

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that local government agencies, before taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report (EIR) is a public document designed to provide both the public and local and State governmental agency decision-makers with an analysis of potential environmental consequences to support informed decision-making.

This Draft EIR has been prepared by the City of Long Beach (City) to analyze the potential environmental impacts of the proposed Long Beach General Plan Land Use and Urban Design Elements (LUE/UDE) project (proposed project); to discuss alternatives; and to propose mitigation measures for identified potentially significant impacts that will minimize, offset, or otherwise reduce or avoid those environmental impacts. Data for this Draft EIR was obtained from on-site field observations; discussion with affected agencies; review of adopted plans and policies; review of available studies and reports; and specialized environmental assessments prepared for the proposed project (e.g., air quality/greenhouse gases [GHG], noise, and traffic).

1.2 SUMMARY OF PROJECT DESCRIPTION

The planning area includes the entire 50 square miles within the limits of the City of Long Beach (excluding the City of Signal Hill, which is completely surrounded by the City of Long Beach) in Los Angeles County (County), California. The City is bordered on the west by the Cities of Carson and Los Angeles (including Wilmington and the Port of Los Angeles); on the north by the Cities of Compton, Paramount, and Bellflower; and on the east by the Cities of Lakewood, Hawaiian Gardens, Cypress, Los Alamitos, and Seal Beach. The City is also bordered by the unincorporated communities of Rancho Dominguez to the north and Rossmoor to the east. The Pacific Ocean borders the southern portion of the City, and as such, portions of the City are located within the California Coastal Zone.

The proposed project is an update to the City's existing General Plan and is intended to guide growth and future development through the year 2040. The proposed project includes the approval of both the General Plan LUE and UDE, which would replace the existing LUE and the Scenic Routes Element (SRE). The following discussion summarizes the key components of each of the proposed General Plan Elements.

1.2.1 Land Use Element

The proposed updated LUE would introduce the concept of "PlaceTypes," which would replace the current approach in the existing LUE of segregating property within the City through traditional land uses designations and zoning classifications. The updated LUE would establish 14 primary PlaceTypes that would divide the City into distinct neighborhoods, thus allowing for greater flexibility and a mix of compatible land uses within these areas. Each PlaceType would be defined by unique land use, form, and

character-defining goals, policies, and implementation strategies tailored specifically to the particular application of that PlaceType within the City. The proposed 14 PlaceTypes are listed below.

1. Open Space
2. Founding and Contemporary Neighborhood
3. Multi-Family Residential—Low
4. Multi-Family Residential—Moderate
5. Neighborhood-Serving Centers and Corridors—Low
6. Neighborhood-Serving Centers and Corridors—Moderate
7. Transit-Oriented Development-Low
8. Transit-Oriented Development- Moderate
9. Community Commercial
10. Industrial
11. Neo-Industrial
12. Regional-Serving Facility
13. Downtown
14. Waterfront

In total, the LUE proposes changes to approximately 13 percent of the land area (or the equivalent of 4,180 acres) in the City. The establishment of PlaceTypes in place of standard parcel-by-parcel land use designations would allow for greater flexibility in development types to create distinct residential neighborhoods, employment centers, and open space areas.

1.2.2 Urban Design Element

The UDE would be an entirely new element of the City's General Plan and would replace the existing SRE upon approval by the City Council. The decision to include an UDE in the City's General Plan grew from the City's stated need to provide an urban framework that addresses the varying aesthetic characteristics associated with the historic districts, traditional neighborhoods, auto-oriented commercial centers, urbanized centers, and corridors located throughout the City.

The UDE would define the physical aspects of the urban environment. Specifically, the UDE aims to further enhance the City's PlaceTypes established in the LUE by creating great places; improving the urban fabric, and public spaces; and defining edges, thoroughfares, and corridors.

See Chapter 3.0, Project Description, for a complete description of the project components.

1.3 SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the *CEQA Guidelines* requires that an EIR describe significant environmental impacts that cannot be avoided if the proposed project is implemented, including those effects that can be mitigated but not reduced to a less than significant level. As determined in the contents of this Draft EIR, implementation of the proposed project would result in significant and unavoidable adverse impacts related to air quality, global climate change, and traffic/transportation. With the exception of air quality, global climate change, and traffic/transportation impacts, all other potentially significant impacts have been effectively mitigated to a less than significant level.

1.3.1 Air Quality

The proposed project would have significant unavoidable impacts related to the violation of applicable air quality standards and the exposure of sensitive receptors to substantial pollutant concentrations. Operational activities associated with future development occurring under the proposed project would be significant and unavoidable because the scale of such activities has not been determined or estimated. Mitigation Measure AQ-2 requires the preparation of project-specific technical assessments evaluating operational-related air quality impacts to ensure that operational-related emissions are reduced to the maximum extent feasible. However, in an abundance of caution, the potential emissions impact associated with the operation of the proposed project would remain significant and unavoidable even with implementation of Mitigation Measure AQ-2.

In addition to significant unavoidable impacts associated with operational activities, a significant and unavoidable impact has also been identified related to the exposure of sensitive receptors to substantial pollutant concentrations because the proposed project would allow for the development of future industrial and commercial uses, which are expected to release toxic air contaminants (TACs) during operational activities. Since it is not possible to determine the amount of TAC concentrations at the time of this analysis, it is not possible to calculate the risks for a particular health effect within the proposed Areas of Change. Future development projects would be subject to environmental review under CEQA and would be required to analyze potential TAC emissions and include mitigation as appropriate.

The proposed project would also permit residential land uses along Interstate 710 (I-710) and in areas near or adjacent to commercial and industrial uses and existing permitted TAC sources. Thus, new residential and other sensitive developments could be sited within the buffer distances to TAC sources. This is a potentially significant impact, and mitigation measures would be required. Mitigation Measures AQ-2 and AQ-3, which require project-specific technical assessments evaluating operational-related air quality impacts and the preparation of project-specific health risk assessments would be required to reduce air quality impacts to sensitive receptors. Despite implementation of Mitigation Measures AQ-2 and AQ-3, and in an abundance of caution, potential impacts associated with the operation of the proposed project, including the potential health risks to sensitive receptors, would remain significant and unavoidable.

1.3.2 Global Climate Change

The proposed project would have significant unavoidable impacts related to the generation of GHG emissions that could significantly impact the environment. Implementation of the proposed LUE/UDE would contribute to Global Climate Change (GCC) through direct and indirect emissions of GHGs from

land uses within the City of Long Beach. On a per capita basis, build out of the proposed LUE/UDE would reduce the GHG emissions from 9.5 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year per service population (MT of CO₂e/yr/SP) under existing conditions down to 5.9 MT of CO₂e/yr/SP (with reduction measures incorporated). However, the LUE/UDE GHG emissions in the City for build-out year 2040 (5.9 MT of CO₂e/yr/SP) would still exceed the interim efficiency threshold of 3.4 MT of CO₂e/yr/SP. As such, Mitigation Measures GHG-1 through GHG-4 would be required to reduce GHG emissions. These measures require the preparation of a GHG Reduction Plan or Climate Action Plan, the preparation of a vehicle miles traveled (VMT) reduction plan, and adoption of mechanisms to ensure that specific GHG reduction features are incorporated into the design of future development projects to meet or exceed the statewide goals aimed at the reduction of GHG emissions. In addition to the proposed mitigation measures, additional statewide measures would be necessary to reduce GHG emissions from development that may occur with adoption of the proposed project to meet the long-term GHG reduction goals under Executive Orders (EO) S-3-05 and EO B-30-15. Although the implementation of the proposed project would result in lower GHG emissions within the City as compared to existing conditions and because no additional statewide measures are currently available that can be implemented, GHG emission impacts for the project under the build-out scenario would remain significant and unavoidable.

1.3.3 Transportation/Traffic

The proposed project would have significant unavoidable impacts related to conflicts with applicable plans, ordinances, and policies, as well as conflicts with an applicable Congestion Management Plan (CMP). The *Traffic Impact Analysis* prepared for the proposed project determined that 44 intersections could be significantly impacted by implementation of future development projects within the Major Areas of Change in the 2040 Build Out scenario based on the City's criteria. As compared to the conclusions in the Mobility Element traffic study, an additional 12 intersections are now forecast to operate at Levels of Service (LOS) E or F under the proposed project. Potential mitigation in the form of vehicle capacity enhancements for each impacted intersection was reviewed for feasibility. In addition, the City's Capital Improvement Program, Mobility Element, and/or applicable specific plans were also reviewed for pending and planned vehicle and non-vehicle capacity improvements throughout the City. While these improvements could contribute to a reduced vehicle LOS, the effectiveness of these improvements cannot be quantified and, therefore, cannot be considered mitigation for the 44 impacted study area intersections for the purposes of CEQA. Therefore, because vehicle capacity enhancements to the impacted intersections are not feasible, and because no additional mitigation to reduce traffic is available and enforceable, impacts to the 44 intersections are considered significant and unavoidable for the build-out year of 2040.

In addition to identifying significant and unavoidable impacts at the 44 impacted intersections based on the City's criteria, the *Traffic Impact Analysis* also identified significant impacts at 5 of the 10 monitored intersections within the study area based on Los Angeles County's 2010 CMP criteria. Based on the results and because there is no feasible mitigation to reduce impacts at the impacted intersections, the significant impacts to these intersections are considered significant and unavoidable for the build-out year of 2040.

1.4 ALTERNATIVES

The following four alternatives to the proposed project were selected for consideration, including the No Project Alternative as required by CEQA:

- **Alternative 1: No Project.** This alternative would involve no amendments to the City's General Plan, no adoption of PlaceTypes, and no changes to the existing land use designations in the City. The existing General Plan Land Use Element (LUE) and the Scenic Routes Element (SRE) would continue to determine land uses and design principles that guide future development in the City.
- **Alternative 2: Areas of Change Reduction/Reduced Project Alternative.** This alternative would include the same PlaceTypes as the proposed project, but would reduce the intensity of land uses in three areas: Mid-City, Downtown, and Traffic Circle. Reductions in land use intensity in these areas would be accomplished through caps on building heights in the Downtown area, reducing the amount of in-fill and regional serving uses in the Mid-City area, and reducing or eliminating new commercial and in-fill development in the Traffic Circle area.
- **Alternative 3: Reduced VMT Alternative/Transit-Oriented Alternative.** The Reduced Vehicle Miles Travelled (VMT) Alternative would implement only the Transit-Oriented Development PlaceType/Overlay Zone. This alternative would recognize the objectives of Senate Bill 743 by reducing VMT per capita in order to improve the efficiency of the transportation network. This alternative would be an amendment to the City's existing LUE and would be implemented as an Overlay Zone intended to focus on development around existing and/or proposed transit to reduce the frequency and length of trips. Alternative 3 would not include a new Urban Design Element (UDE), but would amend the SRE to include design guidelines within the Transit-Oriented Overlay Zone.
- **Alternative 4: Neighborhood-Serving Centers and Corridors Commercial-Only Alternative.** The Neighborhood-Serving Centers and Corridors Commercial-Only Alternative would include the same PlaceTypes as the proposed project, but would eliminate the residential component from the Neighborhood-Serving Centers and Corridors PlaceType. The overall 2040 build-out square footage would remain consistent with the proposed project.

In evaluating an appropriate range of alternatives to the proposed project, a number of alternatives were considered and rejected by the Lead Agency. These included consideration of the following options: (1) Reducing Southeast Area Development and Improvement Plan (SEADIP), and (2) Alternative Sites Considered.

Each of these alternatives was rejected for differing reasons, as described further in Chapter 5.0, Alternatives.

The No Project Alternative would be environmentally superior to the proposed project on the basis of the reduced impacts that would occur with this alternative. The No Project Alternative would have the least impact on the environment because it would not update the General Plan to facilitate new PlaceTypes and urban design guidelines and policies for 2040 build out. While the No Project Alternative would lessen or avoid impacts of the proposed project, the beneficial impacts of the proposed project— including the provision of a mix of land uses and policies for better placemaking not currently provided in the City's General Plan —would not occur, and none of the project objectives would be met.

The *CEQA Guidelines* require that if the environmentally superior alternative is the No Project Alternative, “the EIR also identify an environmentally superior alternative among the other alternatives” (*CEQA Guidelines* Section 15126.6(e)(2)). Alternative 2, Areas of Change Reduction/ Reduced Project Alternative, would lessen most of the significant environmental impacts or result in impacts similar to those associated with the proposed project. With the exception of the No Project Alternative, the Environmentally Superior Alternative would be Alternative 3: Reduced VMT Alternative/Transit-Oriented Alternative. This alternative would lessen significant environmental impacts or result in impacts similar to those associated with the proposed project. Alternative 3 would achieve some of the project objectives—specifically it would directly encourage development near existing and/or proposed transit with the direct intent to create compact development patterns and walkable neighborhoods, consistent with Objectives 3, 14, 16, and 17. However, this alternative would not increase livability, economic vitality, or health throughout the planning area as it would be concentrated along Downtown transit corridors. Alternative 3 would not include the PlaceTypes that include many of the features of the proposed project, and therefore, this alternative’s consistency with the overall LUE goals (Objective 2), job growth (Objective 4), and land use changes that coincide with the regional economy (Objective 5) would not be achieved to the same degree as the proposed project. In addition, the reduction in air quality, GHGs, noise, and traffic impacts would be minimal in comparison to the economic value of providing housing and employment opportunities throughout the City.

The alternatives analysis is described in greater detail in Chapter 5.0, Alternatives.

1.5 AREAS OF CONTROVERSY

Pursuant to *CEQA Guidelines* Section 15123, this EIR acknowledges the areas of controversy and issues to be resolved that are known to the City or that were raised during the scoping process. Major issues and concerns raised at the scoping meeting held on May 27, 2015, and comments submitted in writing during the Notice of Preparation (NOP) process included: (1) concerns regarding project-related impacts on air quality in the South Coast Air Basin; (2) concerns regarding the project’s consistency with applicable land use documents, including the Southern California Association of Governments’ (SCAG) Regional Transportation Plan/Sustainable Communities Strategies; (3) concerns regarding the project’s inclusion of land use goals and policies and zoning requirements that would allow for flexibility in housing densities and types on residential properties; (4) concerns regarding potential project-related conflicts with applicable plans, ordinances, and/or policies establishing measures of effectiveness for the performance of the circulation system; (5) potential project-related impacts to California Department of Transportation (Caltrans) facilities; (6) concerns regarding the ability of the City to provide water to accommodate new development allowed under General Plan Build Out; (7) concerns related to significant increases in allowable building heights and density within the Downtown area; and (8) concerns regarding the potential loss of open space and recreational resources resulting from project implementation.

The Draft EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures designed to reduce or eliminate potentially significant impacts of the proposed project.

1.6 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.A identifies the potential environmental impacts, proposed mitigation measures, and level of significance after mitigation is incorporated into the project. Table 1.A also identifies cumulative impacts resulting from the proposed project. Environmental topics addressed in this Draft EIR include: Aesthetics, Air Quality, Global Climate Change, Land Use and Planning, Noise, Population and Housing, Public Services, Transportation/Traffic, and Utilities.

Refer to Section 2.0, Introduction, of this Draft EIR for a discussion of additional effects found not to be significant through the NOP process (e.g., Agricultural Resources, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, and Recreation).

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
4.1: AESTHETICS		
<p>Threshold 4.1.1: Have a substantial adverse effect on a scenic vista.</p> <p>Less than Significant Impact. There are no City of Long Beach (City) designated scenic viewpoints or scenic corridors in the City. However, the City’s existing Open Space Element requires protection of scenic features in the City, including beaches, bluffs, wetlands, and water bodies. Due to the prominence of existing urban and industrial developments adjacent to the Pacific Ocean and the Port of Long Beach, views of these resources would not be significantly altered by development envisioned under the proposed project. Further, future development facilitated by project approval would be designed according to the development strategies, policies, and standards in the proposed Urban Design Element (UDE). The proposed UDE includes development strategies and policies that consider the context of existing scenic vistas and neighborhoods when designing and implementing projects.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
<p>Threshold 4.1.3: Substantially degrade the existing visual character or quality of the site and its surroundings.</p> <p>Less than Significant Impact. There are no City-designated scenic viewpoints in the planning area, nor are there designated scenic resources for which the City requires view protection. All future proposed projects within the City will require submittal and approval of detailed plans and project-specific environmental review. Further, the proposed project would incorporate goals, policies, strategies, and recommendations intended to avoid, reduce, offset, or otherwise minimize potential adverse impacts to the overall visual character associated with new development followed by project approval.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
<p>Threshold 4.1.4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</p> <p>Less than Significant Impact. While the proposed project itself would not result in direct sources of light or glare, future development facilitated by the proposed project would introduce new sources of light to the City that are typical of development projects. All building and landscape lighting</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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<p>would be consistent with the design standards established in the proposed UDE and the City’s Municipal Code. On-site landscaping proposed as part of new development projects would reduce glare and would serve to screen light sources to reduce the visual impact of lighting from buildings and parking lots. Although future development would introduce new sources of light that would contribute to the light visible in the night sky and surrounding area, the planning area is located within a highly urbanized area that is currently characterized by significant nighttime lighting.</p> <p>The proposed project envisions future development of buildings and structures with a variety of materials, which may include reflective materials. Each future development project would be subject to project-level California Environmental Quality Act (CEQA) review at the time such project is under consideration by the City. The City would review site plans and architectural renderings for the presence of reflective materials, assess potential impacts related to light and glare, and propose mitigation, if necessary.</p>		
<p>Cumulative Aesthetic Impacts.</p> <p>Less than Significant Impact. The cumulative study area for visual resources for the proposed project is the City’s viewshed. The viewshed from the planning area includes vantage points with views of the Pacific Ocean, the Port of Long Beach, the Long Beach marinas, the San Gabriel Mountains, and the Santa Ana Mountains.</p> <p>Future development facilitated by the proposed project would change the visual character of the planning area, specifically within the Major Areas of Change, as compared to existing conditions. The site design, landscaping, and architectural design of future projects would be required to be consistent with goals, policies, strategies, and development standards established by the proposed UDE, which are intended to avoid, reduce, offset, or otherwise minimize identified potential adverse impacts of the proposed project or provide significant benefits to the community and/or to the physical environment.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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<p>The proposed project would introduce new sources of light and glare on the planning area as a result of future development projects facilitated by project approval. Uses permitted under the proposed PlaceTypes would introduce more lighting due to the higher building densities as allowed by the proposed project. However, because the City is currently characterized as an urban environment with existing high levels of light pollution, light emitted by future development projects would not result in a cumulatively significant visual impact related to light and glare.</p>		
<p>4.2: AIR QUALITY</p>		
<p>Threshold 4.2.1: Conflict with or obstruct implementation of the applicable air quality plan.</p> <p>Less than Significant Impact. Because the proposed project involves long-term growth, emissions of criteria pollutants associated with future development would occur. Future development would be required to comply with applicable efficiency standards and the proposed Land Use Element (LUE)/Urban Design Element (UDE) goals and policies. Consequently, emissions generated by development projects in addition to existing sources within the City of Long Beach (City) are not considered to cumulatively contribute to the nonattainment designations of the South Coast Air Basin (refer to the discussion under Threshold 4.2.3, below). Implementation of the proposed project would not contribute to an increase in frequency or severity of air quality violations and delay attainment of the ambient air quality standards (AAQS) or interim emission reductions in the Air Quality Management Plan (AQMP), and emissions generated from the proposed project would not result in a significant cumulative air quality impact as demonstrated below in the discussion.</p> <p>The proposed project would result in a higher population and generate more employment for the City compared to Southern California Association of Governments (SCAG) forecasts. The 2012 AQMP does not consider emissions associated with the proposed project. However, once the proposed project is adopted and the AQMP is revised, SCAG and the South Coast Air Quality Management District (SCAQMD) will incorporate the</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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<p>growth projections associated with build out of the project in their regional planning projections, and the proposed project would become consistent with the AQMP. Based on the requirements for consistency with emission control strategies in the AQMP, the LUE/UDE would not conflict with or obstruct the implementation of the AQMP and/or applicable portions of the State Implementation Plan (SIP). Implementation of the proposed project would result in a less than significant impact associated with conflicts with applicable air quality plans. No mitigation is required.</p>		
<p>Threshold 4.2.2: Violate any air quality standard or contribute to an existing or projected air quality violation.</p> <p>Construction Emissions. Less than Significant Impact with Mitigation Incorporated. Construction activities associated with the proposed project would occur over the build-out horizon of the project, which would cause short-term emissions of criteria air pollutants. For this broad-based analysis, it is not possible to determine whether the scale and phasing of future <i>individual</i> projects would exceed the SCAQMD’s short-term regional or localized construction emissions thresholds. However, localized construction impacts of future LUE/UDE projects could potentially exceed Localized Significance Thresholds (LSTs), particularly for construction of planning areas larger than 5 acres or planning areas with more intense construction activities. To address this, regulatory measures (e.g., SCAQMD Rule 201 for a permit to operate, Rule 403 for fugitive dust control, Rule 1113 for architectural coatings, Rule 1403 for new source review, and the California Air Resources Board [ARB] Airborne Toxic Control Measures) are currently in place, and mitigation imposed at the project level may include extension of construction schedules and/or use of special equipment. Because the scale of construction activities has not been determined or estimated and in order to present conservative assumptions, the air quality impacts associated with future construction of individual projects that may occur with implementation of the proposed project are assumed to be potentially significant.</p> <p>While existing City policies and regulations and proposed LUE/UDE goals</p>	<p>Standard Condition:</p> <p>SC AQ-1: To ensure compliance with South Coast Air Quality Management District (SCAQMD) rules and provide Best Management Practices (BMPs) to reduce air pollutant emissions during construction of future projects facilitated under the proposed project, the construction contractor shall implement the following BMPs during construction, where feasible, to further reduce emissions from these sources.</p> <ul style="list-style-type: none"> • Install temporary construction power supply meters on site and use this to provide power to electric power tools whenever feasible. If temporary electric power is available on site, forbid the use of portable gasoline- or diesel-fueled electric generators. • Use of diesel oxidation catalysts and/or catalyzed diesel particulate traps on diesel equipment, as feasible. • Maintain equipment according to manufacturers’ specifications. • Restrict idling of equipment and trucks to a maximum of 5 minutes (per California Air Resources Board [ARB] regulation). • Phase grading operations to reduce disturbed areas and times of exposure. 	<p>Less than Significant (Construction Emissions).</p> <p>Significant and Unavoidable (Operation Emissions).</p>

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<p>and policies are intended to minimize impacts associated with nonattainment criteria pollutants, best management practice (BMP) measures are included as Standard Conditions imposed by the City (including Standard Condition AQ-1), and are identified to ensure that the intended environmental protections are achieved. Additionally, Mitigation Measure AQ-1 is identified requiring the preparation of project-specific technical assessments evaluating construction-related air quality impacts to further ensure that construction-related emissions are reduced to the maximum extent feasible for projects that require environmental evaluation under the California Environmental Quality Act (CEQA). With implementation of Standard Condition AQ-1 and Mitigation Measure AQ-1, the potential construction emissions impacts associated with future development facilitated by the proposed project would be less than significant.</p> <p>Operation Emissions. Significant and Unavoidable Impact. Because the scale of operational activities has not been determined or estimated, and in order to present conservative assumptions, air quality impacts associated with future operation of individual projects under the proposed project are assumed to be potentially significant. Mitigation Measure AQ-2 requires the preparation of project-specific technical assessments evaluating operational-related air quality impacts to further ensure that operational-related emissions are reduced to the maximum extent feasible for projects that require environmental evaluation under CEQA. Unlike construction activities where the extension of construction schedules and/or use of special equipment can be reasonably assumed to be implemented, operational characteristics and the associated emissions cannot be determined at the time of this analysis. Therefore, despite implementation of Mitigation Measure AQ-2, and in an abundance of caution, the potential emissions impact associated with the operation of the proposed project would remain significant and unavoidable.</p> <p>CO Hot-Spot Analysis. Less than Significant Impact. A carbon monoxide (CO) hot-spot analysis was conducted at four busy intersections in Los Angeles County at the peak morning and afternoon periods and did not predict a violation of CO standards. One of the top four worst intersections (i.e., Long Beach Boulevard/Imperial Highway) is located</p>	<ul style="list-style-type: none"> • Avoid excavation and grading during wet weather. • Limit on-site construction routes and stabilize construction entrance(s). • Remove existing vegetation only when absolutely necessary. • Sweep up spilled dry materials (e.g., cement, mortar, or dirt track-out) immediately. Never attempt to wash them away with water. Use only minimal water for dust control. • Store stockpiled materials and wastes under a temporary roof or secured plastic sheeting or tarp. • Properly dispose of all demolition wastes. Materials that can be recycled from demolition projects include: metal framing, wood, concrete, asphalt, and plate glass. Unusable, un-recyclable debris should be confined to dumpsters, covered at night, and taken to a landfill for disposal. • Hazardous debris such as asbestos must be handled in accordance with specific laws and regulations and disposed of as hazardous waste. For more information on asbestos handling and disposal regulations, contact the SCAQMD. <p>Mitigation Measures: AQ-1: Prior to issuance of any construction permits, future development projects subject to discretionary review shall prepare and submit to the City of Long Beach (City) Department of Development Services Planning Bureau a technical assessment evaluating potential project construction-related air quality impacts. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed</p>	

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<p>approximately 4 miles north of the planning area. Since the SCAQMD-modeled intersections do not exceed the CO standards, all intersections within the project study area with a lesser volume of traffic and under less extreme conditions would not exceed the CO standards. Therefore, implementation of the proposed project would not be expected to result in CO hot spots, and impacts would be less than significant. No mitigation is required.</p>	<p>the SCAQMD-adopted thresholds of significance, the City Department of Development Services shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Department of Development Services. Mitigation measures to reduce construction-related emissions include, but are not limited to:</p> <ul style="list-style-type: none"> • Require the following fugitive-dust control measures: <ul style="list-style-type: none"> o Use nontoxic soil stabilizers to reduce wind erosion. o Apply water every 4 hours to active soil-disturbing activities. o Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials. • Use construction equipment rated by the United States Environmental Protection Agency (EPA) as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower. • Ensure that construction equipment is properly serviced and maintained to the manufacturers' standards. • Limit nonessential idling of construction equipment to no more than five consecutive minutes. • Using Super-Compliant volatile organic compound (VOC) paints for coating of architectural surfaces 	

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	<p>whenever possible.</p> <p>MM AQ-2: Prior to future discretionary project approval, development project applicants shall prepare and submit to the City of Long Beach Department of Development Services a technical assessment evaluating potential project operation phase-related air quality impacts. The evaluation shall be prepared in conformance with SCAQMD methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the Department of Development Services shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the Standard Conditions of Approval. Below are possible mitigation measures to reduce long-term emissions:</p> <ul style="list-style-type: none"> • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plugging in the anticipated number of refrigerated trailers to reduce idling time and emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with 	

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	<p>California Air Resources Board (ARB) Rule 2845 (13 California Code of Regulations [CCR] Chapter 10, Section 2485).</p> <ul style="list-style-type: none"> Site-specific development shall demonstrate that an adequate number of electrical vehicle Level 2 charging stations are provided on site. The location of the electrical outlets shall be specified on building plans, and proper installation shall be verified by the Department of Development Services prior to issuance of a Certificate of Occupancy. 	
<p>Threshold 4.2.3: 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).</p> <p>Less than Significant Impact. Emissions associated with the build out of the proposed project may exceed the daily SCAQMD thresholds for volatile organic compounds (VOCs), nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter less than 10 microns in size (PM₁₀), and particulate matter less than 2.5 microns in size (PM_{2.5}). However, in a cumulative context, emissions would be lower because of the stringent United States Environmental Protection Agency (EPA) and State of California vehicle emissions standards aimed at reducing vehicle emissions that would be phased in over the life of the project. Implementation of the proposed LUE/UDE policies would also help reduce air pollutant emissions by promoting walking, bicycling, and use of public transit that would contribute to reduced vehicle miles traveled (VMT). Further, the City's Air Quality and Mobility Elements also encourage alternative fueling facilities and modes of transportation and Transportation Demand Management. Therefore, emissions of criteria pollutants associated with future development under the proposed project would not result in a cumulatively considerable significant impact associated with emissions of PM₁₀, PM_{2.5},</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>and ozone (O₃) precursors (VOCs, NO_x, and CO) under the California ambient air quality standards (CAAQS). Future development would also be required to demonstrate compliance with the AQMP, the State Implementation Plan (SIP), ARB motor vehicle standards, SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and the proposed LUE/UDE goals and policies. For these reasons, the cumulative air quality impacts associated with the proposed project would be less than significant. No mitigation is required.</p>		
<p>Threshold 4.2.4: Expose sensitive receptors to substantial pollutant concentrations.</p> <p>Criteria Pollutants: Less than Significant Impact with Mitigation. Refer to the analysis provided under Thresholds 4.2.2 and 4.2.3 above for a discussion of construction and operational impacts relating to criteria air pollutants. With implementation of Standard Condition AQ-1 and Mitigation Measure AQ-1, the potential emissions impact associated with the construction of the proposed project would be less than significant.</p> <p>Operation of new land uses consistent with the Land Use Plan of the proposed LUE/UDE would generate fewer criteria air pollutants in the City from area/stationary sources and mobile sources. Therefore, the cumulative air quality impact associated with the proposed project would be less than significant.</p> <p>TAC Emissions: Significant and Unavoidable Impact. Despite implementation of Mitigation Measure AQ-2, the potential emissions impacts associated with the operation of the proposed project would remain significant and unavoidable.</p> <p>Various industrial and commercial processes allowed under the proposed project would release toxic air contaminants (TACs). Emissions of TACs would be controlled through permitting issued by the SCAQMD and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under SCAQMD Rule 1401. Since it is</p>	<p>Refer to Standard Condition AQ-1 and Mitigation Measure AQ-1, above.</p> <p>Mitigation Measure:</p> <p>AQ-3: Prior to future discretionary approval for projects that require environmental evaluation under the California Environmental Quality Act (CEQA), the City of Long Beach would evaluate new development proposals for sensitive land uses (e.g., residences, schools, and daycare centers) within the City for potential incompatibilities with regard to the ARB's <i>Air Quality and Land Use Handbook: A Community Health Perspective</i> (April 2005). In addition, applicants for siting or expanding sensitive land uses that are within the recommended buffer distances listed in Table 1-1 of the CARB Handbook would submit a Health Risk Assessment (HRA) to the City of Long Beach. The HRA shall be prepared in accordance with the policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD). The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children. If the HRA shows that the incremental cancer risk and/or non-cancer hazard index exceeds the respective thresholds, as established by</p>	<p>Criteria Pollutant: Less than Significant.</p> <p>TAC: Significant and Unavoidable Impact.</p>

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<p>not possible to determine the amount of TAC concentrations at the time of this analysis, it is not possible to calculate the risks for a particular health effect within the proposed Areas of Change. The proposed project is a programmatic project and until specific future projects are proposed, the associated TAC emissions cannot be determined or modeled at this time. Future development projects would be subject to environmental review under CEQA and would be required to analyze potential TAC emissions and include mitigation as appropriate.</p> <p>In addition to stationary/area sources of TACs, commercial and industrial operations could generate a substantial amount of diesel particulate matter emissions from off-road equipment use and truck idling. Land development projects are required to comply with Assembly Bill (AB) 2588, SCAQMD Rule 1401, and ARB standards for diesel engines. As stated above, until specific future projects are proposed, the associated emissions cannot be determined or modeled at this time. Future projects would be subject to environmental review under CEQA and would be required to analyze potential emissions and include mitigation as appropriate.</p> <p>If new sensitive receptors were sited within 500 feet (ft) of Interstate 710 or Interstate 405 (both of which emit TACs) or within the ARB’s minimum siting recommendations of other stationary sources, they may be exposed to significant concentrations of air pollutants.</p> <p>Goals and policies are included in the proposed General Plan LUE/UDE that would reduce concentrations of criteria air pollutant emissions and air toxics generated by construction and operation of new developments on nearby residences. Review of projects by SCAQMD for permitted sources of air toxics would ensure that health risks are minimized.</p> <p>It is important to note that the Neo-Industrial PlaceType would be used as a buffer between existing industrial and residential neighborhoods. No heavy industrial, warehousing, and distribution facilities are permitted in this land use category, and as such, industrial uses within this PlaceType would likely be below-average truck trip generators. Thus, no future projects</p>	<p>the SCAQMD at the time a project is considered, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below the aforementioned thresholds as established by the SCAQMD), including appropriate enforcement mechanisms. Measures to reduce risk may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Air intakes oriented away from high-volume roadways and/or truck loading zones; and. • Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value filters. <p>Prior to future discretionary project approval, applicants for new industrial or warehousing land uses that (1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units, and (2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, or nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit an HRA to the Department of Development Services. The HRA shall be prepared in accordance with policies and procedures of the State OEHHA and the SCAQMD. If the HRA shows that the incremental cancer risk and/or non-cancer hazard index exceeds the respective thresholds, as established by the SCAQMD at the time a project is considered, the applicant will be required to identify and demonstrate whether best available control technologies for toxics (T-BACTs), including appropriate enforcement mechanisms, are capable of reducing potential cancer and non-cancer</p>	

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<p>would generate the level of truck trips expected for heavy industrial and/or warehouses. However, since it is not possible to determine the amount of TAC concentrations at the time of this analysis, it is not possible to calculate the risks for a particular health effect within the proposed Areas of Change.</p> <p>The amount of emissions from a project does not necessarily correspond to the concentrations of air pollutants. Because the scale of operational activities has not been determined or estimated and in order to present conservative assumptions, the TAC health risk impacts associated with future operation of individual projects that may occur with implementation of the proposed project are assumed to be potentially significant.</p> <p>Mitigation Measure AQ-3 has been identified to ensure that mobile sources of TACs not covered under SCAQMD permits are considered during subsequent project-level environmental review. Mitigation Measure AQ-3 requires the preparation of project-specific technical health risk assessments evaluating operational-related health risk impacts to further ensure that operational-related emissions are reduced to the maximum extent feasible for projects that require environmental evaluation under CEQA. However, unlike construction activities for which the extension of construction schedules and/or use of special equipment can be reasonably assumed to be implemented, operational characteristics and the associated emissions cannot be determined at the time of this analysis. With implementation of Mitigation Measure AQ-3, the potential TAC health risk impact associated with the operation of the proposed project would remain significant and unavoidable.</p>	<p>risks to an acceptable level. T-BACTs may include, but are not limited to, restricting idling on site or electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.</p>	
<p>Threshold 4.2.5: Create objectionable odors affecting a substantial number of people.</p> <p>Less than Significant Impact. While odor sources are present within the City, the odor policies enforced by the SCAQMD and the City prohibit nuisance odors and identify enforcement measures to reduce odor impacts to nearby receptors. Construction and operation of land uses consistent with the proposed project that would have the potential to result in nuisance odors would be required to comply with these regulations. Therefore,</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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<p>impacts associated with objectionable odors would be less than significant.</p> <p>Cumulative Air Quality Impacts.</p> <p>Less than Significant Impact. Future development that may occur with implementation of the project would contribute criteria pollutants to the area during project construction and operation. However, future development under the proposed project would be required to comply with ARB, SCAQMD, and Title 24 regulations and standards and the proposed LUE/UDE project goals and policies. Consequently, emissions generated by development projects in addition to existing sources within the City are not considered to cumulatively contribute to the nonattainment designations of the South Coast Air Basin. Implementation of the proposed project would not contribute to an increase in frequency or severity of air quality violations and delay attainment of the AAQS or interim emission reductions in the AQMP.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
<p>4.3: GREENHOUSE GAS EMISSIONS</p>		
<p>Threshold 4.3.1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.</p> <p>Significant and Unavoidable Impact. Implementation of the proposed project would contribute to global climate change (GCC) through direct and indirect emissions of greenhouse gases (GHGs) from land uses within the City of Long Beach (City). On a per capita basis, build out of the proposed project would reduce the GHG emissions from 9.5 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year per service population (MT of CO₂e/yr/SP) under existing conditions down to 5.9 MT of CO₂e/yr/SP (with reduction measures incorporated). However, the Land Use Element (LUE)/Urban Design Element (UDE) GHG emissions in the City for build-out year 2040 (5.9 MT of CO₂e/yr/SP) would still exceed the interim efficiency threshold of 3.4 MT of CO₂e/yr/SP.</p> <p>While the proposed LUE/UDE includes various policies that would contribute to reduced GHG emissions, the City would require assistance from additional federal and State programs and regulations to achieve the</p>	<p>GHG-1: The City of Long Beach (City) shall develop a greenhouse gas (GHG) Reduction Plan or Climate Action Plan (CAP) to ensure that the City continues on a trajectory that aligns with the short-term, interim, and long-term state GHG reduction goals of Assembly Bill (AB) 32 (2020 goal), Executive Order (EO) B-30-15 (2030 goal), and EO S-03-05 (2050 goal). Within approximately 36 months of adoption of the proposed General Plan Land Use Element (LUE)/Urban Design Element (UDE) project, the City of Long Beach shall prepare and present to the City Council for adoption a community climate action plan/greenhouse gas reduction plan (Plan). The Plan shall identify strategies to be implemented to reduce GHG emissions associated with the City, and shall include as one alternative a program that achieves the AB 32 targets. In addition, the City shall monitor GHG emissions by updating its community-wide GHG emissions inventory every 5 years upon adoption of</p>	<p>Significant and Unavoidable</p>

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<p>long-term GHG emissions goal. Mitigation Measures GHG-1 through GHG-4 have been proposed to minimize and reduce potentially significant GHG impacts. In addition to the proposed mitigation measures, additional statewide measures would be necessary to reduce GHG emissions from development that may occur with adoption of the proposed project to meet the long-term GHG reduction goals under Executive Orders (EOs) O S-3-05 and B-30-15. Since no additional statewide measures are currently available that can be implemented, GHG emission impacts for the project under the build-out scenario would remain significant and unavoidable.</p>	<p>the initial Plan. Upon the next update to the Plan, the inventory, GHG reduction measures, and GHG reductions shall be forecast to year 2040 to ensure progress toward achieving the interim target that aligns with the long-term GHG reduction goals of EO S-03-04. The Plan update shall take into account the reductions achievable from federal and State actions and measures as well as ongoing work by the City and the private sector. The 2040 Plan update shall be completed by January 1, 2020, with a plan to achieve GHG reductions for 2030 (EO B-30-15 goal), provided the State has an actual plan to achieve reductions for 2030. New reduction programs in similar sectors as the proposed Plan (building energy, transportation, waste, water, wastewater, agriculture, and others) will likely be necessary. Future targets shall be considered in alignment with State reduction targets, to the maximum extent feasible, but it is premature at this time to determine whether or not such targets can be feasibly met through the combination of federal, state, and local action given technical, logistical and financial constraints. Future updates to the Plan shall account for the horizon beyond 2030 as the State adopts actual plans to meet post-2030 targets. The Plan will include details on how the reduction programs will be implemented and will designate responsible parties to monitor progress and ensure implementation of the reductions within the Plan. A monitoring and reporting program will be included to ensure the Plan achieves the reduction targets. The Plan will also include criteria that would trigger an update to the Plan. Examples of triggers requiring a Plan update include monitoring of progress that demonstrates that the Plan will not achieve the reduction targets, or economic and/or population growth that exceeds the scope of the Plan. In all instances, the Plan and any updates shall be consistent with State and</p>	

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	<p>federal law.</p> <p>Long Beach GHG Reduction Plan or Climate Action Plan Measures:</p> <ul style="list-style-type: none"> • Establish a goal to encourage 15 percent of existing single-family homes to install solar installations before 2020. • Establish a goal to encourage 15 percent of existing commercial/industrial buildings to install solar installations before 2020. • Collaborate with Long Beach Transit to implement “Smart Bus” technology, global positioning system (GPS), and electronic displays at all transit stops by 2020 to provide customers with “real-time” arrival and departure time information. • Explore the opportunity for expansion of electric-vehicle infrastructure, including requiring electric-vehicle charging stations in new qualified developments. • Develop public education materials that support and encourage the use of recycled water. • Consider a plan for installing recycled water infrastructures for all new parks, schools, and other public facilities to use 100 percent recycled water for non-potable outdoor uses. • Adopt a municipal goal of 100 percent recycled water for non-potable sources, as feasible, depending on available recycled water infrastructure. • Adopt a landscaping water conservation ordinance that exceeds the requirements in the Model Landscape Ordinance (AB 1881). <p>Post-2020 Measures:</p>	

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	<ul style="list-style-type: none"> • Prior to January 1, 2020, the City of Long Beach shall update the GHG Reduction Plan or CAP to address the GHG reduction goals of EO B-30-15 for GHG sectors for which the City has direct or indirect jurisdictional control. The City shall identify a GHG emissions reduction target for year 2030 that is consistent with the GHG reduction goals identified in EO S-03-05. The GHG Reduction Plan or CAP shall be updated to include measures to ensure that the City is on a trajectory that aligns with the State’s 2030 GHG emissions reduction target. <p>GHG-2: Within approximately 18 months of adoption of the proposed General Plan LUE/UDE project, the City shall prepare and present to the City Council for adoption a vehicle miles traveled (VMT) reduction plan to ensure that GHG reduction can be achieved by reducing VMT and by increasing or encouraging the use of alternative fuels and transportation technologies.</p> <ul style="list-style-type: none"> • The City will ensure that new development incorporate both local and regional transit measures into the project design that promote the use of alternative modes of transportation. • The City shall give priority to transportation projects that will contribute to a reduction in VMT per capita, while maintaining economic vitality and sustainability. • The City will create an interconnected transportation system that allows a shift in travel from private passenger vehicle to alternative modes, including public transit, ride sharing, car sharing, bicycling, 	

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	<p>and walking.</p> <p>GHG-3: Prior to issuance of building permits for residential development projects within the LUE/UDE Areas of Change, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Long Beach Building and Safety Bureau prior to issuance of a certificate of occupancy.</p> <ul style="list-style-type: none"> • For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the California Green Building Standards Code (CALGreen Code). • Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code. <p>GHG-4: Prior to issuance of building permits for non-residential development projects within the LUE/UDE Areas of Change, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Long Beach Building and Safety Bureau prior to issuance of a certificate of occupancy.</p> <ul style="list-style-type: none"> • For buildings with more than ten tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the CALGreen Code. • Preferential parking for low-emitting, fuel-efficient, 	

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	<p>and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.</p> <ul style="list-style-type: none"> Facilities shall be installed to support future electric vehicle charging at each non-residential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code. 	
<p>Threshold 4.3.2: Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p> <p>Less than Significant Impact. In addition to the City’s Sustainable City Action Plan (SCAP), the California Air Resources Board (ARB) Scoping Plan and the Southern California Association of Governments’ (SCAG) 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) identify strategies to reduce GHG emissions, both of which are applicable to the proposed project. The proposed LUE/UDE project and its policies would be consistent with applicable measures and goals identified in the City’s SCAP, the ARB Scoping Plan, and SCAG’s 2012 Regional Transportation Plan (RTP)/Sustainable Community Strategy (SCS). Furthermore, implementation of the proposed project would not conflict with or impede implementation of reduction goals identified in Assembly Bill (AB) 32, Executive Order (EO) S-3-05, or other strategies to help reduce GHGs to the level proposed by the Governor. The project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. Further, the proposed project would result in a net reduction of overall GHG emissions. Therefore, the proposed project would not conflict with any applicable plan, program, policy, or regulation related to the reduction of GHG emissions. Impacts are considered less than significant, and no mitigation is required.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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<p>Cumulative Greenhouse Gas Emission Impacts.</p> <p>Less than Significant Impact. Although the proposed project is expected to emit GHGs, the emission of GHGs by any single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHGs from more than one project and many sources in the atmosphere that may result in GCC. The resultant consequences of that climate change, including sea level rise, could cause adverse environmental effects.</p> <p>The proposed project would result in a GHG emission profile that is lower than existing GHG emissions within the City. Additionally, since climate change is a global issue, it is unlikely that the proposed project would generate enough GHG emissions to influence GCC on its own. Because the proposed project's impacts alone would not cause or significantly contribute to GCC, project-related CO₂e emissions and their contribution to GCC impacts in the State of California would not make a significant contribution to cumulatively considerable GHG emission impacts. Therefore, the proposed project would not result in a significant long-term cumulative impact on GCC (including sea level rise).</p> <p>Rising sea levels may affect the built environment, including coastal development such as buildings, roads, and infrastructure. However, future projects facilitated under the proposed LUE/UDE project would be planned in consideration of the conditions at the time they are proposed and would be evaluated for their potential to be affected by the change in sea level resulting from GCC during environmental review.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
<p>4.4: LAND USE AND PLANNING</p>		
<p>Threshold 4.4.2: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.</p>	<p>Project Design Feature 4.4.1: To ensure that the proposed project complies with and would not conflict with or impede the City of Long Beach (City) Zoning Code, the project shall implement a Zone Change Program to ensure that changes facilitated by the adopted Land Use Element (LUE) are consistent with the Zoning</p>	<p>Less than Significant.</p>

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<p>Less than Significant Impact.</p> <p>General Plan: The proposed project would update and replace the existing Land Use Element (LUE) with an updated LUE and replace the existing Scenic Routes Element (SRE) with the proposed UDE. As part of the proposed LUE, the 14 PlaceTypes would replace the existing land use designations. Although the proposed PlaceTypes are currently inconsistent with the existing General Plan land use designations, approval of the proposed project would result in the project being consistent with the General Plan and would ensure the proposed LUE would be the presiding policy document guiding land use in the City of Long Beach (City). The goals and policies in the General Plan would be updated and replaced by the goals, strategies, policies, and implementation strategies outlined in the proposed LUE and UDE. These goals, strategies, policies, and implementation strategies would be internally consistent between the proposed LUE and UDE, as well as consistent with existing elements of the City's General Plan.</p> <p>City Zoning Code: While the PlaceTypes included as part of the project would be inconsistent with some current zoning districts and regulations outlined in the City's existing Zoning Code and corresponding Zoning Map, the project includes Project Design Feature 4.4.1 to address such inconsistencies. Therefore, with incorporation of Project Design Feature 4.4.1, the proposed project would be consistent with the City's Zoning Code and Zoning Map.</p> <p>Local Coastal Program: Because the proposed project would result in updates to the City's General Plan that would be inconsistent with portions of the City's existing Local Coastal Program (LCP), project implementation could result in potential land use conflicts with the LCP. Therefore, updates/amendments to the City's LCP could be required at the time individual applications for development within the City's Coastal Zone are proposed, if they were determined by the City to be inconsistent with the adopted General Plan LUE. Approval of these future LCP amendments would reduce potential inconsistencies with the City's LCP to a less than</p>	<p>Code. The Zone Change Program shall be implemented to the satisfaction of the City Director of Development Services, or designee, and shall include the following specific performance criteria to be implemented within 5 years from the date of project approval:</p> <ul style="list-style-type: none"> • Year 1: Within the first 12 months following project approval, all Land Use Element/Zoning Code inconsistencies shall be identified and mapped. The City shall evaluate these inconsistencies and prioritize areas needing intervention. • Year 2: Following the identification and mapping of any zoning inconsistencies, the City shall, within 24 months following project approval, begin processing zone changes and zone text amendments in batches, as required to ensure that the Zoning Code is consistent with the adopted LUE. • Year 3: The City shall, within 36 months following project approval, begin drafting new zones, or begin preparation of a comprehensive Zoning Code update, to better reflect the PlaceTypes identified in the adopted LUE. • Year 5: All zoning inconsistencies shall be resolved through mapping and zone text amendments by the end of the fifth year following project approval. 	

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<p>significant level.</p> <p>SCAG RCP and RTP/SCS: The proposed project would be consistent with the Regional Comprehensive Plan (RCP) and RTP/SCS’s goal of locating new development adjacent to High Quality Transit Areas (HQTAs), improving the transportation network, providing a variety of new housing types, promoting a diverse economy, and protecting the existing natural environment.</p>		
<p>Cumulative Land Use and Planning Impacts.</p> <p>Less than Significant Impact. The cumulative impact area for land use for the proposed project is the City of Long Beach. As such, each new development project facilitated by project approval would be subject to its own General Plan consistency analysis and would be reviewed for consistency with adopted land use plans and policies.</p> <p>Approval of the proposed project would ensure that the proposed LUE would become the guiding land use document for the City, thereby mitigating any potential inconsistencies with the City’s General Plan and other applicable land use documents (i.e., the California Coastal Act, the City’s LCP, and SCAG’s RCP and RTP/SCS). The project would also address potential inconsistencies with the City’s Zoning Ordinance and Zoning Map within the first 5 years following project approval (as outlined in Project Design Feature 4.4.1), which would reduce cumulative project impacts related to potential zoning inconsistencies to a less than significant level.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
<p>4.5: NOISE</p>		
<p>Threshold 4.5.1: Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</p> <p>Less than Significant Impact.</p> <p>Short-Term Construction-Related Noise Impacts. Two types of short-</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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<p>term noise impacts could occur during construction of potential development allowed by the Land Use Element (LUE). First, construction crew commutes and the transport of construction equipment and materials to the site for future projects would incrementally increase noise levels on access roads leading to the sites. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance, the effect on longer-term (hourly or daily) ambient noise levels would be small.</p> <p>The second type of short-term noise impact is related to noise generated during demolition, site preparation, excavation, grading, and building erection on the future project sites. The maximum noise level generated by each scraper on future project sites would be approximately 87 A-weighted decibels (dBA) maximum instantaneous noise level (L_{max}) at 50 ft from the scraper. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of future construction would be 91 dBA L_{max} at a distance of 50 ft from the active construction area.</p> <p>Construction activities associated with development allowed under the LUE would be subject to compliance with the City of Long Beach (City) Noise Ordinance to ensure that noise impacts from construction sources are reduced to a less than significant level. No mitigation is required.</p> <p>Long-Term Stationary-Source Noise Impacts. Development allowed under the proposed LUE may include the installation or creation of new stationary sources of noise, or could include the development of new sensitive land uses in the vicinity of existing noise sources. However, noise generation would continue to be limited by the Noise Ordinance of the City's Municipal Code (Chapter 8.80).</p> <p>Implementation of the LUE is not anticipated to result in increased railroad operations within the City. However, the LUE proposes the transit-oriented development (TOD) PlaceType, which would allow future multifamily developments to be located along the Metro Blue Line fixed rail route.</p>		

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Locating multifamily developments near the light-rail corridor could expose sensitive land uses to operational rail noise.</p> <p>Several of the LUE and Urban Design Element (UDE) policies require new development projects to incorporate site planning and project design strategies to separate or buffer neighborhoods from incompatible activities or land uses. Therefore, implementation of the LUE/UDE would not expose persons to noise levels in excess of the City’s Municipal Code, and no mitigation measures are required.</p>		
<p>Threshold 4.5.2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels.</p> <p>Less than Significant Impact. Ground-borne noise and vibration from construction activity would be mostly low to moderate except if pavement breaking or sheet-pile vibration is used on a site. Receptors at 100 ft and 200 ft from the construction activity may be exposed to ground-borne vibration up to 86 vibration velocity decibels (VdB) and 80 VdB, respectively.</p> <p>Construction of future projects associated with implementation of the LUE/UDE could result in the generation of ground-borne vibration. However, Chapter 8.80 of the City’s Noise Ordinance limits the operation of any device that creates vibration above the vibration perception threshold of 67 VdB. Any construction activities associated with implementation of the LUE/UDE would be required to comply with the Noise Ordinance requirements. Therefore, impacts from typical construction methods would not result in the exposure of sensitive receptors to excessive ground-borne vibration or noise levels, and no mitigation is required.</p> <p>Potential ground-borne vibration and noise impacts may also occur from rail activity because the LUE/UDE would include TOD along the Metro Blue Line. To ensure new land uses adjacent to the rail line are not exposed to excessive ground-borne vibration, LU Policy 15-6 requires that new development within 200 ft of the Metro rail line conduct a vibration</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>assessment demonstrating that Federal Transit Administration (FTA) Ground-borne Vibration Impact Criteria for the proposed land use are not exceeded. If necessary, the vibration assessment shall also demonstrate project modifications required to ensure criteria compliance. Therefore, implementation of the LUE/UDE would not expose persons to excessive ground-borne vibration and/or ground-borne noise levels, and no mitigation is required.</p>		
<p>Threshold 4.5.3: Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Less than Significant with Mitigation.</p> <p>Less than Significant Impact.</p> <p>Long-Term Off-Site Traffic Noise Impacts. Potential sources of a permanent increase in ambient noise include increases associated with an increase in traffic on roadways in the planning area. It is projected that traffic volumes on some streets within the City would increase due to the growth envisioned in the LUE/UDE, which is expected to result in greater traffic noise levels compared to existing conditions. However, the anticipated increase in traffic volumes associated with the LUE/UDE would be less than a doubling of traffic, resulting in a noise increase of less than 3 dBA; therefore, implementation of the LUE/UDE is not expected to result in the generation of substantial traffic noise increases. Implementation of the LUE/UDE would not result in a permanent increase in ambient noise levels, and no mitigation is required.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
<p>Threshold 4.5.4: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.</p> <p>Less than Significant Impact. Maximum combined noise levels from proposed project-related construction activities could reach up to 91 dBA L_{max} at 50 ft for limited times during future construction. Construction noise is permitted by the City's Municipal Code when activities occur between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and between 9:00 a.m. and 6:00 p.m. on Saturdays. No construction would be permitted on</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Sundays. Construction activities associated with development allowed under the LUE would be subject to compliance with the City’s Noise Ordinance to ensure that noise impacts from construction sources are reduced to a less than significant level. No mitigation is required.</p>		
<p>Threshold 4.5.5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.</p> <p>No Impact. Aircraft noise in the City of Long Beach is primarily related to aircraft operations at Long Beach Airport, Los Angeles International Airport, and John Wayne Airport. Long Beach Airport is located centrally within the City, approximately 3 miles northeast of the Downtown area. Implementation of the LUE/UDE would locate business parks and airport-related land uses surrounding the airport and would not introduce any new noise-sensitive receptors within the 65 dBA noise contour of the Long Beach Airport. Therefore, the LUE/UDE would not result in the exposure of sensitive receptors to excessive noise levels from aircraft noise sources. No mitigation measures are required.</p>	<p>No mitigation is required.</p>	<p>No Impact.</p>
<p>Threshold 4.5.6: For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.</p> <p>No Impact. Aircraft noise in the City of Long Beach is primarily related to aircraft operations at Long Beach Airport, Los Angeles International Airport, and John Wayne Airport. Implementation of the LUE/UDE would locate business parks and airport-related land uses surrounding the airport and would not introduce any new noise-sensitive receptors within the 65 dBA noise contour of the Long Beach Airport. Therefore, the LUE/UDE would not result in the exposure of sensitive receptors to excessive noise levels from aircraft noise sources. No mitigation measures are required.</p>	<p>No mitigation is required.</p>	<p>No Impact.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Cumulative Noise Impacts.</p> <p>Less than Significant Impact. The proposed project would not create a cumulatively considerable contribution to regional noise conditions. Implementation of the proposed project would not result in a 3 dBA increase in traffic noise levels in the City and would not generate a significant impact under cumulative noise conditions. Additionally, implementation of the LUE/UDE policies and land use strategies would require the City to consider noise and land use compatibility issues when evaluating individual development proposals. Therefore, under cumulative conditions, implementation of the proposed project would result in a less than significant cumulative impact.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
4.6: POPULATION AND HOUSING		
<p>Threshold 4.6.1: 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).</p> <p>Less than Significant Impact. The proposed project would allow for the increased intensity and density of mixed-use and residential uses in the City of Long Beach (City) that would facilitate the future development of up to 11,744 new housing units through the year 2040. This growth would be consistent with Southern California Association of Governments’ (SCAG) regional growth forecasts for the same horizon year. Therefore, the project’s growth-inducing potential would be less than significant, as it would not foster growth in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies (e.g., SCAG).</p> <p>While the place of residence of the persons accepting employment provided by the proposed uses is uncertain, due to the City’s projected jobs-to-housing ratio, it is reasonable that a large percentage of these jobs would be filled by persons already living within the City or project area; therefore, no significant increase in population of the City is anticipated to result from the development or operation of future development facilitated by the proposed project.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Improvements to public utilities, including new water, sanitary sewer, and storm water services would be identified on a project-specific basis as new developments are proposed under the proposed Land Use Element (LUE). Infrastructure improvements associated with future development facilitated by project approval would be sized appropriately for each project and would not be oversized to serve additional growth beyond that envisioned under the proposed LUE.</p>		
<p>Cumulative Population and Housing Impacts.</p> <p>Less than Significant Impact. The City’s population is anticipated to increase by 51,230 persons by 2040. Similarly, the City’s employment is anticipated to increase by 28,511 jobs by 2040 and the County of Los Angeles (County) employment is anticipated to increase by 5,213,136 jobs by 2040. Project-related increases in population and employment have been accounted for in SCAG’s growth projections for the City. The proposed project will serve an existing demand for employment, while also meeting the cumulative demand of employment that will result from the City’s projected future population. These increases for population, housing, and employment would be within the total projected growth forecasts for 2040. Implementation of the proposed project would not result in a cumulatively significant population or housing impact and the future development facilitated by project approval would not significantly induce growth in areas where growth was not previously anticipated.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
4.7: PUBLIC SERVICES		
<p>Threshold 4.7.1: 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.</p> <p>Less than Significant Impact. The proposed project does not include any physical improvements, but allows future development that is anticipated to create an increase in the typical range of fire protection service calls within</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>the City of Long Beach (City). The costs of additional personnel and materials are anticipated to be offset through the increased revenues and fees, such as property taxes, generated by future development. Future projects would be reviewed by the City on a project-by-project basis and would need to comply with any requirements in effect when the review is conducted. Prior to the issuance of building permits, future project applicants would be required to pay the adopted police facilities impact fees. The Long Beach Fire Department (LBFD) would also continue to be supported by Proposition H revenue; the City’s General Funds; the City’s Tidelands operation revenue; and other revenue sources. Therefore, sufficient revenue would be available for necessary improvements to provide for adequate fire facilities, equipment, and personnel upon build out of the proposed project.</p>		
<p>Threshold 4.7.2: 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 <i>police protection</i>.</p> <p>Less than Significant Impact. The proposed project does not include any physical improvements, but allows future development that is anticipated to create an increase in the typical range of police service calls within the City. To serve future growth, new and/or additional police resources would be needed to prevent an impact to service ratios. The costs of additional personnel and materials are anticipated to be offset through the increased revenues and fees, such as property taxes, generated by future development. Future projects would be reviewed by the City on a project-by-project basis and would need to comply with any requirements in effect when the review is conducted. Prior to the issuance of building permits, future project applicants would be required to pay the adopted police facilities impact fees. In addition, the Long Beach Police Department (LBPD) would continue to be supported by Proposition H revenue, a per barrel tax on all oil producers in Long Beach; the City’s Tidelands operation revenue; and other revenue sources.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>By following this process, sufficient revenue would be available for necessary service improvements to provide for adequate police facilities, equipment, and personnel upon build out of the proposed project.</p>		
<p>Threshold 4.7.3: 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 <i>public schools</i>.</p> <p>Less than Significant Impact. Implementation of the proposed project would allow future development that would enable the generation of school-age children within the Long Beach Unified School District (LBUSD) service area. With General Plan build out, elementary and middle school enrollment in LBUSD would continue to be within the 2014–2015 LBUSD facilities capacity, but high school and total estimated enrollment in LBUSD in 2040 would exceed the LBUSD current facilities capacity. The proposed project does not include any physical improvements; therefore, future school facility needs would be funded by fees collected by future development projects. Further, all future projects consistent with the proposed Land Use Element (LUE) and Urban Design Element (UDE) would be required to undergo project-specific environmental review and comply with the provision of school developer fees or new/altered facilities.</p>	<p>No mitigation is required.</p>	<p>No impact.</p>
<p>Threshold 4.7.5: 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 <i>other public facilities</i>.</p> <p>Less than Significant.</p> <p>Public Library.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Less than Significant Impact. The proposed project does not include any physical improvements, but would allow for new PlaceTypes that would facilitate an increase in housing units and demand for Long Beach Public Library (LBPL) facilities. The City has not formally adopted a service standard of library space per capita, but the City did establish a target of 0.45 square feet (sf) per capita in its budget for Fiscal Year 2007. In total, the existing LBPL system has approximately 220,265 sf of library facilities, which is adequate to serve the City’s existing population and sufficiently support the projected demand generated by the build out of the proposed project. Additionally, the North Branch Library is scheduled to move to a new, larger facility later in 2016, which will increase the LBPL square footage by approximately 17,700 sf. Therefore, the proposed project’s increase in demand on library services can be served by the existing facilities and would not adversely affect library services in the project area.</p>		
<p>Cumulative Public Service Impacts.</p> <p>Less than Significant Impact. The proposed project would contribute to cumulative local and regional demand for public services and utilities, including police and fire services, schools, parks, and libraries. For each public service, the proposed project would generate increased demand in varying amounts. However, each future project within the project area would be evaluated individually, and project-specific mitigation would be required as needed. Therefore, no mitigation is required.</p> <p>Fire Protection. The City is almost entirely built out, with most new development occurring as in-fill projects. The LBFD anticipates cumulative demand in order to plan for overall service. This cumulative demand is anticipated to be met through project implementation as the LUE establishes the development of future fire stations. Furthermore, through implementation of the proposed project, the City will reduce the potential for dangerous fires by concentrating development within urban areas where there is a low fire risk and by requiring that future projects comply with applicable City and State regulations related to fire. Therefore, the proposed project’s contribution to fire protection impacts would not be cumulatively considerable, and no mitigation is required.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Police Protection. The City is almost entirely built out, with most new development occurring as in-fill projects. This cumulative demand is anticipated to be met through project implementation as the LUE establishes the development of future police stations. In addition, the need for additional law enforcement associated with cumulative growth would be addressed through the annual budgeting process when budget adjustments would be made in an effort to meet changes in service demand. Therefore, the proposed project’s contribution to police protection impacts would not be cumulatively considerable, and no mitigation is required.</p> <p>Public Schools. The proposed project would generate approximately 3,977 school-aged children, which would lead to an increased demand on existing educational school facilities. Future projects consistent with the LUE would be accounted for on a project-by-project basis. Residential projects located within the LBUSD service area, but outside the City of Long Beach, would have the potential to generate school-aged children, and, as a result, increase demand on educational school facilities. LBUSD would assess developer fees to future projects within its service area in an effort to fund future schools needed to meet the project-related increase in school-aged children. Therefore, the proposed project would not contribute to any cumulative school impacts, and no mitigation is required.</p> <p>Public Libraries. The City currently meets the LBPL system’s square footage requirements, and the proposed project would not exceed the LBPL system’s ability to meet project demand at build out with existing library services. Therefore, the proposed project’s contribution to library impacts would not be cumulatively considerable, and no mitigation is required.</p>		
4.8: TRANSPORTATION/TRAFFIC		
<p>Threshold 4.8.1: Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections.</p>	<p>No feasible mitigation.</p>	<p>Significant and Unavoidable.</p>

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Significant and Unavoidable Impact. The proposed Land Use Element (LUE) concentrates growth along corridors and districts that would provide residents and employees with alternatives for travel aside from a private automobile. However, concentrating future growth in these areas also has the potential to concentrate new automobile trips.</p> <p>Based on the City of Long Beach’s (City’s) criteria, 44 intersections could be significantly impacted by new development occurring under the proposed project. The forecasted intersection level of service (LOS) deficiencies are caused by future traffic volume growth from the projected project-related traffic volumes in the build-out year of 2040. Mitigation in the form of vehicle and non-vehicle capacity enhancements for each impacted intersection was reviewed for feasibility. It was determined that vehicle capacity enhancements would be infeasible, for various reasons, at all 44 impacted intersections.</p> <p>Executing Implementation Measures from the Mobility Element would have an effect on managing travel demand, reducing the volume of vehicle traffic, decreasing the volume-to-capacity (v/c) ratio at City intersections, and improving vehicle LOS. Although these measures would contribute to a reduced vehicle LOS, their effects cannot be quantified and they cannot be considered mitigation for the 44 impacted study area intersections for the purposes of the California Environmental Quality Act (CEQA). Because vehicle capacity enhancements to the impacted intersections are not feasible, and because no other mitigation to reduce traffic is available and enforceable, impacts to the 44 intersections identified above are considered significant and unavoidable for the build-out year of 2040.</p>		
<p>Threshold 4.8.2: Exceed, either individually or cumulatively, a level of service standard established by the County congestion/management agency for designated roads or highways.</p> <p>Significant and Unavoidable Impact. A significant impact at a Congestion Management Plan (CMP) intersection occurs when a project causes a 0.02 or greater increase in v/c ratio at an intersection operating at LOS E or F. Of the 88 study area intersections, the CMP includes 10</p>	No feasible mitigation.	Significant and Unavoidable.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>monitored intersections. Five intersections would have a significant project-related impact based on CMP criteria. Because there is no feasible mitigation to reduce impacts at these impacted intersections, impacts at these five intersections are considered significant and unavoidable for the build-out year of 2040.</p>		
<p>Cumulative Traffic/Traffic Impacts.</p> <p>Significant and Unavoidable Impact. The proposed project is a citywide policy action that would facilitate future development throughout the entire City, and the proposed project itself is cumulative in nature. Under 2040 Plus Project build-out conditions, 44 intersections would be significantly impacted and would operate below the City’s LOS D standard. Therefore, the proposed project would contribute to a cumulative impact at these 44 intersections. As previously stated, intersection enhancements at the impacted intersections were reviewed, but determined to be infeasible. Implementation Measures identified in the Mobility Element were designed to reduce the number of automobile trips on the roadway network and promote mobility by supporting all travel modes, but the effects of these measures on individual intersection LOS cannot be guaranteed because they rely on the changing attitudes and actions of many commuters. Because physical vehicle capacity enhancements are not feasible, the impacts to the 44 intersections identified above are considered cumulatively significant and unavoidable for the build-out year of 2040.</p>	<p>No feasible mitigation.</p>	<p>Significant and Unavoidable.</p>
<p>4.9: UTILITIES</p>		
<p>Threshold 4.9.1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.</p> <p>Less than Significant Impact. The proposed project is anticipated to generate a total estimated wastewater flow of approximately 40.2 million gallons per day (mgd), or an approximate increase of 2.8 mgd over 2012 usage. There is sufficient wastewater treatment capacity within the Los Angeles County Sanitation District (LACSD) facilities to accommodate this increase in wastewater demand citywide, and no major improvements are required. The increase in wastewater flows associated with the proposed</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>project would not exceed the treatment requirements of the Regional Water Quality Control Board (RWQCB) for the Joint Water Pollution Control Plant (JWPCP) and the Long Beach Water Reclamation Plant (WRP) of the LACSD. Future improvements and upgrades to existing sewer lines would continue to be prioritized on an as-needed basis, and development fees collected from future projects facilitated by project approval would fund the highest-priority projects. Therefore, impacts related to wastewater are less than significant, and no mitigation is required.</p>		
<p>Threshold 4.9.2: Require or result in the construction of new <i>water</i> or <i>wastewater</i> treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects</p> <p style="text-align: center;">OR</p> <p>Threshold 4.9.4: Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed</p> <p>Less Than Significant Impact. The anticipated 2040 water demand for the proposed project represents approximately 7 percent of the Long Beach Water Department’s (LBWD) projected water supply for the year 2040. Therefore, the project-related increase in water demand would be within the LBWD’s projected water supply for its service area in the year 2040. Additionally, under Assembly Bill (AB) 610, a Water Supply Assessment (WSA) would be required for certain projects. Individual projects occurring under the proposed project would be required to prepare a WSA if they meet any of the requirements under AB 610. Therefore, impacts related to water demand would be less than significant, and no mitigation is required.</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>
<p>Threshold 4.9.2: Require or result in the construction of new <i>water</i> or <i>wastewater</i> treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects</p> <p style="text-align: center;">OR</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Threshold 4.9.5: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitment</p> <p>Less than Significant Impact.</p> <p>Wastewater. The proposed project does not include physical improvements, but sanitary services during construction of future projects would likely be provided by portable toilet facilities, which transport waste off site for treatment and disposal. Therefore, during construction, potential impacts to wastewater treatment and wastewater conveyance infrastructure would be less than significant, and no mitigation is required.</p> <p>No new major sewer upgrades are anticipated or recommended for the proposed project. All new development in the City of Long Beach (City) will be subject to sewer capacity considerations as part of the City development review and approval process. Improvements and upgrades to sewer lines are prioritized based on need. Development fees from future projects occurring under the proposed project would be collected from each project and used to fund the highest priority improvements.</p> <p>The proposed project would not substantially or incrementally exceed the current or future scheduled capacity of the JWPCP or the Long Beach WRP by generating flows greater than those anticipated. Therefore, project impacts related to wastewater treatment would be less than significant, and no mitigation is required.</p>		
<p>Threshold 4.9.3: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.</p> <p>Less than Significant Impact. Future development under the proposed project would be required to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), or any other subsequent applicable permits. The Construction General Permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) to identify construction best management practices (BMPs) to be implemented during project construction in order to reduce impacts to water quality, including those impacts associated with soil erosion, siltation, spills, and increased runoff. With compliance with the Construction General Permit, construction impacts related to the capacity of the existing storm water drainage systems would be reduced to less than significant levels.</p> <p>Operation of future projects would increase impervious surface area, which would reduce infiltration. Future projects would be reviewed on a project-by-project basis and would need to comply with any requirements in effect when the review is conducted. Depending on the size and nature of the projects, a Water Quality Management Plan (WQMP) would be developed on a project-specific basis to address post-construction urban runoff and storm water pollution from new development and significant redevelopment projects. The hydrological analyses included in the WQMPs prepared for future projects would identify BMPs and improvements to the existing storm drain system that would ensure that the City would be able to adequately handle increased storm water runoff as a result of the proposed project. Therefore, the proposed project would result in less than significant impacts related to the construction or expansion of storm water drainage facilities, and no mitigation is required.</p>		
<p>Threshold 4.9.6: Be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs.</p> <p>Less than Significant Impact. Construction of future projects facilitated by the proposed project would generate demolition waste. Construction waste would be recycled to the extent feasible pursuant to Chapter 18.67, Construction and Demolition Recycling Program, of the City’s Municipal Code. Under the Municipal Code, covered projects requiring demolition or building permits issued on or after January 1, 2014, are required to divert at least 60 percent of all project-related construction and demolition material</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>from landfills. Compliance with this chapter of the Municipal Code would be a condition of approval on any construction or demolition permit issued for a covered project. Therefore, the proposed project would have a less than significant impact related to solid waste generation during construction, and no mitigation measures regarding construction debris are required.</p> <p>The City’s Environmental Services Bureau provides solid waste collection services to collect and dispose of the solid waste/refuse generated by the City. Solid waste generated in the City is also transported to LACSD facilities when solid waste is considered unprocessable to the Southeast Resource Recovery Facility (SERRF). Solid waste generated by operations associated with future development under the proposed project would be collected by the City’s Environmental Services Bureau and hauled to the SERRF. With the proposed project, the City is forecast to generate approximately 1.6 million pounds of solid waste in 2040, or an increase of approximately 133,342 pounds (lbs) per day. There is sufficient landfill capacity in the region to serve solid waste generated by the proposed project. Therefore, impacts related to solid waste generation are considered less than significant, and no mitigation is required.</p>		
<p>Cumulative Utility Impacts</p> <p>Less than Significant Impact.</p> <p>Wastewater. The geographic area for the cumulative analysis for wastewater treatment is defined as the City and LACSD. Within its service area, LACSD uses United States Census Bureau population information with population projections, as well as existing land use and build out or zoned land use to project current and future wastewater flows. While the proposed project does not include physical improvements, the future build out of the proposed project is not anticipated to generate wastewater above LACSD’s current capacity. The proposed project would result in a population consistent with the growth projections for the City provided in the 2016–2040 Regional Transportation Plan/Sustainable Communities</p>	<p>No mitigation is required.</p>	<p>Less than Significant.</p>

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>Strategy. Therefore, the proposed project’s contribution to wastewater generation in the LACSD service area would not be cumulatively considerable, and no mitigation is required.</p> <p>Water. The geographic area for the cumulative analysis of water infrastructure includes the service territory of the LBWD. According to the City’s 2015 Regional Urban Water Management Plan (UWMP), the Metropolitan Water District of Southern California (MWDSC) future water supplies are reliable, because the MWDSC current allocation plan guarantees an amount of water close to the LBWD’s need for water, and because the LBWD has a preferential right to the MWDSC supplies in excess of its need for that water. In addition, LBWD, which provides the groundwater supply to the City, projects that there are sufficient groundwater supplies to meet any future demand requirements in the City. Further, the current 2015 UWMP accounts for the proposed project’s transition from traditional land uses to PlaceTypes and has demonstrated that the LBWD has the ability to serve the project-related increase in water demand through the year 2040.</p> <p>MWDSC’s 2010 Regional UWMP describes its water availability and identifies future water supplies to meet the region’s long-term water demand. The MWDSC has established the Water Supply Allocation Plan (WSAP), which calculates each member agency’s supply allocations and key implementation elements required for administering the allocation. The WSAP also considers how the MWDSC would be able to provide water to its member agencies during a catastrophic interruption in water supplies. Therefore, cumulative impacts related to water demand would be less than significant, and no mitigation is required.</p> <p>Solid Waste. The geographic area for the cumulative analysis of impacts to solid waste disposal capacity is the County of Los Angeles. Development associated with the proposed project and other past, present, and reasonably foreseeable projects within the County would contribute to an increase in demand for landfill capacity and solid waste services for the County. As stated previously, the SERRF, a refuse-to-energy transformation facility,</p>		

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Standard Conditions, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Standard Conditions	Level of Significance After Mitigation
<p>serves the planning area and does not have a scheduled closure date. It is expected that the SERRF will continue to operate at its current permitted daily capacity through 2027. The SERRF currently does not exceed its daily maximum permitted disposal capacity. Solid waste considered unprocessable by SERRF would be taken to landfills in Orange, San Bernardino, and Riverside Counties. There is currently sufficient permitted capacity within the LACSD system serving Los Angeles County to provide adequate future capacity for the County’s solid waste needs.</p> <p>The City currently complies with all federal, State, and local statutes and regulations related to solid waste. Therefore, the proposed project would not have a significant project-specific or cumulative impact on waste disposal capacity at LACSD facilities.</p>		

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