

## 5 Other CEQA Required Discussions

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This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the project.

### 5.1 Growth Inducing Effects

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is therefore considered significant if it could result in significant physical effects in one or more environmental issue areas.

#### 5.1.1 Population and Economic Growth

##### Population

The proposed project would add 40 new single family residences to Long Beach. The current population of Long Beach is 484,958 and the city has approximately 2.84 persons per household (California Department of Finance, 2016). Development of the proposed project would therefore add an estimated 114 residents (40 dwelling units x 2.84 people/dwelling unit), thus increasing the city's population to 485,072. SCAG population growth forecast for Long Beach is 484,500 by 2040, which is less than the city's current population. According to the city's General Plan Housing Element, realization of future housing development potential (7,270 new dwelling units by 2021) would result in an increase in the city's population of 20,647 persons, for a total population of 505,605 in 2021. The city's current population exceeds SCAG's projection by 458 persons and, based on the Housing Element, would exceed the 2040 projection by 21,105 persons in 2021. The project would incrementally increase the anticipated future (2021) exceedance by 0.5 percent. As discussed in Section 3, *Environmental Setting*, planned and pending development within 5 miles of the proposed project would not add any residential units to the city.

##### Economic

The project would generate temporary employment opportunities during construction, which would be expected to draw workers from the existing regional work force. Therefore, construction of the project would not be considered growth inducing from a temporary employment standpoint.

The proposed project does not involve any commercial uses that would generate permanent employment opportunities. The proposed project may generate jobs associated with maintenance of the project site (i.e., the "Tot Lot" play area and landscaped areas). This would be an incremental increase in employment opportunities (expected to be less than five jobs) and would be expected to draw workers from the existing regional work force. Therefore, the proposed project would not be growth-inducing with respect to jobs and the economy.

According to SCAG data, in 2012 (the most recent year for which SCAG data is available) Long Beach had a jobs-housing ratio of 0.94:1 (SCAG, April 2016). This indicates that there are 0.94 jobs for every housing unit. A jobs-housing ratio over 1.5:1 is considered high and may indicate an increasing imbalance

between jobs and housing (i.e., new residential construction has not kept up with job creation), while a ratio below 1:1 is considered low. The new population growth and employment opportunities that would be added by the project are well within SCAG's projections for the City. The project-related increase of 40 housing units would incrementally lower the existing job-housing ratio in Long Beach, but because of the large number of jobs and housing already existing in the city would not significantly change this ratio.

## 5.2 Removal of Obstacles to Growth

The project site is located in a fully urbanized area that is well served by existing infrastructure. As discussed under Item XVII, *Utilities and Service Systems*, and IX, *Hydrology and Water Quality*, of the Initial Study (see Appendix A) existing water supply and utilities would be adequate to serve the proposed project. Additional minor improvements to water and drainage connection infrastructure could be needed, but would be sized to specifically serve the proposed project. The proposed project does not provide for any substantially capacity-increasing transportation or circulation improvements. Because the project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

## 5.3 Energy Effects

The *CEQA Guidelines* Appendix F requires that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy.

The proposed project would involve the use of energy during construction and operation. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment. Long-term operation of the proposed project would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with the project would increase fuel consumption within the city.

Electricity service for the proposed project would be provided by Southern California Edison (SCE). SCE's power mix consists of approximately 25 percent renewable energy sources (wind, geothermal, solar, small hydroelectric, and biomass (SCE 2015)). Gas service would be provided by the Long Beach Gas & Oil Department (LBGOD).

California used 295,405 gigawatt-hours (GWh) of electricity in 2015 (California Department of Energy 2015) and 2,345 billion cubic feet of natural gas in 2014 (U.S. Energy Information Administration 2014). Californians presently consume nearly 18 billion gallons of motor vehicle fuels per year (California Energy Commission [CEC] 2014).

The proposed project's estimated energy usage, calculated using CalEEMod and shown in the CalEEMod output files in Appendix B of the Initial Study (see Appendix A of the EIR), is summarized and compared to state-wide usage in Table 6. Estimated motor vehicle fuel use is further detailed in Table 7. As shown in Table 6, the proposed project would make a minimal contribution to state-wide energy consumption in these categories.

Table 6 Estimated Project-Related Energy Usage Compared to State-Wide Energy Usage

Form of Energy	Units	Annual Project-Related Energy Use	Annual State-Wide Energy Use	Project % of State-Wide Energy Use
Electricity	megawatts per hour	291.8 <sup>1</sup>	296,628,000 <sup>2</sup>	<0.00001%
Natural Gas	billion BTU	1.2 <sup>1</sup>	2,313,000 <sup>3</sup>	<0.00001%
Motor Vehicle Fuels	gallons	70,744 <sup>4</sup>	18,019,000,000 <sup>5</sup>	<0.00001%

<sup>1</sup> CalEEMod output provided in the Air Quality Analysis (see Appendix B of the Initial Study [Appendix A] for calculation results)

<sup>2</sup> California Energy Commission, California Energy Almanac, 2013 Total Electricity System Power, data as of September 2014. Available: [http://energyalmanac.ca.gov/electricity/total\\_system\\_power.html](http://energyalmanac.ca.gov/electricity/total_system_power.html)

<sup>3</sup> California Energy Commission, California Energy Almanac, Overview of Natural Gas in California – Natural Gas Supply. Available: <http://energyalmanac.ca.gov/naturalgas/overview.html>

<sup>4</sup> See Table 7

<sup>5</sup> California Energy Commission, 2014 Integrated Energy Policy Report, Available: <http://www.energy.ca.gov/2014publications/CEC-100-2014-001/CEC-100-2014-001-CMF.pdf>.

Table 7 Estimated Project-Related Annual Motor Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips <sup>1</sup>	Annual Vehicle Miles Traveled <sup>2</sup>	Average Fuel Economy (miles/gallon) <sup>3</sup>	Total Annual Fuel Consumption (gallons)
Passenger Cars	53.09%	691,456	23.41	29,537
Light/Medium Trucks	43.15%	561,996	17.16	32,750
Heavy Trucks/Other	3.39%	44,152	5.29	8,346
Motorcycles	0.37%	4,819	43.54	111
<b>Total</b>	<b>100%</b>	<b>1,302,423</b>	–	<b>70,744</b>

<sup>1</sup> Percent of vehicle trips found in Table 4.3 “Trip Type Information” in CalEEMod output (see Appendix B of Initial Study [Appendix A])

<sup>2</sup> Mitigated annual VMT found in Table 4.2 “Trip Summary Information” in CalEEMod output (see Appendix B of Initial Study [Appendix A])

<sup>3</sup> Average fuel economy provided by the United States Department of Energy, Alternative Fuels Data Center (June 2015).

The proposed project would also be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California’s Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy efficiency measures. The California Green Building Standards Code sets targets for: energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills, and use of environmentally

sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels. Adherence to Title 24 energy conservation requirements would ensure that energy is not used in an inefficient, wasteful, or unnecessary manner.