28 years) (Los Angeles County 2020).
Source: Los Angeles County 2020; CalRecycle 2019.

In 2019, 70,004 tons of municipal solid waste was generated in the City with 81 percent of solid waste being diverted from landfills through recycling and organics collection (City of Santa Monica 2019b). The City's current 81 percent diversion rate already exceeds the State's policy goal of at least 75 percent diversion by 2020 as established in AB 939 (see Section 3.11.3.2, *Regulatory Setting – Solid Waste Management Services*). Further, the Southern California Disposal Transfer Station, located in the City, accepts recycled goods and refuse to be transferred to other area landfills.

Waste Reduction Programs

The City of Santa Monica offers educational as well as physical programs as one of various methods to reduce waste. The Sustainable Works Program is offered to residents and businesses of the City, and Santa Monica College students. The program offers hands-on, interactive and educational experiences on sustainability and how it can be incorporated into daily life. One chapter of the Sustainable Works Workbook is devoted to ways for people to change their behavior by reducing their consumption rate, reducing the amount of solid waste contributed to landfills, and increasing the amount of consumables that can be reused. The City educates future generations by providing K-12 students with opportunities to tour City solid waste facilities.

The City also promotes and participates in recycling efforts to reduce the amount of waste disposed of at local landfills. Items recycled include newspapers, glass, all plastics, aluminum and tin cans, mixed waste paper/cardboard, and waste motor oil. There are also privately contracted recycling programs that have been implemented by the City, such as one that focuses primarily on cardboard/mixed-paper commodities, which began in 1992.

Other recycling and waste reduction activities that have been implemented by the City include:

- Drop-off recycling zones;
- A buy-back and drop-off recycling center operated on City property;
- Scrap metal recycling;
- Collection and recycling of glass from several bars and by the City and private citizens;
- Christmas tree recycling;
- Green waste diversion;
- Mini recycling zones;
- Commercial mixed paper recycling;
- Concrete and asphalt recycling;
- Tire recycling;
- School Recycling Program; and
- Yard Waste and Composting.

3.11.3.2 Regulatory Setting – Solid Waste Management Services

State Policies and Regulations

Assembly Bill 939, California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939; Public Resources Code Section 40000 et seq.) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (Board) and local agencies in implementation, in order of priority: (1) source reduction; (2) recycling and composting; and (3) environmentally safe transformation and land disposal. The Act required each county to establish a task force to coordinate the development of city source reduction and recycling elements and a county-wide siting element. The Act also required each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan.

Additionally, waste diversion mandates were set in AB 939. The law required each city or county plan to include an implementation schedule which shows: diversion of 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities. A city or county may be deemed exempt from these goals or to

reduce the requirements if the city or county demonstrates that attainment of the goals is not feasible due to the small geographic size of the jurisdiction and the small quantity of waste generated. After January 1, 1995, the Act authorized the Board to establish an alternative goal to the 50 percent requirement, if the Board finds that the local agency is effectively implementing all source reduction, recycling, and composting measures to the maximum extent feasible.

Senate Bill 1016

SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing the measurement of waste reduction from a diversion rate to a disposal-based indicator – the per capita disposal rate. The purpose of the per capita disposal measurement system is to make the process of goal measurement as established by AB 939 simpler, timelier, and more accurate. Beginning with reporting year 2007 jurisdiction annual reports, diversion rates will no longer be measured. With the passage of SB 1016, only per capita disposal rates are measured. For 2007 and subsequent years, CalRecycle compares reported disposal tons to population to calculate per capita disposal expressed in pounds/person/day.

Short Lived Climate Pollutants Bill of 2016 (Senate Bill 1383)

SB 1383 requires the California Air Resources Board (CARB) to approve and begin implementing a comprehensive strategy no later than January 1, 2018 to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. It also establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. CalRecycle, in consultation with CARB, is responsible for implementation of regulations to achieve these targets. SB 1383 authorizes local jurisdictions to charge and collect fees to recover the local jurisdiction's costs incurred in complying with the regulations. It also requires CalRecycle, in consultation with CARB, to analyze the progress that the waste sector, State government, and local governments have made in achieving the specified targets for reducing organic waste in landfills no later than July 1, 2020. Depending on the outcome of that analysis, CalRecycle is authorized to amend the regulations to include incentives or additional requirements.

Assembly Bill 341

AB 341 established a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020. Additionally, this law required CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 builds on the existing AB 939 requirement that every jurisdiction divert at least 50 percent of its waste. The bill also mandates local jurisdictions to implement commercial recycling by July 1, 2012. AB 341 requires any business (including schools and government facilities) that generates 4 cubic yards or more of waste per week, and multi-family buildings with five or more units, to arrange for recycling services. Additionally, the

bill requires education and outreach programs be implemented to inform generators cover by the bill of their obligation to meet the terms of the regulation. To measure efforts made to comply with this policy, CalRecycle requires an annual report which details the commercial recycling program, including education, outreach, and monitoring.

Regional Plans and Regulations

County-wide Integrated Waste Management Plan

The 2019 Annual Report by the Los Angeles County Public Works Department complies with the California Integrated Waste Management Act of 1989 and AB 939. Counties are required to prepare and administer a Countywide Integrated Waste Management Plan, which must be comprised of the County and its cities' solid waste reduction planning documents. To assess compliance with AB 939, the Disposal Reporting System was established to measure the amount of disposal from each jurisdiction, which is summarized in this plan. This plan describes the steps taken by local agencies to achieve the state mandated waste diversion rate by integrating strategies aimed at reducing, reusing, recycling, diverting, and marketing solid waste within the County. The California Integrated Waste Management Plan is updated annually, and the annual reports analyze solid waste disposal and estimated future remaining capacity at County landfills. The 2017 Annual Report, which was completed by the Los Angeles County Department of Public Works in April 2019, assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity. Several factors were used in the 2017 Annual Report to determine landfill capacity, including: (1) the expiration of various landfill permits (e.g., land use permits, waste discharge requirement permits, solid waste facilities permits, and air quality permits); (2) restrictions on the processing of waste generated outside given landfills' jurisdictions and/or watershed boundaries; and (3) operational constraints.

As discussed in the 2017 Annual Report, reliance on existing permitted in-County landfill capacity alone would be insufficient in meeting the County's long-term disposal needs. Similar to previous years, the 2017 Annual Report also considered six scenarios (e.g., maximization of waste reduction and recycling; expansion of existing landfills; development of alternative technologies; expansion of transfer and processing infrastructure, and the use of out-of-County disposal options) to assess the County's ability to meet the solid waste daily disposal demand. The analyses of the scenarios demonstrated that the County would be able to meet the disposal needs of all jurisdictions through 2032. However, the County acknowledged in the 2017 Annual Report that there will be significant challenges in developing the processing capacity needed by the 2020 deadline of meeting the 75-percent statewide recycling goal as set forth by AB 341. Accordingly, they concluded that maintaining adequate reserve (i.e., excess) capacity will be essential to ensuring that the disposal needs of the County are met through 2032.

Local Plans and Regulations

Santa Monica General Plan Land Use and Circulation Element

Below are the LUCE policies that relate to solid waste:

Policy S8.1.	Expand solid waste diversion strategies such as increased commercial recycling collection and outreach, expanded food waste collection, and waste to energy conversion programs.
Policy S8.2.	Develop a Zero-Waste Strategic Plan with an aggressive target for waste diversion by 2030.
Policy S8.3.	Continue to implement the ban on non-recyclable plastic food containers and continue to pursue a ban on plastic bags.

Santa Monica Municipal Code

The SMMC includes several provisions regarding the City's solid waste generation and disposal.

- *Section 5.08.400 – Solid Waste Diversion.* Establishes direction for characterizing and reducing the solid waste production within the City. The requirements in this section are a furtherance of State-mandated diversion criteria, and are based, in large part, on the Waste Characterization Study and Source Reduction and Recycling Element (SRRE) that the City completed in 1992.
- *Section 5.108 – Green Building, Landscape Design, Resources Conservation, and Construction and Demolition Waste Management Standard.* Requires applicants for demolition permits and building permits complete and submit a waste management plan as part of their application packet.
- *Section 8.108 – Landscape and Water Conservation.* Contains the Water Efficient Landscape and Irrigation Standards, which ensure efficient water use, elimination of urban runoff, and promotion of health and diverse habitats. Standards include requirements for new landscapes, modifications to existing landscapes, and ongoing maintenance. Requirements are in alignment with the state's Water Efficient Landscape Ordinance.
- *Section 8.108.010, Subpart C (Construction and Demolition Ordinance).* Requires that demolition and/or construction projects costing $50,000 or more, projects 1,000 sf or more, or all demolition-only projects divert at least 70 percent of construction and demolition debris from landfills. Applicants for construction or demolition permits involving these covered projects shall complete and submit a waste management plan as part of the application packet. The completed waste management plan shall indicate all of the following:
    - The estimated *volume* or weight of the project construction and demolition debris, by material type, to be generated;
    - The maximum volume or weight of such materials that can feasibly be diverted via reuse or recycling;
    - The vendor or facility where the applicant proposes to use to collect or receive that material;
    - The estimated volume or weight of construction and demolition debris that will be landfilled in Class III landfills and inert disposal facilities; and
    - A commitment that only City-permitted waste haulers would be used.

Sustainable City Plan

The Sustainable City Plan was updated in 2014 to include a range of new targets and goals for City-wide sustainability, including the goal to become a zero waste City for solid waste management. The Resource Conservation section of the Sustainable City Plan establishes a target for diverting the amount of solid waste that is disposed of at landfills. By the year 2030, 85 percent of solid waste is required to be

diverted, per capita solid waste generation must be reduced to 1.1 pounds per person per day, and total solid waste generated should not exceed year 2000 levels.

Zero Waste Strategic Operations Plan

In 2014, the City adopted the Zero Waste Strategic Operations Plan, providing a roadmap for achieving a 95 percent diversion of waste by 2030. This plan is organized around six goal areas: waste reduction, environmental benefits, economic benefits, City leadership, producer responsibility, and zero waste culture change. Specific goals and indicators have been identified for each of these goal areas, including quantitative targets to measure accomplishment. The City's Zero Waste Strategic Operations Plan also includes tasks for reviewing existing programs, compiling waste generation data, identifying program and infrastructure options, and analyzing program impacts. The plan allows the City to strengthen its solid waste diversion successes and to address some of the significant challenges that remain in terms of solid waste generation.

Zero Waste Plan Update

In 2019, the Zero Waste Plan Update built upon the past successes of waste management in the City to identify new actions that the City can take to achieve its zero waste goals. The Zero Waste Plan intends to strengthen current programs that curb waste and consider new technologies as they become available.

3.11.3.3 Impact Assessment Methodology – Solid Waste Management Services

Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on solid waste if:

a) The project would generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and/or
b) The project would not comply with Federal, State, and local management and reduction statutes and regulations related to solid waste.

Methodology

This section builds upon and updates the solid waste analysis provided in the City's Zero Waste Strategic Operations Plan and 2019 Zero Waste Plan Update. Additional data is included from the 2019 Los Angeles County Integrated Waste Management Plan Annual Report as well as facility information provided by CalRecycle and local agencies. Based on these resources, this section assesses the existing capacity of landfills that serve the City, any planned improvements to or changes to landfill capacity, and projected increases in solid waste generation associated with land use changes anticipated to occur by 2030.

Impacts to solid waste disposal would be considered a significant impact if solid waste generated by residential development planned for under the proposed Housing Element Update exceeds the capacity

of landfills and other solid waste facilities where such waste would be disposed or if the proposed Housing Element Update would adversely affect the City's ability to meet State or local diversion requirements.

3.11.3.4 Project Impacts and Mitigation Measures – Solid Waste Management Services

Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Impact Description (UT-5)

UT-5 **Buildout under the proposed 6th Cycle 2021-2029 Housing Element Update would not result in the generation of solid waste that would exceed the existing capacity of existing landfills serving the City. Therefore, impacts would be *less than significant*.**

Buildout under the proposed Housing Element Update would increase solid waste generation in the City. The resulting increased demand for waste disposal has the potential to result in the need for additional landfill capacity to meet solid waste disposal needs. To determine if there is sufficient landfill capacity to accommodate waste generated under the proposed Housing Element Update, potential solid waste generation was projected for residential developments. The Housing Element Update would result in an increase in municipal solid waste generation in the City of up to 5,295 tons per year (see Table 3.11-15). Assuming the existing diversion rate of 81 percent, this would result in up to 1,006 tons per year that would need to be disposed in one or more landfills serving the City.

Table 3.11-15 Estimated Solid Waste Generation under the Proposed Housing Element Update

Projected Increase	Waste Generation Factor[2]	Estimated Waste[1]
10,994 units	12.23 lb/unit/day	134,456 lb/day (24,538 tons/year)
405,256 sf	25 lb/1,000 sf/day	10,131 lb/day (1,849 tons/year)
Total Increase in Solid Waste	-	**144,587 lb/day (26,387 tons/year)**

Notes:
[1] Estimated solid waste generation was calculated using the most conservative waste generation rates presented by CalRecycle.
Source: CalRecycle 2021.

As described in Section 3.11.3.1, *Environmental Setting – Solid Waste Management Services*, a total of 14 solid waste landfill disposal facilities currently serve the City, including 13 landfills and 1 refuse-to-energy facility. The combined remaining capacity of the landfills is 648.7 million tons (refer to Table 3.11-14). The Olinda Alpha Sanitary Landfill is the sole landfill with less than 10 remaining life years, therefore, the 12 landfills with remaining life years within the planning horizon for the proposed Housing Element Update is 634.7 million tons.

The combined maximum permitted daily capacity of the 14 solid waste facilities is 70,004 tons, although only 54,470 tons per day are disposed on average in these facilities daily (approximately 77.8 percent of daily capacity). The additional solid waste that is anticipated to be generated by implementation of the

Housing Element Update would be a nominal increase to the current 70,004 solid tons per day of the 14 solid waste facilities expected to serve the City in 2030.

In addition, the City has achieved significant waste reduction targets and continues to strive for additional reductions in solid waste. The City met and exceeded its goals for waste diversion, as defined in the City's Sustainable City Plan, attaining a diversion rate of 81 percent by the end of 2018. The City is also currently implementing the Zero Waste Strategic Operations Plan and 2019 Zero Waste Plan Update that will enable the City to reach its zero waste goal of 95 percent diversion by 2030. These efforts will further reduce per capita waste generation, thereby reducing existing waste generation in the City and expected waste generation from implementation of the proposed Housing Element Update. Given the existing sufficient capacity of solid waste facilities combined with the City's efforts to reduce waste generation, this impact would be *less than significant*.

Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Impact Description (UT-6)

UT-6 **The proposed 6th Cycle 2021-2029 Housing Element Update would not result in generation of additional waste, with the potential to conflict with Federal, State, and local statutes and regulations related to solid waste. Due to existing City programs, there is *no impact*.**

As described in Impact UT-5, implementation of the proposed Housing Element Update would not conflict with the goals or requirements of AB 939, AB 341, the City's Zero Waste Strategic Operations Plan, or the SMMC. As discussed in Impact UT-5, the City has already achieved a diversion rate of 81 percent that is in excess of the requirements of AB 939 and AB 341 to achieve a 75 percent diversion by 2020. The City remains committed to continuing its existing waste reduction programs and minimization efforts with the programs with goals, targets, and programs to achieve 85 percent diversion rates by 2020 and 95 percent diversion by 2030.

Individual projects in the City under the proposed Housing Element Update would be required to comply with all applicable solid waste regulations in effect at the time of operation, including solid waste diversion requirements described in SMMC Section 5.08.400. Additionally, individual projects would comply with the Construction and Demolition Ordinance (SMMC Section 8.108.010 Subpart C) by submitting a waste management plan to the City and diverting at least 70 percent of construction and demolition debris from landfills. Therefore, the City is in compliance with State law and implementation of the proposed Housing Element Update would not conflict with federal, state, or local statues and regulations related to solid waste disposal. Therefore, *no impact* would occur.

3.11.3.5 Cumulative Impacts – Solid Waste Management Services

Land use changes anticipated to occur under the proposed Housing Element Update would incrementally contribute to cumulative solid waste generation impacts to regional landfills and waste disposal facilities associated with future growth within the City and the region. As discussed above, the combined maximum

solid waste accepted daily throughput of the 14 solid waste facilities, including a refuse-to-energy facility is 102,244 tons of solid waste per day with an average daily amount disposed of 54,470 tons. The addition of solid waste anticipated from implementation of the proposed Housing Element Update would result in a negligible change to the average daily disposal rate and would remain within the existing capacity of waste disposal facilities for the City. Additionally, the contribution of the proposed Housing Element Update to solid waste may be further limited in that the City's goal is to reach a 95 percent diversion rate by 2030, substantially reducing projected waste generation across the City. Given this large remaining regional landfill capacity and projected increases in diversions rates, the implementation of the proposed Housing Element Update would not contribute considerably to a cumulatively substantial impact related to regional solid waste disposal, including potential impacts associated with residential development within the Greater Los Angeles Area as a result of the 6th Cycle RHNA.

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3.0 Environmental Impact Analysis and Mitigation

3.12 Transportation

The City's regulatory and policy framework (e.g., Climate Action and Adaptation Plan, Bike Action Plan, etc.) emphasizes sustainable development that incentivizes the use of public transit as well as bicycle and pedestrian facilities. The proposed 6th Cycle 2021-2029 Housing Element Update balances the need to accommodate the Regional Housing Needs Allocation, Affirmatively Further Fair Housing, and provide new housing opportunities to meet housing demand.

This section of the Environmental Impact Report (EIR) analyzes the potential environmental effects of the 6th Cycle 2021-2029 Housing Element Update (Housing Element Update) on transportation as defined by the California Environmental Quality Act (CEQA) Guidelines as well as the City of Santa Monica's (City's) existing policy framework and associated regulations. This analysis describes the existing transportation facilities and the current travel trends within the City, including home-based vehicle miles traveled (VMT) and home-based work VMT (i.e., employee commutes), based on transportation modeling provided in the Santa Monica Housing Element Update – 6th Cycle Transportation Impact Report (Transportation Study) prepared by Fehr & Peers (Fehr & Peers 2021; see Appendix G). The proposed Housing Element Update is analyzed using the City's VMT methods and thresholds which were adopted in June 2020.

As discussed in detail below, changes in State law now require the analysis of VMT measuring vehicle trip distance rather than Level of Service (LOS) analysis measuring intersection congestion and roadway capacity. This reflects State policy goals to reduce vehicle energy use, particularly that associated with non-renewable fossil fuels, and associated greenhouse gas (GHG) emissions and their adverse effects on global climate change. VMT is a measure of the amount and distance that residents, employees, or visitors drive, determined by multiplying trip generation by the average length of the trips measured in miles. VMT per capita is calculated as the total annual miles of vehicle travel divided by the total population in the planning area. Many factors affect travel behavior, including density and diversity of land uses, design of the transportation network, access to regional destinations, distance to high quality transit and active transportation facilities, development scale, demographics, and transportation demand management (TDM). Typically, low density development at greater distances from other land uses, located in areas with poor access to non-private vehicular modes of travel, generate more automobile travel compared to development located in urban areas, where there is higher population density and a mix of land uses (e.g., commercial uses near housing), and travel options other than private vehicles are available.

3.12.1 Environmental Setting

3.12.1.1 Transportation Infrastructure

The City is a regional destination, primarily due to its Downtown Third Street Promenade, Santa Monica State Beach, and Santa Monica Pier, which attract thousands of people to the City daily. The City is also

surrounded by neighboring communities with people traveling in, out, and across Brentwood to the north; West Los Angeles, Westwood, and the University of California, Los Angeles (UCLA) to the east; and Venice and Los Angeles International Airport (LAX) to the south.

Three major transportation facilities provide for vehicle travel to and through the City: Interstate (I-) 10 (Santa Monica Freeway) and Santa Monica Boulevard in the east-west direction as well as State Route (SR-) 1 (Pacific Coast Highway), Lincoln Boulevard, and Ocean Avenue in the north-south direction. The lack of adequate regional transportation capacity results in many arterial roadways within the City being used for travel to and from various destinations, which places a strains the City's roadway network, particularly during the A.M. and P.M. peak hours (City of Santa Monica 2010). The Metro E (Expo) Light Rail Transit (LRT) line, which began operation within the City in 2016, provides transit service from Santa Monica to Downtown Los Angeles, with three stations in Santa Monica (i.e., Bergamot Station, Memorial Park, and Downtown; see further discussion below).

The City also provides comprehensive network of bicycle and pedestrian facilities as well as facilities that also serve newer shared mobility devices such as shared e-scooters and bicycles). Together these public transit, bicycle, and pedestrian facilities reduce the overall demands on the roadway network within the City.

Regional Highway and Street System

The Santa Monica General Plan Land Use and Circulation Element (LUCE) categorizes the City's street system according to its use by various modes of travel, including passenger vehicle, transit, bicycle, and pedestrian uses (City of Santa Monica 2010). These street categories include Highway, Boulevard, Downtown Commercial, Neighborhood Commercial, Major Avenue, Secondary Avenue, Minor Avenue, Industrial Avenue, Neighborhood Street, Shared Street, Parkway, Bikeway, Alleyway, Pathway, and Special Street.

The City supports a well-developed and well-spaced grid system of streets, which tends to disperse increases in traffic along many different routes, minimizing intersection congestion. Grid systems are extremely helpful for supporting transit and enabling the layering of networks that serve people walking, biking, and driving.

This grid system breaks down within the vicinity of I-10 (Santa Monica Freeway) and SR-1 (Pacific Coast Highway) with a limited number of streets that cross these highways. Streets immediately north and south of Olympic Boulevard do not follow the fine-grain block pattern found elsewhere in the City, with large blocks and dead end streets in the Bergamot and Memorial Park areas.

Major intersections along larger avenues and boulevards throughout the City are generally signalized while smaller intersections are typically stop-sign controlled and line of sight at intersections is generally adequate, reducing the potential for accidents and conflicts with pedestrians. Each street classification identified in the LUCE are defined below:

Santa Monica Boulevard is a prominent boulevard, which provides locals and visitors a multi-modal experience with coastal views.

- **Highways:** Highways are major regional connectors designed to accommodate longer, regional trips with limited local access. The highway system in the City is owned and operated by the California Department of Transportation (Caltrans) and includes:
    - I-10 (Santa Monica Freeway); and
    - SR-1 (Pacific Coast Highway)
- **Boulevards:** Boulevards are regional transportation corridors with continuous adjacent mixed-use and commercial land uses. Boulevards provide access for all forms of transportation; regional automobile traffic is accommodated in order to minimize regional traffic on parallel local streets; however, transit and pedestrian use is emphasized. Boulevards within the City include:
    - Wilshire Boulevard;
    - Santa Monica Boulevard;
    - Pico Boulevard;
    - Lincoln Boulevard (south of Olympic Boulevard);
    - 4th Street (between Wilshire Boulevard and Pico Boulevard);
    - Main Street (between Colorado Avenue and Pico Boulevard); and
    - Ocean Avenue (between Wilshire Boulevard and Pico Boulevard).
- **Downtown Commercial:** Downtown Commercial refers to all streets in the Downtown district, plus a portion of Lincoln Boulevard. By definition, these streets are very high priority for pedestrians and experience high levels of competition among all modes.
- **Neighborhood Commercial:** Neighborhood Commercial refers to streets in neighborhood commercial zones that are not major boulevards.
- **Major Avenues:** Major Avenues are streets serving regional automobile trips and accommodating all modes of transportation. They are designed to discourage regional automobile traffic from using secondary or minor avenues. Major Avenues within the City include:
    - Olympic Drive (between 4th Street and 11th Street);
    - Centinela Avenue (south of Olympic Boulevard);
    - Moomat Ahiko Way;
    - Olympic Boulevard (between Lincoln Boulevard and 4th Street);
    - 26th Street (between Broadway and Cloverfield Boulevard);
    - Cloverfield Boulevard (between Santa Monica Boulevard and Pico Boulevard); and
    - Neilson Way (south of Pico Boulevard).
- **Secondary Avenues**: Secondary Avenues are streets that distribute vehicle trips into minor avenues and neighborhood streets. They often serve regional bicycle trips by providing signalized crossings of boulevards and major avenues. Secondary Avenues within the City include:

  - Centinela Avenue (between Wilshire Boulevard and Olympic Boulevard);
  - 26th Street (north of San Vicente Boulevard and between Georgina Avenue and Broadway);
  - 23rd Street (south of Pico Boulevard);
  - 20th Street (between Wilshire Boulevard and Pico Boulevard);
  - Cloverfield Boulevard (between Pico Boulevard and Ocean Park Boulevard);
  - Montana Avenue (east of 17th Street and west of 7th Street);
  - Broadway (west of 26th Street);
  - Colorado Avenue;
  - Ocean Park Boulevard (east of 34th Street, between 25th Street and 20th Street, and west of 16th Street); and
  - Olympic Drive (west of 4th Street).

- **Minor Avenues**: Minor Avenues are streets connecting neighborhood streets with other avenues. Minor Avenues within the City include:
  - Arizona Avenue (between Lincoln Boulevard and 23rd Street);
  - Broadway (east of 26th Street);
  - Nebraska Avenue;
  - Airport Avenue;
  - Stewart Street/28th Street (north of Ocean Park Boulevard);
  - 20th Street (between Montana Avenue and Wilshire Boulevard, between Pico Boulevard and Ocean Park Boulevard);
  - 14th Street (between Wilshire Boulevard and I-10, between Pico Boulevard and Ocean Park Boulevard);
  - 11th Street (between Wilshire Boulevard and Ocean Park Boulevard);
  - 7th Street (north of Wilshire Boulevard); and
  - 4th Street (north of Wilshire Boulevard and south of Pico Boulevard).
- **Industrial Avenues:** Industrial Avenues are local streets on which truck movement is prioritized to ensure adequate access to individual parcels.
- **Neighborhood Streets:** Neighborhood Streets primarily provide access to individual residential parcels throughout the City.
- **Shared Streets:** Shared Streets are streets with low enough auto speeds that automobiles, bikes, and pedestrians can mix comfortably and safely.
- **Parkways:** Parkways are streets that serve as a linear park, incorporating continuous landscape, recreational bikeways, and pedestrian paths. Parkways within the City include:
  - San Vicente Boulevard;
  - Olympic Boulevard (east of Lincoln Boulevard);
  - Ocean Avenue; and
  - Barnard Way (north of Ashland Walk).
- **Pathways:** Pathways are pedestrian-only streets.
- **Special Streets:** Special Streets are unique and ceremonial streets requiring special consideration, such as the Third Street Promenade.

Public Transit Services

Public transit service in the City consists of the Metro E (Expo) LRT line, which provides service between Santa Monica and Downtown Los Angeles, and the City's Big Blue Bus system, which serves the entire City as well as areas outside of the City and provides frequent services to popular destinations.

Other regional bus services within the City are operated by the Los Angeles County Metropolitan Transportation Authority (Metro).

Metro E (Expo) LRT

The Downtown Santa Monica Station provides a regional connection to Downtown Los Angeles and is one of three City-wide Metro E (Expo) LRT Stations.

The Metro E (Expo) LRT line makes 19 stops throughout Los Angeles County, including three stations within the City: Bergamot Station (located at 26th Street & Olympic Boulevard), Santa Monica College Station (located at 17th Street & Colorado Avenue), and the terminus Downtown Santa Monica Station (located at 4th Street & Colorado Avenue). The Expo/Bundy Station, which is located approximately 0.25 miles east of the City's eastern border in the City of Los Angeles, is also within walking distance to the City and therefore, also serves City residents. All four stations were developed under Phase 2 of the Metro E (Expo) LRT Project, which was a 6.6-mile extension of the 80-station Metro Rail System. Construction was completed for the stations in 2015 and opened to the public on May 20, 2016 (Metro 2016).

Bergamot Station: The Bergamot Station is in the Pico District of Santa Monica, along the southern edge of Olympic Boulevard, just east of 26th Street. The City refers to the station area as the "Bergamot Transit Village." It is also within walking distance of numerous business offices and studios, including the Water Garden office complex, as well as several parks. Attractions in the area include Ishihara Park, Gandara Park, Virginia Avenue Park, and Bergamot Station Arts Center.

Santa Monica College Station: The Santa Monica College Station is located in the Midtown District of Santa Monica, in the center of Colorado Avenue west of 17th Street, adjacent to Memorial Park. It is three blocks from Santa Monica College. The City refers to this station area as the "Memorial Park Neighborhood Transit Village."

The east end of the station is at 17th Street and the west end of the station is mid-block between 15th Street and 16th Street with entrances at either end. Parking and an off-street bus stop are located just south of Colorado between 16th Street and 17th Street.

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Map of Metro E Extension

FIGURE 3.12-1

Downtown Santa Monica Station: The Downtown Santa Monica Station is located in Downtown Santa Monica, off-street in the block bounded by 4th Street, 5th Street, Colorado Avenue, and I-10. The site is located in the midst of Santa Monica's Civic Center, within a short walk of the Pacific Ocean, Santa Monica Pier, the Third Street Promenade, the Civic Auditorium, and Santa Monica High School. The block was formerly the location of a Sears auto center, which was demolished in 2010 to make way for the station. A trip from Downtown Santa Monica to Downtown Los Angeles takes 47 minutes.

The Metro E (Expo) LRT line runs every 12 minutes during most daytime hours during the weekdays and weekend days, and every 15 to 20 minutes during other periods. The Metro E (Expo) LRT line has become an integral link in local and regional transit, and a catalyst for enhancing accessibility and mobility in the Downtown and the City as a whole. In particular, the introduction of the Downtown Santa Monica Station has had a transformative effect on mobility within the Downtown, and the City has recently completed first-and-last-mile projects to connect the Metro E (Expo) LRT to other modes of transportation including enhanced pedestrian and bicycle access, such as the Colorado Esplanade.

Additionally, the Metro E (Expo) LRT reduces accident and safety risk to the public through implementation of its Traffic Safety Programs including a safety outreach program, On the Move Riders Club, which is geared towards older adults, and the Safety Ambassador Program. City efforts to improve Metro E (Expo) LRT have resulted in a safe public transit service (Metro 2021b).

Metro is constructing a new connecting line along Crenshaw Boulevard under the Crenshaw/LAX Transit Project, which is anticipated to open in mid- to late-2021. This new line would provide service between

the Metro E (Expo) LRT at Expo/Crenshaw and the Metro C Line at LAX, providing indirect access between the City and LAX. As of February 2021, construction is approximately 97.7 percent complete and train testing is ongoing (Metro 2021a).

Big Blue Bus

Big Blue Bus is the municipal bus service for the City, which operates 17 fixed-route lines that serve the entire City (Big Blue Bus 2021). The City has connections to 11 of the 17 fixed-route lines. The majority of the Big Blue Bus lines begin and/or end in the City's Downtown district. Additional connections include to the surrounding areas of Los Angeles with some lines also providing access to major destinations and employment hubs outside of the City, including LAX and UCLA.

Big Blue Bus provides public transit throughout the City with connections to major regional destinations.

In conjunction with opening of the Metro E (Expo) LRT line in 2016, Big Blue Bus implemented a network-wide redesign of bus routes to increase north-south connections to the train stations within their service area. The Colorado Esplanade, from 4th Street to Ocean Avenue, is a promenade designed to connect the Downtown Santa Monica Station, Tongva Park, and the Santa Monica Pier, linking the Civic Center District and Downtown across the freeway.

Headway *is defined as the amount of time between transit vehicle arrivals at a stop. A suburban route that has a bus once an hour would have a 60 minute headway. Frequent service buses often have 10-15 minute headways. Very high service transit, most often seen in LRT can sometime reach headways of 2-5 minutes. Headways have a significant impact on how desirable a transit service is because they effect:*

- *The time penalty for missing a train or bus;*
- *The amount of planning and preparation needed to use transit and stay on schedule;*
- *The amount of time lost when transit schedules do not directly conform to work, school, or activity schedules; and*
- *Average wait times.*

Big Blue Bus lines operated by and within the City include the following:[1]

- **Route 1 (Main Street & Santa Monica Boulevard)** – Route 1 runs from Venice and the Ocean Park neighborhood through the Downtown to UCLA between 5:20 A.M. and 11:19 P.M. Weekday peak hour headways are approximately 10 to 11 minutes, while weekday off peak hour and weekend headways are approximately 12 to 15 minutes.

[1] Service hours and headways listed are current as of the release of the Notice of Preparation (NOP) for the Draft EIR, but are subject to change. For example, there have been various changes in headways as a result of the coronavirus (COVID-19) pandemic that could change again during the post-pandemic recovery period.

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City of Santa Monica
Existing Big Blue Bus System

FIGURE 3.12-2

- **Route 2 (Wilshire Boulevard)** – Route 2 runs from Ocean Park Boulevard and Main Street near the Civic Center through Downtown to UCLA between 6:50 A.M. and 10:38 P.M. Headways are generally between 15 and 20 minutes.
- **Route 3 / Rapid 3 (Lincoln Boulevard) –** Route 3 runs from the Metro C Line / Aviation Station along Lincoln Boulevard to Downtown via Lincoln Boulevard and 4th Street between 4:54 A.M. and 11:48 P.M. Weekday and weekend peak hour headways are approximately 12 to 15 minutes while off peak hour headways are between 15 and 20 minutes.
- **Route 5 (Olympic Boulevard)** – Route 5 runs from 4th Street and Arizona in Downtown to Century City and the Metro E (Expo) LRT line Culver City Station via Broadway, Olympic Boulevard, Pico Boulevard, and Robertson Boulevard between 7:10 A.M. and 7:15 P.M. Weekday peak hour headways are approximately 20 minutes while weekday off peak hour and weekend headways are approximately 30 minutes.
- **Route 7 / Rapid 7 (Pico Boulevard)** – Route 7 runs from 6th Street and Broadway in Downtown to Rimpau Transit Center via Pico Boulevard between 4:50 A.M. and 11:48 P.M. During the weekdays, the Rapid 7 line offers limited-stop service between Downtown and the Purple Line Wilshire/Western Station. Weekday peak hour headways are 10 minutes and weekend headways are approximately 15 minutes.
- **Route 8 (Ocean Park Boulevard)** – Route 8 runs from 7th Street and Olympic Boulevard through Downtown to UCLA via Main Street, Ocean Park Boulevard, National Boulevard, and Westwood Boulevard between 6:30 A.M. and 10:30 P.M. During the weekday peak hours headways are approximately 15 to 30 minutes, while weekend peak hour headways are approximately 30 minutes.
- **Route 9 (Pacific Palisades)** – Route 9 runs from the Civic Center through Downtown to the Pacific Palisades community between 6:52 A.M. and 9:52 P.M. Route 9 operates with peak hour headways of approximately 30 minutes.
- **Route 10 (Downtown LA Freeway Express)** – Route 10 runs from Broadway Boulevard through Downtown on the I-10 to the Downtown LA Express between 3:30 P.M. and 9:19 P.M. This line operates with headways of approximately 15 minutes.
- **Route 14 (Bundy Drive & Centinela Avenue)** – Route 14 provides service between Culver City, Mar Vista, and Brentwood between 6 A.M. and 9 P.M. daily. Headways are between 15 to 30 minutes.
- **Route 41 (SMC – 17th Street Station – Montana Avenue)** – Route 41 runs from Montana Avenue through Colorado Avenue and Olympic Boulevard to Pico Boulevard at the Santa Monica College Main Campus on Monday through Saturday between 6:20 A.M. and 7:25 P.M. Headways are between 15 to 25 minutes.
- **Route 43 (San Vicente Boulevard & 26th Street)** – Route 43 runs between San Vicente Boulevard, the Santa Monica College Expo LRT Station, the Santa Monica College Main Campus, and the Bergamot Expo LRT Station on weekdays between 6:25 A.M. and 6:18 P.M. Headways are between 30 to 60 minutes.

Metro Bus Service

In October 2020, the Metro Board of Directors approved the Next Gen Bus Plan to implement a new competitive bus system in Los Angeles County that is fast, frequent, reliable, and accessible (Metro 2020). The proposed improvements under the Next Gen Bus Plan aim to double the number of frequent Metro bus lines, provide more than 80 percent of current riders with 10 minute or better frequency, expand and improve services creating an all day and seven day a week service, ensure a 0.25-mile walk to bus stop for 99 percent of uses, and create a more comfortable and safe waiting environment. The

Next Gen Bus Plan consolidates the Metro Rapid and Local lines to provide more frequent service on their local partner lines and consolidates bus stops to balance travel times and improve easy access to Metro bus lines. Starting December 13, 2020, Metro expanded trip services within and outside of the City, which included five lines improved to 15-minute frequency during daytime weekdays, three lines improved to 20-minute frequency during daytime weekdays, and one line improved to 30-minute frequency on daytime weekdays.

Metro bus lines that serve the City include the following:

Metro Line 4 / Rapid 704 (Santa Monica Boulevard) – Line 4 runs from Downtown Santa Monica to Downtown Los Angeles via Santa Monica Boulevard and Sunset Boulevard. Off peak hour headways are between 15 and 30 minutes. Rapid Line 704 offers limited service on Santa Monica Boulevard between Downtown Santa Monica and Downtown Los Angeles. Weekday headways are between 10 and 15 minutes.

Metro Line 20 / Rapid 720 (Wilshire Boulevard) – Line 20 / Rapid 720 operates on Wilshire Boulevard between Downtown Santa Monica and Downtown Los Angeles. Rapid 720 service is limited stop operating throughout the day. Peak hour headways are approximately 10 minutes and off-peak hour headways are between 15 and 20 minutes. Overnight, local service on Line 20 has headways between 20 and 30 minutes after Big Blue Bus Line 2 ceases operation.

Metro Line 33 / Rapid 733 (Venice Boulevard) – Line 33 / Rapid 733 provides service on Venice Boulevard and Main Street between Santa Monica and Downtown Los Angeles. The Rapid 733 has peak hour headways between 15 and 20 minutes. Line 33 extends local service along Main Street to Santa Monica from Venice during the late evening and overnight periods.

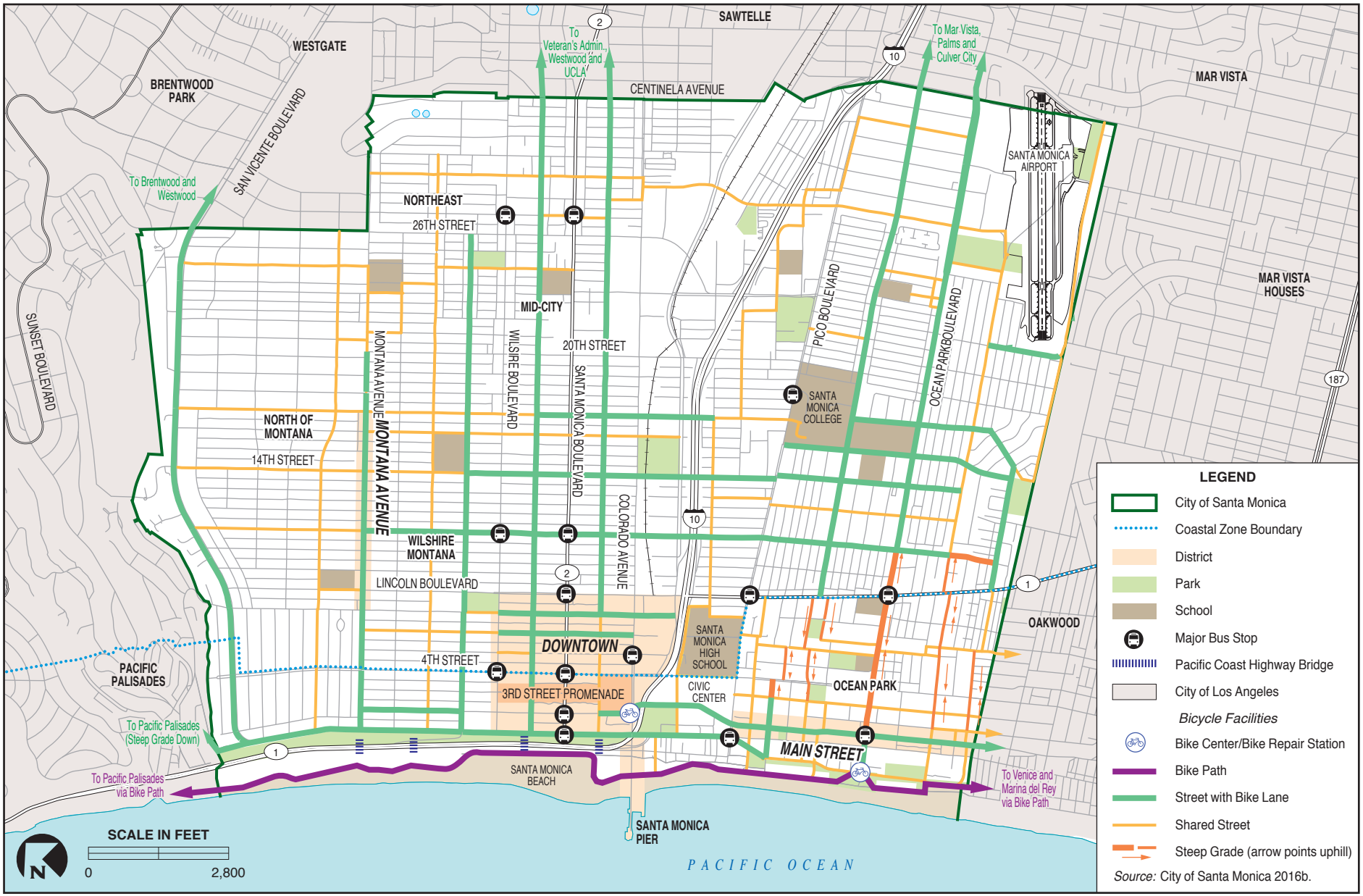
Metro Rapid Line 534 (Malibu) – Line 534 operates local service between Downtown Santa Monica and the City of Malibu along SR-1 (Pacific Coast Highway). Headways are generally between approximately 20 to 40 minutes.

Dial-a-Ride Senior Services (MODE)

Residents of Santa Monica 65 years or older or people with disabilities who are 18 years or older also have access to low-cost, shared-ride, curb-to-curb service offered in partnership between Big Blue Bus, WISE & Health Aging, and Lyft. This service is available to destinations within the City, as well as major medical centers on the Westside and select shopping destinations in Venice.

Bicycle Facilities

The City's bicycle infrastructure includes a connected network of on-street bicycle lanes and routes, as well as off-street paths, intended to increase access to City-wide destinations, cyclist safety and City-wide ridership. Bicycle facilities are classified based on the Caltrans Highway Design Manual (2006) terminology:



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City of Santa Monica
Existing City Bicycle Facilities

FIGURE 3.12-3

- **Class I Bikeway (Bicycle Path)** – A completely separate right-of-way for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian crossflows minimized. Class I bikeways in the City include bicycle paths, side paths, and multi-use trails.
- **Class II Bikeway (Bicycle Lane)** – A restricted right-of-way designated for the use of bicycles, with a striped lane on a street or a highway. Class II bicycle lanes in the City include climbing bike lanes, where a bike lane is provided in the uphill direction, buffered bicycle lanes, where an additional striped buffer between parked cars or traffic is provided, and green bike lanes that increase facility visibility and legibility for people riding and driving.
- **Class III Bikeway (Bicycle Route)** – A right-of-way designated by signs or pavement markings for shared use with pedestrians and motor vehicles. The City's Class III bicycle routes include neighborhood greenways and Shared Streets.
- **Class IV Bikeway (Separated Bikeway)** – A right-of-way for the exclusive use of bicycles which provides a required separation between the bikeway and through vehicular traffic. Class IV bikeways in the City include parking-protected bike lanes, where the bicycle lane is positioned between the parking lane and the curb, cycle tracks where two-way bicycle facilities are located on one side of the street, and contraflow bicycle lanes, where a dedicated lane is provided in the opposite direction of traffic.

The City provides five separate classifications of bicycle lanes, which provide a range of safe biking routes for visitors, residents, and commuters.

The City also includes Bicycle Friendly Boulevards in its bicycle grid network, described below (see Appendix G):

- **Class V Bikeway (Bicycle Friendly Boulevard):** Bicycle Friendly Boulevards are facilities parallel to major corridors and that provide a calmer, safer alternative for bicyclists of all ages and skill levels. Bicycle Friendly Streets include traffic calming elements beyond traditional signage, such as roundabouts, diverters, curb extensions, etc.

The City has over 20 miles of protected bike paths and off-street paths (Class I and Class IV bikeways), 61 lane miles of bike lanes (Class II bikeways), and 55 lane miles of bike boulevards and routes (Class III and Class V bikeways; City of Santa Monica 2020a). The City conducts traffic counts at over 190 intersections every few years, which includes bicycle movements. In 2018, approximately 4.4 percent of commuters within the City biked to work (see Chart 3.12-1). Ridership is highest on Arizona Avenue, Main Street, and throughout the Downtown (City of Santa Monica 2011).

To promote the use of nonautomotive transportation, the City operates the Santa Monica Bike Center in the Downtown with facilities in City Parking Structure #7 at 320 Broadway and City Parking Structure #8 at 215 Colorado. The Santa Monica Bike Center provides secure bicycle parking and a variety of bicycle services, including retail, bicycle repair, bicycle rental, attended bicycle parking, showers, public information on alternative transportation, and a variety of additional related services. The City also offers

the Breeze Bike Share service, which allows residents, visitors, and employees to ride a public bicycle for their travel needs within the City. The bikeshare program provides several hundred "smart" bicycles available for on-demand short-term borrowing at more than 80 stations City-wide, including the Downtown and in neighboring Venice. The Breeze Bike Share Fleet uses “smart” bicycles that can be locked to any post, rather than at proprietary docking stations increasing the flexibility of where users can pick up and drop off a bike. Metro also operates a separate Bike Share service throughout Los Angeles County, including dock-based bicycle stations at three Metro E (Expo) LRT line stations as well as others in neighboring Venice.

Pedestrian Facilities

A complete, high quality pedestrian network is necessary to make all aspects of the transportation system function well. Pedestrian infrastructure includes a nearly City-wide network of sidewalks and marked crosswalks that improve the safety, comfort and visibility of pedestrians. Pedestrian facilities in the City of Santa Monica include sidewalks, cross walks, and multi-use paths.

As described in the City’s Pedestrian Action Plan (2015)

- *Santa Monica has a higher number of pedestrians per square mile than other similarly-sized Southern California.*
- *Biannual intersection counts show that people walking outnumber vehicles at some of the City’s busiest intersections, particularly in Downtown and near the Beach.*

Other infrastructure treatments such as mid-block crossings and scramble crossings provide some efficiency to trips on foot and reduce conflicts between vehicles and pedestrians. These infrastructure treatments are built in many locations throughout the City. Recently, lead-pedestrian walk signals have been added to the signal timing at many signalized intersections to allow pedestrians a “head-start” across intersections which increases pedestrian visibility and safety.[2]

The City provides a range of pedestrian facilities including but not limited to marked cross walks and signalized cross walks in close vicinity to public transit to improve multi-modal transportation access.

As a mixed-use, urban community, the City generally supports a well-developed pedestrian travel network, with sidewalks generally developed along both sides of most streets particularly larger boulevards and avenues and with residential neighborhoods as well. The exception is the Bergamot Plan Area and some areas of the Industrial Conservation zones, where pedestrian sidewalks can be narrow, non-existent, and/or end without continuous connections.

[2] A lead-pedestrian walk signal gives pedestrians an advance walk signal (e.g., generally 3 to 6 seconds) before motorists get a green signal, giving the pedestrian several seconds to start walking in the crosswalk before a concurrent signal is provided to vehicles. This makes pedestrians more visible to motorists and motorists more likely to yield to them.

Pedestrians are accommodated on all street types within the City, ranging from narrower sidewalks (e.g., 5 to 12 feet) in the single-family residential neighborhoods to wider sidewalks (more than 20 feet) with street furniture, pedestrian crosswalks, and pedestrian scrambles in the Downtown, which experiences some of the highest pedestrian counts in the City (City of Santa Monica 2017).[3]

The lack of sidewalks on Olympic Boulevard had previously restricted pedestrian movement through the Bergamot Plan Area; however, the City is currently implementing pedestrian facility improvements to address this issue.

Other Transportation Services

Ride Hailing Services

Ride hailing services are a newer model, and allow riders to hail a ride (e.g., similar to a taxi ride) through a mobile app. Several ride-hailing operators operate within the City, providing users with curb-to-curb service. The City currently partners with Lyft for their Dial-A-Ride Service, offering older residents and residents with disabilities discounted rides.

Shared Micromobility:

The City has designated e-scooter drop zones in an effort to avoid potential conflicts with ADA requirements.

Several private micromobility providers operate within the City through the City's Shared Mobility Pilot Program, providing residents and guests with shared bikes, e-bikes, and scooters to utilize throughout the City. In September 2018, the City Council approved a 16-month Shared Mobility Pilot Program to expand diversity of transportation options in the City and to address ongoing challenges of newly introduced shared micromobility technologies. The City allowed four private companies (e.g., Bird, Jump, Lime, and Lyft) to provide shared mobility services in the public right-of-way. Lyft and Uber have become the most recognized and ubiquitous forms of shared mobility and provide both local and to some extent regional linkages, although contributing to roadway congestion in the City. However, in April and May of 2020, Lime and Jump discontinued operations in the City.

[3] A pedestrian scramble is a type of traffic signal movement that temporarily stops all vehicular traffic, thereby allowing pedestrians to cross an intersection in every direction, including diagonally, at the same time.

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City of Santa Monica
Existing City Pedestrian Sidewalk

FIGURE 3.12-4

Due to uncertainty caused by the COVID-19 pandemic, on May 26, 2020, the City Council voted to extend the first Pilot Program through April 30, 2021, and postponed a previously approved second Shared Mobility Pilot Program with intensified regulations until May 2021 (City of Santa Monica 2021b). Residents and visitors can find shared mobility transportation brands operating in the City, including Bird. These companies offer app-based electric scooters, and Lyft offers electric bicycles as another option to get around. Devices are not permitted to be deployed within: Ocean Front Walk, the beach or beach bicycle path, beach parking lots, Third Street Promenade, the Pier or Pier Bridge, public parks, and the waiting, loading and unloading areas of transit stops (City of Santa Monica 2020b). Metro also operates Metro Bike Share in the City, with bike stations located along the Metro E (Expo) LRT line.

Car Share Services

Car share systems have existed for several decades and rely on a membership model to gain access to hourly car rentals. Currently, Zipcar has the widest coverage in the Greater Los Angeles Area, with car share vehicles in Santa Monica, Marina del Rey, Playa del Rey, near Culver City, near the Sunset Strip in West Hollywood, and throughout the west side of Los Angeles.

Circuit

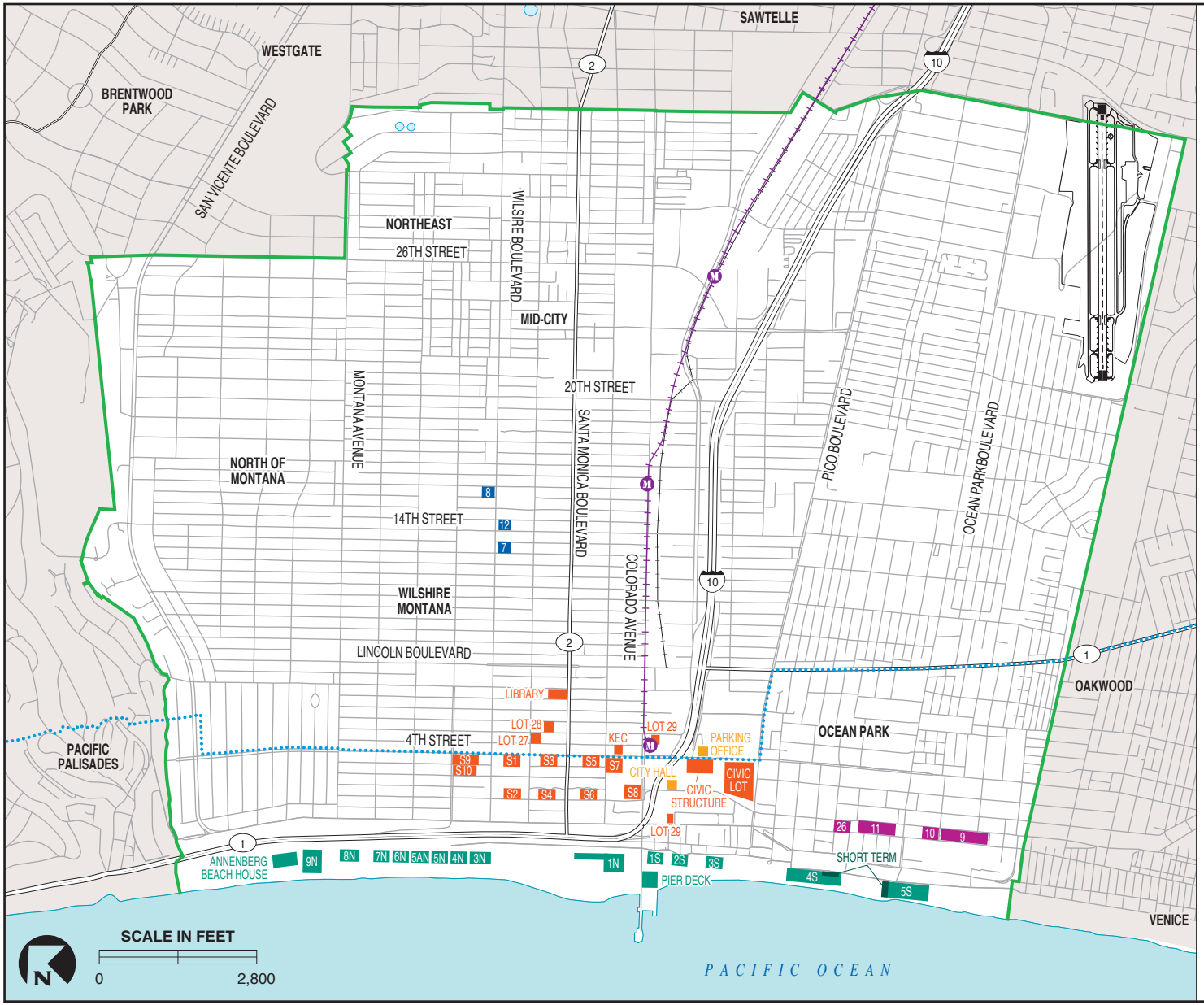
In partnership with local hotels and the City, Circuit is a microtransit service operating free electric shuttles in areas generally west of Lincoln Boulevard between Downtown, Main, Street and the Montana Avenue corridor.

3.12.1.2 Public Parking

The City uses current technology and real-time information to keep cars moving on major boulevards and limit the impact of regional traffic on local streets. This includes a comprehensive street wayfinding system, including signs directing motorists to off-street parking and displaying real time parking availability at many public parking facilities including parking meters.

Although access to parking is no longer considered an environmental impact under CEQA, because parking is a key public concern in the City, information on parking as provided in the interest of full disclosure.[4] The City provides shared public parking throughout the City, which is divided into four parking zones: Main Street Parking, Downtown Parking, Beach & Pier Parking, and Mid-City Parking. The City maintains 39 public parking lots within these four parking zones, with the majority located in the Downtown Parking and Beach & Pier Parking zones (see Table 3.12-1).

[4] Recent caselaw has confirmed that effects to parking supply and demand are not CEQA issues and are not included in Appendix G of the CEQA Guidelines. However, physical impacts related to parking have been addressed in the EIR (*Covina Residents for Responsible Development v. City of Covina [City Ventures, Inc., et al., Real Parties in Interest] [2018] 21 Cal.App.5th 712*).



LEGEND

- City of Santa Monica
- Expo Light Rail and Station
- Coastal Zone Boundary
- City of Los Angeles

Parking Lots and Structures

Main Street Parking

Lot 9 110	Hill Street
Lot 10 111	Hill Street
Lot 11 170	Hollister Avenue
Lot 26 150	Strand Street

Downtown Parking

Structure 1	1234 4th Street
Structure 2	1235 2nd Street
Structure 3	1320 4th Street
Structure 4	1321 2nd Street
Structure 5	1440 4th Street
Structure 6	1433 2nd Street
Structure 7	320 Broadway
Structure 8	1571 2nd Street
Structure 9	1136 4th Street
Structure 10	1125 Third Street
KEC	1527 4th Street (Ken Edwards Center)
Lot 27	1320 5th Street
Lot 28	1323 5th Street
Lot 29	1636 5th Street
Lot 30	1665 Ocean Avenue
Library	601 Santa Monica Blvd.
Civic Lot	1855 Main Street
Civic Structure	333 Civic Center Drive

Beach and Pier Parking

Annenberg Beach House	445 Pacific Coast Highway
Lot 9 North	530 Pacific Coast Highway
Lot 8 North	810 Pacific Coast Highway
Lot 7 North	930 Pacific Coast Highway
Lot 6 North	950 Pacific Coast Highway
Lot 5A North	1018 Pacific Coast Highway
Lot 5 North	1030 Pacific Coast Highway
Lot 4 North	1060 Pacific Coast Highway
Lot 3 North	1150 Pacific Coast Highway
Lot 1 North	1550 Pacific Coast Highway

To reach Lot 1 North, use Ocean Avenue to access Seaside Terrace and follow green dotted line on map to enter via Appian Way.

Pier Deck	West end of Colorado Avenue on the Pier
Lot 1 South	1640 Appian Way
Lot 2 South	1670 Appian Way
Lot 3 South	1750 Appian Way
Lot 4 South	2030 Ocean Avenue
Lot 5 South	2600 Barnard Way

Mid-City Parking

Lot 7	1217 Euclid Street
Lot 8	1146 16th Street
Lot 12	1211 14th Street

Source: SCAG 2016.

wood.

City of Santa Monica
Public Parking Structures

FIGURE 3.12-5

Table 3.12-1 Public Parking Structures and Lots in the City of Santa Monica

Parking Zone	Parking Structure/Lot	Location
Main Street Parking	Lot 9	110 Hill Street
	Lot 10	111 Hill Street
	Lot 11	170 Hollister Avenue
	Lot 26	150 Strand Street
Downtown Parking	Structure #1	1234 4th Street
	Structure #2	1235 2nd Street
	Structure #3	1320 4th Street
	Structure #4	1321 2nd Street
	Structure #5	1440 4th Street
	Structure #6	1433 2nd Street
	Structure #7	320 Broadway Street
	Structure #8	1571 2nd Street
	Structure #9	1136 4th Street
	Structure #10	1125 3rd Street
	Ken Edwards Center	1527 4th Street
	Lot 27	1320 5th Street
	Lot 28	1323 5th Street
	Lot 29	1636 5th Street
	Lot 30	1665 Ocean Avenue
	Library	601 Santa Monica Boulevard
	Civic Lot	1855 Main Street
	Civic Structure	333 Civic Center Drive
Beach & Pier Parking	Annenberg Beach House	445 Pacific Coast Highway
	Lot 9 North	530 Pacific Coast Highway
	Lot 8 North	810 Pacific Coast Highway
	Lot 7 North	930 Pacific Coast Highway
	Lot 6 North	950 Pacific Coast Highway
	Lot 5A North	1018 Pacific Coast Highway
	Lot 5 North	1030 Pacific Coast Highway
	Lot 4 North	1060 Pacific Coast Highway
	Lot 3 North	1150 Pacific Coast Highway
	Lot 1 North	1550 Pacific Coast Highway
	Pier Deck	West end of Colorado Avenue on the Pier
	Lot 1 South	1640 Appian Way
	Lot 2 South	1670 Appian Way
	Lot 3 South	1750 Appian Way
	Lot 4 South	2030 Ocean Avenue
	Lot 5 South	2600 Barnard Way
Mid-City Parking	Lot 7	1217 Euclid Street
	Lot 8	1146 16th Street
	Lot 12	1211 14th Street

Source: City of Santa Monica 2021a.

Public parking is primarily provided by off-street structures, with the total number of spaces with 39 public parking lots throughout the City.

Parking rates reflect the value of parking and are set to ensure that spaces are available when needed. Lot costs and hours vary by location, and buses and recreational vehicles (RVs) are only allowed at certain parking lots. For example, Downtown Structures #1 – #8 and the Ken Edwards Center operate 24 hours a day and provide free parking for the first 90 minutes (rates vary depending on day and duration following 90 minutes) (City of Santa Monica 2021c). Street parking is also available throughout the City with on-street meters, which accept coins and credit cards. Pay machines at City lots and on-street parking are typically $2.50 per hour in the Downtown Parking and the Beach & Pier Parking zones and $1.25 per hour at all other City-wide parking zones. On-street parking in the Downtown consists of a total of 582 parking spaces, which are primarily time limited and metered (City of Santa Monica 2017). Given that parking is limited within the City, it is generally recognized that motorists do not park their vehicles directly in front of their destination(s). Rather, most drivers will park in public parking structures and walk to their destination(s) (City of Santa Monica 2021a).

A substantial supply of private off-street parking facilities supplement public parking within the City. These facilities may include residential, retail, or commercial establishments. There are approximately 3,300 private off-street parking spaces within the Downtown District only. The City is coordinating with the owners of these private parking spaces to explore ways to better utilize unused parking as a part of the Downtown shared parking network (City of Santa Monica 2017).

3.12.1.3 Emergency Access

The City includes a range of official disaster routes for preparation of a large scale disaster, such as a tsunami or regional fire. Disaster Routes include I-10 (Freeway Disaster Route) as well as a local City streetscape access route, which has multiple exit points from Ocean Avenue including along SR-1 (Pacific Coast Highway), Santa Monica Boulevard, and Olympic Boulevard to reach the Greater Los Angeles Area (County of Los Angeles 2021a).

As described in Section 3.10, *Public Services*, the Santa Monica Fire Department (SMFD) does not currently meet its goals for response time Department-wide, which is 7:30 minutes.[5] Currently the SMFD's total Department-wide 90th percentile response time is 10:45 minutes. In terms of emergency incident workload per unit, no single fire unit or station area is approaching workload capacity; however, during peak hours of the day, there is a high simultaneous incident rate that means fire protection units

[5] National Fire Protection Association (NFPA) Code 1710 (Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Services [EMS], and Special Operations to the Public by Career Fire Departments).

are crossing sections of the City to cover other units' calls, which creates longer response times. The City's Community Risk Assessment (2020) identified three factors contributing to fire unit travel time constraints: (1) land use and circulation (i.e., zoning density, street/surface parking design, and traffic congestion); (2) outdoor calls for service, especially those along the oceanfront and pier areas, are problematic to process and difficult to find; and (3) the clustering of fire stations. A full discussion of this issue is included in Section 3.10, *Public Services*.

3.12.1.4 Future Transportation Network Improvements

The City's goal to create a complete and connected mobility network requires a combination of street improvements, and programs to encourage walking, biking, use of transit, and other sustainable modes of mobility. Santa Monica has made great strides in more inclusive street design, but continued investments in future mobility projects and services are needed to create safer roadways and increase the use of more sustainable mobility options. There are many anticipated infrastructure and service changes described in adopted plans such as the Bike Action Plan, Pedestrian Action Plan, Downtown Community Plan (DCP), and Bergamot Area Plan. These improvements are in various stages of planning and development. While too numerous to repeat all off them, the most notable improvements to the local and regional transportation system by 2030 for the purposes of the transportation analysis for the proposed Housing Element Update are described below:

Santa Monica Bike Action Plan Projects

- **Pico Boulevard between 6th Street and Ocean Avenue:** Remove one vehicle travel lane in each direction to facilitate implementation of protected bicycle lanes.
- **Ocean Avenue between California Avenue and Moomat Ahiko Way:** Add protected bicycle lanes on the west side of Ocean Avenue. Two northbound vehicle travel lanes will be maintained while a single southbound through lane for vehicles will be provided between California Avenue and Broadway. (This improvement was implemented in late 2020 and is considered to be a future improvement for the purposes of this analysis.)

Downtown Community Plan Transportation Projects

- **Wilshire Boulevard Road Diet:** Widen sidewalk on south side of Wilshire Boulevard and remove one eastbound vehicle travel lane between Ocean Avenue and 4th Street
- **East-West Local Street between 4th and 5th Street:** Provide a new east-west local access street through the Metro E (Expo) LRT station from 4th Street to 5th Street allowing for taxi and kiss-and-ride drop-off zones, access to bus stops and layover space, and access to potential public parking on this site. Additionally, the access way would include a new traffic signal to enable all turns at 4th Street.
- **East-West Access Street Extension and Sears Access:** Provide a new east-west connection westward through the Sears site and across the I-10 freeway to Main Street (breaking down the superblock and providing additional walking paths between the Downtown Santa Monica Expo Station and Civic Center/Tongva Park).
- **Transit Mall:** Removal of the existing transit mall on Santa Monica Boulevard east of 4th Street to create additional traffic capacity.
- **Additional Capacity:** Selected removal of on-street parking to create additional capacity at selected locations, including an additional westbound through lane on Santa Monica Boulevard

from 5th Street to Ocean Avenue and additional eastbound and westbound through lanes on Olympic Drive between Main Street and 4th Street.

Bergamot Area Plan Transportation Projects

- **Berkeley Street Extension**: Extend Berkeley Street (H Street) between Nebraska Avenue and Olympic Boulevard (one lane each way) with a new traffic signal (full access) at Olympic Boulevard & Berkeley Street.
- **Stanford Street Extension:** Extend Stanford Street (I Street) between Nebraska Avenue and Olympic Boulevard (one lane each way; right-turn in, right-turn out at Olympic Boulevard & Stanford Street.
- **Pennsylvania Avenue Two-Way Conversion:** Convert Pennsylvania Avenue to two-way operation.
- **Pennsylvania Avenue Extension:** Extend Pennsylvania Avenue between Stewart Street and Stanford Street.
- **Minor Network Changes:** Other minor street network changes planned in this area per the Bergamot Area Plan.

Westside Transportation Projects

- **Metro Purple Line:** Complete extension of Metro Purple Line (D Line) Westside Subway Extension to West Los Angeles Veterans Affairs Campus.
- **I-405 Express Lanes Project:** Construct one more high-occupancy vehicle (HOV) lane(s) in each direction and convert all HOV lanes to Express Lane operations on I-405 between Highway 101 and I-10.

3.12.1.5 Mobility Patterns and Trends

The City supports a population of approximately 92,000 residents and roughly the same number of employee population. Residents, employees, as well as visitors move through the City in various ways, by automobiles, transit, bicycles, walking, shared scooters and bicycles, and Uber/Lyft. Despite the range of mobility options available in the City, as with most of the Southern California region, travel by car is the most prevalent mode of travel.

The I-10 (Santa Monica Freeway) and SR-1 (Pacific Coast Highway) provide regional access to and through the City.

State

Vehicle Miles Traveled

State-wide VMT is highly variable and is affected by population centers, density of development, and the mix of land uses within an area. Caltrans reports a total of 347.2 billion State-wide annual VMT, which results in an average 951.2 million daily VMT in 2018 (the most recent publicly available data) (Caltrans 2020; see Table 3.12-2). According to the U.S. Census

Bureau, the 2018 population for the State California was 39.56 million (U.S. Census Bureau 2018). Therefore, the 2018 State-wide annual VMT per capita was approximately 8,777 miles (approximately 24.05 daily VMT per capita).

Table 3.12-2 State-wide Annual and Daily VMT in 2018

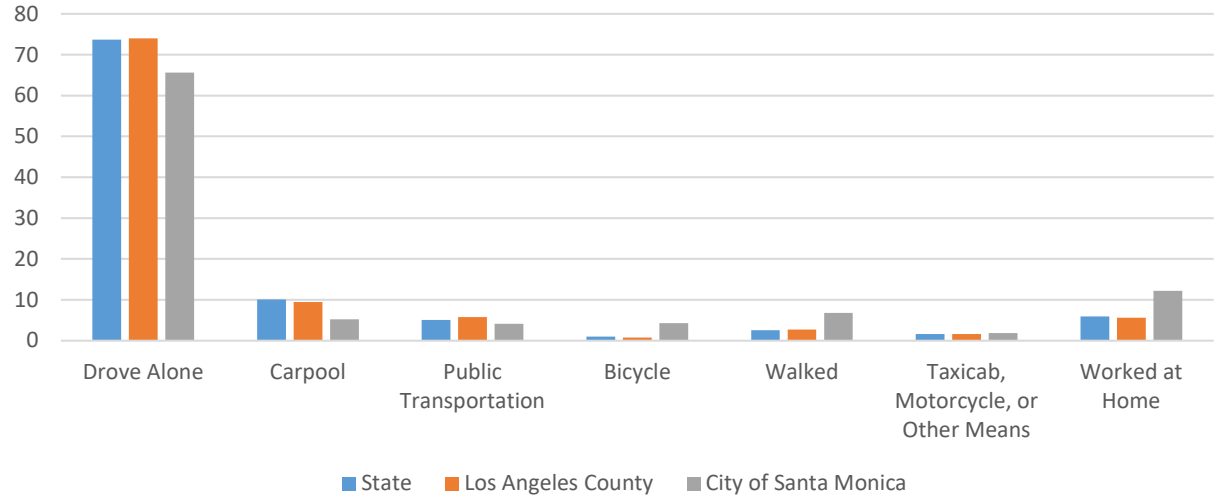
Public Roads	Annual VMT (in billions)	Daily VMT (in millions)
State Highways	191.8	525.5
Local Roads[1]	154.1	422.2
Other Agencies[2]	1.3	3.6
Total of All Public Roads[3]	**347.2**	**951.2**

Notes: Totals may not equal sum of components due to independent rounding.
[1] Includes city streets and county roads only
[2] Includes Federal, other State, and other local jurisdictions
[3] All public roads include those owned by cities, counties, and various Federal and State agencies
Source: Caltrans 2020.

Commute Mode

A majority (approximately 73.7 percent) of the employed population in California drove to work alone in 2018. A smaller portion of the population carpooled (10.1 percent) and took public transit (5.1 percent) to work. Approximately 2.6 percent of the State population walked to work, 1.0 percent biked, and 1.6 percent took a taxi, rode a motorcycle, or chose other means of transportation. Approximately 5.9 percent of the state population worked at home. The Average Vehicle Ridership (AVR) of employees who drove (alone or carpool) was 1.07 persons per vehicle (see Chart 3.12-1; U.S. Census Bureau 2019).[6]

Chart 3.12-1 Means of Transportation to Work for the State, County of Los Angeles, and City of Santa Monica in 2019



Note: Charted data does not reflect the effects of the coronavirus (COVID-19) pandemic and its effects on commuting.
Source: U.S. Census Bureau 2019.

[6] The coronavirus (COVID-19) pandemic has substantially affected travel behavior, with millions of Californians unemployed or working from home; it is unclear what the longer-term implications of this pandemic on travel behavior will be.

Region

Vehicle Miles Traveled

According to the Southern California Association of Governments (SCAG) Transportation Safety Regional Existing Conditions report, the SCAG region includes a population of 19 million and a total of 8,700 annual average of VMT per capita in 2017 (the most recently available data; SCAG 2017). The SCAG's regional VMT equates to a daily VMT per capita of approximately 23.8 within the Greater Los Angeles Area. The 2017 population for Los Angeles County was 10,163,507. The County-wide annual VMT per capita in 2017 was 8,000 annual VMT per capita (approximately 21.9 daily VMT per capita) (County of Los Angeles 2021b; SCAG 2017).

Commute Mode

In Los Angeles County, 74 percent of the employed population drove to work alone in 2019. Less people carpooled to work (9.5 percent) and more people took public transportation (5.8 percent) than the state averages described above. Similar to the State of California, 2.7 percent of the County's population walked to work, 0.8 percent biked, and 1.6 percent of the population got to work by taxi, motorcycle, or other means. The remaining 5.6 percent of the County's population worked at home. The AVR of employees who drove (alone or carpool) was 1.07 persons per vehicle, identical to the State AVR (refer to Chart 3.12-1; U.S. Census Bureau 2019).

City of Santa Monica

Vehicle Miles Traveled

Based on the most recent data available from the City's Transportation Demand Forecast Model (TDFM), the Transportation Study prepared for the proposed Housing Element Update identified the 2020 Adjusted Baseline (i.e., 2019 base year model updated to represent 2020 pre-pandemic conditions) City-wide average daily VMT as 6,617,899. The Transportation Study identified specific home-based resident daily VMT per capita as 11.1 and home-based work daily VMT per employee as 15.3 within the City (see Appendix G).

Santa Monica Residents Commute Mode

Based on the American Community Survey (ACS), the City's residential population includes an employable population of approximately 50,521 residents that are 16 years and older. As compared to the State (73.7 percent) and the County (74 percent), a smaller proportion of the population drove alone (65.6 percent), while more of the population walked (6.8 percent) and biked (4.3 percent) to work in 2019 (refer to Chart 3.12-1). Walking is the second most common way of traveling to work. Approximately 5.2 percent of the working population carpooled to work and 4.1 percent took public transportation. Most residents depart for work between 8:00 A.M. to 9:00 A.M. The mean travel time for commute to work for the City is approximately 26 minutes.

Similar to the State and County averages, the AVR for residents who drove (alone or carpooled) to work in the City was 1.04 persons per vehicle (U.S. Census Bureau 2019). However, the City is a leader in working with employers to encourage the use of sustainable transportation modes to replace solo driving. The City's Transportation Demand Ordinance requires all employers of 50 or more employees to submit an Emission Reduction Plan. The ordinance includes several optional approaches for meeting the detailed requirements and all employers pay an annual fee for administration and enforcement. By encouraging employees to walk, bike, use transit, carpool or telecommute, employers help reduce traffic congestion and carbon emissions in Santa Monica, particularly during peak commuting hours. Data from City progress reports for the Sustainable City Plan show commute trip AVR of 1.64 in 1993 and 1.85 in 2019 (City of Santa Monica 2021; Fehr & Peers 2021; see Appendix G). Use of sustainable transportation modes among employees within the City is improving at a modest rate. In 2007, only 32 percent of employees within the City used sustainable travel options. By 2019, this amount rose to 45 percent chose to travel via bicycle, foot, bus, or carpool. This indicator measures the percent of employees of large employers (50 employees or more) who have chosen to take sustainable transportation modes in lieu of driving alone (City of Santa Monica 2021; Fehr & Peers 2021; see Appendix G).

Santa Monica Workers (Non-Residents)

As described further in Section 3.9, *Population, Employment, and Housing*, the City has a diverse economy comprised of various industry sectors. With the Information and Professional/Scientific/Technical Industries comprising over 30 percent of the City's economy, the City has earned its moniker of "Silicon Beach." The City is also a major tourist and visitor hub, with almost 25 percent of the workforce working in the Food and Accommodation, and Retail Trade sectors. According to the California Employment Development Department, prior to the pandemic, the City had approximately 91,000 people working within its borders in 2019 and a low unemployment rate of 4 percent (refer to Section 3.9, *Population, Employment, and Housing*).

The U.S. Census Bureau partners with the States to produce the Longitudinal Employer-Household Dynamics (LEHD) data. Compared to the ACS, this data provides more direct information on changes in the workforce (e.g., hiring, quits, and layoffs), and can also give insight into commuting flows. Based on the LEHD data, approximately 9.4 percent of employees in City live within the City limits. The remaining 91 percent commute from areas outside of the City, with the majority commuting from the surrounding Greater Los Angeles Area. Additionally, employees in the City commute greater distances on average than employees within the City of Los Angeles and Los Angeles County. The median distance for people working in the City is 11.1 miles, compared to 10.4 miles for all employees in Los Angeles County. Additionally, 26.7 percent of employees in the City commute for more than 60 minutes as compared to 19.2 percent for the City of Los Angeles and 16.4 percent for Los Angeles County (see Table 3.12-3).

Table 3.12-3 Percent of Workers Commuting More than 30 Minutes and 60 Minutes in the City of Santa Monica, City of Los Angeles, and County of Los Angeles in 2019

Geography	Percent of Workers Commuting More than 30 minutes	Percent of Workers Commuting more than 60 minutes
Santa Monica City	62.1%	26.7%
Los Angeles City	58.6%	19.2%
Los Angeles County	52.5%	16.4%

Source: U.S. Census Bureau LEHD data by workplace geography, City of Santa Monica 2019 5-Year estimates

On February 19, 2021 through March 12, 2021, the City's Mobility Division released a public survey to gather data on commute trends in relationship to housing needs, with a focus on employees within the City. Of the approximately 1,736 respondents who work in Santa Monica, 910 (approximately 52 percent) live outside City limits. Survey results support the LEHD data that showed the drive alone by car continues to be the most common mode of commute. Additionally, when respondents were asked what the largest barrier is to living in Santa Monica, cost was cited as the number one factor (refer to Section 3.9, *Population, Employment, and Housing*). The results of the Mobility Survey are provided in Appendix I.

3.12.1.6 Transportation Demand Management

Transportation demand management refers to the application of strategies and policies to reduce single occupant automobile travel demand and minimize vehicle trips. TDM strategies may be implemented as requirements for developers and employers, as incentives for employees, as encouragement programs, and could include information about carpooling, carsharing, and vanpooling, bicycle facilities, and transit passes for employees that do not drive a car to work.

The City actively works with employers to implement the TDM requirements codified in Santa Monica Municipal Code (SMMC) Chapter 9.53. The ordinance applies to employers with 10 employees or more and developers of projects with 7,500 square feet (sf) of floor area, or mixed-use projects with 16 units or more. Under the City's TDM Ordinance, employers and developers shall strive to achieve an AVR of 1.5 prior to January 1, 2016. After January 1, 2016, employers and developers shall strive to achieve the AVR for their respective land use designation. Within the Downtown, the target AVR is 2.2. Due to the coronavirus (COVID-19) pandemic, the City established that the Transportation Demand Ordinance shall be suspended for employers with 49 or fewer employees, beginning October 8, 2020 until October 8, 2024. Detailed requirements of the City's Transportation Demand Ordinance are discussed below in 3.12.2, *Regulatory Framework*.

TDM requirements are also currently implemented through the City's development agreement process. The LUCE requires that applicants of Tier 2 and Tier 3 projects (i.e., projects that request taller building heights) provide community benefits, which include TDM requirements such as bicycle facilities, bicycle and car-sharing lanes, transit passes, parking "cash-out," shared parking, and pricing parking separately from housing units. The measures are in addition to other requirements applicable to the project such as traffic mitigation fees, trip reduction measures imposed by the City's TDM ordinance, and any transportation-related measures imposed to mitigate potentially significant environmental impacts identified through the CEQA review process.

3.12.2 Regulatory Setting

3.12.2.1 Federal Policies and Regulations

Americans with Disabilities Act of 1990

Titles I, II, III, and V of the ADA have been codified in Title 42 of the U.S. Code (USC), beginning at Section 12101. Title III prohibits discrimination on the basis of disability in places of public accommodation (i.e., businesses and non-profit agencies that serve the public) and commercial facilities (i.e., other businesses). This regulation includes Appendix A to Part 36, Standards for Accessible Design, which establishes minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility.

Examples of key guidelines include detectable warning 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.

3.12.2.2 State Policies and Regulations

State-wide Transportation Improvement Program

The California Transportation Commission (CTC) administers transportation programming. 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 State Transportation Improvement Program (STIP) is a multi-year Capital Improvement Program (CIP) of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources. Every State is required to develop a STIP covering a period of at least four years. Caltrans manages the operation of State Highways, including the freeways passing through the Los Angeles Region.

Parking Cash Out

Assembly Bill (AB) 2109 requires employers of 50 or more employees who lease their parking and subsidize any part of their employee parking to offer their employees the opportunity to give up their parking space and rideshare to work instead. In return for giving up their parking space, the employer pays the employee the cost of the parking space. The City of Santa Monica is the first city in the nation to implement a mandatory Parking Cash-Out Program.

Assembly Bill 32

Transportation is the largest single sector of the economy that generates GHGs, and changes in transportation are a focus of several State-wide regulations to reduce VMT and increase access to non-vehicular modes of travel. Assembly Bill (AB) 32 commits the State of California to reduce State-wide GHG emissions to 1990 levels by 2020. AB 32 acknowledges that such emissions cause significant adverse impacts to human health and the environment, and therefore must be identified and mitigated

where appropriate. Achieving these goals requires a reduction of approximately 30 percent from projected State emission levels and 15 percent from 2006 State levels, with even more substantial reductions required in the future. Pursuant to AB 32, the California Air Resources Board (CARB) must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. Refer to Section 3.7, *Greenhouse Gas Emissions and Climate Change* for further discussion.

Senate Bill 375

The adoption of SB 375 on September 30, 2008 recognizes the connection between poor city planning and reliance on automobiles as the primary mode of transportation, with the result being emissions from vehicles accounting for 30 percent of GHG emissions in California. SB 375 aligns the goals of regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations, and requires Metropolitan Planning Organizations (MPOs) such as SCAG to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) within their regional transportation plan to demonstrate the achievement of GHG reduction targets. As discussed below, in compliance with SB 375, SCAG has adopted on September 3, 2020, the 2020-2045 Regional Transportation Plan/Sustainable Communities Plan (RTP/SCS) (Connect SoCal), which aims to build upon and expand land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Refer to Section 3.7, *Greenhouse Gas Emissions and Climate Change* for further discussion.

Executive Order B-30-15 and Senate Bill 32

Executive Order B-30-15 established a new State-wide policy goal to reduce GHG emissions 40 percent below their 1990 levels by 2030. This Executive Order acts as an intermediate goal to achieving 80 percent reductions by 2050 as outlined in Executive Order S-3-05. Additionally, this Executive Order aligns California's GHG reduction targets with those of leading international governments, including the 28 nations comprising the European Union. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal established by Executive Order S-3-05 of reducing emissions 80 percent under 1990 levels by 2050. Refer to Section 3.7, *Greenhouse Gas Emissions and Climate Change* for further discussion.

2017 Climate Change Scoping Plan

As described further in Section 3.3, *Air Quality*, CARB is responsible for the coordination and administration of both Federal and State air pollution control programs within California. CARB's 2017 Climate Change Scoping Plan reflects the new State-wide GHG emissions reduction goals called for in SB 32 of 40 percent below 1990 emissions levels by 2030.

In the transportation sector, GHG emissions reducing measures include low carbon fuels, cleaner vehicles, and strategies to promote sustainable communities and improved transportation choices that result in curbing the growth in VMT. As it relates to transportation, the Climate Change Scoping Plan includes measures to reduce VMT and vehicle GHG emissions, including, but not limited to:

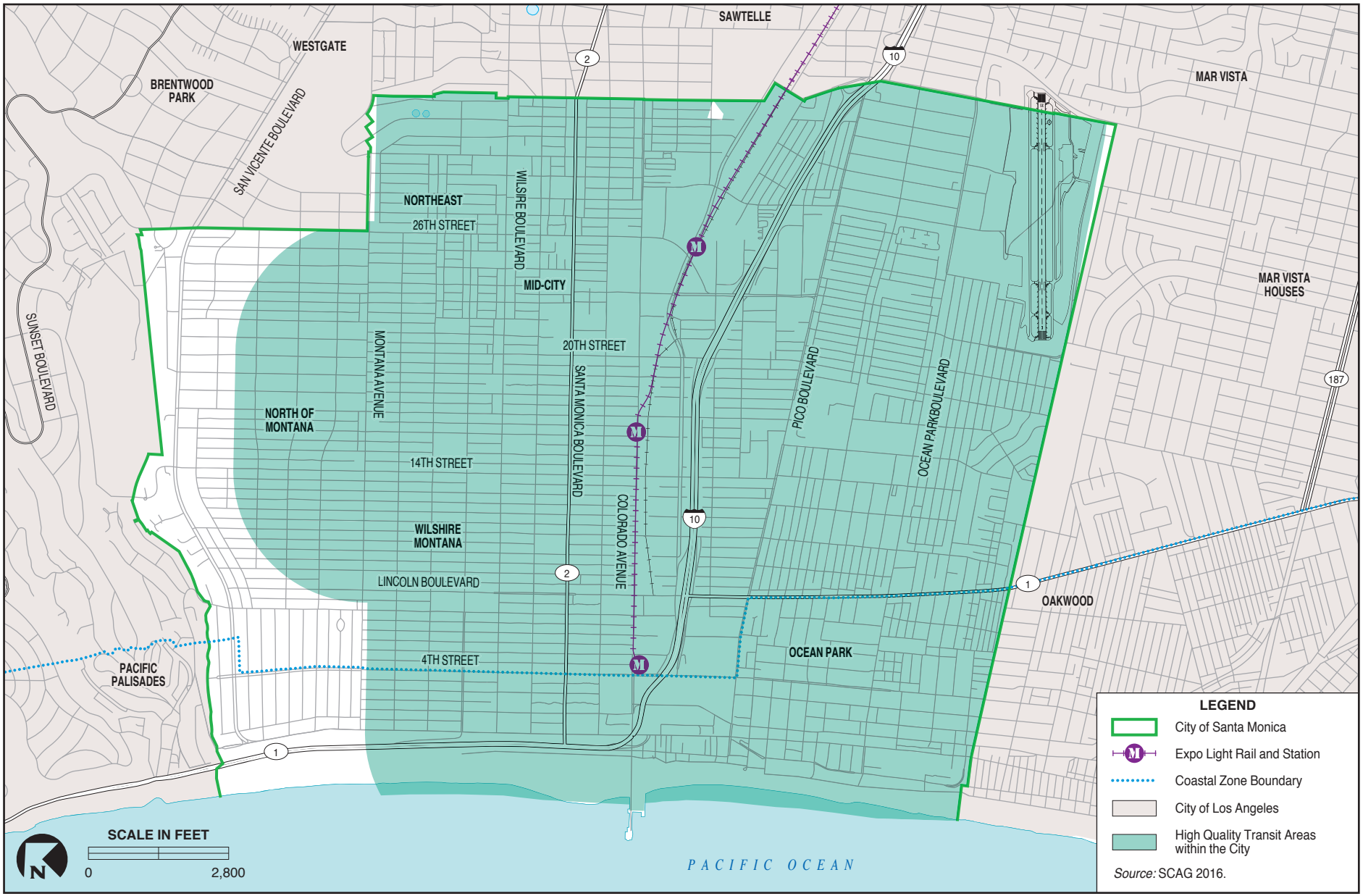
- Pursue 15 percent reduction in VMT for light duty vehicles from Business as Usual by 2050.
- Promote all feasible policies to reduce VMT, including land use and community design that reduce VMT such as transit-oriented development.
- Implement complete street design policies that prioritize transit, biking, and walking.
- Increase low carbon mobility choices, including improved access to viable and affordable public transportation and active transportation opportunities.
- Develop pricing mechanisms such as road user/VMT-based pricing, congestion pricing, and parking pricing strategies.
- Reduce GHG emissions through commute trip reduction strategies, and programs to maximize the use of alternatives to single-occupant vehicles, including bicycling, walking, transit use, and shared mobility options.
- Accelerate equitable and affordable transit-oriented and infill development through new and enhanced financing and policy incentives and mechanisms.
- Increase the number, safety, connectivity, and attractiveness of bicycling and walking facilities to increase use.

3.12.2.3 Regional Policies and Regulations

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

As described in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, SCAG's Regional Council unanimously approved and fully adopted the 2020-2045 RTP/SCS (Connect SoCal) (SCAG 2020). The 2020-2045 RTP/SCS includes more than 3 years of consultation with stakeholders and the public to capture the goals and objectives of the people within the region and capture the most current available data for determining future demographic projections. The intent of the plan is to build upon and expand land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The Connect SoCal plan achieves per capita GHG emissions reductions relative to 2005 of 19 percent in 2035 (SCAG 2020).

In October 2020, CARB determined that Connect SoCal is consistent with CARB's GHG reduction targets. Successfully meeting these targets will require substantial effort to reduce VMT. The strategies in Connect SoCal focus on reducing the number of drive-alone trips and overall VMT through ridesharing, which includes carpooling, vanpooling, and supportive policies for ridesharing services such as Uber and Lyft; redistributing or eliminating vehicle trips from peak demand periods through incentives for telecommuting and alternative work schedules; and reducing the number of drive-alone trips through increased use of transit, rail, bicycling, walking and other alternative modes of travel.



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City of Santa Monica
High Quality Transit Areas

FIGURE 3.12-6

Of the 10 goals presented in Connect SoCal, the following six are applicable to transportation:

- Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.
- Goal 4: Increase person and goods movement and travel choices within the transportation system.
- Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
- Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.

High Quality Transit Areas (HQTAs) *include areas within 0.5 miles from major transit stops and high quality transit corridors.*

High Quality Transit Corridors *are corridors with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.*

Connect SoCal strives to provide a regional investment framework to address the region's transportation and related challenges, while preserving and enhancing the existing transportation system and integrating land use into transportation planning. Funding includes revenues from both core and reasonably available revenue sources which total a combined $638.9 billion from Fiscal Year (FY) 2020-21 to FY 2044-45. Core revenue sources include 60 percent local sources, 32 percent state sources, and 8 percent federal sources. Connect SoCal employs a regional approach to accommodate future growth within existing high quality transit areas (HQTAs) to reduce VMT, congestion, and related GHG emissions. This approach to sustainably manage growth and transportation demand reduces the distance and barriers between new housing, jobs, and services – helping to reduce the demand for single occupancy vehicle travel and to reduce GHG emissions through integrated transportation, land use, housing, and environmental planning.

Connect SoCal outlines SCAG's plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth to attain and exceed the GHG emission-reduction targets set forth by CARB. To achieve these goals, five key connections to address emerging challenges and close the gap in meeting GHG reduction goals. The five key connections are: (1) smart cities and job centers; (2) housing supportive infrastructure; (3) go zones; (4) accelerated electrification; and (5) shared mobility and mobility as a service. Connect SoCal promotes reduction of the number of single operated vehicle trips and per capita VMT through ridesharing and providing first/last mile services to and from transit, increasing multi-modal access, creation of Corridor System Management Plans, and system management initiatives (e.g., variable speed limits, ramp metering, etc.). Connect SoCal designates the majority of the City as a HQTA due to the number of transit routes that serve the City and the opportunity to locate new land uses near the Metro E (Expo) LRT line.

2020 Long Range Transportation Plan

The Long Range Transportation Plan (LRTP) for Los Angeles County, was prepared by the Los Angeles County Metropolitan Transportation Authority and updated in 2020. The 2020 LRTP outlines Metros prioritized actions for Los Angeles County to improve mobility including better transit, less congestion, complete streets design, and increased access to transportation opportunities. The LRTP is guided by the Metro's Vision 2028 Strategic Plan. Metro also invests heavily in the regional rail system, as the Metro E (Expo) LRT is a funded component of Metro's LRTP. Additionally, efforts would be undertaken to increase the efficiency of major City streets through technical enhancements, providing bus priorities, and improving interchanges between freeways, and arterial streets.

3.12.2.4 Local Policies and Regulations

Santa Monica Municipal Code Article 9, Chapter 9.53 Transportation Demand Management

The purpose of the City's TDM Ordinance is to proactively manage traffic congestion, reduce dependence on the single occupant automobile, and enhance transportation choices by requiring trip reduction plans. The ordinance applies to employers with 10 employees or more and developers of projects with 7,500 sf of floor area, or mixed-use projects with 16 units or more. Under the City's Transportation Demand Ordinance, employers and developers shall strive to achieve an AVR of 1.5 prior to January 1, 2016. After January 1, 2016, employers and developers shall strive to achieve the AVR for their respective land use designation and district. Within the Downtown, the target AVR is 2.2 after January 1, 2016. Due to the coronavirus (COVID-19) pandemic, the Transportation Demand Ordinance has been suspended for employers with 49 or fewer employees, beginning October 8, 2020 until October 8, 2024.

Under the City's Transportation Demand Ordinance, employers with 10 to 49 employees are required to provide each of their employees with information about carpooling/vanpooling, transit, air pollution, bicycle routes and facilities, walking and pedestrian safety, and alternatives to driving alone to work every day.[7] Employers of 50 or more employees are required to prepare and submit an Emission Reduction Plan, which shall include the option of: (1) purchase of mobile source emission reduction credits; or (2) preparation and implementation of Employee Trip Reduction Plan to achieve the applicable AVR target. Additionally, developers of projects are required to prepare and implement a TDM plan that would include physical and programmatic elements to reduce single occupancy vehicle trips and achieve the targeted AVR. Annual monitoring is a requirement of the developer TDM plan.

Additionally, employers with 50 or more employees who lease their parking and subsidize all or part of that parking are required implement a parking cash-out program by Health and Safety Section 43845. Employers who fall under the purview of parking cash out must offer their employees the option to give up

[7] To note, due to the COVID-19 pandemic, the TDM Ordinance will be suspended and not apply for employers with 49 or fewer employees beginning October 8, 2020 until October 8, 2024.

their parking spaces and receive a cash subsidy in an amount equal to the cost of the parking space. Employers who are subject to parking cash out requirements must implement a parking cash out plan. Employers who do not implement a parking cash out plan will have their Emission Reduction Plans disapproved.

Santa Monica Municipal Code Chapter 9.66 Transportation Impact Fee Program

SMMC Article 9, Chapter 9.66 is intended to ensure that new development projected through the year 2030 to pay its fair share of the costs of providing transportation infrastructure necessary to implement the policies and achieve the No Net New P.M. Peak Hour Trips goal of the LUCE. The new development will fund transportation improvements such as new sidewalks, crosswalks, traffic signal upgrades, transit, and bicycle facilities that are necessitated by the new trips associated with land use change. The fees are based on residential units or commercial square footage. The fee is charged prior to issuance of building permits unless State law requires the City to accept later fee payments.

Santa Monica Municipal Code Chapter 8.98 Construction Management Plan

Prior to issuance of a building permit, a Construction Management Plan shall be submitted by the applicant to the Planning Director or designee and the Planning Director or designee shall approve that Construction Management Plan for any project that meets the following criteria set forth in Section 8.98.030:

- The project includes:
    - Construction of 7,500 sf or more of new or additional non-residential floor area;
    - Construction of 16 or more new or additional residential units; or
    - Construction of 1,000 sf or more of new or additional nonresidential floor area within the Downtown Community Plan area.
- The project entails excavation or hauling by vehicles of dirt or construction materials to or from the project site that involves closure of or access to the public right-of-way, including any public street, roadway, parkway, alley, sidewalk, or pedestrian path.

Santa Monica General Plan Land Use and Circulation Element

The LUCE provides a set of goals, policies, and standards to guide land use and transportation decisions in the City through 2030. One of the core principles of the LUCE is to proactively manage the transportation system in sustainable ways to serve community goals and effectively limit increases in single occupancy automobile traffic. The LUCE links land use to transportation enabling the City Council to reduce vehicular GHG emissions, address circulation and mobility with a goal of No Net New P.M. Peak Hour Trips, measure and monitor the transportation system on an ongoing basis, and fund and implement the necessary improvements to the system. Objectives and policies in the LUCE related to transportation are listed below.

Goal LU2: Integrate Land Use and Transportation for Greenhouse Gas Emissions Reduction

Policy LU2.2 *Transit Villages.* Capitalize on the Expo LRT stations to create vital new complete sustainable neighborhoods with transit as a focal element, green

connections and pathways, a variety of housing types and jobs, enhanced creative arts and institutions, and local-serving retail and services.

Policy LU2.5 *Vehicle Trip Reduction.* Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalk, bicycle, and roadway improvements, expand transit service, manage parking, and strengthen TDM programs that support accessibility by transit, bicycle, and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjust bus and shuttle services to ensure success of the transit system.

Policy LU2.6 *Active Spaces.* Focus new development in defined districts to create active spaces that can support diverse local-serving retail and services, walkability, arts and culture. Require, whenever possible, new development to provide convenient and direct pedestrian and bicycle connections.

Policy LU3.1 *Reduce Regional-Serving Commercial Uses.* Reduce regional office and commercial uses and encourage smaller floor plate office uses, housing and local-serving retail and services.

Policy LU3.2 *Focus on Housing in Transit-Accessible Corridors and Districts.* Focus additional housing opportunities on the transit rich commercial boulevards.

Policy LU3.3 *Focus on Local-Serving Uses.* Emphasize uses which address local-serving needs and daily resources necessary to reduce vehicle trips and vehicle miles traveled.

Goal LU4: Complete Sustainable Neighborhoods.

Policy LU4.2 *Uses to Meet Daily Needs.* Encourage uses that meet daily needs such as grocery stores, local-serving restaurants and other businesses and activities within walking distance of residences to reduce the frequency and length of vehicle trips.

Policy LU4.3 *Mixed-Use Associated with Transit.* Encourage mixed-use development close to transit to provide housing opportunities for the community, support local businesses, and reduce reliance on automobiles.

Policy LU4.4 *Pedestrian-Oriented Design.* Engage pedestrians with ground floor uses, building design, site planning, massing, and signage that promote vibrant street life and emphasize transit and bicycle access.

Policy LU4.7 Emphasize pedestrian and bicycle access throughout the City, with a special focus on neighborhood gathering areas. Provide direct and convenient bicycle and pedestrian connections between destinations. Prioritize land use patterns that generate high transit ridership at major transit stops.

Policy LU4.8 Utilize parking and TDM Districts to facilitate efficient use of parking resources, shared and reduced parking opportunities, and trip reduction goals.

Goal LU5: Expo Light Rail Line

Policy 5.2 *Integrate Transit Connections.* Integrate supporting transit linkages, as well as pedestrian and bicycle connections, at all stations. Parking developed at or near a station is shared with other uses and priced to ensure availability at all times

Goal LU8: Reduction of Vehicle Trips/Management of Congestion

Policy LU8.1	*Transportation Demand Management.* Require participation in TDM programs for projects above the base to encourage walking, biking, and transit, and to reduce vehicle trips. Engage existing development in TDM Districts and programs to encourage reduction of existing vehicle trips.
Policy LU8.2	*Comprehensive Parking Management.* Comprehensively manage parking and parking policies to address housing affordability, congestion management, and air quality goals. Facilitate the creation of shared parking, particularly within activity centers, transit districts, and near Expo light-rail stations. Use pricing and other innovative strategies to manage parking availability.
Policy LU8.3	*Pedestrian, Bicycle and Transit Connections.* Ensure pedestrian, bicycle, and transit mobility by creating facilities for comfortable walking throughout the City, a complete and safe bicycle network, and convenient and frequent transit service that will make transit an attractive option for all types of trips. age parking availability.

Goal LU15: Enhance Santa Monica's Urban Form

Policy LU15.5	*Pedestrian and Bicycle Connectivity.* Encourage the design of sites and buildings to facilitate easy pedestrian- and bicycle-oriented connections and to minimize the separation created by parking lots and driveways.

Goal B10: Create an Enhanced Mixed-use, Pedestrian Boulevard that Provides Residents, Employees, and Visitors with an Inviting Landscaped Pedestrian Environment

Policy B10.1	Ensure that buildings fronting Colorado Avenue have their primary facades facing the street and are located on the property line or back side of the sidewalk. However, to encourage a lively streetscape with places for people to socialize, small landscaped gathering spaces and plazas are encouraged.
Policy B10.2.	Scale buildings to the pedestrian to create an intimate sidewalk walking/shopping experience. Ground floor facades should include enhanced materials and detailing where they will be perceived by passing pedestrians.
Policy B10.11	Encourage sidewalk dining where it meets established criteria.
Policy B10.13	Enhance the streetscape to create an inviting pedestrian environment.
Policy B10.14	Improve pedestrian crosswalks along the length of Colorado Avenue.
Policy S2.1	Implement the VMT reduction policies of the Land Use and Circulation Element of the General Plan including, but not limited to: focusing new growth in mixed-use, transit-oriented districts; focusing new growth along existing corridors and nodes; supporting the creation of complete, walkable neighborhoods with goods and services within walking distance of most homes; and, promoting and supporting a wide range of pedestrian, bicycle and transit improvements in the city.

Goal D.12: Ensure circulation for the Downtown, Civic Center, and Beach and Oceanfront Districts is interconnected.

Goal D.2: Maximize place-making opportunities associated with the Expo LRT Downtown Station to create a vibrant Downtown gateway.

Goal D.4: Prioritize transit connections associated with the Expo LRT Downtown Station.

Goal D.5: Create convenient and comfortable bicycle linkages to the Expo LRT Downtown Station.

Goal D.11: Address parking needs comprehensively, identifying shared parking opportunities.

Policy S2.1	Implement the VMT reduction policies of the LUCE of the General Plan including, but not limited to: focusing new growth in mixed-use, transit-oriented districts; focusing new growth along existing corridors and nodes; supporting the creation of complete, walkable neighborhoods with goods and services within walking distance of most homes; and, promoting and supporting a wide range of pedestrian, bicycle and transit improvements in the City.
Policy S2.3	Advance the No Net New P.M. Peak Hour Trips goal in the LUCE with TDM projects such as expanded rideshare programs, parking management strategies, as well as development impact fees for public transit infrastructure.

Goal T3: Ensure that Santa Monica's Streets are Pleasant for all Users.

Policy T3.1	Include elements that contribute to quality from the user's perspective, not just throughput for each mode.

Goal T5: Establish Performance Measures and Design Guidelines for the City's Transportation System that Reflect the LUCE Priorities.

Policy T5.1	Develop project evaluation methodology and transportation impact significance criteria that assess how well individual projects contribute to the overall LUCE goals, as well as how they may negatively impact the transportation network.
Policy T5.2	Include performance criteria for each type of street that consider the street's full range of functions.
Policy T5.3	Include performance criteria that consider the City's transportation system as a whole.
Policy T5.4	Develop design guidelines and management tools for all City streets, so that each street supports the land uses along it and provides an optimal accommodation for all modes of transportation.
Policy T5.5	Prioritize property access from transit, walking and bicycling over auto access.

Goal T6: Enable Everyone to Walk Comfortably Everywhere in Santa Monica.

Policy T6.1	Create appropriate enhancements to pedestrian crossings at key locations across all major boulevards.
Policy T6.4	Use a combination of physical improvements and programs to promote walking.

Goal T8: Provide a beautiful and attractive pedestrian environment throughout the City of Santa Monica.

Policy T8.4	Design buildings to prioritize pedestrian access from the street, rather than from a parking lot.

Goal T9: Create a Complete Network of High-quality Bicycle Facilities.

Policy T9.9	Require large property development (defined as greater than one typical city block) to provide through access for bicyclists and pedestrians.

Goal T15: Manage local and regional congestion affecting Santa Monica.

Policy T15.1	Reduce automobile trips starting or ending in Santa Monica, especially during congested periods, with the goal of keeping peak period trips at or below 2009 levels.

Goal T18: Encourage a more sustainable transportation system. An action to further this goal that relates to private development is to prohibit driveways on boulevards and major avenues where access is

available from a side street or alley. Implement standards for the safe and convenient design of projects, including safe interaction between private property and the public right-of-way.

Goal T19: Create an Integrated Transportation and Land Use Program that Seeks to Limit Total Peak Period Vehicle Trips with a Santa Monica Origin or Destination.

Policy T19.2	Impose appropriate TDM requirements for new development.

Goal T21: Use All Available Tools to Make the Most Effective Possible Use of the Transportation System.

Policy T21.3	TDM program requirements shall be triggered for new development consistent with the LUCE performance standards.

Goal T23: Encourage New Projects to Improve Residents' Opportunities to Find Parking.

Policy T23.1	In new multi-family and commercial buildings, encourage building owners to lease parking spaces separately from residential units and commercial space, and allow residents of nearby buildings to lease these spaces at comparable rates as building tenants.
Policy T23.2	In new multi-family and commercial buildings, encourage owners to make parking spaces available to qualified car-share operators, and allow public access to the car-share vehicles.
Policy T23.3	In new multi-family buildings, the City should encourage developers to enroll residents in a qualified car-share program.

Goal T25: Design parking to meet applicable urban design goals and minimize negative impacts on pedestrians, bicyclists and transit users.

Policy T25.1	Require adequate onsite loading areas for child care centers, healthcare offices and other uses with intensive passenger drop-off demands, and work with schools to encourage provision of adequate loading areas.
Policy T25.2	Require that parking be accessed only from alleys, where alley access is available.
Policy T25.3	Minimize the width and number of driveways at individual development projects.

Santa Monica Bike Action Plan

The City's Bike Action Plan (2011) guides the City's efforts to promote an increase in safe bicycling consistent with the LUCE. The Bike Action Plan includes a 5-year implementation plan that will improve 75 percent of the City's bicycle network as well as a 20-year vision plan. The implementation priorities include both bikeway and programmatic investments. Recommended programs include efforts in all program areas: events, awareness, information, education, encouragement, enforcement and supporting facilities such as development of a bicycle wayfinding system and bicycle parking improvements. Recommended bikeway investments include both facility improvements that are relatively easy and low cost, so they can be applied on many streets, as well as protected bikeway facility improvements that require more outreach, design and environmental review, but are critical to the development of a high-quality continuous bikeway "backbone" and showcase leading bicycle treatments.

The Santa Monica City Council adopted the Bike Action Plan Amendment on October 13, 2020. The Amendment improves upon the City's existing infrastructure by upgrading selected corridors from bicycle lanes or bicycle routes to protected bike lanes in the next five years. The Amendment also takes the bicycle corridor projects previously identified in the 20-year vision of the Bike Action Plan prioritizes them

into one of three categories: 5-Year Protected Bikeway Vision, Longer-Term Protected Bikeway Vision, and Future Priority Connections.

Santa Monica Pedestrian Action Plan

In 2016, the City of Santa Monica adopted a Pedestrian Action Plan. The plan provides a comprehensive approach to pedestrian policy in Santa Monica using a multi-disciplined approach to making physical, operational and educational improvements that prioritize pedestrians. The goals, policies and actions in the Pedestrian Action plan address the input gathered from the community, stake holders and key professionals such as public safety personnel, transportation planners and engineers, while aligning a vision with data analysis to develop strategies that prioritize actions for the short- and long-terms. The Plan introduces a Vision Zero program which envisions zero fatalities from pedestrian crashes. Components of the program include prioritizing and organizing community safety goals, and facilitating the systematic implementation of current and future actions that support safer walkability for people of all ages and abilities. The plan also includes a toolbox that provides guidance to best address existing and future street conditions to help all City departments recognize and respond to pedestrian priorities.

City of Santa Monica Climate Action and Adaptation Plan

As described in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, the City adopted the Climate Action and Adaptation Plan (CAAP) to help the City meet its goal of carbon neutrality by 2050 and its interim goal of reducing GHG emissions to 80 percent below 1990 levels by 2030. The 2019 CAAP identifies eight objectives that, if completed by the end of 2030, would achieve the City's interim GHG emissions reduction goal. These objectives are grouped in the following three categories: Zero Net Carbon Buildings, Zero Waste, and Sustainable Mobility. Objectives relevant to transportation within the City include:

- Objective 6: Convert 50 percent of local trips to foot, bike, scooter & skateboard.
- Objective 7: Convert 25 percent of commuter trips to transit.
- Objective 8: Convert 50 percent of vehicles to electric or zero emission.

The intent of the CAAP is to provide overarching policy direction with respect to climate change through City-wide objectives and broad strategies to reduce VMT and associated GHG emissions. The CAAP is not a regulatory plan to be applied on a project-by-project basis. Rather, the City recognizes that GHG reduction goals cannot be achieved by individual projects alone, but instead requires a comprehensive City-wide approach that would include the enactment of future plans, changes to existing ordinances, and an integrated and sustainable approach to land use/transportation planning.

The following City programs and policies support or were developed to support the achievement of targeted reductions in GHG emissions listed in the CAAP.

Policy SM6	Complete Streets Network. Increase the extent and quality of the complete street network and greenways to ensure residents and visitors alike have safe, convenient, and affordable transportation options. Create designated bike lanes that are protected to provide greater safety and assurance for all riders. Emphasize the movement of people with greater space dedicated to

	space efficient and low emission modes of transportation. Lower speed limits to improve safety. Expand publicly owned spaces and work with property owners to facilitate public access.
Policy SM8	Prioritize Transit-Oriented Affordable Housing. Increase the housing-to-jobs ratio by prioritizing the expansion and investment in affordable housing located near dense transit hubs with limited parking, through local zoning and incentives.
Policy SM12	Increase Charging Infrastructure for Electric Vehicles and Electric Mobility Devices. Expand network of off- and on-street public charging stations to 1,000 ports by 2025. Provide charging stations that will accommodate a wide range of vehicle types including bicycles, scooters and other mobility devices. Provide outreach and additional incentives for renters, lower-income individuals and non-profit property owners. Implement emerging best practices in EV technology, including mobile charging, wireless charging, energy storage, and web/smartphone applications.

3.12.3 Impact Assessment and Methodology

3.12.3.1 Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a Lead Agency may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For the purposes of this EIR, the proposed Housing Element Update may have a significant adverse impact related to transportation if:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
d) Result in inadequate emergency access?

City of Santa Monica VMT Screening Criteria and Thresholds

CEQA Guidelines Section 15064.3(a) establishes increases in VMT as the most appropriate measure of vehicular transportation impacts, and states that other considerations may include effects on transit and non-motorized travel (e.g., bicycle and pedestrian travel). VMT as a metric for impacts is consistent with a broad range of state legislation, regional, and local programs, and plans and policies, and the CEQA Guidelines also require consideration of whether a project may conflict either directly or indirectly with plans, policies, programs, or ordinances addressing circulation, particularly related to increases in VMT and associated reductions in GHG generation. The State has set ambitious targets for reductions in GHG generation, which in turn relates to transportation and required reductions in VMT, because transportation is the largest generator (41 percent) of GHGs by sector in the State. Thus, legislation, programs, plans

and policies which target GHG emissions and climate change relate directly to transportation and the need to reduce VMT.

Tier 1: Does the project include the development of the following land uses, which are screened out from further analysis?

- *200 residential dwelling units or less;*
- *50,000 sf or less of commercial floor area by land use type;*
- *Expansions of civic/government use (e.g., fire and police stations) and utility facilities less than 50,000 sf or replacement of such uses/facilities (in the same or another location) to serve the community, or if larger than 50,000 sf, the project would not result in more than 50 net new additional full time equivalent employees; and/or*
- *Local serving parks and recreational facilities, as determined by City staff.*
- *Biannual intersection counts show that people walking outnumber vehicles at some of the City's busiest intersections, particularly in Downtown and near the beach.*

Tier 2: Is the project located within 0.5-mile walking distance of a Metro E (Expo) LRT station or 0.25-mile walking distance of a Rapid BRT stop?

If no, conduct VMT analysis. If yes, move to Tier 3.

Tier 3: Would the project provide more parking than required by the SMMC (or if located in the Downtown, exceed parking maximums)?

If no, no further analysis is required. If yes, conduct VMT analysis.

Additionally, a land use project would be screened for VMT analysis and considered to result in a less than significant VMT impact if it would:

- Decrease total VMT in the project area as compared to existing conditions; or
- Redevelop existing VMT-generating land uses with new uses that result in a net decrease in VMT.

The City's screening criteria are used to "screen" out projects (including land use projects such as the proposed Housing Element Update) from VMT analysis. Projects meeting the VMT screening criteria are deemed to have a less than significant impact and no further VMT analysis is necessary. The tiered screening criteria for land use projects are illustrated below.

Land use projects that are screened out based on the criteria above are presumed to have a less than significant impact on transportation and as such, no VMT analysis is required. The proposed Housing Element Update would plan for up to 8,895 to approximately 11,000 new dwelling units in the City through the planning horizon of 2030 and therefore, does not meet the screening criteria described above and is not exempt from VMT analysis under the City's screening criteria. New housing projects that would occur under the proposed Housing Element Update would be implemented on sites throughout the City that fall within and outside of pre-screened areas. Individual development projects that occur under the proposed Housing Element Update may or may not meet the screening criteria; these aspects of future individual projects are unknown at this time. Therefore, the proposed Housing Element Update is not eligible for pre-screening and requires VMT analysis.

The City has adopted two sets of significance thresholds for VMT analysis, which both must be applied to land use projects. Although the proposed Housing Element Update is a land use plan, the City has applied the same thresholds used for land use projects.

Projects exceeding either or both of these thresholds are considered to result in a significant transportation impact on the environment. These City-specific thresholds reflect a local consideration to the City's existing transportation conditions as well as State and local land use and sustainability goals. This strategic approach also ensures that new development will not hinder the City's progress towards reducing GHG emissions, improving mobility options, and implementing the LUCE.

Threshold 1: VMT per capita

The VMT per capita for a project (including a land use project such as the proposed Housing Element Update) must not exceed the existing City-wide average VMT per capita for that particular land use. Metrics include City-wide average daily home-based VMT per capita for residential land uses and City-wide average daily home-based work VMT per employee for commercial land uses.

Table 3.12-4 City of Santa Monica VMT Significance Thresholds

Land Use Type	VMT Threshold
Residential	No greater than existing City-wide average daily home-based VMT per capita
Commercial	No greater than existing City-wide average daily home-based work VMT per employee
Retail	Any increase in total City VMT

Source: Fehr & Peers 2021; see Appendix G.

Threshold 2: Total VMT

A project's combined total VMT for residents and commercial employees must be at least 16.8 percent below existing City-wide business as usual (BAU) VMT per capita, consistent with the California Governor's Office of Planning and Research's (OPR's) Technical Advisory on Evaluating Transportation Impacts in CEQA.[8] BAU VMT is defined as what the calculated total VMT for a project would be if the project was generating VMT per capita at the existing City-wide average.

3.12.3.2 Impact Assessment Methodology

This analysis is conducted based on the assumptions for the proposed Housing Element Update, as described in Section 2.0, *Project Description*. This analysis considers the construction and operational components of the proposed Housing Element Update. Impact analysis is directly informed by the

[8] As described in the California Governor's Office of Planning and Research's (OPR's) Technical Advisory, California Air Resources Board (CARB) has modeled foreseeable emission reductions associated with existing mobile-source regulations and different combinations of advancements in technologies, fuels, and transportation system efficiencies. The results of CARB's modeling show that a 16.8 percent reduction from existing levels in vehicle miles traveled (VMT) per capita for light-duty vehicles is needed in order to achieve the State required target of 80 percent reduction in greenhouse gas (GHG) emissions by 2050. CARB's recommendations are slightly higher than OPR's original recommendations (i.e., 15 percent below baseline conditions) because the research is based on meeting slightly different goals.

Transportation Impact Study prepared for the proposed Housing Element Update by Fehr & Peers (see Appendix G).

The scope of work for the Transportation Study was determined in consultation with the City to inform the transportation impact analysis, consistent with CEQA. It was prepared in accordance with CEQA Section 15064.3 and CEQA Appendix G, as well as the City's VMT Thresholds, which were adopted in June 2020.

Plans, Ordinances, and Policy Consistency

The plan, ordinance, and policy consistency analysis assesses whether the proposed Housing Element Update would conflict with an adopted plan, ordinance, and policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities as required under CEQA) that is adopted to protect the environment. In general, transportation policies or standards adopted to protect the environment are those that support multi-modal transportation options and a reduction in VMT. A project (including a land use project such as the proposed Housing Element Update) that does not implement a program, plan, policy, or ordinance would not necessarily result in a conflict or an impact. Many of these programs must be implemented by the City over time and over a broad area, and it is the intention of this threshold test to ensure that proposed development projects and plans do not preclude the City from implementing adopted programs, plans, and policies.

This analysis of land use consistency considers whether the proposed Housing Element Update would be consistent with applicable plans, policies, and regulations. Sources utilized in the development of this section include SCAG's Connect SoCal plan, Metro's 2020 LRTP, the City's LUCE, DCP, Bergamot Area Plan, Bike Action Plan, Climate Action and Adaptation Plan, and SMMC. Plan and policy consistency are based on whether the proposed Housing Element Update would result in environmental impacts to transportation as outlined in the applicable plan.

Vehicle Miles Traveled

CEQA Guidelines Section 15064.3(a) requires the following criteria for analyzing transportation impacts: "*[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project."*

The potential VMT impacts under the proposed Housing Element Update are assessed in the context of the City's VMT methodology and thresholds, which were adopted on June 9, 2020. The adopted City methodology accounts for the goals or State, regional, and local plans regarding reduction targets for VMT and GHG emissions, including the 2017 Climate Change Scoping Plan target VMT reduction of 15 percent and the City's CAAP.

The City's adopted VMT methodology consists of a two-step process:

- **VMT Screening and Qualitative Review.** The first step is to determine when a VMT analysis is required. The City's screening criteria establishes that projects may be screened from a VMT analysis based on their size, location, and/or accessibility to transit. If a project does not meet the screening criteria requiring a VMT analysis, it can be presumed to have a less than significant impact under this impact criterion.
- **VMT Analysis Methodology.** If a project is not screened from requiring a VMT analysis, the City's VMT calculator (for an individual project) or the local TDFM (for a City-wide plan) is used to estimate a project's VMT. Consistent with the City's adopted methodology, VMT is reported out as "home-based VMT" per capita for projects that include residential uses and "home-based work VMT" per employee for projects that include commercial uses.

As previously described, the proposed Housing Element Update does not meet the City's screening criteria for exemption from VMT analysis. The VMT analysis within the Transportation Study for the proposed Housing Element Update assesses total VMT, home-based VMT per capita, and home-based work VMT per employee, which are estimated using the City's TDFM. The TDFM was developed as part of the LUCE, and was originally developed to a base year of 2008, based on 2008 land use data and 2008 traffic counts. Since that time, the City's TDFM has been updated and recalibrated to reflect 2019 land uses, traffic volumes on local roadways, trip lengths, and the overall distribution and origin-destination patterns for the various trip purposes. In order to more accurately evaluate VMT generated within the City, Fehr & Peers also obtained average trip length and trip distribution data for various trips originating or arriving in the City using StreetLight location-based service data from 2019, prior to the onset of the coronavirus (COVID-19) pandemic. Using the StreetLight portal, Fehr & Peers mapped the relative weight of the origin/destination grid cells to and from the City (see Appendix G). The City's extensive land use data was supplemented by SCAG traffic analysis zone (TAZ) based data for areas in the City of Los Angeles surrounding the City of Santa Monica. The City's TDFM forecasts future conditions across the City's transportation network in the form of weekday daily and peak hours traffic volumes. The model also produces estimates of trip generation, trip lengths, and VMT by trip type. The model contains all major roadways in the City and considers the trip reduction effects of walking, bicycling, and transit, including the Metro E (Expo) LRT line. The City's TDFM contains several enhancements that allow it to capture the effects of LUCE policy initiatives on traffic congestion. These enhancements include the effects of sustainable development patterns (e.g., mixed-use and transit-oriented development), urban streetscape design factors, alternative transportation networks, parking pricing and management, and TDM programs. The model also includes identified development projects and transportation network changes. For this study, the City's TDFM was used to estimate VMT on a City-wide basis and the results were then used to assess the VMT impacts of the proposed Housing Element Update.

The TDFM models the following trip types:

- Residential trips generated at residential units (home-based trips);
- Employee trips generated at work (home-based work trips); and
- Non-residential trips generated at other places beside home and work (non-home based trips).

Fehr & Peers used the City's TDFM to model three scenarios:

- **2020 Adjusted Baseline Scenario** – Based on information from the California Department of Finance, the land use and socioeconomic data in the 2019 base year model was updated to represent 2020 pre-pandemic conditions for the City. The transportation network under the 2020 Adjusted Baseline scenario is consistent with 2019 base year.
- **Future (2030) No Project Scenario** – This scenario would involve development of fewer dwelling units and a greater amount of commercial space through 2030 as compared to the Future (2030) With Project Scenario.
- **Future (2030) With Project Scenario** – This scenario estimates transportation conditions as a result of the proposed Housing Element Update, which would involve development of a greater number of dwelling units to meet the City's Regional Housing Needs Allocation (RHNA).

Table 3.12-5 Future (2030) Land Use and Population Assumptions

Category	Adjusted Baseline (2020)	Future (2030) No Project	Future (2030) With Project	Percent Change from Future (2030) No Project
Population	92,357	101,583	116,245	14%
Employment	90,992	95,409	92,760	-3%
Total Dwelling Units	52,589	57,552	64,883	13%
Total Commercial Space[1]	31,457,321	32,880,837	31,874,889	-3%

Notes: [1]Total commercial space includes office, retail, restaurant, hotel, hospital, etc.

Given the substantial increase in housing supply in the City (including approximately 50 percent of which would be very low income or low income affordable housing) under both the Future (2030) No Project and Future (2030) With Project Scenarios, the parameters of the TDFM (e.g., internalization of trips within the City) were updated to reflect the increase in percent of jobs that will be fulfilled by local residents and other TDM measures within the LUCE. The LUCE adopted TDM measures to reduce the number of vehicle trips and encourage active transportation and transit trips, which the City has been implementing continually since 2010. Implementation of these TDM measures will also reduce projected increases in VMT per capita and VMT per employee under both the Future (2030) No Project and Future (2030) With Project Scenarios.

Geometric Design Feature or Incompatible Use Hazards

Impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from an individual project site. Impacts can be related to vehicle-vehicle, vehicle-bicycle, or vehicle-pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. These impacts are evaluated for both temporary conditions during individual project construction and permanent conditions after buildout of individual projects under the proposed Housing Element Update.

Project access plans are reviewed in light of commonly accepted traffic engineering design standards to ascertain whether any deficiencies are apparent in the site access plans which would be considered significant. The determination of significance shall be on a case-by-case basis, considering the following factors:

- The relative amount of pedestrian activity at site access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the individual project site, and the visibility of cars to pedestrians and bicyclists.

Emergency Access

Emergency access throughout the City along public streets is addressed programmatically in Impact T-4 below. Analysis of access to individual project sites and potential limits to access for emergency personnel would be speculative at this time as no data or site plans are available. All new development would be subject to applicable City codes and requirements to ensure adequate emergency access to individual sites.

As described in Section 3.10, *Public Services*, the SMFD does not currently meet its goals for response time Department-wide, which is 7:30 minutes. The City's Community Risk Assessment (2020) identified three factors contributing to fire unit travel time constraints: (1) land use and circulation (i.e., zoning density, street/surface parking design, and traffic congestion); (2) outdoor calls for service, especially those along the oceanfront and pier areas, are problematic to process and difficult to find; and (3) the clustering of fire stations. A full discussion of potential impacts on response times related to increased development density and increased vehicle trips is included in Section 3.10, *Public Services*.

3.12.4 Project Impacts and Mitigation Measures

Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Description (T-1)

T-1 **The proposed 6th Cycle 2021-2029 Housing Element Update would not cause significant environmental impacts due to conflicts with any State legislation, regional transportation plans, or City transportation plans, policies, or regulations. Therefore, impacts associated with the proposed Housing Element Update would be *less than significant*.**

The CEQA Guidelines state that a project (including a land use project such as the proposed Housing Element Update) would have a potentially significant impact if the project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. SCAG, Metro, and the City have adopted programs, plans, ordinances, and policies that establish the planning framework to achieve a safe, accessible, and sustainable transportation system for all users. As described below, the proposed Housing Element Update would generally complement and be consistent with the regional and City transportation vision. A more comprehensive analysis of consistency with applicable long-range planning documents and policies is provided in Section 3.6, *Land Use and Planning.*

SCAG's Connect SoCal

Connect SoCal aims to reduce or limit new trip generation and associated regional growth in traffic congestion and VMT by focusing growth, density, and land use intensity within existing urbanized areas. Connect SoCal also strives to enhance the existing transportation system, maximize multi-modal transportation, and integrate land use into transportation planning. Connect SoCal recommends local jurisdictions accommodate future growth within existing urbanized areas to reduce VMT, congestion, and GHG emissions. The proposed Housing Element Update supports these goals by continuing to plan for new housing in the urbanized, transit rich and jobs rich City of Santa Monica. In addition, the proposed Housing Element Update further promotes the creation of walkable, mixed-use neighborhoods by increasing housing opportunities in areas that have historically not accommodated housing. The proposed Housing Element Update is consistent with and would assist the City in meeting Connect SoCal Goal 9, to encourage development of diverse housing types in areas that are supported by multiple transportation options. Individual housing projects under the proposed Housing Element Update would include a mix of market rate and affordable housing units, which would help the City improve mobility through a better jobs-housing balance. As described in Section 3.6, *Land Use and Planning*, the proposed Housing Element Update would be consistent with all applicable goals of Connect SoCal.

Metro 2020 Long Range Transportation Plan

Metro's 2020 LRTP focuses on improving transportation and the environment with the implementation of trip reduction strategies and TDM measures, such as transit-oriented development, to reduce single-occupant vehicle trips and VMT. The proposed Housing Element Update would plan for the development of new residential projects along major transit corridors, in walking distance to at least one of the City's many public transit options (e.g., Metro E [Expo] LRT, Big Blue Bus, Metro bus). Future residential development projects planned for under the proposed Housing Element Update would have convenient access to the three Metro E (Expo) LRT stations (i.e., Bergamot Station, Santa Monica College Station, and Downtown Santa Monica Station) as well as the 17 Big Blue Bus lines within the City, which have recently improved connections to the Metro E (Expo) LRT line and frequency to best serve the City and reduce VMT. Additionally, the proposed Housing Element Update would reduce VMT on a regional basis by increasing housing opportunities in the jobs-rich City. Currently, only 9.4 percent of employees within the City live within the City. The proposed Housing Element Update would plan for the development of a minimum of 8,895 dwelling units (of which 69 percent must be provided at lower income levels), thus creating opportunities for many of the employees within the City to live closer to their jobs, thereby shortening commutes and reducing VMT. Additionally, in accordance with SMMC Chapter 9.53, all individual development projects under the proposed Housing Element Update would be required to prepare and implement a TDM plan with transit and carpool incentives for residents and employees, which would further reduce vehicle trips and VMT. In particular, the proposed Housing Element Update is consistent with the LRTP Goal 3 to enhance communities and lives through mobility and access to opportunity since individual projects under the proposed Housing Element Update would plan for housing opportunities in areas that have access to schools, transit, jobs, residential amenities, and parks. Therefore, the proposed Housing Element Update would enhance active transportation usage in the City, and would be consistent with the goals of the LRTP.

Santa Monica General Plan Land Use and Circulation Element

Implementation of the proposed Housing Element Update would also help fulfill the goals and policies of SB 375 and LUCE Goal LU2, which calls for integration of land use and transportation to reduce GHGs by focusing new development near transit to create sustainable, active pedestrian-friendly development that decreases reliance on the automobile and increases transit use, bicycling, and walking. The proposed Housing Element Update continues and expands upon the LUCE vision of supporting residential development near existing transportation corridors, transit-rich areas, job centers, and public or community services to ensure options for multi-modal and active transportation. In addition, the proposed Housing Element Update further promotes the creation of walkable, mixed-use neighborhoods by increasing housing opportunities in areas that have historically not accommodated housing. As such, the proposed Housing Element Update would promote sustainable land use patterns and create opportunities for active transportation and minimize vehicle trip generation, VMT, and associated GHG emissions, consistent with the LUCE's goals and policies. Additionally, new housing projects as planned for under the proposed Housing Element Update would be required to implement TDM measures to further minimize VMT, consistent with the LUCE strategy.

One of the stated goals of the LUCE is the City-wide goal of No Net New P.M. Peak Hour vehicle trips generated by land uses in the City by 2030. As stated in the LUCE Program EIR, this goal will be achieved by changing travel behavior associated with both existing and future development in the City. To achieve the goal of No Net New P.M. Peak Hour Trips, the LUCE provides a framework for integrating land use and transportation to reduce vehicle trips and VMT; encouraging multi-modal transportation, and creating an active, pedestrian-oriented City.

The LUCE Program EIR established 60,100 as the total City-wide number of weekday P.M. peak hour trips that should not be exceeded by 2030.[9] Using the most updated and calibrated version of the TDFM, it is estimated that there were 56,400 P.M. peak hour trips under the 2020 Adjusted Baseline conditions. The Future (2030) With Project Scenario for the proposed Housing Element Update is forecasted to generate 52,900 P.M. peak hour trips.[10] Therefore, based on the TDFM's projected 52,900 P.M. peak hour trips in the Future (2030) With Project Scenario, the proposed Housing Element Update would not result in a net increase in P.M. peak hour trips from the 2008 baseline and therefore, would be consistent with this adopted LUCE policy.

While the TDFM indicates achievement of the No Net New P.M. Peak Hour Trip policy in the 2020 Adjusted Baseline and Future (2030) With Project Scenario, many people experience traffic congestion as a worsening phenomenon and spend more time traveling daily. This lived experience is informed by

[9] This specific numeric threshold was obtained from the Transportation Demand Forecast Model (TDFM) prepared at that time and included all trips with one or both trip ends in the City. Modeling of peak hour trips excluded through trips based on the City cannot materially affect behavior of travelers whose trips do not begin or end in the City.

[10] Due to the revisions to the structure of the Transportation Demand Forecast Model (TDFM) as it was updated and recalibrated to 2019 conditions, the current estimate cannot be directly compared to the policy driven threshold of 60,100 P.M. peak hour trips that was produced from an earlier version of the TDFM. Instead, the Transportation Study compared the actual traffic counts in the City over the past 10 years, which found the overall volume of P.M. peak period and P.M. peak hour traffic volumes have slightly declined from 2013 to 2019 despite population and employment growth.

many factors, including regional roadway performance such as congestion on I-10, I-405, and major regional corridors like Wilshire Boulevard and Sunset Boulevard. While traffic congestion may be worsening on regional corridors, it does not necessarily mean that City streets have the same trend. In fact, recent data suggests that the traffic congestion trend in the City is improving unlike State highway and regional and County data. As previously noted, the City can influence travel behavior to and from City destinations through services, programs, and infrastructure within Santa Monica. The City continues to advocate on the regional and County levels to encourage similar regional investments to influence trip and VMT reduction on a regional scale. However, for the purposes of this analysis and for transportation planning, the City focuses on local data and trends to inform local decision-making.

Downtown Community Plan

The DCP is a roadmap guiding the evolution of the Downtown District and lays out a framework that integrates mobility, housing, jobs, historic preservation, publicly-accessible open space, infrastructure, and art and culture into a comprehensive long-term plan. DCP Goal A.M.2 aims to create a Downtown renowned for mobility options and low Single Occupancy Vehicle travel. The proposed Housing Element Update would not restrict the City's ability to implement any planned transportation improvements under the DCP. The proposed Housing Element Update would continue to support the smart land use goals and objectives of the DCP by integrating mobility, housing, jobs, through placing housing along transit corridors and in proximity to job centers to reduce vehicle trips and VMT. Therefore, the proposed Housing Element Update would be consistent with the transportation vision and planned transportation improvements under the DCP.

Bergamot Area Plan

The 2013 Bergamot Area Plan provided a change in planning approach for the Bergamot Planning Area to transform the former industrial area to a mixed-use community allowing for housing and local serving retail and services to be developed in this area. The City is currently planning for several future improvements to the local transportation network under the Bergamot Area Plan as described in Section 3.12.1, *Environmental Setting*. The proposed Housing Element would not restrict the City's ability to implement any planned transportation improvements under the Bergamot Area Plan. The Housing Element Update would further the smart land use goals and objectives of the Bergamot Area Plan by integrating mobility, housing, jobs, through placing housing along transit corridors and in proximity to job centers to reduce vehicle trips and VMT. Therefore, the proposed Housing Element Update would not conflict with planned transportation improvements under the Bergamot Area Plan.

Bike Action Plan

The Bike Action Plan identifies community priorities to guide and coordinate implementation of bicycle programs and the LUCE bicycle network to improve resident, visitor, and employee use of biking as a primary mode of transportation. The City is currently planning for several improvements to the transportation under the Bike Action Plan to implement new protected bike lanes on: (1) Pico Boulevard between 6th Street and Ocean Avenue; (2) Cloverfield Boulevard between Colorado Avenue and Olympic

Boulevard; and (3) Ocean Avenue between California Avenue and Moomat Ahiko Way to improve biker safety and the multi-modal transportation interface within the City. The proposed Housing Element Update would not restrict the City's ability to implement any planned transportation improvements under the Bike Action Plan. The proposed Housing Element Update would promote the goals and objectives of the Bike Action Plan by placing housing along multi-modal corridors with bicycle lanes and facilities. Therefore, the proposed Housing Element Update would not conflict with transportation improvements under the Bike Action Plan.

Climate Action and Adaptation Plan

As described in Section 3.7, *Greenhouse Gas Emissions and Climate Change,* the proposed Housing Element Update would support the CAAP's sustainable mobility goals by increasing housing opportunities in the jobs-rich City. Only 9.4 percent of employees within the City currently live within the City. The proposed Housing Element Update would plan for the development of a minimum of 8,895 dwelling units (of which 69 percent must be provided at lower income levels), thus creating opportunities for many of the employees within the City to live closer to their jobs and thereby reducing VMT on a regional basis and associated GHG emissions.

Santa Monica Municipal Code Chapter 9.53 Transportation Demand Management and Chapter 9.66 Transportation Impact Fee Program

As described in Section 3.12.2, *Regulatory Setting*, SMMC Chapter 9.53 sets requirements for employers and developers to implement TDM measures in order to proactively manage traffic congestion, reduce dependence on single occupant automobile, and enhance transportation choices to reduce VMTs. Individual development projects under the proposed Housing Element Update would be required to prepare, obtain City approval, and implement a TDM plan, which must include physical and programmatic elements to reduce single occupancy vehicle trips and achieve the targeted AVR. In compliance with the SMMC, developers would continue to be required to implement annual monitoring under the TDM plan. Therefore, the proposed Housing Element Update would not conflict with SMMC Chapter 9.53.

SMMC Article 9, Chapter 9.66 is intended to ensure that new development projected through the year 2030 to pay its fair share of the costs of providing transportation infrastructure necessary to implement the policies and achieve the goal of no net new P.M. peak hour trips identified in the LUCE. New housing development as planned for under the proposed Housing Element Update would continue to be required to pay the Transportation Impact Fee (TIF) to fund transportation improvements such as new sidewalks, crosswalks, traffic signal upgrades, transit, and bicycle facilities within the City. Therefore, the proposed Housing Element Update would not conflict with SMMC Chapter 9.66.

Based on the above, the proposed Housing Element Update would be consistent with the transportation vision, goals, policies, and programs established in the SCAG Connect SoCal, Metro LRTP, LUCE, DCP, Bergamot Area Plan, Bike Action Plan, CAAP, and SMMC. Impacts would be *less than significant*. Refer to Section 3.6, *Land Use and Planning* for additional discussion of the consistency with the goals and

policies established in the SCAG Connect SoCal, Metro LRTP, LUCE, DCP, Bergamot Area Plan, Bike Action Plan, CAAP, and SMMC.

Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Impact Description (T-2)

T-2 **The proposed 6th Cycle 2021-2029 Housing Element Update would not exceed the City's Vehicle Miles Traveled (VMT) Threshold 1: VMT per capita, which requires a project to generate VMT below the existing City-wide average VMT per capita for that particular land use. However, the proposed Housing Element Update would exceed the City's VMT Threshold 2: Total VMT, which requires a project's total VMT to be at least 16.8 percent below existing City Business as Usual (BAU) VMT per capita. Therefore, impacts would be *significant and unavoidable*.**

As described in Section 3.12.3, *Impact Assessment and Methodology*, the proposed Housing Element Update would not be screened out of VMT analysis, given that the proposed Housing Element Update would plan for up to 8,895 to approximately 11,000 dwelling units and associated potential ground-floor commercial space (e.g., retail, restaurant, office, hotel, etc.) City-wide through the 2030 planning horizon. Therefore, Fehr & Peers prepared a VMT analysis to determine whether implementation of the proposed Housing Element Update would result in a significant increase in VMT that would exceed the City's thresholds described in Section 3.12.2, *Impact Assessment and Methodology*.

VMT Threshold 1

As described in Section 3.12.3, *Impact Assessment and Methodology*, the City's VMT Threshold 1 states that a project's VMT per capita must not exceed the existing City-wide average VMT per capita for that particular land use (i.e., home-based VMT per capita for residential land uses and City-wide average daily home-based work VMT per employee for commercial land uses). As described in Table 3.12-6, the City's TDFM determined that the City-wide average daily home-based VMT per capita for the 2020 Adjusted Baseline is 11.1 and the 2020 Adjusted Baseline City-wide average daily home-based work VMT per employee is 15.3. These 2020 Adjusted Baseline values represent the City's existing average VMT conditions. Therefore, the projected City-wide daily home-based VMT per capita and home-based work VMT per employee for the Future (2030) With Project Scenario are compared to these 2020 Adjusted Baseline values to determine the significance of the impact on VMT per capita (see Table 3.12-6).

Table 3.12-6 Summary of VMT for the 2020 Adjusted Baseline, Future (2030) No Project, and Future (2030) With Project Scenarios

	VMT Metrics	Adjusted Baseline (2020)	Future (2030) No Project	Future (2030) With Project
Socioeconomic Data	Population	92,357	101,583	116,245
	Employment	90,991	95,409	92,760
Vehicle Trips	Total Vehicle Trips	954,436	989,249	995,832
	Home-Based Vehicle Trips	164,861	181,047	198,651
	Home-Based Work Vehicle Trips	118,939	121,163	117,070
	Home-Based Vehicle Trips per capita	1.8	1.8	1.7
	Home-Based Work Vehicle Trips per employee	1.3	1.3	1.3
VMT	Total VMT	6,617,899	6,975,327	6,664,276
	Home-Based VMT	1,025,163	1,127,571	1,162,450
	Home-Based Work VMT	1,392,162	1,383,431	1,233,708
	Total VMT per capita	36.1	35.4	31.9
	Home-Based VMT per capita	11.1	11.1	10.0
	Home-Based Work VMT per employee	15.3	14.5	13.3

Source: Fehr & Peers 2021; see Appendix G.

As described in Table 3.12-6, the proposed Housing Element Update would generate an increase in total VMT of 46,377 under the Future (2030) With Project Scenario. However, given the associated projected increase in City population and employees by 2030, City-wide daily home-based VMT per capita is projected to be 10.0 and City-wide daily home-based work VMT per employee is projected to be 13.3 based on the City's TDFM for the Future (2030) With Project conditions. The decrease in City-wide daily home-based VMT per capita and home-based work VMT per employee is due in part to the proximity of new land uses to jobs, shopping, entertainment, and transit. As such, the projected home-based VMT per capita of 10.0 would not exceed the City's baseline VMT per capita of 11.1. Similarly, the projected home-based work VMT per employee of 13.3 would not exceed the City's baseline VMT per employee of 15.3. Therefore, implementation of the proposed Housing Element would not generate home-based VMT per capita or home-based work VMT per employee that would exceed the City's VMT Threshold 1: VMT per capita.

VMT Threshold 2

The City's VMT Threshold 2 states that a project's total VMT must not exceed 16.8 percent below the City-wide BAU VMT, based on the existing City-wide average VMT per capita. As described in Impact T-2A, the City-wide average daily home-based VMT per capita for the 2020 Adjusted Baseline is 11.1 and the 2020 Adjusted Baseline City-wide average daily home-based work VMT per employee is 15.3. Using the projected net increase of 23,888 City residents through 2030 under the proposed Housing Element Update and an existing average daily home-based VMT per capita of 11.1, the BAU daily VMT per capita would be 1,290,320. With a projected net increase of 1,769 employees and an existing average daily home-based work VMT per employee of 15.3, the BAU daily VMT per employee would be 1,419,228. Therefore, the total BAU daily VMT would be 2,709,548 (see Table 3.12-6).

Table 3.12-7 City VMT Threshold 2: Total VMT

	Housing Element Population	City Average VMT per Capita/Employee	BAU Daily VMT
Business As Usual (BAU) Baseline			
Residential	116,246	11.1	1,290,320
Commercial Employee	92,760	15.3	1,419,228
Total Resident + Employee VMT			**2,709,548**
Future (2030) With Project			
Residential	116,245	10.0	1,162,450
Commercial Employee	92,760	13.3	1,233,708
Total Resident + Employee VMT			**2,396,158**

Is Total Resident + Employee Future VMT at least 16.8% lower than Total BAU VMT?

No, the estimated reduction of 313,390 VMT is 11.6% less than Total BAU VMT.

Source: Fehr & Peers 2021, see Appendix G.

As described in Impact T-2A, the City's TDFM projected the Future (2030) With Project scenario would result in City-wide average home-based VMT per capita of 10.0 and home-based work VMT per employee of 13.3. The Future (2030) With Project scenario would result in an estimated 116,245 residents and 92,760 employees. Therefore, total daily VMT under the proposed Housing Element Update would be 2,396,158. This would be a reduction below the total BAU daily VMT of 313,390 (approximately 11.6 percent). The Future (2030) With Project scenario shows a reduction in VMT, but a lesser reduction than the 16.8 percent threshold of significance. The total residential and employee VMT associated with the proposed Housing Element Update would exceed the City's VMT Threshold 2: Total VMT.

With the proposed Housing Element Update, the decreases in City-wide average VMT metrics are greater for employee trips than for residential trips, which may reflect the improved jobs-housing balance and the fact that existing TDM activities are more effective in reducing commute trips than home-based trips. It should also be noted that the 16.8 percent lower than BAU VMT target was based in part on achieving the City's CAAP GHG reduction goals and was established by the CARB to help the State achieve its GHG emission goals. While the proposed Housing Element Update would create significant housing opportunities for many of the employees within the City and would decrease VMT per capita, meeting the 16.8 percent lower than BAU VMT target would require complementary investments in the City's transportation network and mobility programs. Merely providing housing closer to jobs would not be sufficient to reduce total City-wide VMT to below the targeted goal. A more aggressive transportation approach that is integrated with implementation of the proposed Housing Element Update would be required.

Mitigation Measures

The City has a robust system of public transit, bicycle facilities, and pedestrian services and implements extensive VMT reduction plans and programs such as the Bike Action Plan, Pedestrian Action Plan, and TDM requirements. Even with these plans and programs considered in the Future (2030) With Project analysis, the proposed Housing Element Update would result in Total Future VMT that would exceed the

City's adopted VMT Threshold 2: Total VMT. In order to reduce the Total Future VMT to a less than significant level, a further reduction of 5.2 percent, or 141,184 VMT, would be needed. To achieve this reduction, a range of potential policy actions, infrastructure and transportation service improvements were considered for the City to undertake. These included the following:

MM T-1 ***Residential Transportation Demand Management (TDM) Program****. The City shall conduct a future study of programmatic TDM activities to reduce residential automobile trips, such as promoting: (1) resident travel support and incentives to reduce vehicle-based trips; (2) the expansion of carsharing businesses/activities in the City; (3) the expansion of micromobility services in City; (4) autonomous and/or low-emission goods delivery (e.g., e-bicycles and other land-based delivery modes) and other programs and services. Collaborate with private sector partners and the Transportation Management Organization to improve and expand use of these services.*

MM T-2 ***City-wide Transportation Impact Fee (TIF) Update.*** *The City shall prepare an update to the TIF to change the basic metric from trips to vehicle miles traveled (VMT). The nexus study conducted when the City's TIF was adopted in 2013 reflects the costs associated with specified transportation improvements and the amount of new vehicle trips that can be attributed to projected land use changes. Using VMT as the metric to relate the trip fee to land uses would better align with the City's current analytical framework for analyzing transportation impacts. TIF revenues are used to construct infrastructure that support transit, bicycle, pedestrian and active transportation trips for all purposes.*

MM T-3 ***Connections to Purple Line.*** *The City shall investigate the potential for improving bus transit connections through higher frequency service and route adjustments between Santa Monica and the planned stations on the Metro Purple Line (D Line) at the West Los Angeles Veterans Affairs Campus station or from the Westwood station. Construction on this section of the subway extension began in 2019 and operation is planned to begin in 2027. Investigate the potential for creating a protected bicycle facility to complement high frequency transit service to the Metro Purple Line (D Line).*

Residual Impacts

MM T-1 through -3 require future transportation studies to develop and guide transportation network improvements and transit service improvements, intended to help limit or reduce increases in VMT. The outcome of these studies would be recommendations to the City Council for enhanced TDM measures, potential revisions to the TIF, and potential increases in Big Blue Bus headways and connectivity across the transportation network. Consistent with the City's on-going long-range transportation planning efforts, it is anticipated that the City would implement the recommendations of these studies, as practicable given City-funding limitations. The City would monitor the effect on the overall transportation network, and adaptively make adjustments, as necessary.

Because it is unknown at this time what specific transportation improvements/programmatic interventions would be recommended from MM T-1 through T-3 and empirical data is difficult to collect for these programmatic interventions, it is not possible to quantify the VMT reduction from these efforts in the

context of a CEQA-required analysis. The evidence criteria are higher for a CEQA-required analysis than are needed to guide policy and infrastructure decisions. Research organizations like the Transportation Research Board, UCLA, and University of California, Berkeley transportation institutes regularly study interventions like the ones described with positive results in terms of vehicle trip and VMT reductions. As a result, these interventions continue to be recommended for the City to facilitate access and to manage vehicle congestion. However, given that future recommendations cannot be identified without additional study and given that the overall VMT-reducing effect of any future recommendations cannot be reasonably forecast at this time, VMT impacts under the City's Threshold 2 would remain *significant and unavoidable*.

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Description (T-3)

T-3 **Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Impacts related to hazards due to design features would be *less than significant.***

Construction

Construction traffic associated within individual development projects under the proposed Housing Element Update would typically include haul trucks, cement trucks, equipment delivery trucks, and construction worker vehicles. Demolition typically requires the use of construction equipment such as backhoes to break up and remove existing asphalt, concrete, and building materials. Heavy construction equipment, such as bulldozers and excavators, and haul trucks are typically used to haul away large amounts of debris. During excavation, haul trucks are generally needed for import and export of materials. The timing and frequency of haul trucks would be dictated by the rate of excavation activities for individual projects. However, construction-related increases in traffic for individual development projects would be temporary in nature.

Increased construction traffic on freeways and streets, particularly haul trucks and other heavy equipment (e.g., cement trucks and cranes), may disrupt traffic flows, reduce lane capacities, and generally slow traffic movement. In addition, construction traffic could interfere with or delay transit operations and disrupt bicycle and pedestrian circulation. For example, individual construction activities under the proposed Housing Element Update may require the temporary or extended closure of adjacent traffic lanes and sidewalks on surrounding streets to accommodate excavation for utilities, operation of construction equipment, etc. Other potential construction-related impacts could include idling, parked, or queued haul trucks that could potentially obstruct visibility.

To avoid construction-related safety hazards, individual project applicants would be required to prepare a Construction Management Plan in accordance with the City's Construction Management Ordinance

(SMMC Chapter 8.98). The Construction Management Plan would address construction traffic routing and control, vehicle, bicycle, and pedestrian safety, street closures, and construction parking. The Construction Management Plan would also establish procedures for coordination with local emergency services, training for flagman for emergency vehicles traveling through the work zone, and other measures as necessary to facilitate automobile, pedestrian, and bicyclist safety. The Construction Management Plan would also outline designated haul routes and construction staging areas, construction crew parking, emergency access provisions, traffic control procedures, and avoidance of traffic impacts during construction. Thus, the Construction Management Plan would address temporary traffic impacts that could occur during each construction activity. Implementation of City's Construction Management Ordinance would ensure that construction-related hazards would be *less than significant*.

Operation

The proposed Housing Element Update does not propose any new City-wide improvements to the City's transportation network; instead, the proposed Housing Element Update would plan for new residential development projects on existing in-fill sites within the City's urban grid. While the proposed Housing Element Update provides a framework to increase housing opportunities throughout the City, it does not include any site-specific project plans or circulation schemes that can be evaluated for transportation hazards. Rather, individual projects proposed for development subsequent to approval of the proposed Housing Element Update would be subject to, and designed in accordance with existing standards and specifications.

While the details for future residential development projects (including project layouts, driveway locations, etc.) are unknown, all individual projects as planned for under the proposed Housing Element Update would be subject to City permits and compliance with adopted Santa Monica Standard Design Standards, including City standard street improvement details, standards for driveway ramps from public rights-of-way, and standard bikeway details, which address adequate driveway line of sight, turning movements, etc.

Additionally, the projected increase in vehicle trips associated with the implementation (i.e., buildout) of the proposed Housing Element Update has the potential to result in additional congestion and queuing at signalized and stop-sign controlled intersections. For example, signalized intersections within the Downtown with pedestrian scrambles intended to prioritize pedestrian travel, would likely experience increased congestion. However, as previously described, City's transportation network is generally laid out in a well-spaced grid network, which would continue to distribute vehicle trips limiting increases in congestion from individual residential and mixed-use development projects enabled under the Housing Element Update. Substantial increases in congestion and queuing would be limited to: (1) the areas here the grid system breaks down within the vicinity of I-10 (Santa Monica Freeway) and SR-1 (Pacific Coast Highway); and (2) the streets immediately north and south of Olympic Boulevard. Increased queuing in these areas would continue to be addressed, as necessary by the Mobility Division, which leads the City's transportation policy and programs, oversees parking operations, and manages Santa Monica's traffic signal system. The City's CIP organizes, prioritizes, and allocates funding for the numerous infrastructure maintenance and improvement efforts taking place each year. The CIP includes over 200 active projects

addressing multiple health and safety requirements, infrastructure needs, and community and City Council priorities. The City would continue to fund mobility-related CIP projects, particularly as they relate to complete streets and implementation of Vision Zero to reduce the potential for pedestrian-vehicle and bicycle-vehicle conflicts.

As a result, future residential development projects under the proposed Housing Element Update would not substantially increase hazards due to design features or incompatible uses. Therefore, the proposed Housing Element Update would not introduce new safety hazards at intersections or along roadway segments and from a program-level impacts would be *less than significant.*

Would the project result in inadequate emergency access?

Impact Description (T-4)

T-4 **Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update would not result in inadequate emergency access to individual sites within the City; therefore, impacts would be *less than significant*.**

With respect to emergency access, as described in Section 3.10, *Public Services*, SMFD does not currently meet its goals for response time Department-wide, which is 7:30 minutes. Additional vehicle trips as a result of residential development planned for under the proposed Housing Element Update may exacerbate this system-wide issue. This significant and unavoidable impact is discussed in detail under Impact PS-1. Impact T-4 is focused on emergency access to individual sites within the City.

As described in Impact T-3, the details regarding emergency access at individual future housing sites under the proposed Housing Element Update are not known at this time. However, emergency access for individual residential developments would continue to be required at the project-level. For example, future development would be required to comply with applicable building and fire safety regulations. For example, the City has adopted the California Fire Code, which requires compliance with emergency access design standards as part of new construction of roads to provide sufficient access for emergency equipment. The California Fire Code also sets standards for road dimension, design, grades, and other fire safety features. SMMC Section 9.04.10.08.060(d) states, *"the design, location or position of any parking layout, entry, driveway, approach, or access from any street or alley shall be approved by the Parking and Traffic Engineer."* Site plan approval from the City and SMFD would ensure that individual projects provide sufficient access for emergency vehicles prior to issuance of a building permit. Therefore, emergency access would be maintained following construction of individual projects under the proposed Housing Element Update and impacts would be *less than significant*. In fact, re-development projects enabled under the proposed Housing Element Update may improve site-specific emergency access at individual project sites given that the City's building and design code requirements are frequently updated and improved. Overall, the proposed Housing Element Update may improve emergency access due to existing potential geometric hazards (e.g., turning radius for emergency vehicles, etc.).

3.12.5 Cumulative Impacts

Construction

Construction activities associated with individual projects in the City and Greater Los Angeles Area region could potentially overlap during the planning horizon of the proposed Housing Element Update. The 6th Cycle RHNA would increase growth throughout Los Angeles County (i.e., by approximately 812,060 units, including 456,643 units in the City of Los Angeles alone), which would increase temporary construction-related traffic on the regional transportation network. Residential and mixed-use development under the proposed Housing Element Update, when considered with cumulative development in the region could substantially increase short-term congestion at major streets and intersections throughout the City as well as regional highway system (e.g., I-10 [Santa Monica Freeway] and SR-1 [Pacific Coast Highway]). These cumulative projects could result in potential significant short-term disruptions to vehicle, pedestrian, and bicycle traffic and mobility in City throughout the arterial road network. However, individual projects under the proposed Housing Element Update would be required to prepare a Construction Management Plan in compliance with the City's Construction Management Ordinance, which would address construction traffic routing and control, vehicle, bicycle, and pedestrian safety, street closures (as needed), and construction parking. With implementation of Construction Management Plans for individual residential and mixed-use development projects in the City, the proposed Housing Element Update would not result in a substantial contribution to cumulatively considerable impacts related to construction throughout the Greater Los Angeles Area.

Operation

Residential development projects planned for under the proposed Housing Element Update would contribute to a regional VMT reduction throughout the Greater Los Angeles Area by increasing housing opportunities in the jobs-rich City. As previously described, only 9.4 percent of employees within the City live within the City. The proposed Housing Element Update would plan for the development of a minimum of 8,895 dwelling units (of which 69 percent must be provided at lower income levels), thus creating opportunities for many of the employees within the City to live closer to their jobs, thereby shortening commutes and reducing VMT. As described in Impact T-1, the proposed Housing Element Update would be consistent with the policies of regional transportation plans (e.g., Connect SoCal). For example, Connect SoCal recommends local jurisdictions accommodate future growth within existing urbanized areas to reduce VMT, congestion, and GHG emissions. The proposed Housing Element Update supports these goals through the planning of future individual projects in the City's HQTAs. Land use changes under the proposed Housing Element Update would result in future residential projects within close proximity to stops along the Big Blue Bus, Metro bus lines, Metro E (Expo) LRT line, and pedestrian and bicycle facilities located throughout the City. Overall, the proposed Housing Element Update would not result in a substantial contribution to cumulatively considerable impacts related to transportation plans and policies.

Implementation of the proposed Housing Element Update would not result in adverse impacts to geometric design (refer to Impact T-3) or emergency access (refer to Impact T-4). Given the proposed

Housing Element Update is a land use project and does not identify specific locations, design, or project construction information, future individual projects would be required to comply with all fire and building standards and receive all necessary approvals from agencies and the City prior to construction. Therefore, no cumulative significant impacts would occur from future individual projects under the proposed Housing Element Update.

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3.0 Environmental Impact Analysis and Mitigation

3.13 Tribal Cultural Resources

The City of Santa Monica is located within the Gabrieliño/Tongva tribal territory which, at the start of the Spanish Period, included the Los Angeles Basin and adjacent areas, and San Clemente, Santa Catalina, and San Nicolas islands. This territory included mountain, foothill, prairie, coastal zones, and the islands, which offered a variety of resources to Gabrieliño/Tongva foragers. Decades of development within the City and the Greater Los Angeles Area has disturbed native soils, reducing the potential for intact buried tribal cultural resources. However, given the City's setting in an area with known historic occupation and use, and based on input received through tribal consultation, there is a potential for buried tribal cultural resources to be discovered during the construction of residential developments planned for under the proposed 6th Cycle 2021-2029 Housing Element Update.

This section of the Environmental Impact Report (EIR) analyzes the potential environmental impacts of the proposed 6th Cycle 2021-2019 Housing Element Update (Housing Element Update) on tribal cultural resources. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either: (1) included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register); or (2) included in a local register of historical resources as defined in Public Resource Code Section 21074. Tribal cultural resources may also include resources determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant. A cultural landscape that meets these criteria is considered a tribal cultural resource to the extent that the cultural landscape is geographically defined in terms of the size and scope. Prehistoric and historic period archaeological resources, which are further described in Section 3.4, *Cultural Resources*, may also be considered tribal cultural resources if they meet these criteria.

3.13.1 Environmental Setting

3.13.1.1 Ethnography

The City of Santa Monica (City) is located within the traditional ethnographic territory of the Takic-speaking Gabrieleño/Tongva. The Gabrieleño/Tongva occupied a territory that covered more than 1,500 square miles centered in the Los Angeles Basin and extending south into a portion of Orange County, as far east as the San Bernardino-Riverside area, and north into a portion of Topanga Canyon. The Gabrieleño/Tongva territory also included the southern Channel Islands (i.e., Santa Catalina, San Clemente, and San Nicolas islands).

The Gabrieleño/Tongva occupied a territory that covered more than 1,500 square miles centered in the Los Angeles Basin, including diverse coastal resources in what is now Santa Monica. The photograph above from the Bowers Museum Collection shows a Tongva woman at her shelter covered with tule mats on the bank of the Los Angeles River.

More than 50 villages were located within this territory with populations that ranged from approximately 50 to 150 individuals. Each community consisted of one or more lineages which controlled a specific geographic territory that included a permanent residential settlement, various hunting and gathering areas, and ritual sites. The extended family social group slept in large, circular, domed houses with bent pole frames covered by dried tule (McCawley 1996).

The Gabrieleño/Tongva had access to diverse coastal resources. Subsistence resources included native grass seeds, acorns, pinyon pine nuts, seeds and berries, mule deer, pronghorn, mountain sheep, rabbits and rodents, quail and waterfowl, snakes, lizards, insects, freshwater fish, and a variety of marine fish, shellfish, and sea mammals (McCawley 1996). Acorn meal was the staple of the Gabrieleño/Tongva diet. Acorns were processed in stone or wooden mortars and the bitter tannin was leeched out with water. The acorn meal was then boiled in tightly woven, watertight baskets using heated rocks. Similarly, the black walnut was another important plant resource. Small schooling fish were caught with nets while large fish were caught with shell or bone hooks. Deer and elk were hunted from blinds. Smaller animals were also important to the diet. Rabbits were herded into nets and rodents were smoked out of their burrows. Coastal groups used ocean-going plank canoes and tule balsa canoes for fishing (McCawley 1996). During this time, fishing and sea mammal hunting became more important, corresponding to development of the plank canoe, single-piece shell fishhooks, and harpoons. The bow and arrow also appeared, as well as increasing cultural complexity and technological innovation.

The Gabrieleño/Tongva exhibited a complex culture, social organization, religious beliefs, and art and material production. The Gabrieleño/Tongva were known for excellent artisanship in the form of pipes, ornaments, cooking implements, inlay work, and basketry. Although few specifics are known of Gabrieleño/Tongva life, their economic system managed food reserves (i.e., storage and processing), exchanged goods, and distributed resources.

Due to the level of historic and current urban development within the City, the full extent and density of Gabrieleño/Tongva occupation is difficult to accurately characterize as numerous resources have most likely been disturbed historically without professional documentation. However, the Gabrieleño/Tongva village at Kuruvungna Springs located approximately 2 miles east of Downtown on the University High School campus indicates that the Gabrieleño/Tongva occupied and utilized natural resources within the City over an extended period (City of Santa Monica 2017).

3.13.1.2 Native American Heritage Commission Sacred Lands File

The California Native American Heritage Commission (NAHC) is a nine-member body whose members are appointed by the Governor. The NAHC identifies, catalogs, and protects Native American cultural resources – ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The Sacred Lands File (SLF) is the NAHC's private inventory of spiritually and culturally significant sites in California. Generally speaking, a SLF search assists in determining if any known properties of traditional cultural value are located within or adjacent to a given area, though negative results do not preclude the existence of such sites.

The City previously requested a City-wide SLF search from the NAHC on July 24, 2009 during the preparation of the Land Use and Circulation Element (LUCE) Program EIR (State Clearinghouse [SCH] No. 2009041117). At that time, no known SLF-listed resources were located within the City boundaries. However, the response did indicate that SLF-listed resources were located within a 0.5-mile radius of the City boundaries. Since that time, additional SLF searches have been conducted (e.g., in support of the Downtown Community Plan [DCP] Program EIR [SCH No. 2013091056]), which returned positive results indicating the presence of tribal cultural resources within the immediate vicinity of the Downtown.

As described in Section 3.4, *Cultural Resources*, the NAHC was contacted on December 15, 2020 to request a review of their SLF for the proposed Housing Element Update. The NAHC responded on January 4, 2021, stating that the SLF indicated the presence of Native American cultural resources within the City; however, the NAHC did not provide the location or nature of these resource(s) and recommended that the City contact Native American individuals and organizations to elicit information and/or concerns regarding any cultural resource issues related to the proposed Project (see Section 3.13.1.3, *Tribal Cultural Resources Consultation*).

3.13.1.3 Tribal Cultural Resources Consultation

The City has conducted Native American consultation for numerous long-range planning projects, including for the LUCE Program EIR, which covered the entire City, and the DCP Program EIR, which covered the Downtown. During previous Native American consultation associated with the LUCE Program EIR, Tribal Administrator John Tommy Rosas of the Tongva Ancestral Territorial Tribal Nation, indicated that the City is situated on ancestral Tongva lands, and that numerous sacred sites and lands were found throughout their traditional territory. Mr. Rosas stated that important resources should be considered under the laws that protect them (see Section 3.13.2, *Regulatory Setting*).

During previous Native American consultation associated with the DCP Program EIR, four individuals and organizations responded with comments. The Gabrieleño/Tongva Tribe, represented by Linda Candelaria, Bernie Acuna, and Conrad Acuna, requested that a Native American monitor be present during earthmoving activities. Robert Dorame, also of the Gabrieleño/Tongva Tribe, referred to at least two known Native American middens once located along the coastal bluffs in Santa Monica that have since vanished from the landscape, and concluded that there is a high probability of encountering prehistoric Native American cultural remains in the area at depths where intact native soil is found. As such, he recommended a Native American monitor be present during earth-moving activities. He also asked that if human remains or other Native American cultural remains are found that he be contacted.

As part of the Native American consultation process for the proposed Housing Element Update required by Assembly Bill (AB) 52 and Senate Bill (SB) 18 (see Section 3.13.2, *Regulatory Setting*), the City sent a request for consultation to the list of tribes provided by the NAHC. The letters, which were sent on January 7, 2021 to the seven tribes identified by the NAHC, described the components of the proposed Housing Element Update and requested input from these individuals and organizations. Of the seven individuals and organizations that were contacted, one tribe, the Gabrieleño Band of Mission Indians – Kizh Nation, responded with a request for formal consultation. The Gabrieleño Band of Mission Indians – Kizh Nation, represented by Andrew Salas (Chairperson), Matthew Teutimez (PhD, Tribal Biologist), and

Alex Molina (Tribal Monitor), and the City, represented by Rachel Kwok (Environmental Planner, Community Development Department) initiated formal consultation and discussed the proposed Housing Element Update during a telephone call on March 23, 2021.

During this telephone call, Ms. Kwok described that the proposed Housing Element Update is intended to demonstrate that the City is able to accommodate the Regional Housing Needs Allocation (RHNA) issued by the Southern California Association of Governments (SCAG) as mandated by State law. The proposed Housing Element Update and the associated EIR do not include or evaluate specific residential developments. As individual projects are proposed under the Housing Element Update, each of these projects would be independently evaluated pursuant to the California Environmental Quality Act (CEQA), as appropriate depending on the ministerial and discretionary permit processes. Mr. Salas described that the Tribe has an extensive geography across the City, given that there are many other locations outside of the village communities where Native Americans dispersed and may have left tribal cultural resources. Due to the expansive geography of the Tribe, Mr. Salas indicated that there is a potential for the any disturbance of soils – even soils that were dug up and re-deposited back as fill materials – to impact tribal cultural resources. He requested that the City act as a mediator between the Tribe and future project applicants and developers for future residential and mixed-use projects. The City agreed to develop programmatic mitigation measure language to address potential impacts to tribal cultural resources. Ms. Kwok followed-up on April 22, 2021 in an e-mail providing draft language of a suggested mitigation measure to be incorporated into the EIR. A second follow-up e-mail was sent on May 9, 2021. As of this date, no response has been received from Mr. Salas or other representatives from the Gabrieleño Band of Mission Indians – Kizh Nation.

3.13.2 Regulatory Setting

3.13.2.1 State Policies and Regulations

Assembly Bill 52

AB 52 was approved by former Governor Edmund Gerry "Jerry" Brown, Jr. on September 25, 2014. The bill amended Public Resources Code Section 5097.94, and added Public Resources Code Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. The primary intent of AB 52 is to include California Native American tribes early in the environmental review process and to establish a new category of resources related to Native American tribes that require consideration under CEQA, known as tribal cultural resources (as defined in Public Resources Code Section 21074[a]). On July 30, 2016, the California Natural Resources Agency adopted the final text to update Appendix G of the CEQA Guidelines for tribal cultural resources, which was approved by the Office of Administrative Law on September 27, 2016.

Public Resources Code Section 21080.3.1 requires that within 14 days of a Lead Agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the Lead Agency shall provide formal notification to the designated contact, or a tribal representative, of California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in Public Resources Code Section 21073) and who have requested in writing to be informed

by the Lead Agency (Public Resources Code Section 21080.3.1[b]). Tribes interested in consultation must respond in writing within 30 days from receipt of the Lead Agency's formal notification and the Lead Agency must begin consultation within 30 days of receiving the tribe's request for consultation (Public Resources Code Sections 21080.3.1[d] and 21080.3.1[e]).

Public Resources Code Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures that would mitigate or avoid a significant effect, if a significant effect exists on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (Public Resources Code Section 21080.3.2[b]).

If a California Native American tribe has requested consultation pursuant to Public Resources Code Section 21080.3.1 and has failed to provide comments to the Lead Agency, or otherwise failed to engage in the consultation process, or if the Lead Agency has complied with Public Resources Code Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the Lead Agency may certify an EIR or adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND) (Public Resources Code Section 21082.3[d][2] and [3]).

Public Resources Code Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the Lead Agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the Lead Agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all the information to the public.

However, confidentiality does not apply to data or information that are, or become publicly available, are already in lawful possession of a project applicant before the provision of the information by the California Native American tribe, are independently developed by the project applicant or the project applicant's agents, or are lawfully obtained by the project applicant from a third party that is not the Lead Agency, a California Native American tribe, or another public agency (Public Resources Code Section 21082.3[c][2][B]).

Senate Bill 18

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (as defined in California Government Code Section 65300 et seq.) and specific plans (as defined in California Government Code Section 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements

for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see California Government Code Section 65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. SB 18 took effect on January 1, 2005, several of its provisions regarding tribal consultation and notice did not take effect until March 1, 2005.

The provisions of SB 18 apply only to city and county governments and not to other public agencies. The following list briefly identifies the contact and notification responsibilities of local governments, in sequential order of their occurrence.

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (California Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed project to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45 day comment period (California Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local governments must send notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (California Government Code Section 65092).

Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, requires all State agencies and museums that receive State funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

Native American Historic Resource Protection Act; Archaeological, Paleontological, and Historical Sites; Native American Historical, Cultural, and Sacred Sites (Public Resources Code Section 5097-5097.994)

Public Resources Code Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of Native American human remains on non-federal public lands. Public Resources Code Section 5097.9 states that no public agency or private party on public property shall *"interfere with the free expression or exercise of Native American Religion."* The Public Resources Code further states:

"No such agency or party [shall] cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine…except on a clear and convincing showing that the public interest and necessity so require."

California Government Code Sections 6254 and 6254.10

California Government Code Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to *"Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission."* California Government Code Section 6254.10 specifically exempts from disclosure requests for *"records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the California State Lands Commission, the Native American Heritage Commission, another State agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a State or local agency."*

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (California Health and Safety Code Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (California Health and Safety Code Section 7050.5c). The NAHC will notify the Most Likely Descendant. With the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

3.13.3 Impact Assessment and Methodology

3.13.3.1 Thresholds for Determining Significance

The following threshold of significance regarding tribal resource impacts is based on the Appendix G of the CEQA Guidelines. Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a Lead Agency may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For purposes of this EIR, implementation of the proposed Housing Element Update may have a significant adverse impact on tribal cultural resources if:

a) The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or

cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is at least one of the following:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or

ii. A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c), the Lead Agency shall consider the significance of the resource to a California Native American tribe.

3.13.3.2 Methodology

The impact analysis for tribal cultural resources is based on information provided during outreach with relevant California Native American tribes pursuant to AB 52 and SB 18 (see Appendix H), the City's location relative to known activities of Native American tribes in the vicinity, and geologic and topographic conditions within the City.

3.13.4 Project Impacts and Mitigation Measures

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is at least one of the following:

- *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or*
- *A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c), the Lead Agency shall consider the significance of the resources to a California Native American tribe?*

Impact Description (TCR-1)

TCR-1 **Tribal cultural resources, as defined in Public Resources Code Section 21074, may be inadvertently uncovered during ground disturbing activities associated with residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update. Damage or destruction of such tribal cultural resources would be a potentially significant impact. However, with the implementation of Native American monitoring, impacts would be reduced to *less than significant with mitigation*.**

As previously discussed, Native American outreach and tribal consultation pursuant to AB 52 and SB 18 has indicated that the City is sensitive for tribal cultural resources given its location along the coast and within an area of historic use by Gabrieleño/Tongva villages and trade routes and waterways, which are considered cultural landscapes pursuant to Public Resources Code Section 21074.

As described in Section 2.0, *Project Description*, the proposed Housing Element Update plans for the development of up to 8,895 to approximately 11,000 new dwelling units and potential associated ground floor commercial space. The construction of residential developments as planned for under the proposed Housing Element Update could involve grading and excavation in areas that could potentially uncover significant subsurface tribal cultural resources. If improperly handled, buried tribal cultural resources could be damaged.

Due to the nature of buried tribal cultural resources and the logistical constraints of conducting soil pit test excavations in an urban built environment, comprehensive archaeological testing at properties throughout the City is impractical. Overall, effects on tribal cultural resources can only be determined after a specific development has been proposed because the effects are highly dependent on both the individual site conditions (e.g., whether the site has been previously grading) and the characteristics of the proposed development (e.g., extent of grading and depth of excavation). In addition, depending on the geographical extent of development, phasing of construction, and the level of historical detail about the project site, there may be substantial limits on the ability of an archaeologist to predict the location of potentially significant deposits, which in turn limits the effectiveness of standard archaeological testing techniques alone to identify subsurface cultural resources.

As agreed to by the Gabrieleño Band of Mission Indians – Kizh Nation during the AB 52 and SB 18 consultation process, MM TCR-1 would require the presence of a Native American monitor for individual residential and mixed-use developments, if requested by the Gabrieleño Band of Mission Indians – Kitz Nation. The Native American monitor would observe excavation activities including site clearing, soil excavation, grading, and trenching, specifically for tribal cultural resources. Any discovery of resources would trigger an immediate stop in construction while the resource is evaluated. Depending on the resource value, treatment plans would be developed in consultation with the City, Native American representatives, and Project archaeologists. With the implementation of MM TCR-1 impacts to tribal cultural resources would be *less than significant with mitigation*. Projects located in the City's former claypit/landfill areas would be exempt from this mitigation measure since the underlying soils have been significantly disturbed from former clay mining and landfill activities.

Mitigation Measures

MM TCR-1 ***Tribal Consultation for Residential and Mixed-Use Developments.*** *For new residential and mixed-use developments requiring grading/excavation greater than 5 feet below ground surface (bgs), prior to demolition, the project developer or project construction contractor shall consult with the Gabrieleño Band of Mission Indians – Kizh Nation regarding the cultural sensitivity of the project site and the potential for tribal cultural resources to occur on-site. If required by the Tribe, the project developer shall retain a Native American monitor to be present during project construction excavations such as clearing/grubbing, grading, trenching, or any other excavation activities. The appropriate Native American monitor shall be identified using the most recent contact list provided by the Native American Heritage Commission (NAHC). The frequency of monitoring shall consider the rate of excavation and grading activities, proximity to known cultural resources, the materials being excavated (e.g., younger alluvium versus older alluvium), and the depth of excavation, and if found, the abundance and type of prehistoric*

resources encountered. If, during initial ground disturbance, the Native American monitor determines that the ground disturbing activities have little or no potential to impact tribal resources, and/or the Native American monitor determines that ground disturbances would occur within previously disturbed and nonnative soils, full-time field observation shall be reduced to part-time inspections or ceased entirely. This decision will be made in consultation with the Native American monitor and the City. This mitigation measure shall not apply to projects located within the City's former claypit/landfill areas.

Residual Impact

The implementation of MM TCR-1 would reduce impacts to tribal cultural resources to a less than significant level by requiring a process to identify and, if necessary, avoid and/or recover identified tribal cultural resources throughout the City, including areas where resources have been previously identified. The impact would be less than significant with mitigation incorporated.

3.13.5 Cumulative Impacts

A cumulative impact to tribal cultural resources would result if the potential impacts associated with the proposed Housing Element Update, when combined with other related past, present, and future development within the City, would increase the potential for tribal cultural resources to be altered or damaged. The potential to create adverse cumulative impacts to such resources depends on the nature of each project, including its specific site and surroundings.

Each development proposal received by the City is required to undergo review under existing City regulations and policies. Discretionary projects also require review pursuant to CEQA and associated Native American consultation pursuant to AB 52. If there is a potential for significant impacts on a tribal cultural resource, an investigation would be required to determine the nature and extent of the resource and identify appropriate mitigation measures. The mitigation would have the potential to reduce impacts on tribal cultural resources, but would not necessarily reduce that impact to a less than significant level. For example, recovery of human remains and associated burial related artifacts would reduce a project's impact on tribal cultural resources, but would not necessarily mitigate the impact below cumulatively considerable levels. It is reasonable to assume that some number of past projects within the Gabrieleño/Tongva territory were not capable of fully mitigating this impact on tribal cultural resources. Given the substantial urbanization within the City and other municipalities within the Gabrieleño/Tongva territory, impacts on tribal cultural resources would be cumulatively considerable.

There is the potential for residential development planned for under the proposed Housing Element Update to impact unknown tribal cultural resources, given that these resources are identified within the vicinity of the City. If this were to occur, depending on the nature of the resource, the proposed Housing Element Update would have a cumulatively considerable contribution to impacts on tribal cultural resources. However, with the implementation of MM TCR-1, potential adverse impacts to tribal cultural resources would be mitigated to a less than significant level. Therefore, the implementation of the proposed Housing Element Update would not contribute to cumulatively considerable impacts on tribal cultural resources.

4.0 Other CEQA Considerations

This section of the Environmental Impact Report (EIR) presents a discussion of issues required by California Environmental Quality Act (CEQA) Guidelines Section 15126 that are not covered within the other chapters of this EIR, including: (1) a summary of significant and unavoidable effects of the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update); (2) reasons why the Housing Element Update is being proposed notwithstanding its significant and unavoidable impacts; (3) a summary of significant irreversible effects; (4) a discussion of growth inducing impacts (including removal of obstacles to growth); and (5) a discussion of resources areas that are found not to be significant.

4.1 Significant Unavoidable Environmental Effects

CEQA Guidelines Section 15126.2(b) requires that an EIR describe any significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. As analyzed in this EIR, the proposed Housing Element Update would result in potentially significant and unavoidable impacts to:

- Air quality;
- Cultural resources;
- Noise;
- Public Services;
- Utilities; and
- Transportation.

(Refer to Sections 3.3, *Air Quality*; Section 3.4, *Cultural Resources*, Section 3.8, *Noise*, Section 3.10, *Public Services*, Seciton 3.11, *Utilities*, and Section 3.12, *Transportation* for a complete description of significant and unavoidable impacts to these environmental issue areas.)

4.2 Reasons the Project is Being Proposed Notwithstanding its Significant and Unavoidable Impacts

In addition to the identification of a project's significant unavoidable impacts, CEQA Guidelines Section 15126.2(c) requires a description of the reasons why a project is being proposed, notwithstanding significant unavoidable impacts associated with the project.

As previously described in Section 1.0, *Introduction* and Section 2.0, *Project Description*, the Housing Element is one of seven State-mandated general plan elements. Among other requirements, the Housing Element must identify, analyze, and make adequate provision for the existing and projected housing needs of all economic segments of the community. California Government Code Sections 65580-65589.8 requires that communities prepare and update the Housing Element every 8 years. With the previous 8-year cycle (2013-2021) coming to an end, the City must now plan for the next 8-year cycle. The proposed Housing Element Update would serve as the City's housing plan for 2021-2029, setting clear goals, policies, and programs to meet State requirements by providing for the housing needs of all segments of the population while affirmatively furthering fair housing and preventing the displacement of existing residents. As required by State law, the proposed Housing Element Update must be certified by the Santa Monica City Council no later than October 15, 2021. If the California Department of Housing and

Community Development determines that a Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its general plan is at risk of being deemed inadequate, and therefore invalid. If a jurisdiction is sued over an inadequate general plan, the court may impose requirements for land use decisions until the jurisdiction brings its general plan – including its Housing Element – into compliance with State Housing Law.

4.3 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(d) requires a discussion of "*significant irreversible environmental changes which would be caused by the proposed project should it be implemented. 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. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified*."

Residential development projects planned for under the proposed Housing Element Update would result in the irreversible alteration of the built environment and the irreversible consumption of limited slowly renewable and non-renewable resources as a result of construction and operational activities. Construction activities associated with each individual residential development project would involve the consumption of building materials, including lumber and other forest products; raw materials such as steel; aggregate materials used in concrete and asphalt, such as sand and stone; water; petrochemical construction materials, such as plastic; and petroleum-based construction materials. In addition, fossil fuels would be consumed for construction of new residential development projects (e.g., diesel fuel for heavy construction equipment, heavy haul trucks, concrete trucks, etc.). The consumption of limited slowly renewable resources and nonrenewable resources would continue throughout the operational life of each individual residential development project (e.g., electricity and natural gas for lighting, cooking, heating, air conditioning, etc.).

Although new residential development projects would necessarily result in the consumption of such resources, the proposed Housing Element Update would contribute to a land use pattern that would promote an overall reduction in resource consumption per capita. The proposed Housing Element Update would increase housing opportunities in the jobs-rich City. As described in Section 3.9, *Population, Employment, and Housing*, only 9.4 percent of employees within the City live within the City. The proposed Housing Element would plan for the development of a minimum of 8,895 new dwelling units (of which 69% must be provided at lower income levels), thus creating opportunities for many of the employees within the City to live closer to their jobs - reducing VMT and associated fuel consumption on a regional basis (refer to Section 3.12, *Transportation*). New residents would also have access to the City's extensive pedestrian facilities, bicycle network, and transit options such as the Big Blue Bus, Los Angeles County Metropolitan Transportation Authority (Metro) routes, and Metro E (Expo) Light Rail Transit (LRT) line (refer to Section 3.12, *Transportation*).

4.4 Growth Inducing Impacts

CEQA Guidelines Section 15126.2(e) requires a discussion of ways in which a project could foster economic or population growth, including ways in which a project could remove an obstacle to growth that could result in potential significant irreversible changes. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. A project may induce growth if it directly or indirectly fosters economic or population growth or the construction of additional housing, removes obstacles to population growth, taxes community service facilities to the extent that the construction of new facilities would be necessary, or encourages or facilitates other activities that cause significant environmental effects. In general, a project may foster physical, economic, or population growth in a geographic area if it meets any one of the criteria identified below:

- The project results in the urbanization of land in a remote location (leapfrog development);
- The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area);
- The project establishes a precedent-setting action (e.g., a change in zoning or general plan amendment approval); or
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion, etc.).

If a project meets any one of these criteria, it may be considered growth inducing. Generally, growth inducing projects are in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth. However, in urban areas such as the City of Santa Monica, growth inducing projects typically involve proposed plans or policies that alleviate barriers to growth or increase opportunities for development.

To comply with CEQA, an EIR must discuss the ways in which the project could promote economic or population growth near the project area and how that growth would, in turn, affect the surrounding environment (CEQA Guidelines Section 15126.2[e]). Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth is considered a significant impact only if it affects – either directly or indirectly – the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth, in some other way, significantly affects the environment.

As described in Section 2.0, *Project Description* and analyzed in Section 3.9, *Population, Housing, and Employment*, the proposed Housing Element Update would amend development standards and enact new programs to facilitate the production of housing, particularly affordable housing, as necessary to meet the Regional Housing Needs Allocation (RHNA) issued by the Southern California Association of Governments (SCAG). However, State law requires that the City provide the capacity and the regulatory framework to accommodate its RHNA “fair share” of the region’s housing needs, which cannot be achieved without the proposed revisions to existing development standards and new programs to support housing. SCAG has also indicated that the RHNA does not necessarily encourage or promote growth, but

rather allows communities to anticipate growth and address existing need, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation and housing, and not adversely impact the environment. In this regard, the proposed Housing Element Update would not induce growth, but rather would accommodate growth, particularly anticipated regional growth. The methodology to calculate the City's RHNA demonstrates this fact as it based on a projected housing need using household growth for jurisdictions between the RHNA projection period between July 1, 2021 and October 1, 2029, in addition to a calculated future vacancy need and replacement need.

Additionally, the City has a daytime workforce population of approximately 92,000 people. More than 96 percent of this workforce lives outside the City boundaries and commute into the City for their jobs. The production of new affordable housing under the proposed Housing Element would create new housing opportunities for many employees within the City. Therefore, employees within the City, who make up the City's daytime population, may in turn become part of the City's residential population as well. In this manner, the proposed Housing Element Update would not induce growth but rather would accommodate the housing needs of the existing daytime population.

4.5 Effects Found Not to Be Significant

CEQA Guidelines Section 15128 requires a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Based on the Initial Study (IS) prepared for the proposed Housing Element Update (see Appendix A), the City determined that the proposed Housing Element Update would have *no impact or less than significant* on the following resources: Agriculture and Forestry Resources; Biological Resources; Mineral Resources; Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality; and Wildfire. Potential impacts associated with these issue areas would be negligible because the City of Santa Monica is a highly urbanized city and existing local, State, and Federal regulations are in place to mitigate associated effects. The proposed Housing Element Update would result in residential redevelopment on infill sites that are already fully developed, and as such, would not disturb agricultural or forest areas, mineral resource sites, or protected biological resources. Additionally, the City's Tree Ordinance (SMMC Chapter 7.40) and the Urban Forest Master Plan provides protection for the City's public trees. Additionally, the City's landscaping plan requirements encourages the planting of replacement trees, including 24-, 36-, and 48-inch box trees. Potentially effects associated with geology and soils, hazards and hazardous materials, and hydrology water quality are site specific, and would be mitigated by the existing regulatory framework in place.

5.0 Alternative Analysis

In accordance with the California Environmental Quality Act, this section of the Environmental Impact Report analyzes the environmental impacts for a reasonable range of alternatives to the proposed 6th Cycle 2021-2029 Housing Element Update. Three alternatives have been carried forward for analysis: No Project Alternative; Transit-Oriented Housing Development on Fewer Sites Alternative; and Quantified Objective Alternative. The purpose of this analysis is to identify the alternatives that can feasibly accomplish all or most of the project objectives and are capable of avoiding or substantially reducing any of the potentially significant impacts identified for the proposed Housing Element Update. This alternatives analysis is intended to assist decision-makers and the public in understanding the comparative environmental effects of the proposed Housing Element Update, its alternatives, and the extent to which each alternatives avoids or substantially reduces potentially significant impacts, while also meeting the basic project objectives.

5.1 Introduction

An important aspect of the environmental review process under the California Environmental Quality Act (CEQA) is the identification and assessment of a range of reasonable alternatives that are capable of avoiding or substantially reducing the significant impacts of a proposed project, while accomplishing all or most of the project objectives. The CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) provide the following guidance for evaluating alternatives in Environmental Impact Reports (EIRs). The City decision-makers will need to consider these alternatives to the proposed 6th Cycle 2021-2029 Housing Element Update (Housing Element Update), particularly the No Project Alternative, in relation to the State-mandated update of the Housing Element and the Regional Housing Needs Allocation (RHNA) issued by the Southern California Association of Governments (SCAG), which may reduce City discretion over the selection of a particular alternative since any selected alternative would need to be consistent with State law.

- An EIR need not consider every conceivable alternative to a project. Rather, the range of alternatives required in an EIR is governed by a "rule of reason" … it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible or alternatives whose effects cannot be reasonably ascertained and whose implementation is remote and speculative (CEQA Guidelines Section 15126.6[a]). Notably, alternatives analyzed in an EIR need not be "actually feasible," but rather need only be "potentially feasible." Whether alternatives are "actually feasible" is a determination ultimately made by a Lead Agency's decision-making body at the time of action on a project based on a variety of factors, including how well alternatives meet the stated project objectives. A decision-making body can reject alternatives on policy grounds provided that its adopted findings addressing feasibility embody a reasonable balancing of competing economic, social, environmental, and other considerations supported by substantial evidence (*California Native Plant Society v. City of Santa Cruz [2009] 177 Ca. App.4th 957, 998*).
- The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- In selecting a range of potential reasonable alternatives to the proposed project, the Lead Agency shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially reduce one or more of the significant effects. Among the factors that a Lead Agency may use to eliminate alternatives from detailed consideration are: (i) failure to meet most of the basic project objectives; (ii) infeasibility; or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines 15126.6[d]).
- The CEQA Guidelines also require an EIR to evaluate a "no project" alternative. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the project. The analysis of the "no project" alternative must discuss the existing conditions at the time the Notice of Preparation (NOP) is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved based on current plans and consistent with available infrastructure and community services. As stated in the CEQA Guidelines, when the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy, or operation into the future. Typically, this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan (CEQA Guidelines Section 15126.6[e][2]-[3][A]).
- The CEQA Guidelines require that the EIR identify an "environmentally superior" alternative among the alternatives analyzed. Pursuant to CEQA Guidelines Section 15126.6(e), *"if the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."*

5.2 Project Objectives

As described in Section 2.5.1, *Project Objectives*, the proposed Housing Element Update is built around the following key objectives:

- Meet the State-mandated 6th Cycle RHNA for the City.
- Increase housing production for all, with an emphasis on affordable housing.
- Promote greater housing stability for existing residents at risk of displacement.
- Locate housing close to daily services and amenities like transportation, jobs, parks, and schools in addition to places around the City that have historically not accommodated housing.
- Facilitate equitable housing access to all neighborhoods by expanding access to housing opportunities and overcoming patterns of segregation by planning for housing in areas that have historically excluded diverse housing opportunities.

Based on these objectives, the proposed Housing Element Update includes seven goals that create the framework for how the City of Santa Monica (City) will address the community's housing needs over the next 8 years. As stated above, alternatives carried forward for further analysis must be feasible, avoid or substantially reduce on or more significant and unavoidable environmental impacts, and attain most of the project's key objectives.

5.3 Summary of Potentially Significant Unavoidable Impacts of the Proposed Housing Element Update

Based on the analysis provided in this EIR, the proposed Housing Element Update would result in potentially significant and unavoidable impacts associated with construction-related and operational criteria air emissions (refer to Section 3.3, *Air Quality*); historic resources (refer to Section 3.4, *Cultural Resources*); construction-related ground-borne vibration (refer to Section 3.8 *Noise*), fire protection services, public schools, and parks (refer to Section 3.10, *Public Services*), and vehicle miles traveled (VMT) (refer to Section 3.12, *Transportation*).

Air Quality

Impact AQ-2 **Construction of new residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in construction emissions that could potentially exceed the air quality thresholds recommended by the South Coast Air Quality Management District (SCAQMD). Emissions for individual residential developments would be reduced through mitigation measures; however, when taken together, emissions associated residential development planned for under the proposed Housing Element Update through the planning horizon of 2030 would likely substantialy exceed thresholds. Therefore, this impact is conservatively concluded to be *significant and unavoidable*.**

As described in Section 3.3, *Air Quality*, the results of the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 air quality modeling indicates that construction of residential development planned for under the Housing Element Update would likely result in a cumulatively considerable net increase of carbon monoxide (CO), volatile organic compounds (VOCs), and nitrogen oxides (NO_x) as evaluated under the individual project mix scenario (i.e., 14 average development size projects and 3 maximum development size projects). Compliance with existing City requirements and South Coast Air Quality Management District (SCAQMD) rules, including the limiting of grading activities during high winds and application of soil stabilizers to prevent fugitive dust, would reduce air pollutant emissions from construction activities in the City. However, even with application of these requirements, there is still the potential for construction emissions from individual construction projects to exceed SCAQMD thresholds. MM AQ-1, which would require conditions for the construction of individual residential development projects, is proposed to further reduce construction-related air emissions in the City. However, the potential air emissions reductions resulting from implementation of this mitigation measure cannot be quantified because information related to project size, construction scheduling, heavy construction equipment, etc. for each of the individual projects likely to occur throughout the City is not available. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be reduced to below SCAQMD significance thresholds. For these reasons, construction air quality impacts are conservatively concluded to be *significant and unavoidable*.

Impact AQ-3 **The proposed 6th Cycle 2021-2029 Housing Element Update plans for residential development that may exceed the project-specific air quality standards recommended by the South Coast Air Quality Management District (SCAQMD). Proposed growth would integrate with and contribute to a sustainable and multi-modal City intended to minimize vehicle trips and reduce operational emissions, particularly given increased affordable housing, which may reduce inbound commuter trips. However, when taken together, the total combined operational emissions from energy use and vehicle trips from residential development planned for under the proposed Housing Element Update would exceed SCAQMD recommended thresholds, resulting in a potentially *significant and unavoidable* impact.**

Operational emissions were estimated for two scenarios: the Future (2030) No Project Scenario and the Future (2030) With Project Scenario. The Future (2030) With Project Scenario evaluates the potential for development of up to 8,895 to approximately 11,000 new dwelling units and associated potential ground-floor commercial space. Operational emissions for the Future (2030) With Project Scenario evaluates the potential for development of a greater number of dwelling units and less commercial space through 2030 as compared to the Future (2030) No Project Scenario. Based on the air quality modeling results, the increase in emissions for CO, VOC, NO_x, suspended particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) between the Future (2030) No Project Scenario and Future (2030) With Project Scenario would exceed SCAQMD regional thresholds for daily emissions. Because the proposed Housing Element Update would exceed SCAQMD thresholds for pollutants for which the South Coast Air Basin (Basin) is in nonattainment (i.e., ozone [O_3], PM_{10} and $PM_{2.5}$), the residential development planned for under the proposed Housing Element Update would result in a cumulatively considerable contribution of these criteria air pollutants. However, it should be noted that SCAQMD significance thresholds for criteria air pollutants (2015) do not distinguish between land use plans/programs and individual development projects. The proposed Housing Element Update is a component of the Santa Monica General Plan that addresses potential land use changes in the City on a programmatic level and would involve several simultaneous developments through the planning horizon of 2030. The application of the SCAQMD thresholds to a program-level EIR is highly conservative. Further, the proposed Housing Element Update would achieve operational emissions reductions through locating a portion of development along major transportation corridors and near transportation centers as well as through the enforcement of Transportation Demand Management (TDM) measures. Notwithstanding, when evaluated against SCAQMD's project-level thresholds, the combined operational emissions of potential land use changes anticipated to occur under the proposed Housing Element Update would exceed SCAQMD's project-specific thresholds. Therefore, this impact would be *significant and unavoidable*.

AQ-4 **Construction of new residential development under the proposed 6th Cycle 2021-2029 Housing Element Update may expose sensitive receptors to substantial pollutant concentrations in excess of the established localized significance**

thresholds (LSTs) during construction. This is a potentially significant impact. Because no feasible mitigation is available to reduce this impact to a less than significant level, this impact would be considered *significant and unavoidable*.

The Final Localized Significance Threshold (LST) Methodology is not designed to evaluate localized impacts from mobile sources traveling over along roadways. Additionally, LSTs are applicable at the project-specific level and are not applicable to regional projects such as general plans or other long-term planning documents. For projects greater than 5 acres in total area, dispersion modeling is performed to determine worst-case pollutant concentration at sensitive receptors associated with construction of the project. For projects less than 5 acres in size, screening analyses would occur using the concentrations identified in the LST lookup tables developed by the SCAQMD. Each source receptor area (SRA) within the Basin has a unique LST for pollutants. Because specific construction activities under the proposed Housing Element Update cannot be determined at this time, this impact is considered *significant and unavoidable*.

Cultural Resources (Historic Resources)

Impact CR-1 **As the proposed 6th Cycle 2021-2029 Housing Element Update does not include individual proposals for residential development projects, detailed information (e.g., project size, type, location) regarding potential effects on specific historic resources are unknown. However, it is conceivable that the demolition or substantial modification of a historic resource could occur as a result of some residential development projects, resulting in the potential for a substantial adverse change in the significance of an historical resource as defined in California Environmental Quality Act (CEQA) Guidelines Section 15064.5. Therefore, even with existing State and local regulations and policies in place to protect historic resources, impacts would remain *significant and unavoidable.***

The proposed Housing Element Update does not directly propose the construction of any individual residential development projects, instead it identifies potentially suitable housing sites as well as action programs that would be implemented to accommodate the future development of new dwelling units necessary to meet the RNHA issued by SCAG, consistent with State Housing Law. Historically significant resources would be identified on a project-by-project basis through site-specific, on-site reconnaissance prior to approval by the City. Any future residential development projects planned for under the proposed Housing Element Update would be required to comply with applicable Federal, State, and local polices and regulations that protect historical resources. Nevertheless, individual residential development projects, while not currently proposed as part of the proposed Housing Element Update, could result in *significant and unavoidable* impacts to historic architectural resources through alteration and/or demolition of historical structures. Given that the City's requirements for altering or demolishing a potentially significant historical resource differ based on the listing and designation status of the historical resource, the potential for significant impacts to occur to historical resources would vary.

Indirect impacts to historical resources could also occur through ground-borne vibration generated during the construction phase of individual projects. Substantial ground-borne vibration could be generated during demolition, grading, excavation, boring, drilling, and the use of heavy construction equipment (e.g., bull dozers and heavy haul truck trips), and could undermine the stability of on- and off-site historic structures located adjacent to or near individual project sites. These activities would have to the potential to result in inadvertent, indirect structural damage to this resources as a result of ground-borne vibration. As further discussed in Section 3.8, *Noise*, MM NOI-1 would be required to address potential ground-borne vibration impacts to vibration-sensitive historical structures located adjacent to or near an individual project site. However, even with the implementation of MM NOI-1, there is no guarantee that indirect effects to historical structures would be entirely avoided. As such, construction ground-borne vibration impacts to historical resources are conservatively concluded to be significant and unavoidable.

Land use changes anticipated to occur under the proposed Housing Element Update would potentially include the construction of new residential buildings with increased maximum heights and floor area ratios (FARs) as well as new open space and access improvements (e.g., new driveways, wider sidewalks, bicycle lane connections, etc.). The construction of new residential buildings adjacent to historic resources may alter the historic setting and context of existing historical resources and inadvertently diminish the integrity of its character-defining features. Such potential indirect impacts would be particularly difficult to address under the ministerial (i.e., administrative) approval process, as the City would not have the discretion to require substantial project design changes that could address such potential indirect impacts. Therefore, even with adherence to the City's robust regulatory framework, which addresses the protection of historic resources, new residential development planned for under the proposed Housing Element Update could result in the potential for indirect impacts to adjacent historical resources, in the event that such an adjacency exists. Therefore, indirect impacts related to the loss of historic integrity are conservatively considered to be *significant and unavoidable.*

Noise

Impact NOI-3 Construction of new residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would potentially expose adjacent persons or structures to temporary, excessive ground-borne vibration levels that would exceed thresholds. Impacts on sensitive receptors from construction vibration would be potentially *significant and unavoidable*.

Construction activities associated with new residential development planned for under the proposed Housing Element Update would require the use of heavy equipment, generators, power tools, and other sources of ground-borne vibration. The degree and amplitude of ground-borne vibration would vary, depending on the soil type, ground profile, distance to the receptor building, and the structural characteristics of the receptor building. Construction-related ground-borne vibration could result in short-term impacts on noise sensitive receptors within the City, depending on the location of the individual project. Construction-related ground-borne vibration would have the greatest potential to impact sensitive uses that are adjacent to or located in close proximity to construction projects. For typical construction activities occurring within 25 feet of sensitive receptors, caisson drilling could generate vibration levels

reaching 0.089 inches per second (in/sec) at the receptors. If construction occurs within 25 feet or immediately adjacent to sensitive receptors, vibration levels could potentially exceed the threshold of 0.1 in/sec. Further, the use of pile driving would have the potential to generate significant vibration levels exceeding 0.1 in/sec at nearby sensitive receptors. MM NOI-1 would protect nearby vibration sensitive land uses from excessive vibration impacts. However, given that construction vibration levels could exceed the threshold of 0.1 in/sec at nearby sensitive receptors even with implementation of MM NOI-1 residual impacts are assumed to be *significant and unavoidable*.

Public Services

Impact PS-1 **Increases in the City's residential population anticipated to occur under the proposed 6th Cycle 2021-2029 Housing Element Update would increase the demand for fire protection services and would generate the need for new or physically altered fire protection facilities, the construction of which may have result in significant environmental impacts. Planning for such a facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of Santa Monica Fire Department (SMFD) facilities and staff. This impact would be potentially *significant and unavoidable.***

The proposed Housing Element Update would plan for up to 8,895 to approximately 11,000 new dwelling units and associated potential ground-floor commercial space within the City through the planning horizon of 2030. This would increase the population by up to 18,000 to approximately 22,000 residents within the City through the planning horizon of 2030. This increase would strain fire protection services in some areas of the City and exacerbate delays in emergency responses beyond accepted standards.

Multiple State and City programs and policies are in place to reduce potential fire same impacts associated with new residential development. For instance, current standards in the City Fire Code (Santa Monica Municipal Code [SMMC] Chapter 8.40) are intended to provide for the maximum protection of life and property to the extent feasible, and include stringent requirements addressing fire prevention and fire suppression for new buildings. Further, as part of the City's plan check process, the SMFD provides initial project plan review and comments to ensure that individual projects are designed to meet minimum site requirements relating to adequate emergency access. As another step in the fire prevention review process, SMFD reviews detailed building plans for all new structures prior to issuance of Certificate of Occupancy to ensure that the required fire protection safety features in the City Fire Code are implemented to reduce overall demand for fire protection services, including building sprinklers, fire alarm, water supply, and emergency access.

Notwithstanding these existing City regulations and programs that are intended to substantially reduce fire risks and hazards, the proposed Housing Element Update would contribute to the need for the construction of new or expanded fire protection facilities, the construction of which may result in significant environmental impacts. Any such development with the potential to create impacts to the physical environment would be subject to environmental review under the CEQA process to ensure

impacts would be mitigated to the greatest extent feasible. However, planning for such a facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of SMFD facilities and staff. As such, impacts to fire protection services associated with proposed Housing Element Update would be *significant and unavoidable*.

Impact PS-3 **New residential development planned for under the proposed 6th Cycle 2021-2029 Housing Element Update would result in expected increases in student enrollment, which would increase the demand on existing school facilities. Notwithstanding Senate Bill (SB) 50, the payment of developer fees to the Santa Monica-Malibu Union School District (SMMUSD) and the previously allocated bond funding measures for facilities improvements would not ensure a reduction in impacts. Therefore, the impacts could be potentially *significant and unavoidable*.**

Under implementation of the proposed Housing Element Update, up to 8,895 to approximately 11,000 new dwelling units could be developed through the planning horizon of 2030. Based on the anticipated 0.18 school-aged students per household, buildout under the proposed Housing Element Update would result in approximately 2,179 new school-aged children, a 21-percent increase above the exiting 2019-2020 Santa Monica-Malibu Union School District (SMMUSD) enrollment (refer to Section 3.10.3.4, *Project Impacts and Mitigation Measures – Public Schools*). Assuming that approximately 1,221 new dwelling units are constructed per year, there would be an increase in enrollment of approximately 220 students across the public schools in Santa Monica each year, an approximately 2-percent annual increase. Over the short-term, SMMUSD would need to employ various strategies to temporarily increase capacity. Over the long-term, permanent increases in capacity (e.g., construction of new buildings, satellite schools, or new schools) may become necessary. Infrastructure improvements could be partially funded through existing developer fees required by the SMMUSD for new development. Pursuant to SB 50, individual residential development projects would be required to pay SMMUSD developer fees for both residential and non-residential uses, which could be used for expansion or upgrading of school facilities as needed to accommodate increases in school enrollment over time. Pursuant to California Government Code Section 65995.5, payment of developer fees generally constitutes full mitigation on impacts to school. However, the caps places on developer fees by the State would limit the effectiveness of this mitigation. Since existing bond measures, such as Measures BB, ES, and SMS are already mostly spent and fully allocated, the need for permanent increases in capacity might require for additional bond measures be brought to the community to approve.

In summary, the proposed Housing Element Update may contribute to the need for the construction of new or expanded public school facilities, the construction of which may have result in significant environmental impacts. Any such development with the potential to create impacts to the physical environment would be subject to environmental review under the CEQA process to ensure impacts would be mitigated to the greatest extent feasible. Given the limited revenue available through developer fees for school facilities and the lack of availability of bond funds for facility improvement through Measures

BB, ES, and SMS, impacts on school facilities associated with the proposed Housing Element would be potentially *significant and unavoidable*.

Impact PS-5 **Implementation of the proposed 6th Cycle 2021-2029 Housing Element Update is anticipated to increase the use of existing neighborhood and regional parks, which could cause the acceleration of substantial physical deterioration of these facilities. Although the City would continue to maintain existing parks and develop new parks consistent with the vision of the Santa Monica General Plan Land Use and Circulation Element (LUCE) and other City goals, implementation of the proposed Housing Element Update would require the construction or expansion of recreational facilities that might have potentially significant adverse physical effect on the environment. Therefore, impacts would be *significant and unavoidable*.**

The proposed Housing Element Update would plan for up to 8,895 to approximately 11,000 new dwelling units, potentially generating an increase in population of up to 18,000 to approximately 22,000 people. If no additional parkland were created in the City by 2030, the parkland ratio would decrease from over 4 acres per 1,000 residents to 3.22 acres per 1,000 residents under proposed Housing Element Update. When factoring out the regional beach and open space areas, the proposed Housing Element Update would cause the existing parkland ratio for local park space to decrease from 3.22 acres per 1,000 residents to 1.12 acres per 1,000 residents.

Individual housing developers would pay a Park and Recreation Development Impact Fee as required in SMMC Section 9.67. All revenues collected from this tax would be deposited into a Park and Recreation Facilities Fund to be used for the acquisition, improvement and expansion of public park, playground and/or recreation facilities. New residential development projects would also be required to provide private open and gathering spaces in accordance with the requirements of adopted plans (e.g., Downtown Community Plan [DCP]) and the Zoning Ordinance, which would alleviate demand on the City's public facilities. Even so, with anticipated increase in City population growth, the proposed Housing Element Update would increase the demand on the City's existing parks and recreational facilities.

Currently, most of the City's parks and recreational areas are located in the western edge of the City. As indicated in the Suitable Sites Inventory (SSI), the proposed Housing Element Update could increase the number of dwelling units in the City's "park-poor" areas and therefore, would cause or accelerate the deterioration of parks and recreational facilities if no new parks or recreational facilities are added. Without addition of new local park or recreational facilities, this impact would be *significant and unavoidable*.

MM PS-1 requires the City to resume the update to the Parks and Recreation Master Plan (PRMP) to develop and guide parks and recreation improvements, intended to increase the availability and accessibility of parks. Additionally, MM PS-2 requires the City to consider potential revisions to the Parks and Recreation Development Impact Fee. Consistent with the City's on-going long-range planning efforts, it is anticipated that the City would implement the recommendations of the PRMP, as practicable given

City-funding limitations. Nevertheless, it is unknown at this time what specific parks and recreation improvements would be implemented therefore, this impact would remain *significant and unavoidable*.

Utilities

Impact UT-2 **The City's existing and projected water supply would be adequate to meet the increased water demand from the proposed 6th Cycle 2021-2029 Housing Element Update and the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. However, the increase in residential development planned for by the proposed Housing Element Update would create substantial increases in water demand which would delay or inhibit the City's ability to achieve water self-sufficiency by 2023, a key City policy goal, which could create inconsistencies with City policy, a potentially *significant* impact.**

The 2020 Urban Water Management Plan (UWMP) Update has accounted for projected population growth through 2040 – including population growth as a result of the 6th Cycle RNHA of 8,895 units, assuming a population of 2.0 persons per household (pph). The 2020 UWMP Update demonstrates that with the use imported water, there is an adequate water supply to meet the projected water demand in 2030 and through to 2040. However, the City has adopted a policy to become self-sufficient using Santa Monica Groundwater Basin (SMGB) local groundwater (i.e., using imported water supplies as a backup source only). While the City can continue to rely upon the imported water from the Metropolitan Water District of Southern California (MWD) to supplement local water supplies, the development of up to 8,895 to approximately 11,000 new dwelling units would delay or inhibit the City's ability to achieve the goal of water self-sufficiency by 2023. Therefore, while the City would have sufficient supplies to meet projected future demand during normal, dry, and multiple dry years, this potential conflict with adopted City water self-sufficiency goals would be considered a potentially *significant* impact.

Transportation

T-2 **The proposed 6th Cycle 2021-2029 Housing Element Update would not exceed the City's Vehicle Miles Traveled (VMT) Threshold 1: VMT per capita, which requires a project to generate VMT below the existing City-wide average VMT per capita for that particular land use. However, the proposed Housing Element Update would exceed the City's VMT Threshold 2: Total VMT, which requires a project's total VMT to be at least 16.8 percent below existing City Business as Usual (BAU) VMT per capita. Therefore, impacts would be *significant and unavoidable*.**

The City's Transportation Demand Forecast Model (TDFM) projected the Future (2030) With Project Scenario would result in City-wide average home-based VMT per capita of 10.0 and home-based work VMT per employee of 13.3. Therefore, daily home-based VMT per capita would be 1,162,450 and daily home-based work VMT per employee would be 1,233,708. Total daily VMT under the proposed Housing Element Update would be 2,396,158. This would be a reduction below the total BAU daily VMT of

313,390 (approximately 11.6 percent), which is consistent with the concept that implementation of the proposed Housing Element Update would accommodate existing employees within the City and substantial reduce regional commutes. (As described in Section 3.12, *Transportation* currently over 90 percent of the approximately 91,000 employees within the City do not live within the City. These employees generally commute – sometimes as long as 2 to 4 hours – to their jobs in the City, largely as a result of the City's substantially higher housing costs.) However, the total daily VMT associated with the proposed Housing Element Update would exceed the City's VMT Threshold 2 which requires a 16.8 percent reduction below the total Business as Usual (BAU) daily VMT. MM T-1 through -3 require future transportation studies to develop and guide transportation network improvements and transit service improvements, intended to help limit or reduce increases in VMT. Consistent with the City's on-going long-range transportation planning efforts, it is anticipated that the City would implement the recommendations of these studies, as practicable given City-funding limitations. The City would monitor the effect on the overall transportation network, and adaptively make adjustments, as necessary. However, given that future recommendations cannot be identified without additional study and given that the overall VMT-reducing effect of any future recommendations cannot be reasonably forecast at this time, VMT impacts under the City's Threshold 2 would remain *significant and unavoidable*.

5.4 Alternatives Selection Methodology

Unlike a typical development project or even an update to the general plan initiated by a local agency, the proposed Housing Element Update is being undertaken in response to the State-mandated 6th Cycle RNHA that identified a specific number of new dwelling units that the City is required to plan for and accommodate. As described in Section 1.2, *Proposed Housing Element Update*, regional housing needs are determined by the California Department of Housing and Community Development (HCD), which decides what the numerical housing targets should be for each regional council of governments, including SCAG. Each regional council of governments across the State then further allocates the regional housing number (known as the Regional Housing Needs Allocation, or RHNA) to every city and county within its jurisdiction. For the proposed 6th Cycle 2021-2029 Housing Element Update, the SCAG has determined that the City's RHNA allocation is 8,895 dwelling units, largely due to the City's robust employment base, existing jobs-housing imbalances, and high quality transit connections. As described in Section 3.10, Population, Employment, and Housing, only 9.4 percent of the approximately 91,000 employees within the City currently live within the City. The proposed Housing Element Update would plan for the development of a minimum of 8,895 dwelling units (of which 69 percent must be provided at lower income levels), thus creating opportunities for many of the employees within the City to live closer to their jobs, reducing VMT, transportation-related energy demand, and associated criteria air pollutant and GHG emissions on a regional basis. New residential development planned for under the proposed Housing Element Update would create a more diverse, denser, and mixed-use City with opportunities for residents to use existing pedestrian, bicycle, and public transit facilities, consistent with the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) alignment of transportation, land use, and housing strategies. The RHNA is a targeted housing number; cities and counties must plan for the RHNA and show that under current land use and development standards, there is capacity to accommodate for this number of new dwelling units.

As previously described, the City is required to to meet its obligation to plan for the 6th Cycle RHNA under State Housing Law. If the HCD determines that a Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits. Nevertheless, pursuant to the requirements of CEQA, alternaitves to the proposed Housing Element Update were identified and either retained for further analysis or eliminated, as described below.

As required by the CEQA Guidelines, the selection of alternatives to carry forward for further analysis included a screening process to determine which alternatives could avoid or reduce significant effects and also feasibly meet the project objectives. Because of the *significant and unavoidable* impacts to air quality, cultural resources, noise, public services, utilties, and transportation, these screening criteria were particularly important for determining the feasibility of alternatives. The alternatives selection process consisted of the following steps:

Step 1: Review the significant effects that could occur with implementation of the proposed Housing Element Update and identify possible alternatives to avoid or reduce such impacts.

Step 2: Evaluate each alternative in the context of the following criteria:

- The extent to which the alternative would avoid or lessen one or more of the identified significant environmental effects of the proposed Housing Element Update;
- The extent to which the alternative would accomplish most of the basic project objectives (i.e., the goals of the proposed Housing Element Update described in Section 2.5.1, *Project Objectives*); and
- The potential feasibility of the alternative, taking into account factors such as the availability and suitability of sites to accommodate planed housing; economic viability; availability of infrastructure; consistency with the LUCE; and consistency with other applicable plans, policies, and regulatory limitations.

Step 3: Determine the suitability of the proposed alternative for full analysis in the EIR based on Steps 1 and 2 above. In the final phase of the screening analysis, the environmental advantages and disadvantages of the remaining alternatives were carefully weighed with respect to their potential for overall environmental advantage, technical feasibility, and consistency with the project objectives. Alternatives that did not clearly offer the potential to reduce significant environmental impacts, would not achieve all or most project objectives, and/or were determined to be infeasible were rejected from further consideration and analysis. For the proposed Housing Element Update, characteristics used to eliminate alternatives from further consideration include:

- Inability to avoid or substantially reduce the project's significant environmental impacts;
- Inconsistency with adopted LUCE and other applicable plans and policies; and
- Inability to meet all or most of the proposed project objectives.

Summary of Screening Results

As described in Section 1.2, *Proposed Housing Element Update* and Section 2.0, *Project Description*, the public process for developing the proposed Housing Element Update has included numerous community webinars and online surveys, technical working groups, meetings with the affordable housing

development community, and public hearings with various Boards and Commissions and the City Council. The outcomes of these public meetings and workshops resulted in the development of the project objectives, particularly goals around fair housing (refer to Section 2.5.1, *Project Objectives*). Additionally, as described in Section 1.6, *Environmental Review Process*, the City conducted a public scoping process consistent with CEQA Guidelines Section 15083. The public was provided with an opportunity to comment on the scope of the EIR – including the scope of the alternatives considered for further analysis – through a Notice of Preparation (NOP) released on October 30, 2020, and due to the State's Safer at Home orders as a result of the coronavirus (COVID-19) pandemic, a virtual public scoping meeting held on December 10, 2020. Information gathered during this public outreach processes has also been considered during the development of alternatives. Issues surrounding VMT and GHG emissions, utilities demand (e.g., domestic water supply), and public services (e.g., emergency services, schools, and parks) were all raised as issues by interested members of the public during the public scoping process.

Alternatives Considered and Rejected

As previously described, CEQA Guidelines Section 15126.6(c) requires that an EIR disclose alternatives that were considered and rejected, and provide a brief explanation as to why such alternatives were not fully considered in the EIR. The following alternatives were either discussed or considered but were ultimately eliminated from further analysis by the City due to infeasibility, inability to avoid or substantially reduce significant project impacts, or inconsistency with primary project objectives. Several other alternatives were considered, such as an alternative planning horizon that would extend development through the year 2040 or beyond, but were found to be inconsistent with the State mandate to plan for the 6th Cycle RHNA within the set time frame, This State mandate significantly narrows options available for alternatives analysis that both meet the basic project objectives that are driven by the RHNA issued by the SCAG as well as those capable of avoiding or substantially reducing the potentially significant impacts identified for the proposed Housing Element Update.

Alternate Sites Alternative

Under the Alternate Sites Alternative, the City would consider a different or broader range of sites to accommodate housing to be planned for to meet the RHNA issued by the SCAG, while still considering meeting the project objectives and avoiding or substantially reducing potentially significant environmental impacts. This would still entail planning for sufficient housing, particularly affordable housing, to meet the City's RHNA of 8,895 dwelling units. This approach would be broadly consistent with CEQA Guidelines Section 15126.6(f)(2)(A) that notes *"[t]he key question and first step in (alternative location) analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR."*

Unlike a typical CEQA alternative site analysis for a development project (i.e., a different property), the proposed Housing Element Update is a City-wide planning effort that involves consideration and review of thousands of potential housing sites throughout the City. The guidance provided by CEQA relates largely to how impacts associated with individual sites (e.g., historic architectural resources) could be reduced or

avoided by relocating the planned project. In terms of considering an Alternate Sites Alternative for a City-wide Housing Element Update, sites with potential constraints and potential for site-specific significant impacts such as those supporting historic architectural resources may warrant consideration of other locations for housing. As a first step to consider this issue, as required by State Housing Law, the City prepared an in depth SSI to identify specific land (i.e., sites) that may be available and suitable (e.g., avoids major constraints) for residential development in order to demonstrate that the jurisdiction has adequate capacity to accommodate residential development as necessary to achieve the City's 6th Cycle RHNA. The SSI demonstrates to HCD that there are sufficient sites to accommodate the RHNA by income category. Land suitable for residential development includes all of the following:

- Vacant sites that are zoned for residential development.
- Vacant sites that are not zoned for residential development, but that allow residential development.
- Underutilized sites that are zoned for residential development and capable of being developed at a higher density or with greater intensity.
- Sites that are not zoned for residential development, but can be redeveloped for, and/or rezoned for, residential use (via program actions).

Alternate sites were considered as a part of the SSI, but were filtered out base on a set of criteria. In general, parcels meeting any of the following criteria were determined to not be suitable as a housing site:

- Parcels zoned R1 (Single Family), OP1 (Ocean Park single family), OPD (Ocean Park Duplex), RMH (Residential Mobile Home), OS (Open Space), Civic Center.
- Parcels with existing Landmarks or Historic Resources.
- Parcels that are under construction, have recently completed projects, approved entitlements, and pending entitlement for commercial uses only.
- Parcels that have unique land uses such as hospitals, cemetery, schools, parks, churches/religious facilities,[1] utilities, government offices, libraries, police/fire stations, transportation infrastructure/Metro E (Expo) Light Rail Transit (LRT) and Santa Monica Municipal Airport (SMO).
- Parcels developed with affordable housing, condominiums, and rent control units.
- Parcels with newer buildings developed post 1980.

In addition to not being suitable for new residential development, many of these alternate sites would not avoid or substantially reduced potentially significant impacts associated with the proposed Housing Element Update. For example, re-development of parcels with City-designated Landmarks or historic resources would compound the significant and unavoidable impacts identified in Section 3.4, *Cultural Resouces*. Similarly, redevelopment on sites that support public services (e.g., schools, parks, etc.) would compound the significant and unavoidable impacts identified in Section 3.10, *Public Services*. Redevelopment of existing residential buildings, including affordable housing, could result in potentially

[1] It should be noted that *Program 4.C:* To support the production of affordable housing on surface parking lots owned by religious congregations, standards will be adopted to allow some market-rate units to support the affordable housing.

significant impacts related to displacement and would generally not meet the requirements of the Housing Crisis Act (refer to Section 3.9, *Population, Housing, and Employment*). Further, development on a different or amended set of sites throughout the City would be unlikely to avoid or substantially potentially significant City-wide or regional impacts related to transportation or related increased in criteria air pollutant and GHG emissions as the proposed levels of residential development and population growth would remain similar. Similarly, impacts to public services such as fire protection services, public schools, and the provision of parks and recreation facilities would not be meaninfully reduced as levels of overall growth and demand for such services would remain the same. Construction-related noise impacts (i.e., ground-borne vibration) and impacts to utilities (i.e., domestic water supply) would also likely remain similar. Therefore, based on the City's previous detailed screening of sites throughout the City as part of the SSI and limited or no reduction in environmental impacts, the Alternate Sites Alternative has been eliminated from further consideration in the EIR.

5.5 Alternatives Analysis

This section summarizes the key assumptions and policy-related aspects of the three alternatives to the proposed Housing Element Update that have been carried forward for analysis in this EIR. Pursuant to CEQA, the alternatives were selected based on their ability to reduce or avoid potential significant environmental impacts while still meeting all or most of the project objectives (refer to Section 2.5.1, *Project Objectives*). These alternatives include:

- Alternative 1 – No Project Alternative;
- Alternative 2 – Transit-Oriented Housing Development on Fewer Sites Alternative; and
- Alternative 3 – Quantified Objective Alternative.

The alternatives analysis for this EIR is presented in three parts. The first section contains a summary table of the assumptions for each alternative, and a summary table of the environmental effects of each alternative compared to those under the proposed Housing Element Update. The second section provides an analysis of the potential impacts of each alternative and compares these impacts against those under the proposed Housing Element Update. The third section discusses each alternative's ability to meet the project objectives.

The Environmentally Superior Alternative (i.e., the alternative with the fewest significant and/or least severe impacts that also meets the greatest number of basic project objectives) is discussed in Section 5.6, *Identification of Environmental Superior Alternative*.

5.5.1 Alternative 1 – No Project Alternative

In accordance with the requirements of California Environmental Quality Act, the Environmental Impact Report includes the analysis of a No Project Alternative. It is important to note that in the context of a project involving the potential adoption of a land use plan or long-range plan such as the 6th Cycle 2021-2029 Housing Element Update, the No Project Alternative does not mean "no future growth or land uses," but rather that foreseeable development under existing adopted plans and policies would occur. While not consistent with the City's obligations under State Housing Law and the State mandate to plan for and accommodate RHNA issued by the Southern California Association of Governments, the No Project

Alternative considers the environmental impacts if the proposed Housing Element Update is not adopted by the City. Under this alternative, existing policies and development standards would continue to apply to properties in the City, including those contained within Santa Monica General Plan Land Use and Circulation Element, Downtown Community Plan, Bergamot Area Plan, and the Zoning Ordinance. While new residential development would continue under the No Project Alternative, it would represent up to an approximately 55-percent decrease in total number of dwelling units, as well as a substantial decrease in affordable housing production, as compared to the residential development planned for under the proposed Housing Element Update.

Anticipated Land Use Development under this Alternative (Net New): 4,963 dwelling units; 1,423,516 square feet of commercial uses.

Overview of Significant and Unavoidable Impacts	Comparison to Proposed Housing Element Update
Air Quality	Slightly reduced, though significant and unavoidable impacts would remain as described in the LUCE Program EIR and DCP Program EIR
Cultural Resources	Similar
Noise	Similar
Public Services	Reduced, though significant and unavoidable impacts remain for fire protection services given that current response times do not meet National Fire Protection Association (NFPA) response time goals
Utilities	Reduced, given that the demand for domestic water and wastewater collection would not increase above that projected by the LUCE Program EIR and DCP Program EIR
Transportation	Slightly greater, given that the No Project Alternative would not reduce business as usual (BAU) vehicle miles traveled (VMT) to the same extent as the proposed Housing Element Update

Attainment of Project Objectives: *The No Project Alternative would not implement key goals, policies, and implementation programs of the proposed Housing Element Update and would not meet the basic project objectives for creating affordable housing, market-rate housing production around major transit stop and along major corridors, affirmatively furthering fair housing assistance, address homelessness, balancing housing with other City goals, and assuring equal housing opportunities.*

It should also be noted that the No Project Alternative would not meet the City's obligations under State Housing Law. If the California Department of Housing and Community Development determines that a Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its general plan is at risk of being deemed inadequate, and therefore invalid. If a jurisdiction is sued over an inadequate general plan, the court may impose requirements for land use decisions until the jurisdiction brings its general plan – including its Housing Element – into compliance with State Housing Law.

Under the No Project Alternative, new residential development in the City would be limited to projects already accounted for, either as approved, pending, or under construction, or as allowed for under within projected buildout of existing land use plans.

Under the No Project Alternative (Alternative 1), the proposed Housing Element Update would not be adopted by the City and while a lower level of residential development and affordable housing development would continue, the City would not achieve the State-mandated 6th Cycle RHNA. Rather, this alternative assumes that future growth within the City would occur in accordance with existing adopted plans, policies, and regulations. Residential development in the City would continue to be subject to the applicable policies and standards contained within the LUCE, DCP, Bergamot Area Plan, and the City's Zoning Ordinance; however, the goals, policies, and implementation programs of the proposed Housing Element Update would not be implemented under the No Project Alternative. As such, future production of housing in the City would not be guided by principles that increase housing production for all income levels and strongly addressing fair housing goals to the same extent as required by the 6th Cycle RHNA and the proposed Housing Element Update. Similarly, the No Project Alternative would not promote greater housing stability for existing residents at risk of displacement or facilitate equitable housing access to all neighborhoods by expanding access to housing opportunities to the same extent as proposed Housing Element Update. This alternative would not improve City implementation of an affordable housing production program affirmatively furthering fair housing, homelessness assistance programs, or equal housing opportunity programs, but rather would continue to rely on existing City policies, which while effective, do not provide for the scope of actions as those included in the proposed Housing Element Update.

New residential development under the No Project Alternative would be limited to projects that are under construction or approved with plan check (with permits expected by June 30, 2021), approved/pending projects (assuming a 10-percent discount for approved/pending projects that are not constructed), buildout projected under the DCP, and Accessory Dwelling Units as now allowed under recent changes to State law (ADUs; commonly referred to as "granny flats"). Although some limited residual residential development may occur under the LUCE in other areas of the City, the large majority of residential growth would consist of that described above. As such, the No Project Alternative is projected to result in a net increase of approximately 4,963 new dwelling units, as compared to the proposed Housing Element Update, which would meet the City's 6th Cycle RHNA of 8,895 dwelling units (of which 69 percent must be provided at lower income levels.

Table 5-1 Total Projected Units under Alternative 1 – No Project Alternative

Future (2030) No Project	Units
Under Construction or Approved with Plan Check (permit expected by July 31, 2021)	1,300
Approved/Pending Projects (with 10 percent discount)*	2,368
Downtown Community Plan buildout	595
ADUs	700
Total Future (2030) No Project	4,963

Note: *This 10-percent discount accounts for approved/pending residential development projects, which may ultimately not be built due to funding, economics, etc.

Future development planned for or permitted under existing land use plans and the No Project Alternative would result in an increase of approximately 4,963 net new dwelling units as compared to existing conditions. This would constitute an approximately 13-percent increase in total dwelling units over existing conditions, but a substantial decrease when compared with the residential development planned for under the proposed Housing Element Update. Overall, under the No Project Alternaitve, future residential growth would be strongly focused within the Downtown (consistent with the polices of the LUCE and the DCP), with ADU development scattered throughout the City and only limited resident growth within the Bergamot Area and along Boulevards, when comapred to the proposed Housing Element Update.

The No Project Alternative is projected to result in an increase of approximately 9,226 residents and 4,418 employees within the City as compared to existing conditions. As such, the No Project Alternative would result in a 14-percent decrease in projected City population increases and 3-percent increase in projected City employment as compared to projected growth planned for under the proposed Housing Element Update.

Table 5-2 Land Use and Population in 2030 under Alternative 1 – No Project Alternative

	Adjusted Existing Baseline (2020)	No Project Alternative (2030)
Population	92,357	101,583
Employment	90,991	95,409
Total Dwelling units	52,589	57,552
Total Commercial Space[1] (sf)	31,457,321	32,880,837

Notes: [1]Commercial space includes office, retail, restaurant, hotel, hospital, etc.
Source: Fehr & Peers 2021; see Appendix G.

Table 5-3 Land Use and Population in 2030 Under Alternative 1

	Adjusted Existing Baseline (2020)	No Project Alternative (2030)	Proposed Housing Element Update (2030)	Percent Change from Project
Population	92,357	101,583	116,245	-13%
Employment	90,991	95,409	92,760	3%
Total Dwelling units	52,589	57,552	64,883	-11%
Total Commercial Space[1] (sf)	31,457,321	32,880,837	31,874,889	3%

Notes: [1]Commercial space includes office, retail, restaurant, hotel, hospital, etc.
Source: Fehr & Peers 2021; see Appendix G.

Air Quality

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

Similar to the proposed Housing Element Update, the No Project Alternative would not conflict with the goals of the SCAQMD's 2016 Air Quality Management Plan (AQMP). However, the No Project Alternative would not advance the regional goals for criteria air pollutant emissions reductions and sustainability to the same extent as the proposed Housing Element Update. For example, the No Project Alternative would not address the existing jobs-housing imbalance within the City to the same extent as the proposed Housing Element Update. As described in Section 3.9, *Population, Housing, and Employment* only 9.4 percent of employees within the City currently live within the City. The proposed Housing Element Update would plan for the development of up to 8,895 to approximately 11,000 new dwelling units, of which 69 percent must be provided at lower income levels, thereby creating opportunities for many of the employees within the City to live closer to their jobs, increasing use of pedestrian, bicycle, and public transit facilities thereby reducing VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions on a regional basis. Nevertheless, individual residential development projects would be required to adhere to all applicable SCAQMD rules for reducing and controlling criteria air pollutant emissions. Further, existing LUCE, DCP, and Bergamot Area Plan policies would continue to ensure that future residential development within the City is integrated with public transit (e.g., Metro E [Expo] LRT stations, Big Blue Bus, Metro), bicycle facilities, and pedestrian facilities such that it would not conflict with regional goals for criteria air pollutant emissions reductions and sustainability. Therefore, impacts would remain *less than significant*.

Would the 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?

Construction

Development under the No Project Alternative – consistent with the LUCE, DCP, and Bergamot Area Plan – would require construction activities that would generate short-term construction-related criteria air pollutant emissions. Similar to the proposed Housing Element Update, construction emissions from individual construction projects could potentially exceed SCAQMD thresholds of significance. As the Basin is currently in nonattainment for O_3, $PM_{2.5}$, and PM_{10} under Federal and State standards, development anticipated to occur under the No Project Alternative could cumulatively exceed an air quality standard or contribute to an existing or projected exceedances for these criteria air pollutants. Therefore, construction-related impacts to criteria pollutant emissions would remain *significant and unavoidable* as previously described in the LUCE Program EIR (State Clearinghouse [SCH] No. 2009041117) and DCP Program EIR (SCH No. 2013091056) .

Operation

As described for the proposed Housing Element Update, future development anticipated to occur under the No Project Alternative would generate operational criteria air pollutant emissions associated with

mobile, energy, water, waste, and land use sources. Additionally, the No Project Alternative would not reduce regional mobile emissions to the same extent as the proposed Housing Element Update as it would not address the existing jobs-housing imbalance within the City to the same extent as the proposed Housing Element Update, particularly with regard to affordable and fair housing. Due to the substantial decrease (approximately 14 percent) in dwelling units anticipated to occur under No Project Alternative as compared to the proposed Housing Element Update, operational impacts related to criteria air pollutant emissions would be less than the proposed Housing Element Update. However, operational emissions for the Future (2030) No Project Scenario, which would involve the development of fewer dwelling units but greater amount of commercial space through 2030 as compared to the Future (2030) With Project Scenario, would still exceed SCAQMD thresholds of significance for CO, VOCs, NOx, PM_{10}, and $PM_{2.5}$, similar to the proposed Housing Element Update (refer to Table 3.3-12 in Section 3.3, *Air Quality*). As described for the proposed Housing Element Update, the application of the SCAQMD thresholds to a program-level EIR is highly conservative. Further, as described above, No Project Alternative would not conflict with the 2016 AQMP's strategies to reduce regional air pollutant emissions. However, when evaluated against SCAQMD's project-level thresholds, the combined operational emissions of potential land use changes anticipated to occur under the No Project Alternative would exceed SCAQMD's project-specific thresholds. Therefore, this impact would be *significant and unavoidable* as previously described in the LUCE Program EIR and DCP Program EIR.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Thresholds

As previously described, LSTs are applicable at the project-specific level and are not applicable to regional projects such as general plans or other long-term planning documents. Depending on the size of each individual project, the amount of demolition, excavation, and grading, and the proximity of the individual construction sites to sensitive receptors, individual residential development projects could result in construction-related emissions of CO, NO_x, and PM_{10} that exceed the LSTs for construction. This is particularly true for multiple projects that are constructed concurrently on the same or adjacent blocks. Compliance with existing City polices and regulations as well as SCAQMD rules, including the limitation of grading activities during high winds and application of soil stabilizers to prevent fugitive dust, would reduce air pollutant emissions from construction activities. However, the potential reductions in construction-related emissions resulting from implementation of these measures cannot be quantified because information on project size and construction scheduling for each individual residential development projects likely to occur within the City is not available. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be reduced to below LSTs for construction. For these reasons, localized construction air quality impacts are conservatively concluded to be *significant and unavoidable* as previously described in the LUCE Program EIR and DCP Program EIR.

Toxic Air Contaminants

Although no specific project details (e.g., proposed land uses, site plans, etc.) are available at this time, future development anticipated to occur under the No Project Alternative may locate sensitive uses, such as residential uses, outdoor open spaces, and recreational facilities (e.g., tennis courts, swimming pools, etc.) within 500 feet of the Interstate (I-) 10 freeway corridor, which receives from 150,000 to 194,000 annual average daily traffic (AADT) within the City boundaries. The unmitigated freeway diesel particulate matter (DPM) emissions could exceed SCAQMD thresholds for cancer risk (i.e., 10 in a million or 1.0 x 10^{-5}) at sensitive residential receptors, particularly those sensitive receptors located along I-10 from Pico Boulevard to Cloverfield Boulevard and Cloverfield Boulevard to SR-1. Additional traffic along these segments of I-10 have experienced increases in traffic and cancer risk countours extend up to 1,300 and 1,000 feet from the I-10 centerline (refer to Section 3.3, *Air Quality*). The No Project Alternative would continue to implement the mitigation measures previously identified in the LUCE Program EIR and the DCP Program EIR. The mitigation measures in the LUCE program EIR amended SMMC Section 8.108 to require minimum distances between potentially incompatible land uses. Additionally, the mitigation measures in the DCP Program EIR required the preparation of a Health Risk Assessment (HRA) for sensitive land uses in the Downtown with 500 feet from the I-10.

Would the project result in other emissions (such as those leading to odors) affecting a substantial number of people?

CO Hotspots

Development anticipated to occur under the No Project Alternative would result in the addition of vehicle trips that would increase CO emissions at intersections within the City, as compared to existing conditions. However, as shown in Table 3.3-3 in Section 3.3, *Air Quality*, CO levels near the City are substantially below the Federal and State standards. Maximum CO levels in recent years are 2.2 parts per million (ppm) (1-hour average) and 1.4 ppm (8-hour average), which are well below the California Ambient Air Quality Standard (CAAQS) of 20 ppm (1-hour average) and 9.0 ppm (8-hour average). As described for the proposed Housing Element Update, the most heavily trafficked intersection within the City that would be affected by the No Project Alternative is Palisades Beach Road (Pacific Coast Highway) & California Incline, which currently experiences less than 80,000 vehicle trips per day (see Section 3.12, *Transportation*). None of the intersections within the City, including the Palisades Beach Road (Pacific Coast Highway) & California Incline, would experience 100,000 vehicles per day experienced by the most congested intersection in Los Angeles intersection evaluated in the CO Plan for the 2003 AQMP. As a result, CO concentrations are expected to be far less than those estimated in the 2003 AQMP for and would not create a CO hotspot or exceed the CAAQS for CO concentrations. Federal and State CO standards would not be exceeded and this impact would be *less than significant.*

Other Sources of Emissions such as Odors

As described for the proposed Housing Element Update, standard construction requirements would be imposed upon future development under the No Project Alternative to minimize odors during construction.

Operationally, odors that would be expected from future development under the No Project Alternative would typically be associated with solid waste (refuse) storage typical of urban uses, similar to those described for the proposed Housing Element Update. Potential odors would be consistent with those generated by existing residential and commercial uses throughout the City and would be confined to the immediate vicinity of new development. Solid waste would be stored in covered containers and removed regularly consistent with the City's solid waste and recycling pick-up requirements. As such, impacts associated with generation of objectionable odors would be *less than significant*.

Cultural Resources

Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Under the No Project Alternative, future growth within the City would occur in accordance with existing adopted plans, policies, and regulations, including the LUCE, DCP, Bergamot Area Plan, and the Zoning Ordinance. Historically significant resources would be identified on a project-by-project basis through site-specific, on-site reconnaissance prior to approval of a development permit(s) (e.g., demolition permit, building permit, etc.). As described for the proposed Housing Element Update, any future development under the No Project Alternative would be required to comply with applicable Federal, State, and local polices and regulations that concern the preservation of historical resources, including the City's Landmarks and Historic District Ordinance (SMMC Chapter 9.36), and its regulations governing demolition. However, even with the City's stringent regulatory framework that provides for protection of historical resources, individual projects occurring in the City, while not currently proposed or sited, could result in direct impacts to historic architectural resources through alteration and/or demolition of historical structures. Additionally, indirect impacts could occur as a result of off-site ground-borne vibration during construction or through the loss of historical character/setting, such as potentially siting new large-scale structures next to potentially smaller historic structures or other alterations to historic character.

Development under the No Project Alternative would be required to comply with historic preservation policies in plans such as the Historic Preservation Element, LUCE, DCP, and Bergamot Area Plan as well as the SMMC Chapter 9.56 (Landmarks and Historical Districts Ordinance). Additionally, development within the Downtown that cannot comply with The Secretary of the Interior's Standards and Guidelines would be required to implement mitigation measures previously identified in the DCP Program EIR, which require that historical resources shall be documented to the standards of the Historic American Building Survey (HABS) Level 2. Nevertheless, the demolition or alteration of a historical resource under the No Project Alternative would result in a *significant and unavoidable* impact.

Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines?

Potential impacts to archaeological resources under the No Project Alternative would be similar to those described for the proposed Housing Element Update since grading and excavation for construction of individual projects could potentially uncover significant subsurface archaeological remains in a similar

manner. However, development under the No Project Alternative would be required to comply with applicable policies in Historic Preservation Element, LUCE, DCP, and Bergamot Area Plan. Additionally, development within the Downtown would be required to implement mitigation measures identified in the DCP Program EIR for the treatment of previously unknown buried archaeological resources. Therefore, impacts would be *less than significant*.

Would the project disturb any human remains, including those interred outside of formal cemeteries?

Although human remains have not been identified previously in the City, tribal representatives indicated the extensive geography of the Gabrieleño Band of Mission Indians – Kizh Nation across the City where Native Americans lived and dispersed (refer to Section 3.13, *Tribal Cultural Resources*). As such, ground disturbing activities (e.g., grading, excavation, etc.) for individual development projects under the No Project Alternative would have the potential to disturb human remains similar to the proposed Housing Element Update. As described for the proposed Housing Element Update, future development under the No Project Alternative would be subject to California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, which mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. With compliance with existing regulations prescribed in California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, impacts to human remains would be *less than significant*.

Energy

Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Similar to the proposed Housing Element Update, continued development under the No Project Alternative would result in construction-related energy demand. Such energy demand is difficult to quantify as the details of construction, design/size, and timing of each future project to occur in the City is unknown. Construction-related energy demand under the No Project Alternative would vary on an annual basis. While the No Project Alternative is projected to result in fewer dwelling units, development planned for under the LUCE, DCP, and Bergamot Area Plan would more than triple the amount of new commercial space within the City as compared to the proposed Housing Element Update. Therefore, total construction-related energy demand under the No Project Alternative would be similar to the proposed Housing Element Update. Long-term electricity, natural gas, and transportation-related demand associated with operation of future land uses in the City would also be similar to those forecasted for the proposed Housing Element Update. Development under the No Project Alternative would permanently increase the demand for electricity and natural gas, primarily for building heating and cooling, as well as the demand for transportation related energy, including gasoline and diesel fuels. The provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and the No Project Alternative would not meaningfully reduce the City's existing major jobs-housing imbalance. As a result, when combined with new employment generating commercial growth, this alternative may continue the existing long-distance commuting patterns of workers employed

within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. However, development would continue to comply with the requirements of State and local regulations – including CALGreen, the City's Energy Reach Code, Green Building Standards Code, and the SMMC. Therefore, development under the No Project Alternative would not result in wasteful, inefficient, and unnecessary consumption of energy resources during construction or operation of individual residential development projects, and impacts would be *less than significant*.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Similar to the proposed Housing Element Update, development under the No Project Alternative would be required to comply with the City's energy conservation and GHG reduction goals and policies established in the in the City's LUCE, Sustainable City Plan, Climate Action and Adaptation Plan (CAAP), Energy Reach Code, and Green Building Standards Code. Future development under the No Project Alternative would occur in accordance with existing City regulations, which promote energy efficient sustainable development. The provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and the No Project Alternative would not meaningfully reduce the City's existing major jobs-housing imbalance. As a result, when combined with new employment-generating commercial growth, the No Project Alternative may continue the existing long-distance commuting patterns of employees within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. Without the policies and programs proposed under the Housing Element Update, the No Project Alternative would not support energy efficient development to the same extent as the proposed Housing Element Update. However, the No Project Alternative would not conflict with or obstruct plans for renewable energy or energy efficiency. Therefore, impacts would be *less than significant*.

Land Use and Planning

Would the project physically divide an established community?

The proposed No Project Alternative would not physically divide an established community as it would not introduce land uses or new infrastructure (e.g., roads) that would physically or functionally conflict with existing land uses. The No Project Alternative would not amend the development standards in the City's LUCE, DCP, Bergamot Area Plan, or Zoning Ordinance. While impacts related to the division of an established community would be *less than significant*, the beneficial effects of creating more inclusive communities under the proposed Housing Element Update would not be realized under the No Project Alternative.

Would the project cause a significant environmental effect due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Without implementation of the proposed Housing Element Update, the existing land use designations, policies, and standards set forth in the City's LUCE, DCP, Bergamot Area Plan, and Zoning Ordinance would continue to apply. However, the No Project Alternative The City is required by State Element Law to submit the Housing Element to HCD for review to ensure compliance with State law; under the No Project Alternative, the proposed Housing Element Update would not be submitted and the City would not meet the requirements of State Housing Law.

The No Project Alternative would not conflict with SCAG's Connect SoCal as it would not result in population growth greater than the current projections. This alternative would also not conflict with City plans and regulations, such as the LUCE, DCP, Bergamot Area Plan, and Zoning Ordinance. Specifically, the No Project Alternative would not amend policies and development standards for building heights and FARs within the LUCE, DCP, Bergamot Area Plan, and Zoning Ordinance. However, the No Project Alternative would not further incentivize housing projects, particularly with affordable, and it would not affirmatively further fair housing, eliminate barriers to housing production, or encourage a variety of housing opportunities to the same extent as the propose Housing Element Update. The provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and the No Project Alternative would not meaningfully reduce the City's existing major jobs-housing imbalance. As a result, when combined with new employment-generating commercial growth, the No Project Alternative may continue the existing long-distance commuting patterns of employees within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. This alternative would not achieve the City's 6th Cycle RHNA issued by SCAG and impacts associated with land use policy inconsistencies would be potentially *significant and unavoidable*.

Greenhouse Gas Emissions and Climate Change

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Similar to the proposed Housing Element Update, development under the No Project Alternative would result in temporary construction-related GHG emissions. Such emissions are difficult to quantify as the details of construction, design/size, and timing of each individual project within the City is unknown. Construction-related emissions anticipated to occur under the No Project Alternative would vary on an annual basis. While the No Project Alternative is projected to result in the development of fewer dwelling units, this alternative would more than triple the amount of new commercial space within the City as compared to the proposed Housing Element Update. Therefore, total construction-related GHG emissions resulting from No Project Alternative would be similar to those described for the proposed Housing

Element Update. Long-term GHG emissions associated with operation of future land uses in the City would also be similar to those forecasted for the proposed Housing Element Update.

As described for the proposed Housing Element Update in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, development under the No Project Alternative would be subject to the City's energy conservation and GHG reduction standards established in the CAAP, Energy Reach Code, Zero-Net Energy Code, Green Building Standards Code, and SMMC. Compliance with City policies and regulations would ensure that new development under No Project Alternative would occur in accordance with State, regional, and local plans and policies adopted for the purpose of reducing GHG emissions. However, the provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and the No Project Alternative would not meaningfully reduce the City's existing major jobs-housing imbalance. As a result, when combined with new employment-generating commercial growth, the No Project Alternative may continue the existing long-distance commuting patterns of employees within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. Overall, the No Project Alternative would not further sustainability and GHG reduction goals established in SCAG's Connect SoCal to the same extent as the proposed Housing Element Update.

Nevertheless, while the No Project Alternative would not reduce regional VMT and associated GHG impacts to the same extent as the proposed Housing Element Update, impacts would be *less than significant* since City's existing policy framework would ensure that future land uses in the City would not conflict with existing GHG goals.

Noise

Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Construction activities associated with future development under the No Project Alternative would result in a temporary increase in noise levels in the vicinity of individual project sites or clusters of such sites. Construction noise levels from individual projects could result in noise levels above normal acceptable levels (e.g., greater than 85 A-weighted decibels [dBA]) and would potentially create a substantial temporary or periodic increase in ambient noise levels. Although the City's Noise Ordinance exempts increases of noise during construction activities of up to 20 dBA and 40 dBA depending on the timing of high noise-generating activities, the potential for a substantial periodic impact is based on a perceived increase by the receptor. However, construction activities would generally only occur during the permitted hours designated in the SMMC, and therefore, would not occur during recognized sleep hours for residences or on Sundays or Federal holidays. All development projects located within 500 feet of residential uses would be required to adhere to SMMC Section 4.12.110(c), which requires applicants of construction projects located within 500 feet of any residential development, or other noise sensitive land

uses, to submit a list of equipment and construction activities to the City staff prior to the issuance of a building permit. Since all construction activities would be required to adhere to the noise standards and requirements established the City's Noise Ordinance, construction noise impacts would be *less than significant*.

Operation

As described in Table 3.12-6 in Section 3.12, *Transportation*, while the No Project Alternative would result in fewer home-based vehicle trips and VMT, this alternative would generate more home-based work trips and VMT when compared to the proposed Housing Element Update. Given that traffic volumes generated under the No Project Alternative would be greater than under the proposed Housing Element Update, operational noise impacts associated with vehicle trips would also be greater under the No Project Alternative. However, as described under Impact NOI-2 in Section 3.8, *Noise*, projected traffic volumes generally need to double over existing volumes in order for associated noise levels to increase by approximately 3 dBA, the increase in noise level that is generally perceptible to the human ear. Since traffic volumes under the No Project Alternative are not projected to double over existing conditions, the increase in traffic volumes under No Project Alternative would not cause a perceptible increase in operational noise.

Given that the No Project Alternative would generate substantially more commercial and mixed-use development than the proposed Housing Element Update, special events or other temporary activities under the No Project Alternative could cause an increase in ambient noise levels in the City to a greater extent than the proposed Housing Element Update. Nevertheless, prior to any individual special event conducted within City, applicants would be required to obtain a permit from the City's Special Events Office, whose permitting process takes into account the hours of operation of the potential event in order to minimize the potential impact to nearby sensitive receptors. In addition, these types of events already occur periodically under existing conditions within the City – particularly within the Downtown – and would continue to occur under the No Project Alternative. Operational noise impacts would be reduced through compliance with the noise standards in the SMMC. Therefore, impacts relating to temporary or periodic noise increases would be *less than significant.*

Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Similar to the proposed Housing Element Update, future development in the City under the No Project Alternative would potentially expose adjacent persons or structures to temporary, excessive ground-borne vibration levels that would exceed thresholds. For typical construction activities occurring within 25 feet of sensitive receptors, vibration levels could potentially exceed the threshold of 0.1 in/sec. Further, similar to the proposed Housing Element Update, development projects may require the use of pile driving which would have the potential to generate significant vibration levels exceeding 0.1 in/sec at nearby sensitive receptors. Therefore, as with the proposed Housing Element Update construction-related ground-borne vibration impacts under the No Project Alternative are conservatively concluded to be potentially *significant and unavoidable*.

For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels?

Future development under the No Project Alternative could potentially be located within 2 miles of SMO. However, individual development projects would be subject to environmental review and evaluated on a project-by-project basis. Additionally, the eventual closure of SMO in 2028 would ensure that people residing or working in the vicinity of the airport are not exposed to excessive noise levels. Therefore, this impact is *less than significant*.

Population, Housing, and Employment

Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

As described in Section 3.9, *Population, Housing, and Employment*, there were approximately 52,589 existing dwelling units in the City as of 2020. Land use changes anticipated to occur under the No Project Alternative could result in an increase of up to approximately 4,963 net new dwelling units, an increase of approximately 10 percent from 2020 City-wide housing inventory and an approximately 11-percent reduction as compared to the proposed Housing Element Update. Additionally, the No Project Alternative would result in an associated 14-percent decrease in projected City population increases and a 3-percent increase in City employment as compared to projected growth planned for under the proposed Housing Element Update.

The growth anticipated under the No Project Alternative would be consistent with the LUCE and DCP; however, the provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update. The No Project Alternative would not meaningfully reduce the City's existing major jobs-housing imbalance. As a result, when combined with new employment-generating commercial growth, the No Project Alternative may continue the existing long-distance commuting patterns of employees within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. Further, the No Project Alternative would not enact the new programs to facilitate the construction of housing within the City, particularly affordable housing, to meet identified housing need under the 6th Cycle RHNA as proposed under the Housing Element Update. Without these programs associated with the proposed Housing Element Update, it is anticipated that a smaller portion of the new dwelling units under the No Project Alternative would be deed-restricted as affordable housing or workforce housing. Therefore, the No Project Alternative would provide less housing diversity and would be less likely to accommodate affordable housing within the City.

Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

While development would still be subject to the requirement of the Housing Crisis Act, which remains in effect until January 1, 2025, without the proposed policies and programs included in the proposed Housing Element Update, the City's existing housing stock could be subject to greater threat of future demolition or loss. Additionally, future development under the No Project Alternative would occur on the sites identified in SSI associated with the proposed Housing Element Update, which includes primarily commercially zoned parcels and vacant sites. Should an existing property owner of multi-family or multi-unit property choose to redevelop, such a decision would be beyond the discretion or control of the City. Displacement impacts could be anticipated to potentially incrementally increase under the No Project Alternative and would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with State and local requirements, such as the City's Tenant Relocation Assistance Ordinance (SMMC Chapter 4.36). Therefore, impacts related to displacement under No Project Alternative would be *less than significant*.

Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

Future land use changes anticipated to occur under the No Project Alternative would increase the population in the City by approximately 9,226 new residents (refer to Table 5-3). The increase in residential population would result in an increased demand for public services, as described further below.

Fire Protection

The No Project Alternative is projected to result in an increase of approximately 9,226 residents and 4,418 employees within the City as compared to existing conditions. As such, the No Project Alternative would result in a 14-percent decrease in projected City population increases and 3-percent increase in projected City employment as compared to projected growth planned for under the proposed Housing Element Update (refer to Table 5-3). Therefore, the No Project Alternative would not increase the demand for SMFD services to the same extent as the proposed Housing Element Update. Nevertheless, the increase in population under this alternative would continue to increase the demand for fire protection services as compared to existing conditions. Increases in the demand for SMFD services would potentially generate the need for new or physically altered fire protection facilities. As discussed in Section 3.10, *Public Services*, the City has identified strategies and recommended expansions to facilities to improve SMFD response times. However, planning for such a facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future

construction or expansion of SMFD facilities and staff. As such, impacts to fire protection services associated with No Project Alternative would remain *significant and unavoidable*.

Police Protection

Under the No Project Alternative, the forecasted amount of population growth in the City would be less than the proposed Housing Element Update, although employment growth would greater (refer to Table 5-3). Nevertheless, the increase in the residential and visitor populations within the City would continue increase the demand for Santa Monica Police Department (SMPD) services. As discussed in Section 3.10, *Public Services*, the SMPD prepares a 5-year Staffing Plan approved by the City Council which addresses departmental budget, staffing, and equipment needs. This 5-year Staffing Plan allows for SMPD to determine any increases in police resources and equipment if needed. The SMPD is funded through general fund revenues and pier fund revenues generated by property, sales, and transient occupancy taxes, all of which are expected to increase in proportion to the new residential development as well as commercial and mixed-use development associated with implementation of this alternative. Such revenues would be used by the SMPD to hire additional officers and purchase equipment to maintain or improve SMPD service levels over time to meet changing demands. However, unlike fire protection services, the construction of new facilities is not anticipated to be necessary to address a potential future increase in call volumes. Therefore, this impact would be *less than significant*.

Public Schools

The No Project Alternative is anticipated to facilitate the development of 7,331 fewer dwelling units and generate 9,226 fewer new City residents by 2030 as compared to the proposed Housing Element Update. Increases in student enrollment at Santa Monica-Malibu Unified School District (SMMUSD) under the No Project Alternative would be substantially less than the project enrollment under the proposed Housing Element Update. New residential development projects as well as commercial and mixed-use projects would be subject to payment of developer fees to the SMMUSD. Given the modest increase in enrollment expected under the No Project Alternative, the payment of developer fees would constitute full mitigation on impacts to schools pursuant to California Government Code Section 65995.5. Therefore, impacts would remain *less than significant* as described in the LUCE Program EIR and DCP Program EIR.

Libraries

As previously described, the No Project Alternative is anticipated to facilitate the development of 7,331 fewer dwelling units and generate 9,226 fewer new City residents by 2030 as compared to the proposed Housing Element Update. Further, due to the growing use of electronic resources, new residential uses in the City do not immediately equate to an increase in demand for total volumes or square feet of library space. Therefore, new City residents occurring under No Project Alternative would only incrementally increase the demand for library services and facilities within the City. Additionally, modification of library operations (e.g., continued curbside drop-off / pick-up services) would help absorb the increased demand and prepare the system for future demand under the No Project Alternative. It should be noted that the City's annual budgeting also addresses maintenance of existing library facilities to ensure that the deterioration of existing libraries does not occur. Therefore, impacts would be *less than significant*.

Parks and Recreation

Residential and population growth anticipated to occur under the No Project Alternative would subsequently increase demand for City parks and recreational facilities. However, individual developers would be required to pay the applicable Park and Recreation Facilities Fee and Park and Recreation Facilities tax as required in SMMC Section 9.67 and SMMC Chapter 6.80, respectively. All revenues collected from these fees and taxes would be deposited into a Park and Recreation Facilities Fund to be used for the acquisition, improvement and expansion of public park, playground and/or recreation facilities. LUCE policies and regular budgeting also address maintenance of existing park and recreational facilities to ensure that the deterioration of existing recreational opportunities does not occur. Further, new private open and gathering spaces required with new development, as required by existing Zoning Ordinance would help absorb the increased demand for public parks. Given the significant reduction in housing anticipated under the No Project Alternative and eventual funding of parks and recreational space such as Airport Park Expansion, the No Project Alternative would not result in substantial deterioration of these facilities or service levels and this impact would be *less than significant* as described in the LUCE Program EIR and the DCP Program EIR.

Utilities

Would the project require or result in the construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

Implementation of the No Project Alternative is anticipated to result in the development of 4,963 dwelling units and 1,423,516 sf of commercial uses City-wide through 2030. As described for the proposed Housing Element Update, future development under the No Project Alternative would tie into the existing network of water lines throughout the City, characterized by various sizes and ages. With the increase in water demand at a given location, individual projects may trigger the need for construction of new laterals and/or the replacement/expansion of existing water mains, necessary to provide adequate water supply and water pressure. Construction associated with individual facilities is unlikely to cause significant effects, construction of new laterals and/or installation/replace of new water mains sufficient to serve up to 4,963 new dwelling units and 1,423,516 sf of commercial development under the No Project Alternative may have the potential to create temporary impacts related to air quality, archaeological resources, noise, and transportation. However, the installation of new water lines and connections would be reviewed on a project-by-project basis. All future required improvements to the water delivery system for individual projects under the No Project Alternative would be funded through the City's Capital Improvement Program (CIP) and/or the Downtown Public Infrastructure Financing Program identified in the DCP Program EIR.

As described further below, new residential and commercial development anticipated to occur under the No Project Alternative would increase City-wide water demand over existing conditions, but to a lesser extent than under the proposed Housing Element Update. Therefore, increased water demand under the No Project Alternative would be less than the 486,839 gallons per day (gals/day) (545 acre-feet per year [AFY]) of net new water demand projected under the proposed Housing Element Update. As described

for the proposed Housing Element Update under Impact UT-1 in Section 3.11, *Utilities*, the City has sufficient water supplies available from a combination of the SMGB and imported water sources to meet water demand – including the projected growth under the proposed Housing Element Update. Given that the projected development and associated increase in water demand under the No Project Alternative would be reduced as compared to the proposed Housing Element Update, the City would have sufficient water supplies available to meet water demand generated by the No Project Alternative. No additional major infrastructure improvements (e.g., production, treatment, or storage facilities) would be required to enhance the City's water production and treatment capacity in order to meet the future demand – including the projected growth under the No Project Alternative – and impacts would be *less than significant*.

Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Implementation of the No Project Alternative is anticipated to result in the development of 4,963 net new dwelling units and 1,423,516 sf of net new commercial uses City-wide through 2030. The City's 2020 UWMP has accounted for a projected increase of 8,895 new dwelling units based on the 6th Cycle RHNA issued by the SCAG. Therefore, the 2020 UWMP planned for substantially more development than what is projected to occur under the No Project Alternative. As such, increased water demand for normal and dry years under the No Project Alternative would be met by existing water supplies and facilities and impacts to water supplies would be *less than significant*.

Would the project require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects?

As discussed in detail in Section 3.11, *Utilities*, the City's existing wastewater collection system is largely adequate to meet projected demand of the proposed Housing Element Update and individual residential development under the proposed Housing Element Update would not exceed the capacity of the Coastal Interceptor Sewer (CIS) or the Hyperion Water Reclamation Plant (HWRP). The projected increase in wastewater generation under the No Project Alternative would be less than that described for the proposed Housing Element Update. However, development of land uses under this alternative – particularly commercial and mixed-used development – may still contribute to the need for limited replacement and upgrade of individual sewer line segments to meet increased wastewater demand by 2030. Improvements to individual sewer line segments would be reviewed on a project-by-project basis and funded through the CIP and/or the Downtown Public Infrastructure Financing Program identified in the DCP Program EIR.

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Wastewater flows from the City are treated at the HWRP, which has a dry weather capacity of approximately 450 million gallons per day (MGD) processed through full secondary treatment and an 850 MGD wet weather capacity. Currently this facility receives and treats 340 MGD of wastewater; therefore, the existing HWRP system has approximately 110 MGD of additional full secondary treatment capacity. As described in Table 5-3, development of 4,963 dwelling units and 1,423,516 sf of commercial uses under the No Project Alternative would add up to 1.03 MGD (0.23 percent of dry weather capacity and 0.12 percent of wet weather capacity). Therefore, the HWRP system has sufficient capacity to serve the projected increase in demand associated with the No Project Alternative in addition to the provider's existing commitments and this impact would be *less than significant.*

Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The No Project Alternative is projected to generate approximately 4,963 new dwelling units and 1,423,516sf of net new commercial space in the City through 2030. The projected increase in dwelling units under the No Project Alternative, while less than the proposed Housing Element Update, is anticipated to generate an additional 60,697 pounds per day (lbs/day) of solid waste. Likewise, the projected increase in commercial space is anticipated to generate an additional 35,588 lbs/day of solid waste. The total increase in municipal solid waste generation in the City under the No Project Alternative is projected to be up to 96,285 lbs/day (17,572 tons per year). Assuming the existing diversion rate of 81 percent, this would result in up to 3,339 tons per year that would need to be disposed in one or more landfills serving the City. The combined maximum permitted daily capacity of the 14 solid waste facilities that serve the City is 70,004 tons, although only 54,470 tons per day are disposed on average in these facilities daily (approximately 77.8 percent of daily capacity). The resulting increased demand for waste disposal has the potential to result in the need for additional landfill capacity to meet solid waste disposal needs. The additional solid waste that is anticipated to be generated by implementation of the No Project Alternative would be a nominal increase to the current 70,004 solid tons per day of the 14 solid waste facilities expected to serve the City in 2030. Given the existing sufficient capacity of solid waste facilities combined with the City's efforts to reduce waste generation (i.e., the City's Sustainable City Plan, Zero Waste Strategic Operations Plan and 2019 Zero Waste Plan Update), this impact would be *less than significant.*

Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Implementation of the No Project Alternative would not conflict with the goals or requirements of Assembly Bill (AB) 939, AB 341, the City's Zero Waste Strategic Operations Plan, or the SMMC. As discussed under Impact UT-5 in Section 3.11, *Utilities*, the City has already achieved a diversion rate of

81 percent that is in excess of the requirements of AB 939 and AB 341 to achieve a 75 percent diversion by 2020. The City remains committed to continuing its existing waste reduction programs and minimization efforts with the programs with goals, targets, and programs to achieve 85 percent diversion rates by 2020 and 95 percent diversion by 2030. Individual projects in the City under the No Project Alternative would be required to comply with all applicable solid waste regulations in effect at the time of operation, including solid waste diversion requirements described in SMMC Section 5.08.400. Additionally, individual projects would comply with the Construction and Demolition Ordinance (SMMC Section 8.108.010, Subpart C) by submitting a waste management plan to the City and diverting at least 70 percent of construction and demolition debris from landfills. Therefore, the City is in compliance with State law and implementation of No Project Alternative would not conflict with Federal, State, or local statues and regulations related to solid waste disposal. Therefore, *no impact* would occur.

Transportation

Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

As previously described, the No Project Alternative would not achieve the goals of the SCAG's SoCal Connect to the same extent as the proposed Housing Element Update. For example, the No Project Alternative would not address the existing jobs-housing imbalance within the City to the same extent as the proposed Housing Element Update. (As described in Section 3.9, *Population, Housing, and Employment* only 9.4 percent of employees within the City currently live within the City. The proposed Housing Element Update would plan for the development of up to 8,895 to approximately 11,000 new dwelling units, of which 69 percent must be provided at lower income levels, thereby creating opportunities for many of the City's workers to live closer to their jobs, reducing VMT, transportation related energy demand and associated criteria air pollutant and GHG emissions on a regional basis.) In failing to address the existing significant jobs-housing imbalance, the No Project Alternative would not meet adopted regional goals to the same extent as the proposed Housing Element, Nevertheless, individual residential development projects would be required to adhere to existing LUCE, DCP, and Bergamot Area Plan policies, which would continue to ensure that future residential development within the City is integrated with public transit (e.g., Metro E [Expo] LRT stations, Big Blue Bus, Metro), bicycle facilities, and pedestrian facilities. Therefore, impacts would remain *less than significant*.

Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Under the No Project Alternative, growth within the City would occur in accordance with existing adopted plans and regulations, including the LUCE, DCP, Bergamot Area Plan, and Zoning Ordinance. This alternative is projected to result in the development of approximately 4,963 dwelling units and 1,423,516 sf of commercial uses City-wide through the 2030 planning horizon. As described in Section 3.12, *Transportation*, the No Project Alternative would result in a net increase of 9,226 City residents and an associated increase of 34,813 new daily trips within the City as compared to existing conditions (see Table 5-4).

The projected increase in residential and commercial space and associated increase in City residents under the No Project Alternative would generate 6,975,327 in total VMT. Given the projected increase in City population and employees by 2030, City-wide daily home-based VMT per capita is projected to be remain unchanged at 11.1 and City-wide daily home-based work VMT per employee is projected to decline from 15.3 to 14.5 based on the City's TDFM for the Future (2030) No Project Scenario (refer to Section 3.12, *Transportation*). This data can be used to calculate that the No Project Alternative would generate at total of 2,511,002 combined total Future VMT for residents and commercial employees, which is a reduction of 3 percent from the 2,587,329 BAU VMT under this alternative. Therefore, as well the proposed Housing Element Update, the No Project Alternative would generate less than BAU VMT but not 16.8 percent or more less than BAU VMT, which would still be considered a significant and unavoidable total VMT impact. Because the reduction would be less than what is forecast for the proposed Housing Element Update, it would be a relatively greater impact (Fehr & Peers 2021; see Appendix G).

Table 5-4 Summary of VMT for the Adjusted Existing Baseline (2020) and Future (2030) No Project Scenarios

	VMT Metrics	Adjusted Existing Baseline (2020)	Future (2030) No Project
Socioeconomic Data	Population	92,357	101,583
	Employment	90,991	95,409
	Service Population	183,348	196,992
VMT	Total VMT (Include Auto and Trucks)	6,617,899	6,975,327
	Home-Based VMT	1,025,163	1,127,571
	Home-Based Work VMT	1,392,162	1,383,431
	Total VMT per capita	36.1	35.4
	Home-Based VMT per capita	11.1	11.1
	Home-Based Work VMT per employee	15.3	14.5

Source: Fehr & Peers 2021, see Appendix G.

Table 5-5 City VMT Threshold 2: Total VMT for the Future (2030) No Project Scenario

	Housing Element Population	City Average VMT per Capita/Employee	BAU Daily VMT
BAU Baseline			
Residential	101,583	11.1	1,127,571
Commercial Employee	95,409	15.3	1,459,758
Total Resident + Employee VMT			2,587,329
Future (2030) No Project			
Residential	101,583	11.1	1,127,571
Commercial Employee	95,409	14.5	1,383,431
Total Resident + Employee VMT			2,511,002

Source: Fehr & Peers 2021, see Appendix G.

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Under the No Project Alternative, growth within the City would occur in accordance with existing adopted plans and regulations and would result in the development of approximately 4,964 dwelling units City-wide through 2030. Construction traffic associated within individual development projects would typically include heavy haul trucks, construction equipment delivery, and construction worker vehicles. Increased construction traffic on freeways and streets, particularly haul trucks and other heavy equipment (e.g., cement trucks and cranes), may temporarily disrupt traffic flows, reduce lane capacities, and generally slow traffic movement. Construction traffic could also interfere with or delay transit operations and disrupt bicycle and pedestrian circulation. However, as described for the proposed Housing Element Update, future construction projects under the No Project Alternative would be required to prepare and implement a Construction Management Plan in accordance with the City's Construction Management Ordinance, ensuring that construction-related hazards would be *less than significant*.

As with the proposed Housing Element Update, the No Project Alternative does not propose any new City-wide improvements to the City's transportation network and does not include site-specific project plans that can be evaluated for transportation hazards. Individual projects proposed for development would be subject to, and designed in accordance with, City standards and specifications within the SMMC, including the City Fire Code and California Building Code. While the details for future development (e.g., project layouts, driveway locations, land use types, and intensities) are unknown at this time, all individual projects under the No Project Alternative would be subject to discretionary permits and CEQA evaluation as well as compliance with applicable City regulations related to site access and street design; and would be required to adhere to all State and local requirements for avoiding impacts related to design and incompatible uses. As a result, future development under this alternative would not substantially increase hazards due to design features or incompatible uses. Therefore, the No Project Alternative would not introduce new safety hazards at intersections or along roadway segments, and from a programmatic perspective, impacts would be *less than significant*.

Would the project result in inadequate emergency access?

While the details for future residential development under the No Project Alternative are not known at this time, all individual development projects with the potential to impact emergency access would be subject to ministerial and/or discretionary permits. As described for the proposed Housing Element Update, all development projects would be required to comply with applicable building and fire safety regulations and adhere to all State and City requirements for safe access, including emergency access. As a part of the plan check process, project site access plans would be reviewed and approved by the City and the SMFD to ensure compliance with City Fire Code requirements and the provision of adequate emergency access. Therefore, emergency access would be maintained following construction of individual projects under the No Project Alternative. Therefore, any impacts would be *less than significant.*

Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is at least one of the following:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or

- A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c), the Lead Agency shall consider the significance of the resources to a California Native American tribe?

As previously described, future development would continue to occur under the No Project Alternative. Ground disturbing activities associated with future construction projects could potentially uncover significant subsurface tribal cultural resources. Individual development projects under the No Project Alternative would be evaluated on a project-by-project basis under CEQA to ensure that future construction activities would not cause a substantial adverse change in the significance of a tribal cultural resource. Therefore, this impact would be *less than significant*.

Attainment of Project Objectives

Under the No Project Alternative, none of the Project Objectives would be accomplished as discussed in the table below.

Project Objective	Ability for Alternative to Achieve Objective
Meet the State-mandated 6th Cycle RHNA for the City.	This alternative would continue to allow new residential development pursuant to the existing applicable City policy framework, including the LUCE, DCP, Bergamot Area Plan, and Zoning Ordinance. However, the No Project Alternative would not meet the City's obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.
Increase housing production for all, with an emphasis on affordable housing.	The No Project Alternative would not provide the necessary framework to promote affordable housing production in the City to the same extent as the proposed Housing Element Update. Additionally, the No Project Alternative would not meet the City's obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA, including the associated affordability mix requirements. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.
Promote greater housing stability for existing residents at risk of displacement.	While development would still be subject to the requirement of the Housing Crisis Act, which remains in effect until January 1, 2025, without the proposed policies and programs included in the proposed Housing Element Update, the City's

Project Objective	Ability for Alternative to Achieve Objective
	existing housing stock could be subject to greater threat of future demolition or loss. Should an existing property owner of multi-family or multi-unit property choose to redevelop, such a decision would be beyond the discretion or control of the City. Displacement impacts could be anticipated to potentially incrementally increase under the No Project Alternative and would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with State and local requirements.
Locate housing close to daily services and amenities like transportation, jobs, parks, and schools in addition to places around the City that have historically not accommodated housing.	This alternative would continue to allow new residential development pursuant to the existing applicable City policy framework, including the LUCE, DCP, Bergamot Area Plan, and Zoning Ordinance. Development under the LUCE, DCP, and Bergamot Area Plan would continue to encourage the development of transit-oriented communities and provide housing within close proximity to major transportation corridors and multi-modal transit opportunities, though to a lesser extent than described for Alternative 2. Overall, the No Project Objective would not achieve this objective to the same extent as compared the proposed Housing Element Update.
Facilitate equitable housing access to all neighborhoods by expanding access to housing opportunities and overcoming patterns of segregation by planning for housing in areas that have historically excluded diverse housing opportunities.	Without the implementation of the proposed Housing Element, the No Project Alternative would not provide new programs to ensure that new development is distributed to provide equitable housing access throughout the City. Therefore, the No Project Alternative would not align with the project objective of Affirmatively Furthering Fair Housing to the same extent as the proposed Housing Element Update.

5.5.2 Alternative 2 – Transit-Oriented Housing Development on Fewer Sites Alternative

As with the proposed 6th Cycle 2021-2029 Housing Element Update, Alternative 2 would meet the 6th Cycle 2021-2029 Regional Housing Needs Allocation issued by the Southern California Association of Governments; however, new residential development under Alternative 2 would be concentrated within a 0.5-mile radius of the City's three Metro E (Expo) Light Rail Transit stations in order to more fully support transit-oriented communities. This would have the effect of further reducing vehicle miles traveled, transportation-related energy demand, and associated criteria air pollutant and greenhouse gas emissions associated with housing production. However, this approach would not expand housing opportunities across the City from participating in meeting the required RHNA and would not affirmatively further fair housing to the same extent of the proposed Housing Element Update.
Anticipated Land Use Development under this Alternative (Net New): 8,895 to approximately 11,000 dwelling units; 405,246 sf commercial uses.

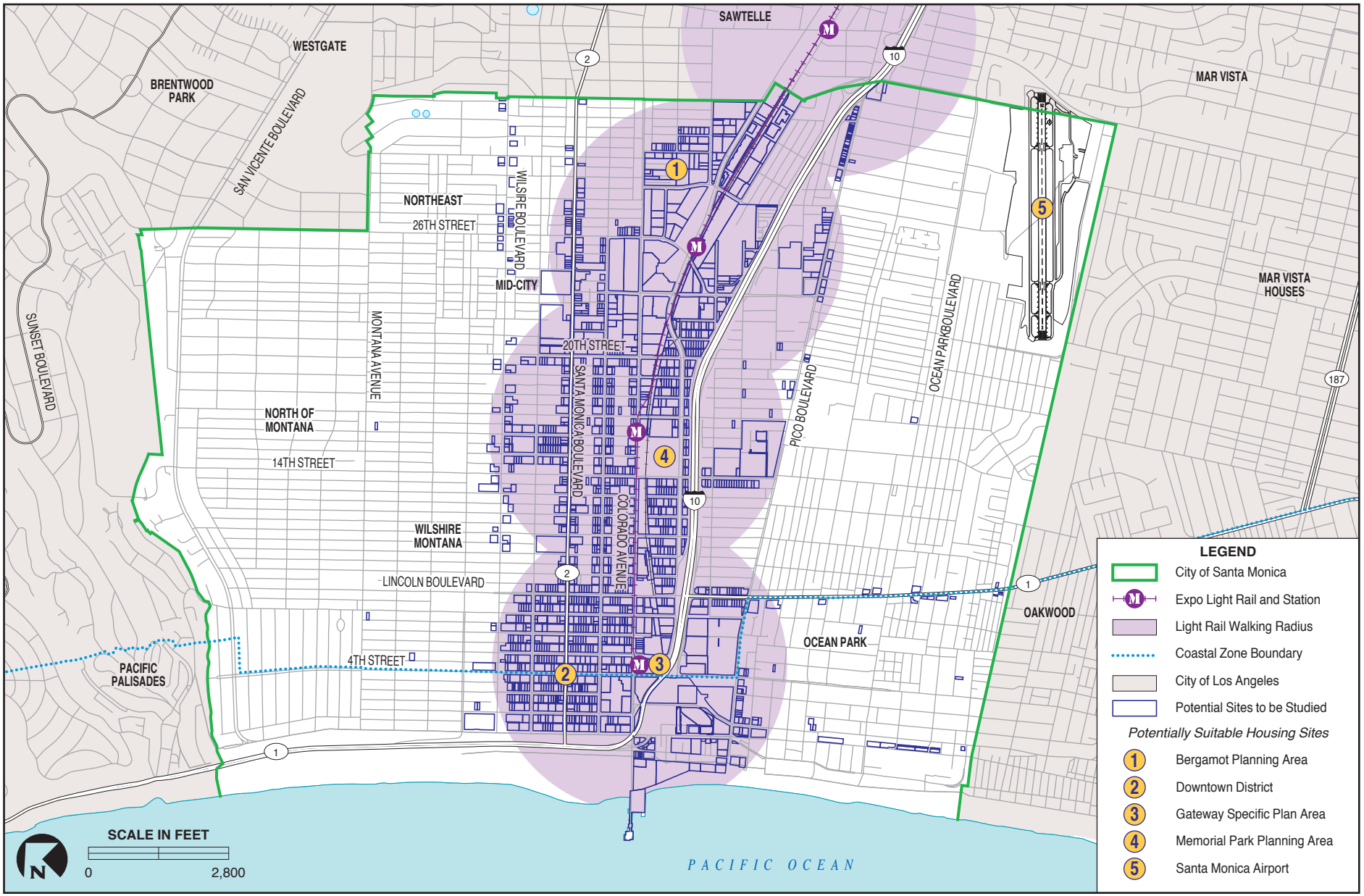
Overview of Significant and Unavoidable Impacts	Comparison to Proposed Housing Element Update
Air Quality	Similar, though more concentrated within the 0.5-mile radius of the Metro E (Expo) LRT stations
Cultural Resources	Similar, though potentially increased impacts related to the alterations in historic character within the immediate within the 0.5-mile radius of the Metro E (Expo) LRT stations.
Noise	Similar, though more concentrated with the 0.5-mile radius of the Metro E (Expo) LRT stations
Public Services	Similar

Overview of Significant and Unavoidable Impacts	Comparison to Proposed Housing Element Update
Utilities	Slightly greater, given that the demand for domestic water and in particular wastewater collection services would be concentrated in three distinct areas of the City
Transportation	Slightly reduced, given the closer proximity to public transit facilities and other multi-modal connections

Attainment of Project Objectives: *While Alternative 2 would meet some of the basic project objectives, but not fully meet a number of other project objectives, including affirmatively furthering fair housing. By limiting development to the area immediately surrounding the Metro E (Expo) Light Rail Transit stations, Alternative 2 would eliminate most of the City from participation in meeting the new housing needs under the 6th Cycle 2021-2029 Regional Housing Need Allocation. This alternative would reduce the City's ability to provide affordable housing in all areas of the City, affirmatively further fair housing, and assuring equal housing opportunities to all. However, this alternative would better support project objectives related balancing housing with other City goals such as sustainable development and increasing the use of public transit, bicycle facilities, and pedestrian facilities. Additionally, similar to the proposed Housing Element Update this alternative would provide housing assistance and address homelessness within the City.*

Alternative 2 would support high-density housing clusters within a 0.5-mile radius of the City's three Metro (E) Expo LRT stations, supporting the development of transit-oriented communities and increasing walkability and non-automobile travel in residential neighborhoods.

As with the proposed Housing Element Update, the Transit-Oriented Housing Development on Fewer Sites Alternative (Alternative 2) would plan for up to 8,895 to approximately 11,000 dwelling units. However, under Alternative 2, new residential development would be concentrated within three areas of the City: the Downtown/Civic Center, Bergamot Area, and Memorial Park. Specifically, Alternative 2 would locate new residential development to the potential housing sites in the SSI that are located within a 0.5-mile radius of Metro E (Expo) LRT stations (see Figure 5-1). Given that Alternative 2 would plan for the same number of dwelling units within fewer individual sites within the City, Alternative 2 would require taller building heights and greater density in order to achieve the housing production required by the 6th Cycle RHNA issued by the SCAG.



wood.

Alternative 2 – Transit-Oriented Housing Development on Fewer Sites

FIGURE 5-1

Implementation of Alternative 2 would support the LUCE's strategy to encourage housing production around the Metro E (Expo) LRT stations. However, this approach would not align with the new State Housing Law requirements. In particular, AB 686 mandates that cities and counties Affirmatively Furthering Fair Housing, meaning that they must foster inclusive communities free from barriers for the development of equitable housing access and affordable housing spread more broadly through the community. While this alternative would increase development standards around the transit stations, development standards in other areas such as the Neighborhood Commercial (NC) zones would not be modified to incentives housing. Additionally, this alternative would not encourage development of housing on parking lots of religious congregations or on residentially zoned parking lots. All other proposed goals, policies, and programs of the proposed Housing Element Update would be carried forward under Alternative 2.

Air Quality

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

Implementation of Alternative 2 would not conflict with the goals of the SCAQMD's 2016 AQMP. Alternative 2 would be consistent with the goals for criteria air pollutant emissions reductions and sustainability to an even greater extent than the proposed Housing Element Update. As with the proposed Housing Element Update, this alternative would improve the existing jobs-housing imbalance within the City. However, by concentrating development within a 0.5-mile radius of the Metro E (Expo) LRT stations, this alternative would create multi-modal districts that fully integrate and increase accessibility to transit. As a result of this transit-oriented development, VMT, transportation-related energy demand and operational criteria air pollutant emissions would be reduced further on a City-wide and regional basis. As described for the proposed Housing Element Update, individual development projects under Alternative 2 would be required to adhere to all applicable SCAQMD rules for controlling air pollutant emissions. Therefore, impacts would be *less than significant*.

Would the 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?

Construction

As with the proposed Housing Element Update, development under Alternative 2 would also require construction activities that could generate short-term construction-related air pollutant emissions. Similar to the proposed Housing Element Update, construction emissions from individual construction projects could potentially exceed SCAQMD thresholds of significance. As the Basin is currently in nonattainment for O_3, $PM_{2.5}$, and PM_{10} under Federal and State standards, development anticipated to occur under Alternative 2 could cumulatively exceed an air quality standard or contribute to an existing or projected air quality exceedance for these pollutants. MM AQ-1, which would require conditions for the construction of new residential development projects planned for under Alternative 2, would further reduce construction-related air emissions in the City. However, the potential air emissions reductions resulting from implementation of this mitigation measure cannot be quantified because information on construction

scheduling and project size for all individual projects likely to occur in the City are not available. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities under Alternative 2 would be reduced to below SCAQMD significance thresholds. For these reasons, construction air quality impacts are conservatively concluded to be *significant and unavoidable*.

Operation

As described for the proposed Housing Element Update, future residential development anticipated to occur under Alternative 2 would generate operational emissions associated mobile, energy, water, waste, and land use sources. Alternative 2 would implement the same sustainability and trip-reduction policies and standards included in the proposed Housing Element Update. Further, this alternative would reduce operational emissions from mobile sources to an even greater extent when compared to the proposed Housing Element Update, given that new development under Alternative 2 would be concentrated within a 0.5-mile radius of the City's three Metro E (Expo) LRT stations. It is anticipated that this transit-oriented development would reduce VMT and associated operational criteria air pollutant emissions further on a City-wide and regional basis by integrating and improve accessibility to multi-modal transit within the City. However, the majority of the operational emissions associated with the proposed Housing Element Update are projected to occur from area sources associated with the total number of proposed dwelling units (refer to Table 3.3-13 in Section 3.3, *Air Quality*). Therefore, while operational impacts to criteria pollutant emissions would be less than the proposed Housing Element Update under Alternative 2, it can be reasonably assumed that total operational emissions would remain above the SCAQMD's project-level thresholds of significance. Impacts would be *significant and unavoidable*.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Thresholds

As previously described, LSTs are applicable at the project-specific level and are not applicable to regional projects such as general plans or other long-term planning documents. Depending on the size of each individual project, the amount of demolition, excavation, and grading, and the proximity of the individual project sites to sensitive receptors, individual residential development could result in construction-related emissions of CO, NO_x, and PM_{10} that exceed the LSTs for construction. This is particularly true for multiple projects that are constructed concurrently on the same or adjacent blocks, which would be likely given the amount and locations of residential development planned for under Alternative 2. Compliance with existing City polices and regulations as well as SCAQMD rules, including the limiting of grading activities during high winds and application of soil stabilizers to prevent fugitive dust, would reduce criteria air pollutant emissions from construction activities. However, the potential reductions in construction-related emissions resulting from implementation of these measures cannot be quantified because information on construction scheduling and project size for all individual residential development projects likely to occur within the City are not available. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be reduced to below LSTs for construction. For these reasons, localized construction air quality impacts are conservatively concluded to be *significant and unavoidable*.

Toxic Air Contaminants

Although no specific project details (e.g., proposed land uses, site plans, etc.) are available, future development anticipated to occur under Alternative 2 may locate sensitive uses, such as residential uses, outdoor open spaces, and recreational facilities (e.g., tennis courts, swimming pools, etc.) within 500 feet of the I-10 freeway corridor, which receives from 150,000 to 194,000 AADT within the City boundaries. The unmitigated freeway diesel particulate matter (DPM) emissions would exceed SCAQMD thresholds for cancer risk (i.e., 10 in a million or 1.0 x 10^{-5}) at sensitive residential receptors; therefore, as described for the proposed Housing Element Update, health risk impacts to sensitive receptors from development activities under Alternative 2 would be potentially significant. In fact, given that Alternative 2 would concentrate residential development within a 0.5-mile radius of the Metro E (Expo) LRT stations, it is likely that this potential impact would be substantially increased relative to the proposed Housing Element Update However, as described proposed Housing Element Update, Alternative 2 would implement MM AQ-2, which would require the use of design techniques and air filtration systems to reduce the exposure of sensitive receptors to TAC emissions from freeway operations. Given that these measures could reduce exposure to DPM emission by up to 50 percent for outdoor areas and over 90 percent for indoor areas, mitigated DPM emissions anticipated at new sensitive residential receptors within the City under Alternative 2 would not exceed SCAQMD thresholds for cancer risk, and impacts would be *less than significant with mitigation.*

Would the project result in other emissions (such as those leading to odors) affecting a substantial number of people?

CO Hotspots

Implementation of Alternative 2 would support transit-oriented communities and encourage multi-modal transportation, how development under Alternative 2 would result in additional vehicle trips that would increase CO emissions at intersections within the City, as compared to existing conditions. However, as shown in Table 3.3-3 in Section 3.3, *Air Quality*, CO levels near the City are substantially below the Federal and State standards. Maximum CO levels in recent years are 2.2 ppm (1-hour average) and 1.4 ppm (8-hour average), which are well below the CAAQS of 20 ppm (1-hour average) and 9.0 ppm (8-hour average). As described for the proposed Housing Element Update, the most heavily trafficked intersection within the City that would be affected by Alternative 2 is Palisades Beach Road (Pacific Coast Highway) & California Incline, which currently experiences less than 80,000 vehicle trips per day (see Section 3.12, *Transportation*). None of the intersections within the City, including the Palisades Beach Road (Pacific Coast Highway) & California Incline, would experience 100,000 vehicles per day experienced the most congested intersection in Los Angeles intersection evaluated in the CO Plan for the 2003 AQMP. As a result, CO concentrations are expected to be far less than those estimated in the 2003 AQMP for and would not create a CO hotspot or exceed the CAAQS for CO concentrations. Federal and State CO standards would not be exceeded and this impact would be *less than significant.*

Other Sources of Emissions such as Odors

Similar to the proposed Housing Element Update, standard construction requirements would be imposed upon future projects under Alternative 2 to minimize odors from construction. Operationally, odors that would be expected from residential development anticipated to occur under Alternative 2 would typically be associated with solid waste (refuse) storage typical of urban uses, similar to those described for the proposed Housing Element Update. These odors would be consistent with that generated by existing residential and commercial uses throughout the City and would be confined to the immediate vicinity of new development. Solid waste would be stored in covered containers and removed regularly consistent with the City's solid waste and recycling pick-up requirements. As such, impacts associated with generation of objectionable odors would be *less than significant*.

Cultural Resources

Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Alternative 2 would facilitate the same amount of residential development as the proposed Housing Element Update, but on fewer sites within the City due to the concentration of development along the City's three Metro E (Expo) LRT stations. By concentrating development around the Expo Stations, the majority of the City and associated historic resources would be subject to reduced impacts from new development, while historic resources within a 0.5-mile radius of the Metro E (Expo) stations (i.e., Downtown Santa Monica Station, Bergamot Station, and Santa Monica College Station) may be subject to greater impacts. Under Alternative 2, historically significant resources would be identified on a project-by-project basis through site-specific, on-site reconnaissance prior to approval of a development permit(s) (e.g., demolition permit, building permit, etc.). As described for the proposed Housing Element Update, any future residential development planned for under Alternative 2 would be required to comply with applicable Federal, State, and local polices and regulations that concern the preservation of historical resources, including the City's Landmarks and Historic District Ordinance (SMMC Chapter 9.36), and its regulations governing demolition would continue to apply. However, even with the City's stringent regulatory framework that provides for protection of historical resources, the modified development standards and incentives that would apply to new residential development projects under Alternative 2 could still result in direct impacts to historic architectural resources as a result of alteration and/or demolition. Additionally, indirect impacts could occur as a result of off-site ground-borne vibration during construction or through the loss of historical character/setting, such as potentially siting new large-scale structures next to potentially smaller historic structures or other alterations to historic character. Given the increase in height required to meet the RHNA under this alternative, there may be an increased potential for indirect impacts on the historical character/setting for historical resources within the Downtown/Civic Center, Bergamot Area, and Memorial Park. Similar to the proposed Housing Element Update, Alternative 2 would implement MM CR-1a and -1b as well as MM NOI-1 to reduce many of the potential adverse effects to historical resources that could conceivably occur from future residential development. However, as demolition or significant alteration of a historic resource could still occur as a result of future development under Alternative 2, impacts would remain *significant and unavoidable.*

Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines?

Potential impacts to archaeological resources under Alternative 2 would be similar to those described for the proposed Housing Element Update since grading and excavation for construction of individual projects could potentially uncover significant subsurface archaeological remains in a similar manner. As described for the proposed Housing Element Update, Alternative 2 would be required to implement MM CR-2a and -2b, which establish processes to protect prehistoric or historic-period archaeological resources if discovered during future construction activities. Alternative 2 would also be required to implement MM TCR-1, which would require a Native American monitor (if required by the tribe during Native American consultation) to be present during project construction excavations (e.g., clearing/grubbing, grading, trenching, or any other excavation activities) for all new residential developments involving grading/excavation greater than 5 feet below ground surface (bgs). With implementation of MM CR-2a and -2b as well as MM TCR-1, impacts would be reduced to *less than significant*.

Would the project disturb any human remains, including those interred outside of formal cemeteries?

Although human remains have not been identified previously in the City, tribal representatives indicated the extensive geography of the Gabrieleño Band of Mission Indians – Kizh Nation across the City where Native Americans lived and dispersed (refer to Section 3.13, *Tribal Cultural Resources*). As such, ground disturbing activities (e.g., grading, excavation, etc.) for individual development projects under Alternative 2 would have the potential to disturb human remains similar to the proposed Housing Element Update. As described for the proposed Housing Element Update, future development under the Alternative 2 would be subject to California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, which mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. With compliance with existing regulations prescribed in California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, impacts to human remains would be *less than significant*.

Energy

Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Similar to the proposed Housing Element Update, the construction of new land uses under Alternative 2 would result in construction-related energy demand. Such energy demand is difficult to quantify as the details of construction, design/size, and timing of each future project to occur in the City is unknown. Construction-related energy demand under the Alternative 2 would vary on an annual basis. Overall, total construction-related energy demand under Alternative 2 would be similar to the proposed Housing Element Update.

Operation of residential development under Alternative 2 would generate similar electricity and natural gas demand as compared to the proposed Housing Element Update; however, given that residential development under Alternative 2 would be concentrated along transit stops, this alternative would more fully support transit-oriented communities and encourage multi-modal transportation within the City, thereby reducing VMT and associated vehicle fuel consumption. Therefore, transportation-related energy under Alternative 2 would be reduced as compared to the proposed Housing Element Update. Similar to the proposed Housing Element Update, residential development under Alternative 2 would permanently increase the overall demand for electricity and natural gas primarily for lighting, cooking, building heating and cooling, etc. However, new development under Alternative 2 would comply with the requirements of State and local regulations – including CALGreen, the City's Energy Reach Code, Green Building Standards Code, and the SMMC. Therefore, Alternative 2 would increase energy demand, but would not result in wasteful, inefficient, and unnecessary consumption of energy resources during construction or operation of individual residential or mixed-used developments. Impacts would be *less than significant*.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Similar to the proposed Housing Element Update, development under Alternative 2 would be required to comply with the City's energy conservation and GHG reduction goals and policies established in the City's LUCE, Sustainable City Plan, CAAP, Energy Reach Code, and Green Building Standards Code. Alternative 2 would promote energy efficient sustainable development to an even greater extent than the proposed Housing Element Update as it would concentrate residential development in proximity to transit corridors and job centers. As a result, Alternative 2 would decrease transportation-related energy demand compared with the project and support State, regional, and City efforts to improve transportation-related energy efficiency and would not conflict with or obstruct plans for renewable energy or energy efficiency. Impacts would be *less than significant*.

Land Use and Planning

Would the project physically divide an established community?

As described for the proposed Housing Element Update, Alternative 2 would not directly introduce new superblocks (i.e., multiple blocks with restricted pedestrian or vehicle access) or new infrastructure (e.g., roads) that would physically or functionally conflict with existing land uses. Similar to the proposed Housing Element Update, Alternative 2 would amend the development standards in the LUCE as well as the DCP, Bergamot Area Plan, and Zoning Ordinance to provide opportunities for increased housing production within high quality transit areas that are aligned with regional growth objectives and State law as well as City priorities. Impacts related to the division of an established community would be *less than significant*. However, while Alternative 2 would not physically divide an established community, this alternative would not remove barriers to affordable housing production to the same extent .as the proposed Housing Element Update.

Would the project cause a significant environmental effect due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Alternative 2 would amend the City's LUCE, DCP, Bergamot Area Plan, and the Zoning Ordinance to substantially increase permitted building heights and FARs to incentivize housing projects with affordable (inclusionary) housing pursuant to the State Density Bonus Law. Compared to the proposed Housing Element, Alternative 2 would better support LUCE principles addressing integration of new land uses and transportation. However, by limiting new development to areas within a 0.5-mile radius of the three Metro E (Expo) LRT stations and along major transit corridors, this alternative would not comply with AB 686 mandate to affirmatively further fair housing to the same extent as the proposed Housing Element Update. Alternative 2 would not increase and distribute housing throughout the City, or incentivize housing in areas that have historically excluded diverse populations. Nevertheless, given the consistency of Alternative 2 with the policies of the LUCE, DCP, and Bergamot Area Plan as well as the Zoning Ordinance land use impacts would be *less than significant.*

Greenhouse Gas Emissions and Climate Change

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Alternative 2 would plan for the same amount of residential development as the proposed Housing Element Update and would result in similar construction-related GHG emissions. Such emissions are difficult to quantify as the details of construction, design/size, and timing of each future project to occur in the City is unknown. Construction-related emissions anticipated to occur under Alternative 2 would vary on an annual basis. While Alternative 2 is projected to result in the same amount of new residential development as the proposed Housing Element Update, this alternative would concentrate development along transit stops and major transportation corridors within the City, thereby enhancing multi-modal transportation connections and decreasing VMT and associated operational GHG emissions. Therefore, long-term GHG emissions associated with operation of future land uses under Alternative 2 would be less than those forecasted for the proposed Housing Element Update.

As described for the proposed Housing Element Update in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, all individual residential development projects in the City under Alternative 2 would be subject to meet the City's energy conservation and GHG reduction standards established in the CAAP, Energy Reach Code, Zero-Net Energy Code, Green Building Standards Code, and SMMC. Compliance with City policies and regulations would ensure that new development under Alternative 2 would occur in accordance with State, regional, and City plans and policies adopted for the purpose of reducing GHG emissions. Additionally, Alternative 2 would achieve State, regional, and City sustainability and GHG reduction goals to an even greater extent than the proposed Housing Element Update by concentrating housing potential in the transit-rich areas. This alternative would be more aligned with the GHG goals and

policies established in SCAG's Connect SoCal, the LUCE, Sustainable City Plan, CAAP, AB 32, and SB 375, as these goals which call for integration of land use and transportation to reduce GHGs by focusing new development around the City's three existing Metro E (Expo) LRT stations and creating increase the use of public transit, bicycle facilities, and pedestrian facilities. Compliance with the City's existing policy framework would ensure that residential development planned for under Alternative 2 would not conflict with GHG goals and impacts would be *less than significant*.

Noise

Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Construction activities associated with development under Alternative 2 would result in a temporary increase in noise levels in the vicinity of individual project sites or clusters of such sites, located within a 0.5-mile radius of the Metro E (Expo) LRT Stations. Construction noise levels from individual projects could result in noise levels above normal acceptable levels (e.g., greater than 85 dBA) and would potentially create a substantial temporary or periodic increase in ambient noise levels. Although the City's Noise Ordinance exempts increases of noise during construction activities of up to 20 dBA and 40 dBA depending on the timing of high noise-generating activities, the potential for a substantial periodic impact is based on a perceived increase by the receptor. However, construction activities would generally only occur during the permitted hours designated in the SMMC, and all development projects located within 500 feet of residential uses would be required to adhere to SMMC Section 4.12.110(c), which requires applicants of construction projects located within 500 feet of any residential development, or other noise sensitive land uses, to submit a list of equipment and construction activities to the City planning staff prior to the issuance of a building permit. Since all construction activities would be required to adhere to the noise standards and requirements established the City's Noise Ordinance, construction noise impacts would be *less than significant*.

Operation

Alternative 2 would plan for the same amount of residential development as the proposed Housing Element Update, but would concentrate development within a 0.5-mile radius of the City's three Metro E (Expo) LRT Stations to ensure the development of transit-oriented communities and reduce vehicle trips. Therefore, compared to the proposed Housing Element Update, Alternative 2 would reduce anticipated vehicle trips, and associated operational noise levels in the City. As such, noise impacts related to City-wide vehicle trips under Alternative 2 would be reduced as compared to the proposed Housing Element Update. Similar to the proposed Housing Element Update, new residential development projects under Alternative 2 would also result in exposure of residents to new permanent sources of noise from deliveries, trash hauling, parking noise, and mechanical equipment and operation of land uses (e.g., music, loud conversations, etc.). However, operational noise impacts would be reduced through

compliance with the noise standards in the SMMC. Therefore, similar to the proposed Housing Element Update, impacts under this alternative would be *less than significant*.

Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Similar to the proposed Housing Element Update, construction of new residential development projects in the City under Alternative 2 would potentially expose adjacent persons or structures to temporary, excessive ground-borne vibration levels that would exceed thresholds. For typical construction activities occurring within 25 feet of sensitive receptors, vibration levels could potentially exceed the threshold of 0.1 in/sec. Further, as described for the proposed Housing Element Update, development projects under Alternative 2 may require the use of pile driving which would have the potential to generate significant vibration levels exceeding 0.1 in/sec at nearby sensitive receptors. Therefore, construction ground-borne vibration impacts are conservatively concluded to be potentially *significant and unavoidable*.

For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels?

Similar to the proposed Housing Element Update, new residential development planned for under Alternative 2 would not be located within an airport land use plan, but could be located within 2 miles of the SMO property. However, individual development projects would be subject to environmental review and evaluated on a project-by-project basis. Additionally, the eventual closure of SMO in 2028 would ensure that people residing or working in the vicinity of the airport are not exposed to excessive noise levels. Therefore, this impact is *less than significant*.

Population, Housing, and Employment

Would the proposed project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Alternative 2 plans for the same amount of new dwelling units and associated population growth as under the proposed Housing Element Update. Similar to the proposed Housing Element Update, Implementation of Alternative 2 would not directly propose the construction of housing, but rather would amend development standards and enact new programs to facilitate the construction of housing, particularly affordable housing, within the City. Thus, similar to the proposed Housing Element, Alternative 2 would accommodate regional growth anticipated by the SCAG rather than induce or stimulate such growth (refer to Section 3.9, *Population, Housing, and Employment*). Further, State law requires that the City provide the capacity and the regulatory framework to accommodate its “fair share” RHNA of the region’s housing needs, which cannot be achieved without the proposed revisions to the development standards and new programs. Therefore, this impact is considered *less than significant*.

Alternative 2 would include the same housing programs to facilitate the construction of housing (particularly affordable housing) within the City as those described for the proposed Housing Element Update in Section 2.0, *Project Description*. However, given that Alternative 2 would concentrate new affordable units along transit stops and transportation corridors, this alternative would not provide the same level housing diversity as compared to the proposed Housing Element Update.

Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

Similar to the proposed Housing Element Update, Alternative 2 would not be anticipated to displace substantial amounts of housing or existing residents. As described for the proposed Housing Element Update, land use changes through 2030 associated with this alternative are anticipated to occur almost entirely on commercially zoned parcels and vacant sites. However, should an existing property owner of multi-family and multi-unit property choose to redevelop, such a decision would be beyond the control of the City. In limited cases where residential tenants may be displaced, displacement impacts would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with state and local requirements, such as the City's Tenant Relocation Assistance Ordinance (SMMC Chapter 4.36). Therefore, Alternative 2 would not displace substantial numbers of housing or people, and impacts would be *less than significant*.

Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

As described for the proposed Housing Element Update, future land use changes anticipated to occur under Alternative 2 would increase the population in the City by up to 18,000 to approximately 22,000 new residents. The increase in residential population would result in an increased demand for public services as discussed below.

Fire Protection

Implementation of Alternative 2 is anticipated to result in the same amount of residential as projected for the proposed Housing Element Update. Therefore, Alternative 2 is anticipated to facilitate the same increase in population growth and associated future demand for fire protection services in the City as described for the proposed Housing Element Update. Increases in the demand for SMFD services would potentially generate the need for new or physically altered fire protection facilities – particularly within the Downtown/Civic Center, Bergamot Area, and Memorial Park. (It should also be noted that the required building heights necessary to meet the 6th Cycle RHNA may place further constraints on firefighting capabilities.) As discussed in Section 3.10, *Public Services*, the City has identified strategies and recommended expansions to facilities to improve SMFD response times. However, planning for such a

facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of SMFD facilities and staff. As such, impacts to fire protection services associated with Alternative 2 would be *significant and unavoidable*.

Police Protection

The anticipated amount of population growth in the City and associated increase in future demand for police protection services under Alternative 2 would be similar to those described for the proposed Housing Element Update. As discussed in Section 3.10, *Public Services*, the SMPD's 5-year Staffing Plan identifies the need for additional police resources and equipment as necessary. The SMPD is funded through general fund revenues and pier fund revenues generated by property, sales, and transient occupancy taxes, all of which are expected to increase in proportion to the new residential development associated with implementation of this alternative. Such revenues would be used by the SMPD to hire additional officers and purchase equipment to maintain or improve SMPD service levels over time to meet changing demands. However, unlike fire protection services, the construction of new facilities is not anticipated to be necessary to address a potential future increase in call volumes. Therefore, this impact would be *less than significant*.

Public Schools

Based on the anticipated amount of population growth under Alternative 2, increases in student enrollment at SMMUSD would be similar to the proposed Housing Element Update. Over the short-term, SMMUSD would need to employ various strategies to temporarily increase capacity. Over the long-term, permanent increases in capacity (e.g., construction of new buildings, satellite schools, or new schools) may become necessary. Infrastructure improvements could be partially funded through existing developer fees required by the SMMUSD for new development. Pursuant to SB 50, individual residential development projects would be required to pay SMMUSD developer fees for both residential and non-residential uses, which could be used for expansion or upgrading of school facilities as needed to accommodate increases in school enrollment over time. Pursuant to California Government Code Section 65995.5, payment of developer fees generally constitutes full mitigation on impacts to school. However, as described for the proposed Housing Element Update, the caps places on developer fees by the State would limit the effectiveness of this mitigation. The residential development under this alternative may contribute to the need for the construction of new or expanded public school facilities, the construction of which may have result in significant environmental impacts. Given the limited revenue available through developer fees for school facilities and the lack of availability of bond funds for facility improvement through Measures BB, ES, and SMS, impacts on school facilities associated with the proposed Housing Element would be potentially *significant and unavoidable*.

Libraries

The anticipated amount of population growth in the City and associated increase in future demand for library services would be similar to those described for the proposed Housing Element Update. Due to the growing use of electronic resources, new residential uses in the City do not immediately equate to an increase in demand for total volumes or square feet of library space. Therefore, as described for the

proposed Housing Element Update, new City residents occurring under Alternative 2 are anticipated to only incrementally increase the demand for library services and facilities within the City. Although library use would be expected to increase under implementation of Alternative 2, anticipated increases in digital online media as well as modification of library operations (e.g., continued curbside drop-off / pick-up services) would help absorb the increased demand and prepare the system for future demand under Alternative 2. It should be noted that the City's annual budgeting also addresses maintenance of existing library facilities to ensure that the deterioration of existing libraries does not occur. Therefore, impacts would be *less than significant*.

Parks and Recreation

As described for the proposed Housing Element Update, Alternative 2 would plan for up to 8,895 to approximately 11,000 new dwelling units, potentially generating an increase in population of up to 18,000 to approximately 22,000 people. These new City residents would be concentrated within the immediate vicinity of the Downtown/Civic Center, Bergamot Area, Memorial Park placing an additional strain on the park space in these areas. Most of the City's parks and recreational areas are located in the western edge of the City, near the Downtown. Memorial Park is also centered around a 10.3-acre community park with six baseball/softball fields, a skate park, four tennis courts, gated children's play structures. The Bergamot Area is more park poor in comparison, with only Stewart Street Park located in close proximity. As with the proposed Housing Element Update, Alternative 2 would require the implementation of MM PS-1, which requires the City to resume the update to the PRMP to develop and guide parks and recreation improvements, intended to increase the availability and accessibility of parks. Additionally, MM PS-2 would the City to consider potential revisions to the Parks and Recreation Development Impact Fee. Consistent with the City's on-going long-range planning efforts, it is anticipated that the City would implement the recommendations of the PRMP, as practicable given City-funding limitations. Nevertheless, it is unknown at this time what specific parks and recreation improvements would be implemented therefore, this impact would remain *significant and unavoidable*.

Utilities

Would the project require or result in the construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

Implementation of Alternative 2 is anticipated to result in the same amount of residential development as described for the proposed Housing Element Update. However, development under Alternative 2 would be concentrated along the City's three Metro E (Expo) LRT stations. As described for the proposed Housing Element Update, new residential development planned for under Alternative 2 would tie into the existing network of water lines throughout the City, characterized by various sizes and ages. Given that Alternative 2 would result in higher density housing within concentrated areas of the City, this alternative would concentrate the increase in water demand at a given location. Therefore, individual projects may trigger the need for construction of new laterals and/or the replacement/expansion of existing water mains, necessary to provide adequate water supply and water pressure. Construction associated with individual facilities is unlikely to cause significant effects, construction of new laterals and/or

installation/replace of new water mains sufficient to serve up to 8,895 to approximately 11,000 new dwelling units may have the potential to create potentially significant air quality, cultural resources, noise, and transportation impacts. Installation of new water lines and connections would be reviewed on a project-by-project basis. As described for the Housing Element Update, MM U-1 would ensure individual project applicants pay a fair-share mitigation fee for the installation of new water lines.

As described further below, new residential development anticipated to occur under this alternative would increase City-wide water demand over existing conditions to the same extent as the proposed Housing Element. Therefore, increased water demand under Alternative 2 would be approximately 486,839 gals/day (545 AFY) of net new water demand as projected under the proposed Housing Element Update. As described for the proposed Housing Element under Impact UT-1 in Section 3.11, *Utilities*, the City has sufficient water supplies available from a combination of the SMGB and MWD imported water sources to meet water demand – including the projected growth under the proposed Housing Element Update. Given that the projected development and associated increase in water demand under Alternative 2 would be the same as the proposed Housing Element Update, the City would have sufficient water supplies available to meet water demand generated by Alternative 2. Therefore, no additional major infrastructure improvements (e.g., production, treatment, or storage facilities) would be required to enhance the City's water production and treatment capacity in order to meet the future demand – including the projected growth under Alternative 2 – and impacts would be *less than significant with mitigation*.

Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Implementation of Alternative 2 is anticipated to result in the same amount of new residential development as the proposed Housing Element Update. Therefore, Alternative 2 would result in the same increase in water demand as described for the proposed Housing Element Update. The City's existing and projected water supply would be adequate to meet the increased water demand from this development and the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. However, while the City, can continue to rely upon the water allocation from MWD to supplement local water supplies, the development of new dwelling units planned for Alternative 2 may delay or inhibit the City's ability to achieve the goal of water self-sufficiency by 2023, a key City policy goal, which could create inconsistencies with City policy, a potentially *significant impact*.

Would the project require or result in the construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects?

Given that Alternative 2 is projected to result in the same amount of new residential development within the City as the proposed Housing Element Update, this alternative would result in an identical increase in wastewater generation associated with new development. Therefore, land changes anticipated to occur in the City under this alternative would increase the amount of wastewater transported by the sewer system by approximately 1,927,614 gallons per day (1.93 MGD), an approximately 6-percent increase over existing flows (refer to Table 3.11-13 in Section 3.11, *Utilities*). As described for the proposed Housing

Element Update, the City's existing wastewater collection system is largely adequate to meet projected demand. However, the given the more concentrated areas of development in the Downtown/Civic Center, Memorial Park, and Bergamot Area the waster conveyance systems in these areas could be more heavily impacted. As a result, residential development under Alternative 2 would likely require expansion or replacement of individual sewer line segments – particularly in these areas surrounding the Metro E (Expo) LRT stations – to meet increased residential wastewater demand by 2030. Because the precise location and intensity of new development can only be generally forecast, the precise location and length of sewer pipes impacted cannot be completely identified. However, with the assurance of adequate funds through implementation of MM UT-2 to finance the CIP projects (e.g., replacement/expansion of sewer mains), as necessary, impacts to the sewer system would be reduced to *less than significant with mitigation*.

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The HWRP, which treats wastewater flows from the City, has a dry weather capacity of approximately 450 MGD processed through full secondary treatment and an 850 MGD wet weather capacity. Currently this facility receives and treats 340 MGD of wastewater; therefore, the existing HWRP system has approximately 110 MGD of additional full secondary treatment capacity. As previously described, implementation of Alternative 2 would plan for the same amount of residential development as the proposed Housing Element Update. Therefore, as described for the proposed Housing Element Update, the 1.93 MGD of wastewater generated under Alternative 2 would be a *de minimis* incremental increase and the HWRP system has sufficient capacity to serve the projected increase in demand associated with Alternative 2 in addition to the provider's existing commitments. This impact would be *less than significant.*

Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Implementation of Alternative 2 is anticipated to result in the same amount of new residential development as the proposed Housing Element Update. Therefore, the projected increase in solid waste generation under Alternative 2 would the same as described under the proposed Housing Element Update (up to 5,295 tons per year, or up to 1,006 tons per year when accounting for the existing diversion rate of 81 percent). The additional 1,006 tons per year of solid waste that is anticipated to be generated by implementation of Alternative 2 would be accommodated by the 14 solid waste facilities expected to serve the City in 2030, which have a combined permitted daily capacity of 70,004 tons. Given the existing sufficient capacity of solid waste facilities combined with the City's efforts to reduce waste generation (i.e., the City's Sustainable City Plan, Zero Waste Strategic Operations Plan and 2019 Zero Waste Plan Update), this impact would be *less than significant.*

Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Implementation of Alternative 2 would not conflict with the goals or requirements of AB 939, AB 341, the City's Zero Waste Strategic Operations Plan, or the SMMC. As discussed under Impact UT-5 in Section 3.11, *Utilities*, the City has already achieved a diversion rate of 81 percent that is in excess of the requirements of AB 939 and AB 341 to achieve a 75 percent diversion by 2020. The City remains committed to continuing its existing waste reduction programs and minimization efforts with the programs with goals, targets, and programs to achieve 85 percent diversion rates by 2020 and 95 percent diversion by 2030. Individual projects in the City under Alternative 2 would be required to comply with all applicable solid waste regulations in effect at the time of operation, including solid waste diversion requirements described in SMMC Section 5.08.400. Additionally, individual projects would comply with the Construction and Demolition Ordinance (SMMC Section 8.108.010 Subpart C) by submitting a waste management plan to the City and diverting at least 70 percent of construction and demolition debris from landfills. Therefore, the City is in compliance with State law and implementation of Alternative 2 would not conflict with federal, state, or local statues and regulations related to solid waste disposal. Therefore, *no impact* would occur.

Transportation

Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Under this alternative, new residential development would be concentrated within a 0.5-mile radius of the Metro E (Expo) LRT stations. Compared to the proposed Housing Element Update, this alternative would better support goals to reduce City-wide and regional VMT by placing residential development along multi-modal corridors as described in SCAG's Connect SoCal Plan, Metro's 2020 LRTP, the City's LUCE, DCP, Bergamot Area Plan, Bike Action Plan, and CAAP. This alternative would not restrict the City's ability to implement any planned transportation improvements under the Bike Action Plan, DCP, or Bergamot Area Plan. Under this alternative, new development would continue to be subject to TDM and transportation impact fees per SMMC Chapter 9.53 and Chapter 9.66, respectively. Therefore, impacts would be *less than significant.*

Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Alternative 2 would support the same amount of residential development as projected under the proposed Housing Element Update, although Alternative 2 development would be concentrated within a 0.5-mile radius of the Metro E (Expo) LRT stations, enhancing transit accessibility within the City. The increased development density around rail transit stations would increase the convenience of non-auto travel modes and reduce vehicle trips and therefore would be expected to result in fewer vehicle trips than what is forecast under the proposed Housing Element Update. Thus, it would generate less VMT per capita than the proposed Project and would have a *less than significant impact* for VMT per capita. With fewer vehicle

trips and the same number of future residents and commercial employees that are anticipated under the proposed Project, Alternative 2 would generate a lower combined total VMT for residents and commercial employees than what would occur under BAU VMT and lower than what is projected for the proposed Housing Element Update. Without conducting a comprehensive quantitative analysis, however, it cannot be known if the reduction in total VMT would be 16.8 percent or more from Alternative 2 BAU VMT and this impact would be conservatively considered to remain *potentially significant*.

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Implementation of Alternative 2 is anticipated to result in the same amount of new residential development, and therefore, would generate a similar amount of construction traffic. Construction traffic associated within individual development projects under Alternative 2 would typically include heavy haul trucks, construction equipment delivery, and construction worker vehicles. Increased construction traffic on freeways and streets, particularly haul trucks and other heavy equipment (e.g., cement trucks and cranes), may temporarily disrupt traffic flows, reduce lane capacities, and generally slow traffic movement. Construction traffic could also interfere with or delay transit operations and disrupt bicycle and pedestrian circulation. However, as described for the proposed Housing Element Update, construction projects under Alternative 2 would be required to prepare a Construction Management Plan in accordance with the City's Construction Management Ordinance, ensuring that construction-related hazards would be *less than significant*.

As with the proposed Housing Element Update, Alternative 2 does not propose any new City-wide improvements to the City's transportation network and does not include any site-specific project plans that can be evaluated for transportation hazards. Individual projects proposed for development would be subject to, and designed in accordance with, City standards and specifications within the SMMC, including the City Fire Code and California Building Code. While the details for future development (e.g., project layouts, driveway locations, land use types, and intensities) are unknown at this time, all individual projects under Alternative 2 would be subject to ministerial and/or discretionary permits as well as compliance with applicable City regulations related to site access and street design; and would be required to adhere to all State and local requirements for avoiding impacts related to design and incompatible uses. As a result, future development under Alternative 2 would not substantially increase hazards due to design features or incompatible uses. Therefore, Alternative 2 would not introduce new safety hazards at intersections or along roadway segments, and from a programmatic perspective, impacts would be *less than significant*.

Would the project result in inadequate emergency access?

While the details for future residential development project under Alternative 2 are not known at this time, all individual development projects with the potential to impact emergency access would be subject to ministerial and/or discretionary permits. As described for the proposed Housing Element Update, all development projects would be required to comply with applicable building and fire safety regulations and adhere to all State and City requirements for safe access, including emergency access. As a part of the

plan check process, project site access plans would be reviewed and approved by the City and the SMFD to ensure compliance with City code requirements and the provision of adequate emergency access. Therefore, emergency access would be maintained following construction of individual projects under Alternative 2. Therefore, any impacts would be *less than significant.*

Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is at least one of the following:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or

- A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c), the Lead Agency shall consider the significance of the resources to a California Native American tribe?

While Alternative 2 would facilitate the same amount of development projected under the proposed Housing Element Update, this alternative would concentrate development on fewer sites within the immediate vicinity of the City's three Metro E (Expo) LRT stations. As such, Alternative 2 would involve construction of residential developments over fewer sites than under the proposed Housing Element Update, and therefore, would have less potential to encounter tribal cultural resources during future grading and excavation activities. Nevertheless, such activities could potentially uncover significant subsurface tribal cultural resources. However, as described for the proposed Housing Element, Alternative 2 would be required to implement MM TCR-1, which would require the presence of a Native American monitor for individual residential developments, if requested by the Gabrieleño Band of Mission Indians – Kitz Nation. Any discovery of resources would trigger an immediate stop in construction and treatment plans would be developed in consultation with the City, Native American representatives, and project archaeologists as necessary. With the implementation of MM TCR-1, impacts to tribal cultural resources would *be less than significant with mitigation.*

Attainment of Project Objectives

Alternative 2 would concentrate new housing development within 0.5 miles of Metro E (Expo) LRT stations and major transit corridors. As discussed below, this would limit housing opportunities, especially affordable housing, in all areas of the City. As, such, this alternative would not affirmatively further fair housing or assure equal housing opportunities to the same extent as the proposed Housing Element Update. However, development in proximity to transit corridors would support key City objectives related to encouraging transit-oriented communities.

Project Objective	Ability for Alternative to Achieve Objective
Meet the State-mandated 6th Cycle RHNA for the City.	This alternative would adequately plan for and accommodate the City's 6th Cycle RHNA of 8,895 dwelling units. Additionally, this alternative would meet the required affordability mix under the City's 6th Cycle RHNA.
Increase housing production for all, with an emphasis on affordable housing.	This alternative would concentrate residential development over Downtown/Civic Center, Bergamot Area, and Memorial Park. In effect, there would be a more narrow distribution of affordable housing options throughout the City. Overall, Alternative 2 would not fully achieve the project objective for housing to the same extent as the proposed Housing Element Update.
Promote greater housing stability for existing residents at risk of displacement.	Similar to the proposed Housing Element Update, Alternative 2 would not be anticipated to displace substantial amounts of housing or existing residents. As described for the proposed Housing Element Update, land use changes through 2030 associated with this alternative are anticipated to occur almost entirely on commercially zoned parcels and vacant sites. In limited cases where residential tenants may be displaced, displacement impacts would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with state and local requirements, such as the City's Tenant Relocation Assistance Ordinance (SMMC Chapter 4.36). Overall, Alternative 2 would generally achieve this project objective to a similar extent as the proposed Housing Element Update
Locate housing close to daily services and amenities like transportation, jobs, parks, and schools in addition to places around the City that have historically not accommodated housing.	This alternative would carry forward the proposed Housing Element Update's goals, policies, and implementation programs that incorporate other community goals. Alternative 2 would encourage the development of transit-oriented communities and provide housing within close proximity to major transportation corridors and multi-modal transit opportunities. As such, this alternative would increase walkability and non-motorized forms of transportation. Overall, Alternative 2 would achieve this objective to a similar extent as compared the proposed Housing Element Update.
Facilitate equitable housing access to all neighborhoods by expanding access to housing opportunities and overcoming patterns of segregation by planning for housing in areas that have historically excluded diverse housing opportunities.	Because this alternative would focus new development over three areas of the City (i.e., Downtown/Civic Center, Bergamot, and Memorial Park) within a 0.5-mile radius of the Metro E (Expo) LRT stations, Alternative 2 would not provide opportunity for equitable distribution of new housing. Segregated land use patterns would continue, and housing opportunities would continue to be limited in areas that have historically not accommodated housing access. Therefore, Alternative 2 would not align with the goal of Affirmatively Furthering Fair Housing to the same extent as the proposed Housing Element Update.

5.5.3 Alternative 3 – Quantified Objective Alternative

The Quantified Objective Alternative would generally establish and implement similar policies, development standards, and programs as the proposed Housing Element Update; however, this alternative would substantially reduce the number of new dwelling units as compared to the Housing Element Update. Specifically, this alternative proposes the development of 5,363 net new dwelling units through the planning horizon of 2030, as compared to the City's RHNA of 8,895 dwelling units. These 5,363 dwelling units would include approved/pending projects (with permits expected after June 30, 2021 within the planning horizon for the 6th Cycle RHNA), development of the sites with high potential for housing development in the Downtown Community Plan, use of City-owned sites (i.e., Parking Structure #3, 4th Street & Arizona Avenue, and Bergamot Arts Center), which have previously been declared as

surplus lands that could be used for the development of housing with an assumed density of 150 dwelling units per acre.
Anticipated Land Use Development under this Alternative: 5,363 net new dwelling units. While not quantified, associated potential ground-floor commercial development is also anticipate (though reduced from the 405,256 square feet anticipated for the proposed Housing Element Update).

Overview of Significant and Unavoidable Impacts	Comparison to Proposed Housing Element Update
Air Quality	Slightly reduced, though significant and unavoidable impacts would remain as a result of the increase in construction and operational emissions relative to existing conditions
Cultural Resources	Similar
Noise	Similar
Public Services	Slightly reduced, though significant and unavoidable impacts would remain for fire protection services, public schools, and parks and recreation given the increase in housing production relative to existing conditions
Utilities	Slightly reduced, though significant and unavoidable impacts would remain domestic water and wastewater collection services given the increase in housing production relative to existing conditions
Transportation	Slightly greater, given that this alternative would generate a higher combined total VMT for residents and employees than what would occur under the proposed Housing Element Update

Attainment of Project Objectives: *Implementation of Quantified Objective Alternative would meet many of the principles and goals of the proposed Housing Element Update; however, the number of dwelling units through the 2030 planning horizon would not meet the City's 6th Cycle Regional Housing Needs Allocation. Additionally, this alternative would not meet some of the project objectives, such the production of affordable housing and affirmatively furthering fair housing to the same extent as the proposed Housing Element Update, given that fewer dwelling units would be developed under this alternative.*

It should also be noted that the No Project Alternative would not meet the City's obligations under State Housing Law. If the California Department of Housing and Community Development determines that a Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its general plan is at risk of being deemed inadequate, and therefore invalid. If a jurisdiction is sued over an inadequate general plan, the court may impose requirements for land use decisions until the jurisdiction brings its general plan – including its Housing Element – into compliance with State Housing Law.

As described in Section 2.0, *Project Description*, the City's 6th Cycle RHNA is 8,895 dwelling units, of which 69 percent must be affordable. However, as noted in Section 2.5.3, *Suitable Sites Inventory*, housing production under the project would total up to approximately 11,000 new dwelling units in order to provide a buffer to ensure the City can met its RHNA. (The buffer accounts for the likelihood that not all sites identified SSI may be necessarily developed by a property owner for housing.)

State law (California Government Code Section 65583[b]) requires that the City's Housing Element contain "quantified objectives," relative to the maintenance, preservation, improvement, and development of housing. Government Code Section 65583[b][2] also recognizes that *"[t]he total housing needs identified pursuant to subdivision may exceed available resources and the community's ability to satisfy this need within the content of the General Plan requirements outlined in Article 5 (commencing with Government Code Section 65300). Under these circumstances, the quantified objectives need not be identical to the total housing needs. The quantified objectives shall establish the maximum number of housing units by income category, including extremely low income, that can be constructed, rehabilitated, and conserved over a 5-year time period."*

Under the Quantified Objective Alternative, numerical housing targets for the City would be lowered from 8,895 dwelling units under the 6th Cycle RHNA to 5,363 dwelling units. The 5,363 net new dwelling units planned for under this alternative through 2030 would not represent a "ceiling" on development, but rather would set more realistic numerical housing target for the City to achieve based on needs, resources, and constraints.

The City's past production of affordable deed-restricted dwelling units for the 5th Cycle 2013-2021 Cycle Housing Element was made possible by public assistance through the City's Housing Trust Fund, inclusionary units required by the City's Affordable Housing Production Program, inclusionary units negotiated in development agreements, and the City's pursuit of new funding resources. As described in the *Draft Housing Element* published on May 24, 2021, in order to meet the City's ambitious RHNA goal of producing 69 percent affordable housing, it would cost approximately $2.9 billion (i.e., $480,000 per affordable unit) in total development costs to meet the City's 6th Cycle RHNA allocation of affordable units. However, the lack of a significant and consistent funding source for affordable housing coupled with high land and construction costs in the City present major challenges for the City to be able to achieve its current allocation of affordable dwelling units (i.e., 6,168 dwelling units) without a very significant infusion of State or other funding, even with new Housing Element policies.

The Quantified Objective Alternative presents a development goal of 5,363 net new dwelling units, of which 2,148 units (approximately 40 percent) would be affordable. Given the uncertainty of available funding resources from the State and other sources, this reduced development goal would be more feasible for the City. As shown in Table 5-4, the 5,363 dwelling units under the Quantified Objective Alternative would account for approved/pending projects (with permits expected *after* June 30, 2021 within the planning horizon for the 6th Cycle RHNA), development of the sites identified with high potential for residential development in the DCP, use of City-owned sites (i.e., Parking Structure #3, 4th Street & Arizona Avenue, and Bergamot Arts Center), which have previously been declared as surplus lands that could be used for the development of housing with an assumed density of 150 units per acre. (Approximately 1,381 dwelling units within the City that are either currently under construction or approved [with permits expected *before* June 30, 2021 within the planning horizon for the 5th Cycle RHNA] would also contribute to the *total* number of units developed by 2030, bringing the *total* number of dwelling units under the Quantified Objective Alternative to 6,744 by 2030.)

Table 5-4. Quantified Objective by 2030

Quantified Objective (Alternative 3)	Total Number of Units	Affordable Units
Pending Projects (with 10% discount)*	680	165
Approved Projects (with 10% discount)*	1,717	416
Category 2 (prior SSI) based on existing zoning	331	34
Category 2 (prior SSI) DCP	364	73
Category 3: DCP Buildout	596	120
City Sites: Parking Structure #3, 4th Street & Arizona Avenue, and Bergamot Arts Center	975	878
ADUs	700	462
Total	5,363	2148
Notes: *This 10-percent discount accounts for approved/pending residential development projects, which may ultimately not be built due to funding, economics, etc.		
Under Construction and Approved Projects (Not Included Alternative 3)	1,005	
Approved in Plan Check – Permit expected by July 31, 2021	376	
Future (2030) Total	6,744	

Table 5-5. RHNA Compared with the Quantified Objective

Household Income Category	RHNA	Percent of Total	Quantified Objective	Percent of Total
Very Low	2,794	31%	1,171	22 %
Low	1,672	19%	617	12%
Moderate	1,702	19%	360	7%
Above Moderate	2,727	31%	3,215	60%
Total	**8,895**		**5,363**	

Source: City of Santa Monica 2021.

Air Quality

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

Similar to the proposed Housing Element Update, Alternative 3 would not conflict with implementation of the SCAQMD's 2016 AQMP. However, the Quantified Objective Alternative would not advance regional goals for sustainability and pollutant emission reduction targets as established in the AQMP and Connect SoCal to the same extent as the proposed Housing Element Update. For example, the Quantified Objective would not address the existing jobs-housing imbalance within the City to the same extent as the proposed Housing Element Update. As described in Section 3.9, *Population, Housing, and Employment* only 9.4 percent of employees within the City currently live within the City. The proposed Housing Element Update would plan for the development of up to 8,895 to approximately 11,000 new dwelling units, of which 69 percent must be provided at lower income levels, thereby creating opportunities for many of the employees within the City to live closer to their jobs, increasing use of pedestrian, bicycle, and public transit facilities thereby reducing VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions on a regional basis. Nevertheless, individual residential development projects would be required to adhere to all applicable SCAQMD rules for reducing and controlling criteria air pollutant emissions. Further, existing LUCE, DCP, and Bergamot Area Plan policies would continue to ensure that future residential development under the Quantified Objective Alternative is integrated with

public transit (e.g., Metro E [Expo] LRT stations, Big Blue Bus, Metro), bicycle facilities, and pedestrian facilities such that it would not conflict with regional goals for criteria air pollutant emissions reductions and sustainability. Therefore, impacts would remain *less than significant*.

Would the 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?

Construction

Land use changes anticipated to occur under the Quantified Objective Alternative would require construction activities that could generate short-term construction-related air pollutant emissions. While the Quantified Objective Alternative would result in substantially fewer residential development projects within the City through the planning horizon of 2030, construction emissions from individual construction projects could still potentially exceed SCAQMD thresholds of significance as described for the proposed Housing Element Update. As the Basin is currently in nonattainment for O_3, $PM_{2.5,}$ and PM_{10} under Federal and State standards, development anticipated to occur under Alternative 3 could cumulatively exceed an air quality standard or contribute to an existing or projected air quality exceedance for these pollutants. Therefore, construction-related impacts to criteria pollutant emissions are conservatively considered to be *significant and unavoidable*.

Operation

As described for the proposed Housing Element Update, future residential development under the Quantified Objective Alternative would generate operational emissions associated with mobile, energy, water, waste, and land use sources. Additionally, as previously described, the Quantified Objective Alternative would not reduce regional mobile emissions to the same extent as the proposed Housing Element Update as it would not address the existing jobs-housing imbalance within the City to the same extent as the proposed Housing Element Update. Due to the substantial decrease (approximately 40 percent) in dwelling units anticipated to occur under the Quantified Objective Alternative as compared to the proposed Housing Element Update, operational impacts related to criteria air pollutant emissions would be less than the proposed Housing Element Update. Nevertheless, the residential development and the associated potential ground-floor commercial development under the Quantified Objective Alternative would exceed the number of dwelling units and amount of commercial space projected under the No Project Alternative. As described in Section 5.5.1, *Alternative 1 – No Project Alternative*, operational emissions from the No Project Alternative are anticipated to exceed SCAQMD thresholds of significance for CO, VOCs, NO_x, PM_{10}, and $PM_{2.5}$, similar to the proposed Housing Element Update (refer to Table 3.3-12 in Section 3.3, *Air Quality*). Given that implementation of the Quantified Objective Alternative is projected to result in more development than the No Project Alternative, the Quantified Objective Alternative is anticipated to result in *significant and unavoidable* impacts to operational criteria pollutant emissions.

wood.

Alternative 3 – Quantified Objective Alternative

FIGURE 5-2

Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Thresholds

As previously described, LSTs are applicable at the project-specific level and are not applicable to regional projects such as general plans or other long-term planning documents. Depending on the size of each individual project, the amount of demolition, excavation, and grading, and the proximity of the individual project sites to sensitive receptors, individual residential development could result in construction-related emissions of CO, NO_x, and PM_{10} that exceed the LSTs for construction. This is particularly true for multiple projects that are constructed concurrently on the same or adjacent blocks. Compliance with existing City polices and regulations as well as SCAQMD rules, including the limiting of grading activities during high winds and application of soil stabilizers to prevent fugitive dust, would reduce air pollutant emissions from construction activities. However, the potential reductions in construction-related emissions resulting from implementation of these measures cannot be quantified because information on project size and construction scheduling for each individual residential development projects likely to occur within the City is not available. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be reduced to below LSTs for construction. For these reasons, localized construction air quality impacts are conservatively concluded to be *significant and unavoidable*.

Toxic Air Contaminants

Although no specific project details (e.g., proposed land uses, site plans, etc.) are available, future projects anticipated to occur under the Quantified Objective Alternative may locate sensitive uses, such as residential uses, outdoor open spaces, and recreational facilities (e.g., tennis courts, swimming pools, etc.) adjacent to the I-10 freeway corridor, which receives from 150,000 to 194,000 AADT within the City boundaries. The unmitigated freeway DPM emissions could exceed SCAQMD thresholds for cancer risk (i.e., 10 in a million or 1.0 x 10^{-5}) at sensitive residential receptors, particularly those sensitive receptors located along I-10 from Pico Boulevard to Cloverfield Boulevard and Cloverfield Boulevard to SR-1. Additional traffic along these segments of I-10 have experienced increases in traffic and cancer risk countours extend up to 1,300 and 1,000 feet from the I-10 centerline (refer to Section 3.3, *Air Quality*). However, as with the proposed Housing Element Update, the implementation of MM AQ-2 would require the use of design techniques and air filtration systems to reduce the exposure of sensitive receptors to TAC emissions from freeway operations. Given that these measures could reduce exposure to DPM emission by up to 50 percent for outdoor areas and over 90 percent for indoor areas, mitigated DPM emissions anticipated at new sensitive residential receptors within the City under Alternative 2 would not exceed SCAQMD thresholds for cancer risk, and impacts would be *less than significant with mitigation.*

Would the project result in other emissions (such as those leading to odors) affecting a substantial number of people?

CO Hotspots

Development anticipated to occur under the Quantified Objective Alternative would result in the addition of vehicle trips that would increase CO emissions at intersections within the City, as compared to existing conditions. As described for the proposed Housing Element Update, the most heavily trafficked intersection within the City that would be affected by the Quantified Objective Alternative is Palisades Beach Road (PCH) & California Incline, which currently experiences less than 80,000 vehicle trips per day (see Section 3.12, *Transportation*). None of the intersections within the City, including the Palisades Beach Road (Pacific Coast Highway) & California Incline, would experience 100,000 vehicles per day experienced by the most congested intersection in Los Angeles intersection evaluated in the CO Plan for the 2003 AQMP. As a result, CO concentrations are expected to be far less than those estimated in the 2003 AQMP for and would not create a CO hotspot or exceed the CAAQS for CO concentrations. Federal and State CO standards would not be exceeded and this impact would be *less than significant.*

Other Sources of Emissions such as Odors

Similar to the proposed Housing Element Update, standard construction requirements would be imposed upon future residential development projects under the Quantified Objective Alternative to minimize odors during construction. Operationally, odors that would be expected from residential development planned for under the Quantified Objective Alternative would typically be associated with solid waste (refuse) storage typical of urban uses, as described for the proposed Housing Element Update. These odors would be consistent with that generated by existing residential and commercial uses throughout the City,

would be confined to the immediate vicinity of new residential development, and would be stored in covered containers and removed regularly consistent with the City's solid waste and recycling pick-up requirements. As such, impacts associated with generation of objectionable odors would be *less than significant*.

Cultural Resources

Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

The Quantified Objective Alternative would facilitate substantially less residential development than described the proposed Housing Element Update and therefore may have a slightly reduced potential to impact historical resources within the City. As described for the proposed Housing Element Update, historically significant resources would be identified on a project-by-project basis through site-specific, on-site reconnaissance prior to approval of a development permit(s) (e.g., demolition permit, building permit, etc.). Future residential development would be required to comply with applicable Federal, State, and local polices and regulations that concern the preservation of historical resources, including the City's Landmarks and Historic District Ordinance (SMMC Chapter 9.36), and its regulations governing demolition would continue to apply. However, as described for the proposed Housing Element Update, even with the City's stringent regulatory framework that provides for protection of historical resources, individual projects occurring in the City could result in direct impacts to historic architectural resources through alteration and/or demolition of historical structures. Additionally, indirect impacts could occur as a result of off-site ground-borne vibration during construction or through the loss of historical character/setting, such as potentially siting new large-scale structures next to potentially smaller historic structures or other alterations to historic character. Similar to the proposed Housing Element Update, the Quantified Objective Alternative would implement MM CR-1a and -1b as well as MM NOI-1 to reduce many of the potential adverse effects to historical resources that could conceivably occur from future residential development planned for under the Quantified Objective Alternative. However, as demolition or significant alteration of a historic resource could still occur as a result of future development under the Quantified Objective Alternative, impacts would remain *significant and unavoidable.*

Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines?

The Quantified Objective Alternative plans for the development of 5,363 new dwelling units (an approximately 40-percent reduction in number of dwelling units planned for under the proposed Housing Element Update). Therefore, there would be less ground disturbance under this alternative as compared to the proposed Housing Element Update. However, potential impacts to archaeological resources under this alternative would be similar to those described for the proposed Housing Element given that grading and excavation for construction of individual projects could potentially uncover significant subsurface archaeological remains in a similar manner. As described for the proposed Housing Element Update, the Quantified Objective Alternative would be required to implement MM CR-2a and -2b, which establish processes to protect prehistoric or historic-period archaeological resources if discovered during future

construction activities. The Quantified Objective Alternative would also be required to implement MM TCR-1, which would require a Native American monitor (if requires by the tribe during Native American consultation) to be present during project construction excavations (e.g., clearing/grubbing, grading, trenching, or any other excavation activities) for all new residential developments involving grading/excavation greater than 5 feet bgs. With implementation of MM CR-2a and -2b as well as MM TCR-1, impacts would be reduced to *less than significant*.

Would the project disturb any human remains, including those interred outside of formal cemeteries?

Ground disturbing activities (e.g., grading, excavation, etc.) for individual development projects planned for under the Quantified Objective Alternative would have the potential to disturb human remains similar to the proposed Housing Element Update. As described for the proposed Housing Element Update, residential development planned for under the Quantified Objective Alternative would be subject to California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, which mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. With compliance with existing regulations prescribed in California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, impacts to human remains would be *less than significant*.

Energy

Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

The Quantified Objective Alternative plans for the development of 5,363 new dwelling units (an approximately 40-percent reduction in number of dwelling units planned for under the proposed Housing Element Update). As such, residential development under this alternative would require less energy consumption for construction activities, transport of demolition debris, soil, and construction materials, and construction worker commute trips as compared to the proposed Housing Element Update. However, the provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and the Quantified Objective Alternative would not reduce the City's existing major jobs-housing imbalance to the same extent. As a result, this alternative may continue the existing long-distance commuting patterns of workers employed within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. Additionally, residential development planned for under the Quantified Object Alternative would permanently increase the overall demand for electricity and natural gas primarily for lighting, cooking, building heating and cooling, etc. However, operational electricity, natural gas, and transportation-related energy demand would be reduced as compared to the proposed Housing Element Update due to the substantial reduction in the number of new dwelling units. Additionally, development would comply with the requirements of State and local regulations – including CALGreen, the City's Energy Reach Code, Green Building Standards Code, and the SMMC. While the Quantitative Objective Alternative would increase energy demand over existing conditions, it would not result in wasteful,

inefficient, and unnecessary consumption of energy resources during construction or operation of individual residential or mixed-used developments. Impacts would be *less than significant*.

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Similar to the proposed Housing Element Update, residential development planned for under the Quantified Objective Alternative would be required to comply with the City's energy conservation and GHG reduction goals and policies established in the in the City's LUCE, Sustainable City Plan, CAAP, Energy Reach Code, and Green Building Standards Code. Future residential development would occur in accordance with existing City regulations, which promote energy efficient sustainable development. However, the provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and the Quantified Objective Alternative would not reduce the City's existing major jobs-housing imbalance to the same extent. As a result, the Quantified Objective Alternative may continue the existing long-distance commuting patterns of employees within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. Nevertheless, the Quantified Objective Alternative would not conflict with or obstruct plans for renewable energy or energy efficiency. Therefore, impacts would be *less than significant*.

Land Use and Planning

Would the project physically divide an established community?

As described for the proposed Housing Element Update, the Quantified Objective Alternative would not directly introduce new superblocks (i.e., multiple blocks with restricted pedestrian or vehicle access) or new infrastructure (e.g., roads) that would physically or functionally conflict with existing land uses .Rather, the Quantified Objective Alternative would amend the development standards in the LUCE as well as the DCP, Bergamot Area Plan, and Zoning Ordinance to provide opportunities for increased housing production. The Quantified Objective Alternative would generally establish and implement similar policies, development standards, and programs as the proposed Housing Element Update; however, this alternative would substantially reduce the number of new dwelling units as compared to the Housing Element Update. As such, the Quantified Objective Alternative would facilitate a mix of complementary land uses to create more integrated, inclusive communities, though to a lesser extent than the proposed Housing Element Update. Impacts related to the division of an established community would be *less than significant*.

Would the project cause a significant environmental effect due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Similar to the proposed Housing Element Update, the Quantified Objective Alternative would amend the City's LUCE, DCP, BAP, and Zoning Ordinance to increase permitted building heights and FARs to incentivize housing projects affordable (inclusionary) housing pursuant to the State Density Bonus Law.

However, given the reduced level of residential development planned for under the Quantified Objective Alternative, this alternative would not meet the affordability mix required by the City's 6th Cycle RHNA. Additionally, this alternative would not meet some of the project objectives, such the production of affordable housing and affirmatively furthering fair housing to the same extent as the proposed Housing Element Update, given that fewer dwelling units would be developed under this alternative. The provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and would not reduce the City's existing major jobs-housing imbalance to the same extent as the proposed Housing Element Update. As a result, when combined with new employment-generating commercial growth, the No Project Alternative may continue the existing long-distance commuting patterns of employees within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions. This alternative would not achieve the City's 6th Cycle RHNA issued by SCAG and impacts associated with land use policy inconsistencies would be potentially *significant and unavoidable*.

Greenhouse Gas Emissions and Climate Change

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The Quantified Objective Alternative plans for the development of 5,363 new dwelling units (an approximately 40-percent reduction in number of dwelling units planned for under the proposed Housing Element Update). As such, residential development planned for under this alternative would result in less construction-related GHG emissions. Such emissions are difficult to quantify as the details of construction, design/size, and timing of each future project to occur in the City is unknown. Construction-related emissions anticipated to occur under the Quantified Objective Alternative would vary on an annual basis.

As described for the proposed Housing Element Update in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, all individual residential development projects in the City under the Quantified Objective Alternative would be subject to meet the City's energy conservation and GHG reduction standards established in the CAAP, Energy Reach Code, Zero-Net Energy Code, Green Building Standards Code, and SMMC. Compliance with City policies and regulations would ensure that new development under the Quantified Objective Alternative would occur in accordance with State, regional, and City plans and policies adopted for the purpose of reducing GHG emissions. However, the provision of new housing, especially affordable housing, would decline substantially as compared to the proposed Housing Element Update, and the Quantified Objective Alternative would not reduce the City's existing major jobs-housing imbalance to the same extent. As a result, the Quantified Objective Alternative may continue the existing long-distance commuting patterns of employees within the City, with associated adverse impacts to VMT, transportation energy demand, and criteria air pollutant and GHG emissions. Nevertheless, this alternative would remain generally aligned with the GHG goals and policies established in SCAG's

Connect SoCal, the LUCE, Sustainable City Plan, CAAP, AB 32, and SB 375. Compliance with the City's existing policy framework would ensure that residential development planned for under the Quantified Objective Alternative would not conflict with GHG goals and impacts would be *less than significant*.

Noise

Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

The Quantified Objective Alternative plans for the development of 5,363 new dwelling units (an approximately 40-percent reduction in number of dwelling units planned for under the proposed Housing Element Update). As such, residential development planned for under this alternative would result in fewer construction-related noise impacts. Construction noise levels from individual residential development projects could result in noise levels above normal acceptable levels (e.g., greater than 85 dBA). Although the City's Noise Ordinance exempts increases of noise during construction activities of up to 20 dBA and 40 dBA depending on the timing of high noise-generating activities, the potential for a substantial periodic impact is based on a perceived increase by the receptor. However, construction activities would generally only occur during the permitted hours designated in the SMMC, and all development projects located within 500 feet of residential uses would be required to adhere to SMMC Section 4.12.110(c), which requires applicants of construction projects located within 500 feet of any residential development, or other noise sensitive land uses, to submit a list of equipment and construction activities to the City planning staff prior to the issuance of a building permit. Since all construction activities would be required to adhere to the noise standards and requirements established the City's Noise Ordinance, construction noise impacts would be *less than significant*.

Operation

As compared to the proposed Housing Element Update, residential development planned for under the Quantified Objective Alternative would reduce the anticipated increase in vehicle trips and associated operational noise. Similar to the proposed Housing Element Update, new residential development under the Quantified Objective Alternative would also result in exposure of residents to new permanent sources of noise from deliveries, trash hauling, parking noise, and mechanical equipment and operation of land uses (e.g., music, loud conversations, etc.). However, operational noise impacts would be reduced through compliance with the noise standards in the SMMC. Therefore, similar to the proposed Housing Element Update, impacts under this alternative would be *less than significant*.

Would the project result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Similar to the proposed Housing Element Update, construction of new residential development projects in the City under the Quantified Objective Alternative would potentially expose adjacent persons or structures to temporary, excessive ground-borne vibration levels that would exceed thresholds. For typical construction activities occurring within 25 feet of sensitive receptors, vibration levels could potentially exceed the threshold of 0.1 in/sec. Further, as described for the proposed Housing Element Update, development projects may require the use of pile driving which would have the potential to generate significant vibration levels exceeding 0.1 in/sec at nearby sensitive receptors. Therefore, construction ground-borne vibration impacts are conservatively concluded to be potentially *significant and unavoidable*.

For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels?

Similar to the proposed Housing Element Update, new residential development planned for under the Quantified Objective Alternative would not be located within an airport land use plan, but could be located within 2 miles of the SMO property. However, individual development projects would be subject to environmental review and evaluated on a project-by-project basis. Additionally, the eventual closure of SMO in 2028 would ensure that people residing or working in the vicinity of the airport are not exposed to excessive noise levels. Therefore, this impact is *less than significant*.

Population, Housing, and Employment

Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The Quantified Objective Alternative would plan for an increase of up to approximately 5,363 new dwelling units, representing an increase of approximately 10 percent from existing City-wide housing inventory and a reduction of approximately 11-percent as compared to the proposed Housing Element Update. Of these 5,363 net new dwelling units, 2,148 would be affordable dwelling units. Therefore, the Quantified Objective Alternative would result in substantially less housing production than the proposed Housing Element Update and would not meet the City's 6th Cycle RHNA issued by the SCAG or accommodate projected growth projected by the SCAG to the same extent. The Quantified Objective Alternative would provide less housing diversity and would be less likely to accommodate affordable housing within the City. Further, the Quantified Objective Alternative would not reduce the City's existing major jobs-housing imbalance to the same extent as the proposed Housing Element Update. As a result, the Quantified Objective Alternative may continue the existing long-distance commuting patterns of

employees within the City, with associated adverse impacts to VMT, transportation-related energy demand, and criteria air pollutant and GHG emissions.

Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

Similar to the proposed Housing Element Update, this alternative would not be anticipated to displace substantial amounts of housing or existing City residents. The Quantified Objective Alternative would support new residential development within previously identified SSI sites, sites previously identified as having a high potential for housing development in the DCP, and City-owned sites (i.e., Parking Structure #3, 4th Street & Arizona Avenue, and Bergamot Arts Center), which do not currently provide housing. However, should an existing property owner of multi-family dwelling units choose to redevelop, such a decision would be beyond the control of the City. Displacement impacts would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with state and local requirements, such as the City's Tenant Relocation Assistance Ordinance (SMMC Chapter 4.36). Therefore, impacts would be *less than significant*.

Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

Future land use changes anticipated to occur under the Quantified Objective Alternative would increase the population in City by approximately 5,363 new dwelling units. The increase in residential and visitor population would result in an increased demand for public services, as described further below, though to a lesser extent than the proposed Housing Element Update.

Fire Protection

Under the Quantified Objective Alternative, the project housing production in the City would be less than the proposed Housing Element Update. As such, the demand for SMFD services would be slightly reduced as compared to the proposed Housing Element Update. Nevertheless, the increase in the City population relative to existing conditions would increase the overall demand for fire protection services as compared to existing conditions. Increases in the demand for SMFD services would potentially generate the need for new or physically altered fire protection facilities. As discussed in Section 3.10, *Public Services*, the City has identified strategies and recommended expansions to facilities to improve SMFD response times. However, planning for such a facility has not yet begun and given the uncertainties regarding the City's future budget, the City cannot guarantee funding for needed future construction or expansion of SMFD facilities and staff. As such, impacts to fire protection services associated with the Quantified Objective Alternative would be *significant and unavoidable*.

Police Protection

The anticipated amount of population growth and associated demand on police services in the City under the Quantified Objective Alternative would be reduced as compared to the proposed Housing Element Update. Nevertheless, the increase in the City population relative to existing conditions would increase the overall demand for SMPD services as compared to existing conditions. As discussed in Section 3.10, *Public Services*, the SMPD's 5-year Staffing Plan identifies the need for additional police resources and equipment as necessary. The SMPD is funded through general fund revenues and pier fund revenues generated by property, sales, and transient occupancy taxes, all of which are expected to increase in proportion to the new residential development associated with implementation of this alternative. Such revenues would be used by the SMPD to hire additional officers and purchase equipment to maintain or improve SMPD service levels over time to meet changing demands. However, unlike fire protection services, the construction of new facilities is not anticipated to be necessary to address a potential future increase in call volumes. Therefore, this impact would be *less than significant*.

Public Schools

As previously described, the Quantified Objective Alternative plans for the development of 5,363 new dwelling units (an approximately 40-percent reduction in number of dwelling units planned for under the proposed Housing Element Update). This alternative would generate approximately 7,274 fewer residents than the proposed Housing Element Update.

Based on the anticipated 0.18 school-aged students per household, buildout under the proposed Housing Element Update would result in approximately 956 new school-aged children, a 56-percent decrease as compared to the proposed Housing Element Update. Under the Quantified Objective Alternative there would be an increase in enrollment of approximately 121 students across the public schools in Santa Monica each year, an approximately 2-percent annual increase. As described for the proposed Housing Element Update, over the short-term, SMMUSD would need to employ various strategies to temporarily increase capacity. Over the long-term, potential increases in capacity (e.g., construction of new buildings, satellite schools, or new schools) may become necessary, though to a lesser extent than described for the proposed Housing Element Update. Infrastructure improvements could be partially funded through existing developer fees required by the SMMUSD for new development. Pursuant to SB 50, individual residential development projects would be required to pay SMMUSD developer fees for both residential and non-residential uses, which could be used for expansion or upgrading of school facilities as needed to accommodate increases in school enrollment over time. Pursuant to California Government Code Section 65995.5, payment of developer fees generally constitutes full mitigation on impacts to school. However, as described for the proposed Housing Element Update, the caps places on developer fees by the State would limit the effectiveness of this mitigation. The residential development under this alternative may contribute to the need for the construction of new or expanded public school facilities, the construction of which may have result in significant environmental impacts. Given the limited revenue available through developer fees for school facilities and the lack of availability of bond funds for facility improvement through Measures BB, ES, and SMS, impacts on school facilities associated with the

proposed Housing Element would remain potentially *significant and unavoidable*, as described for the proposed Housing Element Update.

Libraries

The Quantified Objective Alternative is anticipated to facilitate the development substantially fewer dwelling units and substantially fewer City residents by 2030 as compared to the proposed Housing Element Update. Further, due to the growing use of electronic resources, new residential uses in the City do not immediately equate to an increase in demand for total volumes or square feet of library space. Therefore, new City residents occurring under Quantified Objective Alternative would only incrementally increase the demand for library services and facilities within the City. Additionally, modification of library operations (e.g., continued curbside drop-off / pick-up services) would help absorb the increased demand and prepare the system for future demand under the Quantified Objective Alternative. It should be noted that the City's annual budgeting also addresses maintenance of existing library facilities to ensure that the deterioration of existing libraries does not occur. Therefore, impacts would be *less than significant*.

Parks and Recreation

As previously described, the Quantified Objective Alternative plans for the development of 5,363 new dwelling units and would generate 7,274 fewer residents than the proposed Housing Element Update. As such, impacts related to the demand on existing parks and recreation facilities would be slightly reduced. Individual developers would be required to pay the applicable Park and Recreation Facilities Fee and Park and Recreation Facilities tax as required in SMMC Section 9.67 and SMMC Chapter 6.80, respectively. All revenues collected from these fees and taxes would be deposited into a Park and Recreation Facilities Fund to be used for the acquisition, improvement and expansion of public park, playground and/or recreation facilities. Nevertheless, the increased strain on park space may result in potentially *significant impacts*, as described for the proposed Housing Element Update. As with the proposed Housing Element Update, the Quantified Objective Alternative would require the implementation of MM PS-1, which requires the City to resume the update to the PRMP to develop and guide parks and recreation improvements, intended to increase the availability and accessibility of parks. Additionally, MM PS-2 would the City to consider potential revisions to the Parks and Recreation Development Impact Fee. Consistent with the City's on-going long-range planning efforts, it is anticipated that the City would implement the recommendations of the PRMP, as practicable given City-funding limitations. Nevertheless, it is unknown at this time what specific parks and recreation improvements would be implemented therefore, this impact would remain *significant and unavoidable*.

Utilities

Would the project require or result in the construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

Implementation of the Quantified Objective Alternative is anticipated to result in the development of 5,363 new dwelling units. New residential development planned for under Alternative 3 would tie into the

existing network of water lines throughout the City, characterized by various sizes and ages. With the increase in water demand at a given location, individual projects may trigger the need for construction of new laterals and/or the replacement/expansion of existing water mains, necessary to provide adequate water supply and water pressure. Construction associated with individual facilities is unlikely to cause significant effects, construction of new laterals and/or installation/replace of new water mains sufficient to serve up to 5,363 new dwelling units associated ground-floor commercial development may create potentially significant air quality, cultural resources, noise, and transportation impacts. Installation of new water lines and connections would be reviewed on a project-by-project basis. As described for the Housing Element Update, MM U-1 would ensure individual project applicants pay a fair-share mitigation fee for the installation of new water lines.

New residential development anticipated to occur under this alternative would increase City-wide water demand over existing conditions, but to a lesser extent than under the proposed Housing Element Update. Increased water demand under the Quantified Objective Alternative would be less than the 486,839 gals/day (545 AFY) of net new water demand projected under the proposed Housing Element Update. As described for the proposed Housing Element under Impact UT-1 in Section 3.11, *Utilities*, the City has sufficient water supplies available from a combination of the SMGB and MWD imported water sources to meet water demand – including the projected growth under the proposed Housing Element Update. Given that the projected development and associated increase in water demand under the Quantified Objective Alternative would be reduced as compared to the proposed Housing Element Update, the City would have sufficient water supplies available to meet the resulting water demand. Therefore, no additional major infrastructure improvements (e.g., production, treatment, or storage facilities) would be required to enhance the City's water production and treatment capacity in order to meet the future demand – including the projected growth under the Quantified Objective Alternative – and impacts would be *less than significant with mitigation*.

Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The Quantified Objective Alternative would plan for the development of 5,363 new dwelling units through 2030. The City's 2020 UWMP has accounted for a projected increase of 8,895 new dwelling units based on the 6th Cycle RHNA issued by the SCAG. Therefore, the 2020 UWMP planned for substantially more development than what is projected to occur under the Quantified Objective Alternative. However, as described for the proposed Housing Element Update, while the City can continue to rely upon the water allocation from MWD to supplement local water supplies, the development 5,363 new dwelling units under the Quantified Objective Alternative may still delay or inhibit the City's ability to achieve the goal of water self-sufficiency by 2023. As such, this impact conservatively remains *significant and unavoidable*, as described for the proposed Housing Element Update.

Would the project require or result in the construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects?

As discussed in detail in Section 3.11, *Utilities*, the City's existing wastewater collection system is largely adequate to meet projected demand of the proposed Housing Element Update and individual residential development under the proposed Housing Element Update would not exceed CIS or HWRP capacity. The projected increase in wastewater generation under the Quantified Objective Alternative would be substantially less than that described for the proposed Housing Element Update, due to the comparative reduction in residential development. Nevertheless, residential development planned for under this alternative may still contribute to the need for limited replacement and upgrade of individual sewer line segments to meet increased residential wastewater demand by 2030. Improvements to individual sewer line segments would be reviewed on a project-by-project basis. Similar to the proposed Housing Element Update, the Quantified Objective Alternative would implement MM U-2 to ensure individual project applicants pay a fair-share mitigation fee for the replacement and upgrade of sewer lines.

Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As previously described, wastewater flows from the City are treated at the HWRP, which has approximately 110 MGD of additional full secondary treatment capacity. The development of 5,363 dwelling units under the Quantified Objective Alternative would add up to approximately 0.80 MGD (less than 0.18 percent of the existing dry weather capacity and 0.01 percent of existing wet weather capacity). Therefore, the HWRP system has sufficient capacity to serve the projected increase in demand associated with the Quantified Objective in addition to the provider's existing commitments and this impact would be *less than significant.*

Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The Quantified Objective Alternative is projected to generate approximately 5,363 new dwelling units in the City through the planning horizon of 2030. The projected increase in dwelling units is anticipated to generate an additional 65,589 lbs/day of solid waste. Likewise, the projected increase in commercial space is anticipated to generate an additional 4,555 lbs/day of solid waste. The total increase in municipal solid waste generation in the City under the Quantified Objective Alternative is projected to be up to 70,144 lbs/day (12,801 tons per year). Assuming the existing diversion rate of 81 percent, this would result in approximately 2,432 tons per year that would need to be disposed in one or more landfills serving the City. The combined maximum permitted daily capacity of the 14 solid waste facilities that serve the City is 70,004 tons, although only 54,470 tons per day are disposed on average in these facilities daily (approximately 77.8 percent of daily capacity). The additional solid waste that is anticipated to be generated by implementation of the Quantified Objective Alternative would be a nominal increase to the current 70,004 solid tons per day of the 14 solid waste facilities expected to serve the City in 2030.

Given the existing sufficient capacity of solid waste facilities combined with the City's efforts to reduce waste generation (i.e., the City's Sustainable City Plan, Zero Waste Strategic Operations Plan and 2019 Zero Waste Plan Update), this impact would be *less than significant.*

Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Implementation of the Quantified Objective Alternative would not conflict with the goals or requirements of AB 939, AB 341, the City's Zero Waste Strategic Operations Plan, or the SMMC. As discussed under Impact UT-5 in Section 3.11, *Utilities*, the City has already achieved a diversion rate of 81 percent that is in excess of the requirements of AB 939 and AB 341 to achieve a 75 percent diversion by 2020. The City remains committed to continuing its existing waste reduction programs and minimization efforts with the programs with goals, targets, and programs to achieve 85 percent diversion rates by 2020 and 95 percent diversion by 2030. Individual projects in the City under the Quantified Objective Alternative would be required to comply with all applicable solid waste regulations in effect at the time of operation, including solid waste diversion requirements described in SMMC Section 5.08.400. Additionally, individual projects would comply with the Construction and Demolition Ordinance (SMMC Section 8.108.010 Subpart C) by submitting a waste management plan to the City and diverting at least 70 percent of construction and demolition debris from landfills. Therefore, the City is in compliance with State law and implementation of the Quantified Objective Alternative would not conflict with federal, state, or local statues and regulations related to solid waste disposal. Therefore, *no impact* would occur.

Transportation

Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Quantified Objective Alternative would support development of fewer dwelling units as compared to the proposed Housing Element Update; however, similar to the proposed Housing Element, development would occur within the City's high quality transit area (refer to Figure 3.12-6). As such, this alternative would be consistent goals described in SCAG's Connect SoCal Plan, Metro's 2020 LRTP, the City's LUCE, DCP, Bergamot Area Plan, Bike Action Plan, and CAAP regarding the development of housing in proximity to transit opportunities and multi-modal corridors. This alternative would not restrict the City's ability to implement any planned transportation improvements under the Bike Action Plan, DCP, or Bergamot Area Plan. Under this alternative, new development would continue to be subject to TDM and transportation impact fees per SMMC Chapter 9.53 and Chapter 9.66, respectively. Therefore, impacts would be *less than significant*.

Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As previously described, the Quantified Objective Alternative plans for the development of 5,363 new dwelling units (an approximately 40-percent reduction in number of dwelling units planned for under the

proposed Housing Element Update). This alternative would generate approximately 7,274 fewer residents than the proposed Housing Element Update. Fehr & Peers (2021) is estimated that the Quantified Objective Alternative would result in average trip lengths for home-based work trip productions and home-based work trip attractions that are between what was calculated for the No Project Alternative and for the proposed Housing Element Update. As such, this alternative would result in VMT per capita values that are between what was calculated for the No Project Alternative and the proposed Housing Element Update. Therefore, it is estimated that the Quantified Objective Alternative would have a less than significant VMT per capita impact. However, with longer average trip lengths for than anticipated for the proposed Housing Element Update, this alternative would generate a higher combined total VMT for residents and employees than what would occur under the proposed Housing Element Update. Because the proposed Housing Element Update was found to have a significant and unavoidable total VMT impact, it was concluded that the Quantified Objective Alternative would also have a *significant and unavoidable* total VMT impact.

Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction traffic associated within individual development projects under the Quantified Objective Alternative would typically include heavy haul trucks, construction equipment delivery, and construction worker vehicles. Increased construction traffic on freeways and streets, particularly haul trucks and other heavy equipment (e.g., cement trucks and cranes), may temporarily disrupt traffic flows, reduce lane capacities, and generally slow traffic movement. In addition, construction traffic could interfere with or delay transit operations and disrupt bicycle and pedestrian circulation. However, as described for the proposed Housing Element, construction projects under the Quantified Objective Alternative would be required to prepare a Construction Management Plan in accordance with the City's Construction Management Ordinance, ensuring that construction-related hazards would be *less than significant*.

As with the proposed Housing Element Update, the Quantified Objective Alternative does not propose any new Citywide improvements to the City's transportation network and does not include any site-specific project plans that can be evaluated for transportation hazards. Individual projects proposed for development would be subject to, and designed in accordance with, City standards and specifications within the SMMC including the City Fire Code and California Building Code. While the details for future development (e.g., project layouts, driveway locations, land use types, and intensities) are unknown at this time, all individual projects under the Quantified Objective Alternative would be subject to ministerial and/or discretionary permits as well as compliance with applicable City regulations related to site access and street design; and would be required to adhere to all State and local requirements for avoiding impacts related to design and incompatible uses. As a result, future development under the Quantified Objective Alternative would not substantially increase hazards due to design features or incompatible uses. Therefore, the Quantified Objective Alternative would not introduce new safety hazards at intersections or along roadway segments, and from a programmatic perspective, impacts would be *less than significant*.

Would the project result in inadequate emergency access?

While the details for future residential development under the Quantified Objective Alternative are not known at this time, all individual development projects with the potential to impact emergency access would be subject to ministerial and/or discretionary permits. As described for the proposed Housing Element Update, all development projects would be required to comply with applicable building and fire safety regulations and adhere to all State and City requirements for safe access, including emergency access. As a part of the plan check process, project site access plans would be reviewed and approved by the City and the SMFD to ensure compliance with City code requirements and the provision of adequate emergency access. Therefore, emergency access would be maintained following construction of individual projects under Alternative 3. Therefore, any impacts would be *less than significant.*

Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is at least one of the following:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or

- A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c), the Lead Agency shall consider the significance of the resources to a California Native American tribe?

Proposed development under the Quantified Objective Alternative would limit development within the highly urbanized and developed Downtown, and City-owned sites (Parking Structure #3, 4th Street & Arizona Avenue , and Bergamot Arts Center), and previously approved sites identified within the SSI associated with the 5th Cycle. As such, the Quantified Objective Alternative would involve construction of residential developments over fewer sites than under the proposed Housing Element Update, and therefore, would have less potential to encounter tribal cultural resources during future grading and excavation activities. Nevertheless, such activities could potentially uncover significant subsurface tribal cultural resources. However, as described for the proposed Housing Element, the Quantified Objective Alternative would be required to implement MM TCR-1, which would require the presence of a Native American monitor for individual residential developments, if requested by the Gabrieleño Band of Mission Indians – Kitz Nation. Any discovery of resources would trigger an immediate stop in construction and treatment plans would be developed in consultation with the City, Native American representatives, and project archaeologists as necessary. With the implementation of MM TCR-1, impacts to tribal cultural resources would *be less than significant with mitigation.*

Attainment of Project Objectives

The Quantified Objective Alternative would carry forward the same policies and implementation programs as the proposed Housing Element Update. Therefore, this alternative would partially meet the objectives of the proposed Housing Element Update, such as Affirmatively Furthering Fair Housing, Housing Assistance, Address Homelessness, and Balancing Housing with Other City Goals. The Quantified Objective aims for approximately 50 percent of units produced to be affordable to lower income households, compared to the 69 percent goal of the proposed Housing Element Update and required by the 6th Cycle RHNA issued by the SCAG. As analyzed above, the Quantified Objective Alternative would provide fewer dwelling units and these units would be limited to sites selected for their feasibility to support new residential development, not necessarily for their potential to encourage transit-oriented communities or multi-modal travel and affirmatively furthering fair housing. Therefore, the objective to provide equitable housing opportunities and support the production of housing in areas that have traditionally not accommodated housing would not be achieved to the same extent as the proposed Housing Element Update.

Project Objective	Ability for Alternative to Achieve Objective
Meet the State-mandated 6th Cycle RHNA for the City.	The Quantified Objective Alternative would adjust the numerical housing target for the City to 5,363 dwelling units. Therefore, this alternative would not meet the City's obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.
Increase housing production for all, with an emphasis on affordable housing.	The Quantitative Objective Alternative would limit new development within the Downtown, City-owned parcels, and sites identified in the SSI associated with City's 5th Cycle RHNA. In effect, there would be a reduced and more narrow distribution of affordable housing options throughout the City. Overall, this alternative would not fully achieve the project objective for housing to the same extent as the proposed Housing Element Update.
Promote greater housing stability for existing residents at risk of displacement.	Similar to the proposed Housing Element Update, the Quantified Objective Alternative would not be anticipated to displace substantial amounts of housing or existing residents. As described for the proposed Housing Element Update, land use changes through 2030 associated with this alternative are anticipated to occur almost entirely on commercially zoned parcels and vacant sites. In limited cases where residential tenants may be displaced, displacement impacts would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with state and local requirements, such as the City's Tenant Relocation Assistance Ordinance (SMMC Chapter 4.36). Overall, Alternative 2 would generally achieve this project objective to a similar extent as the proposed Housing Element Update
Locate housing close to daily services and amenities like transportation, jobs, parks, and schools in addition to places around the City that have historically not accommodated housing.	This Quantitative Objective Alternative would generally establish and implement similar policies, development standards, and programs as the proposed Housing Element Update; however, this alternative would substantially reduce the number of new dwelling units as compared to the Housing Element Update. Additionally, given that the Quantitative Objective Alternative would limit new development to the Downtown, City-owned parcels, and sites identified in the SSI associated with City's 5th Cycle RHNA,

	there would be a reduced and more narrow distribution of affordable housing throughout the City. Overall, this alternative would not fully achieve the project objective for locating housing in places around that City that have historically not accommodated housing.
Facilitate equitable housing access to all neighborhoods by expanding access to housing opportunities and overcoming patterns of segregation by planning for housing in areas that have historically excluded diverse housing opportunities.	Because this alternative would limit new development within the Downtown, City-owned parcels, and sites identified in the SSI associated with City's 5th Cycle RHNA, the Quantified Objective Alternative would not ensure that there are equitable housing opportunities throughout the City to the same extent as the proposed Housing Element Update. Therefore, the No Project Alternative would not achieve the project objective of Affirmatively Furthering Fair Housing to the same extent as the proposed Housing Element Update

5.6 Identification of Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives shall identify an environmentally superior alternative among the alternatives evaluated in the EIR. In general, the environmentally superior alternative as defined by CEQA should minimize adverse impacts to the project site and its surrounding environment.

For a broad policy document such as the proposed Housing Element Update, there may not be a clear Environmentally Superior Alternative. An alternative may reduce environmental impacts to certain resource areas and increase impacts to other resource areas as compared to the proposed project, while another alternative may reduce different environmental impacts. Although CEQA does not provide specific guidance in this matter, where an alternative is anticipated to result in reduced impacts for a majority of resource areas and/or substantially reduced impacts in especially critical resource areas, this can support a finding that the alternative is environmentally superior. In such instances, the EIR may disclose the differences between the alternatives and identify how each alternative may be superior. The Lead Agency retains the authority to identify the Environmentally Superior Alternative based on the evidence in the EIR, agency and public input, Lead Agency standards and policies, and the Lead Agency's independent decision-making.

Table 5-6 summarizes the environmental advantages and disadvantages associated with the analyzed alternatives relative to the proposed Housing Element Update. In evaluating alternatives under CEQA, different weights may be assigned to the relative importance of specific environmental impacts. In comparing the alternatives to the proposed Housing Element Update, "more weight" was given to air quality, cultural resources, noise, public services, utilities and transportation effects than to other resource area impacts, primarily considering the importance of these issue areas to have the most significant and irreversible impacts. However, in addition to these resource areas, additional importance must be placed on how and to what extent each of the alternatives accomplish the goals and objectives of the proposed Housing Element Update (refer to Section 2.5.1, *Project Objectives*). The project objective to "meet the State-mandated 6th Cycle RHNA for the City," was given particular importance because not doing so could have potentially serious consequences for the City, including limited access to State funding as well as potential for lawsuits. When a jurisdiction's Housing Element is found to be out of compliance, its general plan is at risk of being deemed inadequate, and therefore invalid. If a jurisdiction is sued over an

inadequate general plan, the court may impose requirements for land use decisions until the jurisdiction brings its general plan – including its Housing Element – into compliance with State Housing Law.

Table 5-6 Comparison of Significant Impacts by Alternative

Significant and Unavoidable Impacts	Alternative 1 No Project	Alternative 2 Transit-Oriented Housing Development on Fewer Sites	Alternative 3 Quantified Objective
Air Quality	Slightly reduced, though significant and unavoidable impacts would remain as described in the LUCE Program EIR and DCP Program EIR	Similar, though more concentrated within the 0.5-mile radius of the Metro E (Expo) LRT stations	Slightly reduced, though significant and unavoidable impacts would remain as a result of the increase in construction and operational emissions relative to existing conditions
Cultural Resources	Similar	Similar, though potentially increased impacts related to the alterations in historic character within the immediate within the 0.5-mile radius of the Metro E (Expo) LRT stations.	Similar
Noise	Similar	Similar, though more concentrated within the 0.5-mile radius of the Metro E (Expo) LRT stations	Similar
Public Services	Reduced, though significant and unavoidable impacts remain for fire protection services given that current response times do not meet National Fire Protection Association (NFPA) response time goals	Similar	Slightly reduced, though significant and unavoidable impacts would remain for fire protection services, public schools, and parks and recreation given the increase in housing production relative to existing conditions
Utilities	Reduced, given that the demand for domestic water and wastewater collection would not increase above that projected by the LUCE Program EIR and DCP Program EIR	Slightly greater, given that the demand for domestic water and in particular wastewater collection services would be concentrated in three distinct areas of the City	Slightly reduced, though significant and unavoidable impacts would remain domestic water and wastewater collection services given the increase in housing production relative to existing conditions
Transportation	Slightly greater, given that the No Project Alternative would not reduce business as usual (BAU) vehicle miles traveled (VMT) to the same extent as the proposed Housing Element Update	Slightly reduced, given the closer proximity to public transit facilities and other multi-modal connections	Slightly greater, given that this alternative would generate a higher combined total VMT for residents and employees than what would occur under the proposed Housing Element Update
Project Objectives Met	None, importantly this alternative would not meet the City's obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.	Many, but this alternative would not affirmatively further fair housing to the same extent as the proposed Housing Element Update	Many, but this alternative would not meet the City's obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.

As described in Table 5-6, the No Project Alternative would reduce or slightly reduce the impacts described for each of the highly weighted environmental resource areas, with the exception of transportation. However, significant and unavoidable impacts related to construction and operation criteria pollutant emissions and ground-borne vibration would remain as described in the LUCE Program EIR and the DCP Program EIR. Additionally, significant and unavoidable impacts remain for fire protection services given that current response times do not meet National Fire Protection Association (NFPA) response time goals. The No Project Alternative would result in greater impacts to transportation because the reduction in VMT under this alternative would be less than what is forecast for the proposed Housing Element Update (Fehr & Peers 2021; see Appendix G). This is a direct result of the inability of the No Project Alternative to address the City's existing major jobs-housing imbalance. However, this alternative could potentially result in a new significant land use impact and would not meet the project objectives related to the City meeting its obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.

The Transit-Oriented Housing Development on Fewer Sites (Alternative 2) would result in similar impacts related criteria pollutant emissions, ground-borne vibration, and cultural resources. Though these impacts would be more concentrated within the areas surrounding the Metro E (Expo) LRT stations. Additionally, indirect impacts to historical resources may be slightly increased within the vicinity of the Metro E (Expo) LRT stations due to the potential for increased building heights – necessary to meet the 6th Cycle RHNA under this alternative – to result in more substantial alterations in historical character within the area. Additionally, this alternative may result in greater impacts related to domestic water and wastewater collection facilities given that all residential development would be concentrated in three district areas of the City. Additionally, given that this alternative would concentrate residential development over Downtown/Civic Center, Bergamot Area, and Memorial Park, there would be a narrower distribution of affordable housing options throughout the City. Overall, Alternative 2 would not fully achieve the project objectives for affordable housing to the same extent as the proposed Housing Element Update. Additionally, Alternative 2 would not provide opportunity for equitable distribution of new housing. Segregated land use patterns would continue, and housing opportunities would continue to be limited in areas that have historically not accommodated housing access.

The Quantified Objective Alternative (Alternative 3) would reduce significant and unavoidable impacts reduced construction and operation criteria pollutant emissions and ground-borne vibration as described for the proposed Housing Element Update. However, impacts to these environmental issue areas would remain significant and unavoidable as described in the LUCE Program EIR and the DCP Program EIR. Additionally, while impacts related to domestic water supply, wastewater collection services, and public services – including fire protection services, schools, and parks and recreation – would be reduced, these impacts would not be substantially reduced to a level that is less than significant. Additionally, the Quantified Objective Alternative would result in slightly greater impacts to transportation as it would generate a higher combined total VMT for residents and employees than what would occur under the proposed Housing Element Update (Fehr & Peers 2021; see Appendix G). This is largely due to the reduce number of dwelling units, which would not address the City's existing major jobs-housing

imbalance to the same extent as the proposed Housing Element Update. While this alternative meets many of the project objectives described for the proposed Housing Element Update, this alternative would not meet the project objectives related to the City meeting its obligations under State Housing Law to plan for and accommodate the 6th Cycle RHNA. If HCD determines that the City's Housing Element fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits. Additionally, this alternative would not fully achieve the project objectives related to affirmative fair housing.

In strictly comparing reductions in the severity of physical environmental impacts it has been determined that the implementation of Alternative 2 would be the environmentally superior alternative. With respect to meeting the basic project objectives, the Quantified Objective Alternative would generally establish and implement similar policies, development standards, and programs as the proposed Housing Element Update. Additionally, implementation of Quantified Objective Alternative would meet many of the principles and goals of the proposed Housing Element Update; however, the number of dwelling units planned for through the 2030 planning horizon would not meet the City's 6th Cycle Regional Housing Needs Allocation. As previously described, if HCD determines that the City's reduced numerical housing target fails to substantially comply with the State Housing Law, there are potentially serious consequences including limited access to State Funding as well as potential for lawsuits.

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6.0 List of Preparers

City of Santa Monica, Community Development Department

Jing Yeo	Planning Manager
Rachel Kwok	Environmental Planner
Francie Stefan	Strategic Planning & Transportation Manager

City of Santa Monica, Public Works Department

Sunny Wang	Water Resources Manager
Chris Aguillon	Water Resources Protection Specialist
Frank Cahill	Water Engineering Consultant

City of Santa Monica Fire Department

Tom Clemo	Deputy Chief
Eric Binder	Fire Marshal

Santa Monica Malibu Unified School District

Carey Upton	Chief Operations Officer

Wood Environment & Infrastructure Solutions, Inc.

Erika Leachman	Project Principal
Nick Meisinger	Project Manager
Sydnie Margallo	Deputy Project Manager
Dan Gira	Senior QA/QC Manager
Taylor Lane	Senior Air Quality Specialist
Brian Cook	Senior Noise Specialist
Aidan Patterson	Environmental Analyst
Ashlyn Navarro	Environmental Analyst
Hannah Thomas	Environmental Analyst
Kaylan Lamb	Environmental Analyst
Janice Depew	Word Processor

Fehr & Peers

Tom Gaul	Principal Transportation Planner
Netai Basu	Senior Transportation Planner
Fatemeh Ranaiefar	Senior Transportation Planner

Historic Resources Group

Paul Travis, AICP	Principal Architectural Historian

MRS Environmental

Greg Chittick	Senior Engineer
Dean Dusette	Senior Scientist

Graphics Consultant

Deirdre Stites	Graphics Specialist

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7.0 References

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