## CHAPTER SUMMARY

- 4 This chapter characterizes the existing socioeconomic conditions of the proposed Project area and vicinity
- 5 as well as the factors contributing to positive or adverse conditions affecting environmental quality. The
- 6 socioeconomic topics described in Section 7.2 of this chapter include employment, income, population,
- 7 and housing characteristics. Potential socioeconomic outcomes are evaluated in terms of the effects of the
- 8 proposed Project and each of the alternatives on employment, population, and housing directly and
- 9 indirectly related to construction and operation, as well as associated wages and tax revenues.
- 10 Chapter 7, Socioeconomics, provides the following:
- employment and income conditions at the regional, county, and local levels;
- a discussion of the Port's role in the local and global economy and the economic effects of its operations;
- population characteristics at the regional, county, and local levels;
- a brief history of the Port and discussion of environmental programs and initiatives;
  - a discussion on the methodology used to determine socioeconomic effects associated with the proposed Project and alternatives; and
  - an evaluation of the socioeconomic effects associated with the proposed Project and alternatives.

#### **Key Points of Chapter 7:**

- The proposed Project and alternatives would involve improvements to an existing container terminal and
- 21 expenditures from construction activities and "Port Industry" operations, including associated jobs,
- 22 output, and tax revenues related to cargo movement and handling. Long-term jobs associated with the
- 23 proposed Project would include those directly related to cargo movement and handling operations at the
- Port, and those related to purchases of goods and services by Port Industry businesses. The economic
- benefits would primarily occur within the Southern California region comprising Los Angeles, Orange,
- 26 Riverside, San Bernardino, and Ventura Counties. While the economic impacts of the proposed Project
- would be beneficial, the increase in jobs attributable to the proposed Project would be relatively small
- 28 compared to current and projected future employment in the larger economic region.

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## 7.1 Introduction

This chapter describes the existing socioeconomic conditions of the proposed Project area, the vicinity of the Port and the larger Southern California region in terms of socioeconomic indicators, as well as the factors contributing to positive or adverse conditions affecting environmental quality.

# 7.2 Environmental Setting

The environmental setting includes existing or baseline conditions and describes attributes of the human and built environment (including infrastructure) near the Port and within the larger region of Southern California. For the purposes of this analysis and as used in this section, Southern California refers to a five-county region comprising Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. This region represents the area in which the bulk of the economic activity stimulated by the Port (directly and indirectly) occurs and for which economic modeling is appropriate.

# 7.2.1 Socioeconomic Topics

Socioeconomics encompasses a number of topical areas, including employment, income, population, and housing. Within each of these areas, subtopics include an examination of conditions at different geographical scales that are relevant to the potential impacts associated with implementation of the proposed Project or an alternative.

## 19 7.2.1.1 Employment and Income

Existing conditions with regard to employment and income are described from a number of perspectives. They include the following:

- Conditions at the regional (Southern California) level;
- Contribution to the regional economy made by international trade;
- Importance of the "logistics" sector of the economy;
- Role of the Port; and
- Conditions at the county and local levels (small geographical areas near the Port, including San Pedro, Wilmington, Carson, and Harbor City).

#### Southern California

Between 1990 and 2015, total civilian employment in Southern California increased by 1,456,300 jobs (from 6,981,700 jobs to 8,438,000 jobs) at an average annual rate of 0.8 percent. However, this growth rate has been uneven, with high annual increases occurring during periods of strong economic growth, and negative job growth occurring during economic downturns, such as 2008 through 2010. Table 7-1 presents the variation in job growth from 1990 to 2015 for each county and the region as a whole. Within the region, the most rapid increase in annual percentage employed over the 25-year period, with the addition of over 467,400 jobs, took place in Riverside County, where employment grew at an annual average rate of 3.8 percent (approximately 93.8 percent over the 25-year period). San Bernardino County experienced the next-highest rate of growth (approximately 44.6 percent over the 25-year period, or 1.8 percent per year, on

average) with an increase of 267,400 jobs. Orange County and Ventura County experienced the third-most rapid growth rate in employment of 0.92 percent annually, with a 16.8 and 17.3 percent increase respectively over the 25-year period. Los Angeles County experienced the smallest increase with a 0.4 percent annual growth rate, with an 10.4 percent increase over the 25-year period, resulting in an increase of 441,700 jobs.

Table 7-1: Total Civilian Employment by County (1990–2015)

			County			
Year	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Total
1990	4,233,100	1,305,700	498,100	599,400	345,400	6,981,700
1991	4,114,800	1,249,800	494,600	591,400	338,900	6,789,500
1992	4,002,600	1,242,900	508,200	604,800	339,800	6,698,300
1993	3,908,800	1,237,800	512,000	609,400	341,700	6,609,700
1994	3,893,300	1,257,100	533,800	612,700	350,200	6,647,100
1995	3,935,600	1,253,000	549,300	621,800	350,700	6,710,400
1996	3,971,500	1,279,600	562,700	633,900	349,400	6,797,100
1997	4,116,800	1,328,700	589,800	658,800	353,500	7,047,600
1998	4,235,400	1,384,200	615,400	679,500	364,300	7,278,800
1999	4,307,000	1,420,900	653,000	712,000	375,300	7,468,200
2000	4,425,600	1,430,100	644,700	704,500	375,200	7,580,100
2001	4,471,500	1,452,100	671,400	723,900	379,600	7,698,500
2002	4,430,900	1,449,500	698,500	739,600	382,800	7,701,300
2003	4,409,900	1,472,500	725,700	752,300	386,200	7,746,600
2004	4,445,400	1,502,700	768,900	781,600	390,300	7,888,900
2005	4,525,200	1,526,600	806,900	807,200	396,200	8,062,100
2006	4,577,600	1,543,500	836,900	818,600	401,500	8,178,100
2007	4,614,800	1,543,700	847,600	813,900	402,400	8,222,400
2008	4,555,100	1,529,700	833,300	792,800	401,800	8,112,700
2009	4,345,200	1,451,700	795,800	749,100	388,800	7,730,600
2010	4,302,300	1,387,400	841,300	769,900	383,400	7,684,300
2011	4,327,900	1,406,400	849,600	774,200	387,500	7,745,600
2012	4,385,300	1,441,400	873,600	791,600	395,700	7,887,600
2013	4,494,400	1,465,900	899,900	811,100	400,800	8,072,100
2014	4,611,500	1,491,800	933,800	837,900	403,900	8,278,900
2015	4,674,800	1,525,600	965,500	866,800	405,300	8,438,000
Change from 19	90–2015					
Change in Number of Jobs	441,700	219,900	467,400	267,400	59,900	1,456,300
Percent Change	10.4	16.8	93.8	44.6	17.3	20.9
Average Annual Percent Change	0.4	0.7	3.8	1.8	0.7	0.8

Source: CEDD, 2016a

1 Based on projections prepared by the Southern California Association of Governments 2 (SCAG) for the 2012 to 2035 Regional Transportation Plan/Sustainable Communities 3 Strategy (RTP/SCSP), employment in Southern California will expand over the next 4 decades, particularly in Riverside and San Bernardino Counties as indicated in Table 7-2 5 (SCAG, 2012). These two counties are expected to experience growth rates far in 6 excess of those of other counties. Of the selected cities in Los Angeles County for which 7 information is presented in Table 7-2, Lakewood and Rancho Palos Verdes are expected 8 to see their employment bases expand at a pace similar to the county as a whole (SCAG, 9 2012). This is more rapid than the job growth projected for other cities in the area 10 through 2035. However, in absolute terms, Rancho Palos Verdes would have some of the lowest numbers of new jobs created. The greatest absolute number of jobs created would 11 12 occur in the cities of Los Angeles and Long Beach. 13

Unemployment levels in Southern California have closely mirrored the cyclical pattern of the State of California. In 1993, the state's unemployment rates peaked and then fell gradually throughout the remainder of the 1990s, with the rebound of the economy buoyed by the surge in dot-com activity and the residential construction boom. Following the exuberance of this period, unemployment rates rose for a few years before moving downward again for several years. Beginning in 2007, the unemployment rates began again to rise, and by 2010 were at their highest levels in the past two decades (12.2 percent), before beginning to drop in 2011. Throughout these cycles, the unemployment rate in Orange County was consistently lower than that of other counties in Southern California, as well as the state (Table 7-3).

The total number of farm and non-farm jobs in Los Angeles County increased over the period of 1990 to 2015 by approximately 86,000 jobs, or approximately 2.1 percent (Table 7-4). Declines took place in several sectors, such as the manufacturing sector with a decrease of 55.7 percent, or over 454,000 jobs. This decline in manufacturing employment, as well as declines in other industries, was offset by large increases in education and health services, leisure and hospitality, and local government.

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<sup>&</sup>lt;sup>1</sup> The 2016 to 2040 RTP/SCS was adopted in 2016. The EIS/EIR analysis presents the projections for the 2012 – 2035 RTP/SCS because it was the RTP/SCS in effect when the Notice of Preparation for the proposed Project was issued in June 2015, and there are no substantial changes in 2016 – 2040 projections that would alter the analysis contained herein. The 2016 to 2040 RTP/SCS projections show job growth rising at slightly greater rate on average than the 2012 - 2035 RTP/SCS, with an average annual growth rate of 1.14 percent in the Southern California region as a whole between 2012 and 2040, resulting a in projected number of approximately 9.5 million jobs in 2035 and 9.7 million jobs in 2040. As shown in Table 7.2, the average annual growth rate between 2020 and 2035 was projected to be 0.81 percent with a projected number of jobs in the southern California region of approximately 9.3 million in 2035.

Table 7-2: Total Civilian Employment Projection by County and City (2020–2035)

			Change (2020-2035)					
	2020	2035	Numeric	Percent	Average Annual Percent			
Southern California (Five-County Region)	8,312,000	9,319,000	1,007,000	12.12	0.81			
County								
Los Angeles County	4,558,000	4,827,000	269,000	5.90	0.39			
Orange County	1,626,000	1,779,000	153,000	9.41	0.63			
Riverside County	939,000	1,243,000	304,000	32.37	2.16			
San Bernardino County	810,000	1,059,000	249,000	30.74	2.05			
Ventura County	379,000	411,000	32,000	8.44	0.56			
Area Cities (in Los Angeles Cour	ity)							
Los Angeles	1,817,700	1,906,800	89,100	4.90	0.33			
Carson	52,500	54,000	1,500	2.86	0.19			
Palos Verdes Estates	3,400	3,400	0	0.00	0.00			
Rancho Palos Verdes	6,700	7,100	400	5.97	0.40			
Redondo Beach	30,600	31,600	1,000	3.27	0.22			
Rolling Hills	40	40	0	0.00	0.00			
Rolling Hills Estates	4,000	4,200	200	5.00	0.33			
Torrance	109,100	113,300	4,200	3.85	0.26			
Lakewood	16,800	17,800	1,000	5.95	0.40			
Long Beach	176,000	184,800	8,800	5.00	0.33			
Signal Hill	12,300	12,700	400	3.25	0.22			

Source: SCAG, 2012

Table 7-3: Unemployment Rate (%) by County (1990–2015)

			County			
	Los	_		San		
Year	Angeles	Orange	Riverside	Bernardino	Ventura	California
1990	5.9	3.5	7.2	5.6	5.8	5.8
1991	8.0	5.2	10.0	8.2	7.5	7.7
1992	9.9	6.7	11.9	9.7	9.0	9.4
1993	10.0	6.9	12.2	10.0	9.1	9.5
1994	9.3	5.7	10.6	8.7	7.9	8.6
1995	8.0	5.1	9.5	7.9	7.4	7.9
1996	8.3	4.2	8.4	7.4	7.3	7.3
1997	6.9	3.3	7.6	6.5	6.7	6.4
1998	6.6	2.9	6.7	5.7	5.6	6.0
1999	5.9	2.7	5.5	4.9	4.8	5.3
2000	5.4	3.5	5.4	4.8	4.5	4.9
2001	5.7	4.0	5.5	5.1	4.8	5.4
2002	6.8	5.0	6.5	6.0	5.8	6.7
2003	7.0	4.8	6.5	6.3	5.8	6.8
2004	6.5	4.3	6.0	5.8	5.4	6.2
2005	5.4	3.8	5.4	5.2	4.8	5.4
2006	4.8	3.4	5.0	4.8	4.3	4.9
2007	5.1	3.9	6.0	5.6	4.9	5.4
2008	7.5	5.3	8.5	8.0	6.3	7.2
2009	11.6	8.9	13.4	12.9	9.9	11.3
2010	12.6	9.5	14.5	14.2	10.8	12.4
2011	12.3	8.8	13.7	13.4	10.1	11.8
2012	10.9	7.6	12.2	12.0	9.0	10.5
2013	9.8	6.5	9.9	9.8	7.9	8.9
2014	8.3	5.5	8.2	8.1	6.7	7.5
2015	6.7	4.5	6.7	6.5	5.7	6.2

Source: CEDD, 2016b

Table 7-4: Total Farm and Non-Farm Employment for Los Angeles County, California (1990–2015)

								Change (1990-2015)		
Industry Group	1990	1995	2000	2005	2010	2014	2015	Number	Percent	Average Annual Percent
Total, All Industries	4,193,200	3,797,000	4,130,900	4,127,300	3,896,300	4,231,700	4,279,200	86,000	2.1	0.1
Total Farm	13,700	8,000	7,700	7,400	6,200	5,300	5,000	-8,700	-63.5	-2.5
Total Nonfarm	4,179,500	3,789,000	4,123,200	4,119,900	3,890,000	4,226,400	4,274,200	94,700	2.3	0.1
Natural Resources and Mining	8,200	4,100	3,400	3,700	4,100	4,700	3,900	-4,300	-52.4	-2.1
Construction	146,300	114,100	131,800	148,700	104,500	120,200	126,100	-20,200	-13.8	-0.6
Manufacturing	814,800	631,200	615,200	474,000	373,300	364,900	360,800	-454,000	-55.7	-2.2
<ul> <li>Trade, Transportation, and Utilities</li> </ul>	800,100	723,700	784,900	793,900	740,400	800,700	817,800	17,700	2.2	0.1
Information	194,200	192,600	244,300	207,700	191,600	195,900	202,700	8,500	4.4	0.2
Financial Activities	280,800	225,000	223,400	242,200	209,600	209,700	214,200	-66,600	-23.7	-0.9
<ul> <li>Professional and Business Services</li> </ul>	546,600	522,800	590,700	576,800	528,100	609,400	600,300	53,700	9.8	0.4
Educational and Health Services	399,300	395,600	463,100	567,200	637,300	748,000	742,200	342,900	85.9	3.4
<ul> <li>Leisure and Hospitality</li> </ul>	309,000	311,700	345,000	377,800	384,800	464,600	488,100	179,100	58.0	2.3
Other Services	137,500	132,000	140,200	144,300	136,700	151,700	151,700	14,200	10.3	0.4
Government	542,500	536,100	581,400	583,700	579,600	556,700	566,400	23,900	4.4	0.2
o Federal Government	74,500	63,500	57,900	53,500	51,600	46,800	47,400	-27,100	-36.4	-1.5
o State and Local Governments	468,000	472,600	523,400	530,200	528,000	509,900	519,000	51,000	10.9	0.4
State Government	69,900	70,700	77,200	78,200	80,700	85,400	87,400	17,500	25.0	1.0
<ul> <li>Local Government</li> </ul>	398,100	401,900	446,200	452,000	447,300	424,500	431,600	33,500	8.4	0.3

Source: CEDD, 2015c

Research conducted by SCAG demonstrates that the average per capita income and average payroll per job in the five counties of Southern California have declined over the last several decades when compared to other metropolitan areas in the nation. In the 1970s, the region had the fourth-highest per capita income among the 17 largest metropolitan regions in the county. In 1990, this dropped to the seventh-highest, and in 2005 it dropped to 16<sup>th</sup> (LAHD, 2011). This deterioration began with the severe economic dislocation experienced in the high-paying aerospace and defense manufacturing sectors in the early 1990s during the post-Cold War recession. Although the region recovered from the employment loss in succeeding years, the quality (and salary) of the jobs created compared poorly with those lost (SCAG, 2008).

Since 1990, many of the lost jobs have been in well-paying sectors such as manufacturing (aerospace, electronic instrument, computer and peripheral, machinery, and fabricated metal) and Department of Defense and other federal agencies. Although a significant number of well-paying jobs were added to the regional economy over the same time period (arts, entertainment, and recreation; wholesale trade; transportation and warehousing; construction; local government; and health care), the majority of new jobs were lower-paying positions in the service sector (office administration, employment, and food and drinking establishments) and local government and education sectors. The average annual wage level of the losing sectors was just over \$45,000, while that of the gaining sectors was just over \$33,000, which is almost 27 percent lower.

#### International Trade

The Los Angeles Customs District (LACD) includes the Port of Los Angeles, Port of Long Beach, Port Hueneme, and Los Angeles International Airport. Of the total value of imports entering the LACD in 2014, over 87 percent were transported by marine vessels (Los Angeles Economic Development Corporation [LAEDC], 2015a).

In the case of China (ranked first as trading partner for imports), over 90 percent of goods by value entered through the Ports of Los Angeles and Long Beach (Ports). In the case of Japan (second-ranked origin of commodities), over 93 percent entered through the Ports. For South Korea (third-ranked origin of commodities), the proportion that entered through the Ports was almost 96 percent. In the case of exports leaving the LACD, over 61 percent (by value) were shipped through the Ports in 2014. The LACD was ranked first in the United States by value for total imports and exports (LAEDC, 2015a).

#### "Logistics" Sector of the Economy

Freight movement is a system of related and integrated businesses with components of infrastructure, equipment, personnel, and information and is often referred to as the "logistics" sector. The purpose of this system is to achieve the distribution of goods and commodities between origins and destinations, or suppliers and consumers, in an increasingly global economy. The system includes maritime vessels, trucks, railroads, aircraft, pipelines, warehouses, and terminals, all of which work collectively and cooperatively.

According to a study sponsored by SCAG, a number of factors important to companies have become especially costly in Southern California: workers compensation insurance, electrical energy, and housing (LAHD, 2011). For companies that have the freedom to locate elsewhere, costs in Southern California negatively influence their decision to remain or expand in the region. However, for many companies proximity to customers

(the general population) and other factors such as facilities (ports and airports) and skilled workforce (e.g. motion picture industry) are of overriding importance. These industries include the services sector, transportation and warehousing, and the motion picture industry.

The logistics and distribution sector of the economy largely consists of industries that are dependent on port and airport functions. This sector, which involves receiving, processing, storing, and moving goods, includes the following industries: wholesale trade, truck transportation, support services for transportation, non-local couriers, general warehousing, and air, rail, and water transportation. This group of industries has begun to provide large numbers of blue-collar jobs that have traditionally been found in manufacturing and, thus, provide an alternative employment source to replace well-paying manufacturing jobs that have left and continue to leave the region.

For over a decade, the nation's manufacturers and retailers have adopted "just-in-time" systems, which is a method of producing materials and goods in smaller batches to meet current demand and avoiding surplus or waste. This change in business practices has resulted in the distribution industry creating a series of large goods-holding centers, including in Southern California. Their location in Southern California is related to the fact that a high proportion of the nation's trade with Asian economies passes through the Ports of Los Angeles and Long Beach. It is anticipated that the volume of this trade will continue to increase, especially with the projected use of super post-Panamax<sup>2</sup> container ships. These wide and deep-draft vessels can be accommodated on the west coast only at the larger ports, such as the Ports of Los Angeles, Long Beach, and Seattle.

The *Trade Impact Study* prepared for the Alameda Corridor Transportation Authority (ACTA) and the Ports of Los Angeles and Long Beach examined the economic impacts of the trade that passes through the Ports in San Pedro Bay (ACTA, 2007). Impacts at the state, congressional district, and national levels were assessed. According to this study, state and local taxes generated throughout the nation from this trade activity grew from an estimated \$6 billion in 1994 to more than \$28 billion in 2005, \$6.7 billion of which was in California. The ACTA study estimated that the Ports support, directly and indirectly, 1,100,000 full- and part-time jobs throughout California and 3,300,000 jobs nationwide. This employment translates into \$63 billion annually towards the economy and \$23 billion annually throughout the U.S. in state and local taxes (ACTA, 2007). This report included the economic contributions of the logistics industries located at the Ports of Los Angeles and Long Beach, as well as at wholesalers, distributors, and retailers located off the Ports.

## Port of Los Angeles

In 2015, the Port of Los Angeles had the highest total two-way trade value (combined import and export values) of any port in the United States at \$269.7 billion. The majority of this cargo was imported goods, with a value of \$238. billion. In 2015, the Port of Los Angeles handled approximately \$,200,000 twenty-foot equivalent units (TEUs), down from \$,300,000 TEUs in 2014 and the throughput peak of \$,500,000 TEUs in 2006 (POLA, 2016a). The top five containerized imports in 2015 in terms of TEU volume were furniture, auto parts, apparel, electronic products, and plastics. The top trading partners in terms of cargo value for 2015 were China/Hong Kong, Japan, South Korea,

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<sup>&</sup>lt;sup>2</sup> Super Post-Panamax container ships are ships that are too large to pass through the Panama Canal.

Taiwan, and Vietnam. The top five containerized export categories in terms of TEU volume were paper/wastepaper, pet and animal feeds, scrap metal, fabrics, and soy beans. The total value of the cargo was \$290.2 billion in 2014, falling to \$269.7 billion in 2015 (POLA, 2016a). The Port is one of the world's largest trade gateways, and the economic contributions to the regional and national economy are substantial. The Port facilitates tens of billions of dollars in industry sales each year in the Southern California region. These sales translate into jobs, wages and salaries, and state and local taxes, including \$5.8 billion in state tax revenue (POLA, 2016b). The major ways in which the Port contributes to the local and regional economy are through Port industries, Port users, and Port customers.

Port industries are businesses involved in the moving and handling of maritime cargo and include "users" and "customers" described in more detail below. It is estimated that for every dollar spent by Port industries, another 97 cents is generated in indirect sales in the region. Port industries account for approximately 16,360 direct jobs (85 percent of which are trucking and warehousing jobs) (USACE and LAHD, 2014).

Port users are the biggest contributors to the economy. Port users are businesses that use the Port to receive imports or ship exports. Export manufacturers are among the major Port users, while others include local manufacturers who process imported, unfinished goods. Port users generate approximately \$12.1 billion in sales and stimulate an additional \$5.5 billion in local industry indirect sales. Local "respending" by workers employed by Port users and the industries they affect is estimated at approximately \$4.1 billion. Each dollar of spending for Port user goods and services produces about 79 cents of additional industry sales in the five-county region (POLA, 2016b).

Port customers are the retail and other non-cargo businesses in the Port. They are most important to communities near the Port as a source of jobs, recreation, and specialty consumer goods. Port customers contribute about \$760,000,000 to the local economy. Direct jobs associated with Port customers numbered about 6,400, or roughly half of the jobs actually located in the Port. For every one of these Port customer jobs, nearly 1.7 additional jobs are created elsewhere in the five-county region (POLA, 2016b).

#### **Geographical Distribution of Port Workers**

The employment generated by maritime cargo activity at the marine terminals owned by the Port can be categorized into trucking, International Longshore and Warehouse Union (ILWU), freight forwarders/customs house brokers, warehousing, steamship agents, chandlers, surveyors, and others. In 2007, LAHD retained the services of Martin Associates to evaluate the economic impacts generated by waterborne cargo and other activity at the Port. The study found that approximately 43,397 jobs are directly generated by activities at the marine terminals (Martin Associates, 2007). Table 7-5 presents the geographical distribution of the 43,397 direct jobs by place of residency, based on the results of interviews with 721 firms. As this table indicates, 12.7 percent of the direct job holders reside in the City of Los Angeles (excluding Wilmington and San Pedro), 16.8 percent in the City of Long Beach, 13 percent in San Pedro, and 8.7 percent in Wilmington. Another 37 percent reside in other parts of Los Angeles County (Martin Associates, 2007).

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Table 7-5: Distribution of Direct Cargo Jobs by Place of Residency for the Port of Los Angeles

Jurisdiction	Share (in Percent)	Cargo Direct Jobs
City of Los Angeles (Excluding San Pedro and Wilmington)	12.66	5,495
City of Long Beach	16.78	7,280
San Pedro	13.06	5,669
Wilmington	8.73	3,790
Other Los Angeles County	36.97	16,042
Orange County	7.76	3,367
Riverside County	1.15	498
San Bernardino County	2.25	978
Ventura County	0.13	58
Other	0.51	220
Total	100.00	43,397

Source: Martin Associates, 2007

### Occupation by Place of Residence

Information regarding occupation (aggregated to industry sectors similar to those addressed earlier) was obtained from the Census Bureau's website, American FactFinder (AFF), for the five-year period between 2010 and 2014. The definition of the categories varies somewhat from those presented earlier in the document; however, these differences are minor. The occupational breakdown (for the employed civilian population 16 years of age and over) is available for small geographical areas, such as the zip code areas presented in Table 7-6. The zip code areas selected are those in the vicinity of the Port for the communities of Wilmington, San Pedro, and Harbor City, and the cities of Torrance, Carson, and Long Beach.

Two of the small areas surrounding the Port (Carson and part of the City of Torrance) had in excess of 14 percent of the employed persons working in manufacturing. All, but one of the small areas have 6.5 percent or more of their residents employed in the transportation, warehousing, and utilities sector of the economy.

Table 7-6: Occupational Breakdown (%) by Place of Residence (Zip Code Area) 2010–2014 Five-Year Estimate (Employed Civilian Population 16 years and over)

	90501 Torrance	90502 Torrance	90710 Harbor City	90731 San Pedro	90732 San Pedro	90744 Wilmington	90745 Carson	90802 Long Beach	90806 Long Beach	90810 Long Beach	90813 Long Beach
Percent (%) by Occupation											
Agriculture, forestry, fishing and hunting, and mining	0.4	0.0	0.4	0.8	0.3	0.9	0.6	0.3	0.5	0.3	0.8
Construction	4.6	3.4	4.0	7.4	4.6	8.7	4.4	3.7	6.1	5.4	7.5
Manufacturing	14.1	12.3	9.0	8.2	10.3	12.3	15.0	7.7	10.3	11.7	12.7
Wholesale trade	4.0	3.1	3.9	2.3	3.8	3.6	3.7	3.2	2.0	3.1	5.1
Retail trade	10.8	9.3	13.1	10.3	9.5	12.8	11.3	9.0	10.7	9.3	11.8
Transportation and warehousing, and utilities	4.8	6.5	7.5	13.5	13.5	11.4	9.7	7.2	8.9	9.8	6.8
Information	3.4	2.2	1.1	1.3	2.4	1.5	2.2	3.3	1.5	2.1	1.0
Finance, insurance, real estate and rental/leasing	5.6	6.1	6.1	5.2	7.5	2.7	3.5	7.9	4.3	3.2	3.8
Professional, scientific, management, administrative, and waste management services	13.9	14.1	13.6	10.1	10.6	10.3	9.1	14.7	11.3	10.1	10.6
Educational, health, and social services	19.5	27.2	21.2	20.3	21.4	13.7	26.0	20.1	22.4	26.5	15.5
Arts, entertainment, recreation, accommodation, and food services	11.2	7.1	9.9	11.3	6.3	12.5	7.1	13.9	12.4	9.1	15.0
Other services (except public administration)	5.1	4.4	6.7	5.6	5.3	8.2	4.5	5.7	6.2	6.2	7.4
Public administration	2.7	4.3	3.4	3.6	4.5	1.3	2.9	3.4	3.4	3.3	2.0

Source: AFF, 2016a

Note: Some totals may not add to 100 percent due to rounding.

#### Income

The median household income (income received by all members of a household, 16 years old and over) reported by AFF between 2010 and 2014 for Los Angeles County was just under \$56,000. Riverside and San Bernardino counties had very similar values, while the value for Orange County was approximately \$76,000 and for Ventura County was \$77,300. By comparison, the median household income for the City of Los Angeles was \$49,700 (Table 7-7). Of total aggregate income at the county level, by far the largest proportion (between approximately 76 percent and 81 percent) is contributed by private wage and salary workers. For the zip code areas near the Port, values ranged from approximately \$31,200 to \$80,500 (Table 7-8).

Median family income (the sum of the incomes of members of a household that are 15 years old and over and related to the householder) varied between approximately \$62,300 and \$86,900 across the five counties, and was approximately \$54,000 for the City of Los Angeles. For the zip code areas near the Port, values exhibited a wider range from between approximately \$31,500 to \$103,200 (Table 7-8).

## 7.2.1.2 Population

Between 1990 and 2010, the number of residents in the five-county region increased by approximately 3,350,000, or an average annual rate of 1.15 percent. The most rapid rate of change and the largest numeric increase took place in Riverside County (4.35 percent annual average and just over 1,000,000 people) and San Bernardino County (2.17 percent annual average). Los Angeles County had the second-largest numeric increase (approximately 956,000 persons); however, the rate of change was the lowest of the counties (0.54 percent annually) (Table 7-9).

The population of the City of Los Angeles increased over the same time, but at a slower pace. The number of residents increased by more than 307,000, at an average annual rate of 0.44 percent. Five cities in the South Bay section of Southern California saw population increase at an average annual rate equal to or greater than that of the City of Los Angeles: Signal Hill (1.58 percent), Redondo Beach (0.55 percent), Torrance (0.46 percent), Carson (0.46 percent), and Lakewood (0.44 percent).

Population projections prepared by the California Department of Finance forecast a growth rate over the 50-year period between 2010 and 2060 of approximately 0.55 percent annually for Southern California. The region is projected to increase by approximately 4,928,000 residents over this period. The highest growth rates are projected for Riverside and San Bernardino Counties. The population of Los Angeles County is projected to increase by approximately 1,665,000 residents at an annual average rate of 0.34 percent (Table 7-10).

Table 7-7: Household and Family Income by Source of Income by County, 2010–2014 Five-Year Estimate

	Los Angeles County	Orange County	Riverside County	San Bernardino County	Ventura County	City of Los Angeles
Median household income (\$)	55,870	75,998	56,592	54,100	77,335	49,682
Median family income (\$)	62,289	85,472	63,523	59,626	86,890	54,171
Per capita income (\$)	27,987	34,416	23,660	21,384	33,308	28,320
Contribution (%) to Total Agg	regate Income fro	om:				
Private Wage and Salary Workers	78.7	81.4	76.9	76.1	77.3	78.8
Self-Employed (in own, not incorporated business) Workers	9.3	7.9	7.9	6.7	9.0	11.5
Government Workers	11.9	10.5	15.1	17.1	13.5	9.5
Unpaid Family Workers	0.2	0.2	0.1	0.2	0.2	0.1

Source: AFF, 2016b

Notes:

Per capita income is the mean income computed for every man, woman, and child in a geographic area.

**Household income** is the sum of money income received by all household members 15 years old and over, including household members not related to the householder, people living alone, and other nonfamily household members. Because many households consist of only one person, average household income is usually lower than average family income.

**Family Income** is the incomes of all members of a family household (consisting of a householder and one or more persons related by blood, marriage, or adoption) 15 years old and over, summed and treated as a single amount.

Table 7-8: Household and Family Income by Source of Income by Zip Code, 2010–2014 Five-Year Estimate

	90501 Torrance	90502 Torrance	90710 Harbor City	90731 San Pedro	90732 San Pedro	90744 Wilmington	90745 Carson	90802 Long Beach	90806 Long Beach	90810 Long Beach	90813 Long Beach
Median household income (\$)	59,878	62,533	54,630	49,786	84,537	41,578	71,757	44,984	43,785	49,087	31,215
Median family income (\$)	67,720	71,153	61,413	56,741	103,191	41,037	75,014	50,155	45,715	54,065	31,496
Per capita income (\$)	26,567	26,687	24,096	24,952	41,749	14,786	22,338	33,775	17,730	17,019	12,637
Contribution (%) to Total A	ggregate I	ncome from	n:								
Private Wage and Salary Workers	82.8	77.5	81.3	75.9	74.8	83.9	80.8	81.7	77.9	79.0	81.8
Self-Employed (in own, not incorporated business) Workers	6.0	9.1	7.2	10.4	9.1	8.0	5.8	7.0	8.3	7.9	9.3
Government Workers	11.0	13.3	10.7	13.6	16.1	8.1	13.3	11.2	13.6	13.1	8.4
Unpaid Family Workers	0.2	0.2	0.8	0.1	0.0	0.1	0.1	0.2	0.2	0.0	0.5

Source: AFF, 2016b

Table 7-9: Population by Region, County, and Local Jurisdictions (1990–2010)

				(	Change (1990–2	010)
	1990 (Census)	2000 (Census)	2010 (Census)	Numeric	Percent (%)	Average Annual Percent
Southern California (Five-County Region)	14,531,529	16,373,645	17,877,006	3,345,477	23.02	1.15
Counties						
Los Angeles County	8,863,052	9,519,338	9,818,605	955,553	10.78	0.54
Orange County	2,410,668	2,846,289	3,010,232	599,564	24.87	1.24
Riverside County	1,170,413	1,545,387	2,189,641	1,019,228	87.08	4.35
San Bernardino County	1,418,380	1,709,434	2,035,210	616,830	43.49	2.17
Ventura County	669,016	753,197	823,318	154,302	23.06	1.15
Local Jurisdictions						
City of Los Angeles	3,485,398	3,694,820	3,792,621	307,223	8.81	0.44
Carson	83,995	89,730	91,714	7,719	9.19	0.46
Lakewood	73,553	79,345	80,048	6,495	8.83	0.44
Long Beach	429,321	461,522	462,257	32,936	7.67	0.38
Palos Verdes Estates	13,512	13,340	13,438	-74	-0.55	-0.03
Rancho Palos Verdes	41,667	41,145	41,643	-24	-0.06	0.00
Redondo Beach	60,167	63,261	66,748	6,581	10.94	0.55
Rolling Hills	1,871	1,871	1,860	-11	-0.59	-0.03
Rolling Hills Estates	7,789	7,676	8,067	278	3.57	0.18
Signal Hill	8,371	9,333	11,016	2,645	31.60	1.58
Torrance	133,107	137,946	145,438	12,331	9.26	0.46

Source: AFF, 2016c

Table 7-10: Population Projections for Region and County (2010–2060)

							Projected	Change (20	10–2060)
	2010	2020	2030	2040	2050	2060	Numeric	Percent (%)	Average Annual Percent
Southern California (Five- County Region)	17,898,356	19,260,501	20,598,733	21,705,120	22,422,345	22,826,576	4,928,220	27.53	0.55
County									
Los Angeles	9,824,194	10,435,991	10,930,986	11,290,501	11,494,738	11,489,127	1,664,933	16.95	0.34
Orange	3,014,996	3,243,261	3,361,556	3,449,498	3,481,613	3,464,374	449,378	14.9	0.3
Riverside	2,194,933	2,478,059	2,862,915	3,215,291	3,480,980	3,678,439	1,483,506	67.59	1.35
San Bernardino	2,039,040	2,227,066	2,515,972	2,783,746	2,997,446	3,190,566	1,151,526	56.47	1.13
Ventura	825,193	876,124	927,304	966,084	987,568	1,004,070	178,877	21.68%	0.43%

Source: DOF, 2014

### **7.2.1.3** Housing

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44 45 Aspects of housing described in this section include construction trends, characteristics of the existing housing stock, and trends in housing prices.

#### **Housing Construction**

Housing construction typically exhibits a cyclical pattern in response to local, regional, and national economic conditions. In the case of Southern California, following a decline in the early 1990s, residential construction experienced a strong period of expansion between 1995 and 2004. A slight decline began in 2005, which continued in the following years. The steepest drops occurred in 2007 and 2008. This decline in activity was in response to a weakening housing market and onset of a severe economic recession. After a high of more than 90,000 units authorized for construction in 2004, the number declined annually over the next five years, ultimately falling to just below 14,000 in 2009, which is the lowest number of housing starts during the last 20-year period. Since 2009, the number of new housing permits has shown a slow annual increase, reaching just over 38,000 in 2014.

Over the 30-year period from 1995 to 2015, just under 966,000 housing units were issued permits for construction in Southern California. Of these units, the majority were constructed in Los Angeles County (33.0 percent of the regional total), followed by Riverside County (with 29.4 percent of the total). The other three counties accounted for just below 40 percent of the total (Orange County at 18.3 percent, San Bernardino County at 14.6 percent, and Ventura County at 4.7 percent.)

The contribution made to new housing (single-family and multi-family units) constructed in Southern California by each of the individual counties has varied over time. In the 1990s, the largest share of new housing was in Los Angeles County (36.8 percent), followed by Riverside County (22.5 percent), San Bernardino County (19.4 percent), Orange County (17.5 percent), and Ventura County (3.8 percent). During the period of rapid housing growth in the mid-1990s and early 2000s, the share of new housing in Riverside and San Bernardino Counties grew to a combined high of 59.2 percent in 2005 (39.9 percent and 19.3 percent, respectively), while the shares in Los Angeles, Orange, and Ventura Counties decreased. In 2006, the trends began to reverse, and by 2009 the shares of new housing by county were similar to those of 1990, with the greatest share again being in Los Angeles at 36.8 percent, followed by Riverside County (29.2 percent), San Bernardino County (16 percent), Orange County (15.3 percent), and Ventura County (2.5 percent). Between 2010 and 2015, as the Southern California housing market began recovering from the economic downturn, Los Angeles County accounted for the greatest number of new housing permits, at approximately 46.7 percent, followed by Orange Counties at 24.5 percent and Riverside at 18.2 percent. San Bernardino and Ventura Counties comprised 8.7 percent and 3.0 percent, respectively (U.S. Census, 2016).

#### **Housing Characteristics**

In Los Angeles County, the proportion of owner-occupied housing units between 2009 and 2013 was 47 percent; 53 percent were renter-occupied. For the City of Los Angeles, the corresponding shares were approximately 38 percent and 62 percent. Within the zip code areas near the Port, the percentage of owner-occupied housing units varies from high values for eastern Torrance, western San Pedro, and Carson to low values for areas of Long Beach, eastern San Pedro and Wilmington (Table 7-11).

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Table 7-11: Housing Characteristics between 2010 and 2014

								Zip Code Area					
	Los Angeles County	City of Los Angeles	90501 Torrance	90502 Torrance	90710 Harbor City	90731 San Pedro	90732 San Pedro	90744 Wilmington	90745 Carson	90802 Long Beach	90806 Long Beach	90810 Long Beach	90813 Long Beach
Total housing units	3,452,901	1,422,368	15,345	6,142	9,296	24,154	8,870	14,564	15,408	22,807	13,081	9,876	17,828
Total occupied housing units	3,230,383	1,320,960	14,361	5,647	8,909	22,185	8,346	13,912	14,945	20,190	12,156	9,431	16,500
Percent (%) owner-occupied	46.9	37.6	44.9	70.1	58.9	33.0	68.7	41.1	69.6	21.8	33.0	55.5	15.6
Percent (%) renter-occupied	53.1	62.4	55.1	29.9	41.1	67.0	31.3	58.9	30.4	78.2	67.0	44.5	84.4
Vacancy rate (%)	5.9	6.4	4.7	7.6	6.2	7.6	3.6	4.6	1.1	11.7	8.0	4.5	8.0
Median number of rooms per unit	4.6	4.2	4.3	4.7	4.7	4.3	5.2	4.4	5.3	3.2	4.2	4.8	3.6
Number of Units in Structure (%)					•								
Percent single detached units	49.7	38.8	45.4	51.3	44.4	36.6	51.6	52.4	65.9	4.8	41.5	66.7	20.7
Percent single attached units	6.5	6.0	7.6	10.8	7.5	7.6	12.1	5.9	11.2	2.2	5.7	5.9	8.2
Percent 2 units	2.4	2.8	3.0	0.7	0.8	4.9	0.4	3.8	0.3	1.8	4.9	2.8	4.6
Percent 3 or 4 units	5.6	5.9	11.0	4.1	5.6	17.4	5.2	7.2	2.9	8.4	12.7	6.3	14.5
Percent 5 to 9 units	7.9	8.7	9.7	12.7	10.1	13.4	8.3	10.1	3.0	12.2	17.5	5.5	14.4
Percent 10 to 19 units	7.8	10.0	7.8	0.9	9.9	9.8	5.1	7.7	1.2	24.7	10.5	3.1	22.5
Percent 20 or more	18.5	27.2	12.3	9.0	10.7	10.2	14.5	11.7	7.0	45.4	7.3	7.7	14.7
Percent mobile home	1.5	0.6	3.3	9.8	11.0	0.0	2.8	1.2	8.3	0.3	0.0	2.0	0.4
Percent boat, recreational vehicle (RV), van, etc.	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.0
Year Structure Built (%)													
Percent Built 2010 or later	0.3	0.4	0.2	0.2	0.3	0.0	0.0	0.2	0.2	0.8	1.3	0.1	0.0
Percent Built 2000 to 2009	5.9	6.2	7.3	4.3	7.0	3.6	2.3	5.9	5.3	10.8	1.9	1.3	2.7
Percent Built 1990 to 1999	6.2	5.6	5.4	6.5	10.2	5.9	4.0	4.6	6.1	6.7	2.6	1.2	6.4
Percent Built 1980 to 1989	11.7	10.2	8.9	14.2	13.2	9.3	17.5	10.7	10.9	11.1	7.6	3.1	12.6
Percent Built 1970 to 1979	14.1	13.7	17.8	25.0	22.7	15.0	22.6	12.9	12.3	12.1	5.8	12.9	9.5
Percent Built 1960 to 1969	14.9	14.4	18.0	18.5	24.5	15.1	13.4	14.2	29.8	11.6	13.4	9.8	13.7
Percent Built 1950 to 1959	20.7	18.3	21.4	22.6	12.7	16.8	23.5	21.1	25.3	11.0	15.4	24.1	10.5
Percent Built 1940 to 1949	11.0	10.8	11.5	6.2	4.9	10.3	7.5	13.0	8.2	4.8	20.2	34.3	8.8
Percent Built 1939 or earlier	15.1	20.3	9.4	2.6	4.4	24.1	9.0	17.3	1.8	30.9	31.8	13.1	35.9
Year Householder Moved In (%)													
Percent Moved in 2010 or later	18.8	21.1	18.0	13.0	15.3	19.1	18.0	16.2	11.5	31.4	23.2	13.3	25.6
Percent Moved in 2000 to 2009	45.5	46.0	46.0	47.1	48.3	45.8	37.3	44.6	42.5	56.5	50.5	43.7	55.7
Percent Moved in 1990 to 1999	18.1	17.4	19.9	18.0	17.1	20.7	19.6	19.9	22.7	9.5	14.5	17.0	14.4
Percent Moved in 1980 to 1989	8.1	7.0	7.2	9.4	7.6	5.1	10.2	9.4	8.9	1.7	6.1	12.5	2.5
Percent Moved in 1970 to 1979	5.5	4.8	4.9	7.1	8.3	4.9	8.7	6.0	9.4	0.6	3.7	7.4	0.8
Percent Moved in 1969 or earlier	3.9	3.6	4.2	5.4	3.4	4.4	6.1	3.9	4.9	0.3	2.0	6.0	1.0
Percent lacking complete plumbing facilities	0.5	0.7	0.5	1.5	0.0	0.6	0.6	0.4	0.1	0.4	0.3	1.2	0.5
Percent lacking complete kitchen facilities	1.6	2.0	1.6	1.7	0.5	1.6	1.5	1.1	0.7	2.2	2.2	1.9	2.1

Source: AFF, 2016d

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### **Residential Property Values**

During the period from 2004 to 2014, the median home price (for existing homes) in Los Angeles County increased from \$391,208 to \$455,261, which is a rise of approximately 16.37 percent, or an average annual rate of 1.49 percent. Median prices for existing homes also rose in Orange County over the same 11-year period (0.95 percent annually), while prices decreased in the other three counties (0.77 in Riverside County, 0.28 percent annually in San Bernardino County, and 0.18 percent annually in Ventura County). This rate of change in home prices, however, did not take place uniformly during the period. Over the period from 2004 to 2009, median prices of existing homes fell in all counties due to a drop in prices in the later-2000s. Over the period from 2009 to 2014, median prices of existing homes rose on average in all five counties. The trends in prices of new homes were similar, falling on average over the period from 2004 to 2009 and rising in the period from 2009 to 2014. (Table 7-12 and Table 7-13) (LAEDC, 2015b). Overall during the period of 2004 and 2014, median home prices for new homes have increased on average in all counties with the exception of Ventura County, where prices have fallen at an average of 2.30 percent annually.

As illustrated in Table 7-14, median home prices at the community level also followed a similar pattern, with strong growth rates in the early to mid-2000s, followed by price drops towards the later 2000s. In some communities (i.e., Carson, Lomita, Wilmington, and San Pedro), the average prices began to drop in 2006 and 2007, while average prices in other communities continued to rise (i.e., Palos Verdes Estates, Manhattan Beach, and Hawthorne). By 2008, average home prices in all communities had fallen below 2007 levels. Overall, during the period from 2001 to 2012, all communities had positive average annual growth rates with the exception of Wilmington (-1.45 percent). Median single-family residence sales prices over the period from 2001 to 2012 for homes in the communities in the immediate vicinity of the Port were mixed, with a rise of approximately 2.3 percent annually on average in San Pedro and a decline of 1.3 percent annually on average in Wilmington (USACE and LAHD, 2014).

Table 7-12: Existing Home Sale Prices (Median) by County (2004–2014)

			County		
Year	Los Angeles	Orange	Riverside	San Bernardino	Ventura
2004	391,208	511,132	306,789	236,699	478,281
2005	471,015	583,411	373,549	316,697	556,920
2006	515,717	616,680	401,802	356,670	585,017
2007	537,011	616,424	380,375	345,442	559,687
2008	393,343	454,388	244,221	209,935	402,744
2009	315,131	416,100	175,366	140,890	358,138
2010	330,295	438,702	189,798	149,052	372,895
2011	312,541	416,571	185,262	147,325	354,022
2012	327,921	437,728	198,667	159,166	365,892
2013	411,095	525,581	247,753	197,544	433,589
2014	455,261	564,742	280,683	229,490	468,558
Change (2004–200	9)				
Percent	-19.45	-18.59	-42.84	-40.48	-25.12
Average Annual Percent	-3.24	-3.10	-7.14	-6.75	-4.19
Change (2010-201	4)				
Percent	44.47	35.72	60.06	62.89	30.83
Average Annual Percent	7.41	5.95	10.01	10.48	5.14
Total Change (200	4–2014)				
Percent	16.37	10.49	-8.50	-3.05	-2.03
Average Annual Percent	1.49	0.95	-0.77	-0.28	-0.18

Source: LAEDC, 2015b

Table 7-13: New Home Sale Prices (Median) by County (2004–2014)

	County								
Year	Los Angeles	Orange	Riverside	San Bernardino	Ventura				
2004	449,728	649,253	355,761	291,129	651,229				
2005	449,374	705,917	411,707	364,224	696,102				
2006	447,286	694,797	439,692	395,707	662,290				
2007	503,757	600,074	410,557	383,482	612,913				
2008	435,033	502,785	332,918	321,952	433,312				
2009	406,681	509,780	273,522	285,561	379,553				
2010	410,010	566,173	281,087	279,016	363,083				
2011	388,644	564,952	286,678	253,610	358,919				
2012	376,870	616,053	297,030	304,784	360,422				
2013	446,175	695,753	330,945	366,163	414,518				
2014	526,793	798,099	358,298	403,755	486,576				
Change (2004-2009)	Change (2004–2009)								
Percent	-9.57	-21.48	-23.12	-1.91	-41.71				
Average Annual Percent	-1.59	-3.59	-3.85	-0.32	-6.95				
Change (2010–2014)									
Percent	29.54	56.56	31.00	41.39	28.20				
Average Annual Percent	4.92	9.43	5.17	6.90	4.70				
Total Change (2004–2014)									
Percent	17.14	22.93	7.13	38.69	-25.28				
Average Annual Percent	1.56	2.08	0.65	3.52	-2.30				

Source: LAEDC, 2015b

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Los Angeles Harbor Department

Table 7-14: Average Home Sale Prices by Community (2001–2012)

													Percent Change (2001–	Percent Change (2007–	Average Annual
Community	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2006)	2012)	Percent
Carson	225,000	250,000	318,500	410,000	465,000	515,000	507,500	362,000	297,000	305,000	285,000	280,000	128.89	-44.83	2.22
El Segundo	N.A.	N.A.	535,000	781,250	N.A.	770,000	782,500	718,500	657,000	691,500	653,750	652,500	N.A.	-16.61	2.00
Gardena	196,500	250,000	310,000	370,000	515,000	498,500	490,000	380,000	298,500	300,000	282,000	290,000	153.69	-40.82	4.33
Hawthorne	226,000	260,000	322,000	410,000	520,000	530,000	540,000	412,500	325,000	345,000	329,500	335,000	134.51	-37.96	4.38
Hermosa Beach	544,000	570,000	750,000	976,500	N.A.	1,077,500	1,165,000	1,149,000	977,500	915,000	978,500	957,000	98.07	-17.85	6.90
Inglewood	182,500	233,500	243,750	380,000	470,000	500,000	450,000	323,250	245,500	235,000	230,000	230,000	173.97	-48.89	2.37
Lawndale	193,000	237,000	313,500	379,500	532,500	505,000	483,000	365,500	291,500	300,000	305,000	320,000	161.66	-33.75	5.98
Lomita	300,000	359,000	N.A.	N.A.	N.A.	561,000	556,000	481,000	435,000	406,000	402,000	390,750	87.00	-29.72	2.75
Manhattan Beach	680,000	797,000	1,100,000	1,250,000	1,425,000	1,550,000	1,649,000	1,575,000	1,330,000	1,400,000	1,330,000	1,379,000	127.94	-16.37	9.34
Marina Del Ray	562,500	457,000	N.A.	N.A.	N.A.	785,000	789,000	771,000	600,000	607,500	612,500	633,000	39.56	-19.77	1.14
Palos Verdes Estates	631,500	685,000	1,065,000	1,117,500	N.A.	1,380,000	1,395,000	1,300,000	1,151,000	N.A.	1,162,000	1,225,000	118.53	-12.19	8.54
Playa Del Rey	279,000	345,000	352,000	475,000	N.A.	524,500	515,000	496,000	468,750	449,500	395,000	372,500	87.99	-27.67	3.05
Rancho Palos Verdes	610,000	615,500	742,500	900,000	1,056,364	1,073,000	1,010,000	1,000,000	862,250	860,000	840,000	862,500	75.90	-14.60	3.76
Redondo Beach	420,000	475,000	580,000	717,000	780,000	770,000	780,000	715,000	645,000	650,000	635,000	640,000	83.33	-17.95	4.76
San Pedro	262,500	320,000	379,500	454,000	539,000	541,500	520,000	437,500	385,000	390,000	335,000	330,000	106.29	-36.54	2.34
Torrance	327,750	380,000	439,250	527,000	610,000	600,000	601,500	520,000	471,000	490,000	445,000	455,000	83.07	-24.36	3.53
Wilmington	N.A.	N.A.	275,000	355,000	N.A.	469,500	450,000	325,000	250,000	251,000	235,000	235,000	N.A.	-47.78	-1.32

Source: USACE and LAHD, 2014

Los Angeles Harbor Department

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# 7.2.2 Environmental Quality and the Role of the Port

"Environmental quality" refers to an aggregative set of factors that contribute to the overall condition of the natural, physical, and human environment. In the context of an urban setting, some key contributing factors include visual quality and aesthetics, land use compatibility and encroachment, socioeconomic conditions, real property values and attributes, air and water quality, hazardous materials and waste sites, and the adequacy of public facilities and services. Socioeconomic conditions and real property values are addressed in this chapter. The remaining factors are addressed in corresponding resource-specific sections of this Draft EIS/EIR.

### 7.2.2.1 Port History

The Port of Los Angeles was created in 1907 with the establishment of the Los Angeles Harbor Commission (see Section 3.4, Cultural Resources, for additional detail). Port growth was relatively slow until after World War I. Growing exports of local oil and lumber, shipbuilding, fishing, and cannery activities resulted in the construction of numerous warehouses and sheds between 1917 and 1930. In 1917, an extensive railroad network was established for transporting goods from the Harbor throughout the United States. Port growth continued during the Depression of the 1930s, with new cargo and passenger terminal construction, in some cases, replacing outdated wooden cargo structures. Containerized cargo handling and storage at the Port was modernized in the late 1950s.

As commerce and technology have changed, the function of the Port has shifted from its earlier focus on fishing, shipbuilding, and cargo uses to one where the predominant use is container shipping. These changes also have affected off-site land uses, transportation infrastructure, and employment. For example, different kinds of storage and transport facilities are required than previously. As the volume of cargo moving through the Port has increased, highway and rail system improvements have been required (for example, the Alameda Corridor). Much of the incoming container cargo consists of finished goods from Asia that are transported to other parts of California and beyond. These types of goods do not require assembly in the region, and may be transported to warehouses or distribution centers beyond the Port area. In contrast, imported oil (non-containerized) may be refined in nearby refineries before being transported elsewhere. Local refineries also have supported oil production near the Port or in other parts of California. Ancillary uses have also changed, including shipping suppliers, goods recyclers, and various light industrial uses. As a result, uses may have become outmoded or less economically viable, in some cases resulting in the need for economic revitalization and redevelopment.

# 7.2.2.2 Port Community Programs and Redevelopment

LAHD has implemented and continues to implement and fund a variety of programs and events that are designed to improve quality of life in nearby communities. These special events and ongoing community programs are provided to benefit the public and encourage surrounding communities to experience the Port and learn about its operations.

Special events sponsored by LAHD include educational boat tours, summer concerts, parades, festivals, and outdoor movies. LAHD also offers diverse community programs that educate children and adults about a variety of Port topics. A Speakers Bureau

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Program allows organizations to schedule speakers to discuss the history of the Port, current projects, and topical Port issues. Historical guides and audio casts are available for guests to download to facilitate their exploration of historical sites in the harbor area. The TransPORTer, a 53-foot mobile museum, brings a comprehensive Port of Los Angeles exhibit to surrounding communities to inform them about the impact the Port has on the local and global economies (POLA, 2015).

In addition to ongoing public involvement initiatives, the Port Community Mitigation Trust Fund was established in 2008 as a result of the settlement between the Port of Los Angeles and the City of Los Angeles known as the TraPac Memorandum of Understanding (MOU). The Harbor Community Benefit Foundation, an independent nonprofit organization was established to administer the Port Community Mitigation Trust Fund in partnership with the Board of Harbor Commissioners. The Trust Fund was established to address the negative cumulative environmental and public health impacts created by the business operations at the Port. The mission of the Harbor Community Benefit Foundation is "to carry out public benefit projects that assess, protect, and improve public health, quality of life, and the natural environment of the local communities." The Harbor Community Benefit Foundation carries out its mission by overseeing grants and addressing, through mitigation projects, off-port impacts from existing and future operations at the Port of Los Angeles in the communities of Wilmington and San Pedro (Harbor Community Benefit Foundation, 2015). This includes a Healthy Harbor program to help fund organizations that address Port-related health issues in Wilmington and San Pedro. This has included providing grant funds for mobile health clinics, air quality education, noise and hearing screening, and chronic disease self-management, as well as funding for programs to reducing asthma and promote health education of respiratory health through San Pedro and Wilmington community-based programs. Other Harbor Community Benefit Foundation programs include community benefit grants that go towards projects such as habitat restoration, beautification, and youth education.

LAHD is also in the process of implementing several development projects, including the San Pedro Waterfront Master Plan and Wilmington Waterfront Master Plan. Additionally, the Port Public Access Investment Plan, adopted February 11, 2015, allocates \$400 million dollars for LA Waterfront projects and community benefits over the next 10 years. The Public Access Investment Plan provides guidelines for the planning and budgeting of such projects. These development programs are aimed at strengthening economic development and enhancing community amenities.

Objectives of the San Pedro Waterfront Master Plan include increasing public waterfront access, enhancing commercial opportunities, improving transportation and non-vehicular mobility around the waterfront, and growing the Port in a sustainable manner. Project elements include the creation of new harbors and a public pier, new commercial development, enhancement of visitor attractions, development of a waterfront promenade and open space, and a variety of transportation improvements. The EIS/EIR for the San Pedro Waterfront Master Plan was certified in September 2009, project elements that have been implemented by 2015, include completion of the Downtown Harbor, which features a town square with public open space with promenade and public art and a new harbor inlet, as well as other features such as Crafted at the Port of Los Angeles, which is an arts and crafts market.

Objectives of the Wilmington Waterfront Development Project include connecting the community with the waterfront, creating open space, enhancing the livability and economic viability of the Los Angeles Harbor area by promoting sustainable economic development, and developing an environmentally responsible project. Project elements include commercial and industrial development and creation of visitor amenities, such as open space, plazas, a waterfront promenade, and a Waterfront Red Car Museum. The EIR for the Wilmington Waterfront Development Project was certified in June 2009 and project elements that have been implemented as of 2015 include the Wilmington Waterfront Park, a 30-acre largely contiguous public landscaped area, and Wilmington Marina Parkway, three acres of landscaped promenade.

In addition to the community programs and special events, LAHD implements a variety of plans and programs to reduce the environmental effects associated with operations at the Port, including programs aimed at improving the efficiency of cargo handling, reducing cargo storage time, use of electric cranes, use of electric and alternative fuel vehicles, on-dock rail systems and use of the grade-separated Alameda Corridor, reducing truck traffic during daytime peak periods, and sharing technologies with other ports to continue improving pollution-control technologies. One plan under the policy, the San Pedro Bay's Clean Air Action Plan (CAAP), specifically aims to reduce public health risk from Port operations in nearby communities (POLA and POLB, 2006). The Clean Trucks Program, a subcomponent of CAAP, was approved in 2007 and aims to reduce the pollution from diesel-powered trucks in the Port. Furthermore, LAHD is aggressively studying zero-emission technology with the intent of integrating zero emission equipment into terminal operations. The CAAP was updated in 2010 and the next update is currently in development. A community workshop was held on Wednesday, October 14, 2015, to gather input, and concepts for the update were released in 2016.

In addition, the Water Resources Action Plan (WRAP) was initiated in 2008. This is a comprehensive program that targets waterside and landside sources of water and sediment pollution in San Pedro Bay. Other Port initiatives for environmental quality that are underway include Inner Cabrillo Beach Water Quality Improvements, Consolidated Slip Remediation, Oil Spill Prevention, Sediment Quality Improvement Programs, Watershed and Stormwater Management, and Water Quality Monitoring. In July 2012, the Port began a voluntary Environmental Ship Index (ESI) Program to reward vessel operators for reducing particulate matter and nitrogen oxide emissions from their vessels in advance of regulations. The program includes three incentives for applicants who register with LAHD and which are awarded based on a point system. Further details regarding the Port's Environmental Plans and Programs is located in Section 1.6.8 of Chapter 1, Introduction.

# 7.3 Project Effects Related to Socioeconomics

This section evaluates the effects of the proposed Project and alternatives on employment, population, and housing along with a detailed description of the impact methodology used in the analysis.

# 7.3.1 Impact Methodology

The initial step in estimating socioeconomic impacts associated with implementation of the proposed Project is to link construction and operational activities to measurable socioeconomic indicators such as jobs and income. Economic impact modeling techniques (described below) can then be used to assess the economic impacts that implementation of the proposed Project could have on the regional and local economy using a number of criteria such as net changes in regional employment, output, wages, tax revenue, and value added. Attention is focused here on employment, income, and tax revenues within the five-county Southern California region.

The primary catalyst for changes to socioeconomic resources is a change in economic activity (that is, industry output [value of goods and services], employment, and income). Changes in employment in an area have the potential to affect population and housing. This is especially the case when the additional job opportunities created through implementation of the proposed Project (during the construction and operational phases) cannot be satisfied by the local workforce. Such a situation can trigger a movement of workers to the area to fill the supply of new jobs. Such an influx may be temporary, as in the case of short-lived construction activity, or permanent, as in the case where workers move to an area to fill long-term jobs. The movement of workers (and sometimes their accompanying family members) into an area depends mainly on the number of job opportunities made available by the proposed Project and the number and skill mix of workers available in the local labor force.

As discussed further in Section 7.3.1.4 below, under CEQA, social and economic effects are not treated as significant effects on the environment; however, where a physical change is caused by economic or social effects of the proposed Project, the physical change may be regarded as a significant impact (pursuant to Section 15064(e) and Section 15131 of the CEQA Guidelines). Therefore, the potential for physical changes as a result of socioeconomic changes are also considered. This may include the need for new construction, infrastructure, and transportation facilities to accommodate an influx of new population and/or businesses, or physical blight related to falling property values and movement of people out of an area.

NEPA considers social effects that have causal relationships to the environment, which may be direct, indirect, and cumulative. Socioeconomic effects are most often indirect, growth-inducing effects that induce changes in the patterns of land use, population density, or growth rate. The primary catalyst is a change in economic activity (i.e., employment, income, and tax revenues).

## 7.3.1.1 Economic Effects of Port Operations

The "Port Industry" is considered to be any regional economic activity directly associated with the movement of waterborne cargo and passengers. This includes expenditures associated with vessels, terminals, cargo and passenger transactions, and inland transport. For example, cargo movement transactions include documentation, financing, brokering, and other essential services that are directly required for the movement of waterborne cargo. Table 7-15 provides a detailed breakdown of Port Industry activities related to cargo movement.

Table 7-15: Port Industry Activities Associated with Cargo Movement

Vessel Activities	Terminal Activities	Transaction Activities	Inland Activities
Waterside Services:  Tugs Pilotage Line Hauling Launch Radio/Radar Surveyors Dockage Lighterage Suppliers: Chandler/Provisions Laundry Medical Waste Handling Bunkers: Oil Water	Stevedoring     Clerking and Checking     Watching/Security     Cleaning/Fitting     Equipment Rental     In-Transit Storage:     Wharfage     Yard Handling     Demurrage     Warehousing     Auto and Truck Storage     Grain Storage     Refrigerated Storage     Cargo Packing:     Export Packing     Container Stuffing and Stripping	Government Requirements:  Customs Entrance/Clearanc e Immigration Quarantine Fumigation Other: Banking Freight Forwarding Insurance Brokers	Inland Movement:  • Long Distance Truck  • Short Distance Truck  • Barge  • Air  • Rail  • Pipeline

Source: U.S. Maritime Administration, 2000

Because the revenues and employment associated with Port Industry activities could cease to exist if a port were to close down or become less efficient and lose its cargo base, this employment base is directly impacted by port activities. A much larger group of business that is less directly related to a port includes businesses that produce, consume, or sell the products that move through the port, such as exporters and importers that use the marine terminals for shipment and receipt of cargo. These businesses are often called "Related Users." Both the Port Industry and Related Users have a "ripple effect" by which expenditures in one sector contribute more output and jobs than the direct expenditure alone.

Vessels, terminals, transportation providers, and other Port Industry businesses purchase goods and services from industries to support their operations. These suppliers, in turn, purchase supplies and services to support their operations. These purchases continue to ripple through the regional economy and impact the surrounding communities. In economic impact terms, this set of expenditure ripples is known as the indirect effect.

In addition to the indirect effect of expenditure ripples, workers employed by the Port Industry and its suppliers also generate economic impacts. Employees of the Port Industry and its suppliers spend their wages and salaries on such purchases as food, clothing, retail items, and vehicles. The economic ripples generated by employee spending are known as the *induced effect*.

The total economic impact of each economic sector associated with port operations consists of direct, indirect, and induced effects. The sum of indirect and induced effects is also referred to as the secondary effect.

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#### 7.3.1.2 Direct, Indirect, and Induced Jobs

Similar to the direct, indirect, and induced effects described above, the new jobs associated with the construction and operation of the proposed Project and the alternatives are categorized in terms of *direct jobs*, *indirect jobs*, and *induced jobs*. Together the indirect and induced jobs are referred to as *secondary jobs*. In terms of construction, direct jobs are those jobs created by construction activities. Indirect construction jobs are related to purchases from materials supply firms and their suppliers, and induced jobs are related to household expenditures by workers. For operations, the three categories are defined as follows:

- Direct jobs are those jobs that would not exist if activity at the Port were to cease. Direct jobs created by marine cargo activity are jobs with the firms that directly provide cargo handling and vessel services, such as trucking companies, terminal operators and stevedores, members of the ILWU, stevedores and customs house brokers, vessel agents, pilots and tug assist companies, and shippers directly dependent upon the use of the Port.
- Indirect jobs are created throughout the region as the result of purchases of goods and services by the firms directly impacted by the Port's cargo activity. Indirect jobs are measured based on actual local purchase patterns of the directly dependent firms, and include industries such as utilities, office supplies, contract service providers, maintenance and repair, and insurance and construction.
- Induced jobs are jobs created in the region by the purchases of goods and services by those individuals directly employed by the Port's cargo activity. These jobs are based on the local purchase patterns of residents in the region, and include the local housing/construction industry and transportation services, as well as wholesalers providing goods to the retailers.

The employment effects of the proposed Project and alternatives relative to construction are presented in terms of direct and secondary jobs, and total jobs (direct and secondary [indirect and induced] combined) over the 24-month construction period.

The employment effects of the proposed Project and alternatives are presented in terms of direct and secondary jobs and total jobs (direct and secondary combined) for model years 2019, 2026, and 2038. This data is presented in tables that show net jobs (new jobs created as a result of the proposed Project or alternative), and gross jobs, which is the combined total of net jobs and jobs associated with existing operations. The number of jobs associated with existing operations and throughput is expected to increase over time in conjunction with forecasted increases in cargo throughput for each of the study years. This projected increase, which would occur with or without the proposed Project, is reflected in the gross employment tables. This increase in jobs associated with the growth of existing operations is equivalent to the job growth that would occur under the NEPA baseline.

The CEQA baseline represents a fixed point in time; thus, any increase in employment associated with existing operations subsequent to the January to December 2013 period represents an increase over the CEQA baseline.

## 7.3.1.3 Construction and Operations Model Description

LAHD uses two primary tools for calculating the economic impacts of Port expansion projects. For impacts related to the ongoing operations of a cargo terminal, LAHD relies on a Cargo Impact Model, which was based on a detailed survey of the actual economic impacts of operations at the Port in 2007. For impacts related to construction and other activities for which LAHD does not have detailed survey data available, LAHD relies on the IMPLAN (IMpact analysis for PLANning) economic impact modeling system. Both models are described below.

#### **Construction Impacts: IMPLAN Model**

The economic impact analysis of the construction phase was prepared using the IMPLAN model to evaluate potential changes in regional economic activity. Originally developed by the U.S. Department of Agriculture, Forest Service to assist with land and resource management planning, the IMPLAN model is a widely used model employed to assess the regional economic impacts of private and public projects.

The heart of IMPLAN is an input-output model. Input-output accounting describes commodity flows from producers to intermediate and final consumers. The total industry purchases of commodities, services, employment compensation, value added, and imports are equal to the value of the commodities produced. Purchases for final use (final demand) drive the model. Industries produce goods and services for final demand and purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services (indirect purchases) continues until leakages from the region (imports and value added) stop the cycle.

These indirect and induced effects (the effects of household spending) can be mathematically derived. The derivation is called the *Leontief inverse*. The resulting sets of multipliers describe the change of output for each and every regional industry caused by a one-dollar change in final demand for any given industry.

Creating regional input-output models requires a tremendous amount of data. The costs of surveying industries within each region to derive a list of commodity purchases (production functions) are prohibitive. IMPLAN was developed as a cost-effective means to develop regional input-output models. The IMPLAN accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis (2000) and the rectangular format recommended by the United Nations.

The IMPLAN model used by LAHD is based on 2011 regional data for the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura, and results are expressed in 2014 dollars. The model calculates the direct, indirect, and induced effects of construction projects based on the estimated changes in final demand across industries, as shown in the projected design and construction costs.

It should be understood that, although input-output analysis is a widely used approach to estimating the local and regional economic effects of implementing projects, it is not without its limitations. The information represents a snapshot at a specific time. In the case of the current model, the technical coefficients are based on 2011 data. Over time, the relationships between industries in an economy change, and their dependency on each other shifts. Input-output modeling does not account for economies of scale. Thus, the

 input required by an industry does not vary proportionately even though the final demand that is entered in the model varies.

#### **Operations Impacts: Cargo Impact Model**

In 2007, LAHD retained the services of Martin Associates to evaluate the economic impacts generated by waterborne cargo and other activity at the Port. The study employed methodology and definitions that have been used by Martin Associates to measure the economic impacts of seaport activity at more than 250 ports in the United States and Canada, and at the leading airports in the United States. Martin Associates developed a Cargo Impact Model for the Port based on data developed through an extensive interview and survey program of the firms participating in lines of business operated by LAHD. Specific re-spending models have been developed for the five-county region to reflect the unique economic and consumer profiles of the regional economy. The Cargo Impact Model calculates direct jobs, indirect jobs, induced jobs, wages, and tax impacts; unlike input-output models, which must attempt to regionalize national multipliers, the survey-based Cargo Impact Model uses the actual observed operational impacts of the Port of Los Angeles in 2006 as the basis for its calculations.

The Cargo Impact Model is designed to test the sensitivity of impacts to changes in such factors as marine tonnage levels, seaport productivity and work rules, new marine facilities development, inland distribution patterns of marine cargo, number of vessel calls, and the introduction of new ocean carrier service. The Cargo Impact Model can also be used to assess the impact of developing a parcel of land as a marine terminal versus other non-cargo land uses. Finally, the marine Cargo Impact Model can be used to assess the economic benefits of increased maritime activity due to infrastructure development and the opportunity cost of not undertaking specific maritime investments, such as dredging, new terminal development, or warehouse development.

#### **CEQA Baseline**

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions normally would constitute the baseline physical conditions by which the CEQA lead agency determines if an impact is significant. The NOP for the proposed Project was published in October 2014. For purposes of this Draft EIS/EIR, the CEQA baseline takes into account the throughput for the 12-month calendar year preceding NOP publication (January through December 2013) in order to provide a representative characterization of terminal activity levels throughout the complete calendar year preceding the release of the NOP. In 2013, the Everport Container Terminal encompassed approximately 205 acres (181 acres under its long-term lease plus an additional 25 acres on month-to-month space assignment), supported eight cranes, handled approximately 1.24 million TEUs, and had 166 vessel calls. The CEQA baseline conditions are also described in Section 2.7.1 and summarized in Table 2-1 in Chapter 2, Project Description.

The CEQA baseline represents the setting at a fixed point in time. The CEQA baseline differs from the No Project Alternative (Alternative 2) in that the No Project Alternative addresses what is likely to happen at the Project site over time, starting from the existing conditions. Therefore, the No Project Alternative allows for growth at the Project site that could be expected to occur without additional approvals, whereas the CEQA baseline does not.

#### NEPA Baseline

For purposes of this Draft EIS/EIR, the evaluation of significance under NEPA is defined by comparing the proposed Project or other alternatives to the NEPA baseline. The NEPA baseline conditions are described in Section 2.7.2 and summarized in Table 2-1 in Chapter 2, Project Description. The NEPA baseline condition for determining significance of impacts includes the full range of construction and operational activities the applicant could implement and is likely to implement absent a federal action, in this case the issuance of a DA permit.

Unlike the CEQA baseline, which is defined by conditions at a point in time, the NEPA baseline is not bound by statute to a "flat" or "no-growth" scenario. Instead, the NEPA baseline is dynamic and includes increases in operations that are projected to occur absent a federal permit. Federal permit decisions focus on direct impacts of the proposed Project permit area to the aquatic environment, as well as indirect and cumulative impacts in the uplands determined to be within the scope of federal control and responsibility. Significance of the proposed Project or the alternatives under NEPA is determined by comparing the proposed Project or the alternatives to the NEPA baseline.

The NEPA baseline, for purposes of this Draft EIS/EIR, is the same as the No Federal Action Alternative (Alternative 1). Alternative 1 has no dredging, dredged material disposal, in-water pile installation, or crane raising or crane installation nor would the existing terminal capacity be increased. Alternative 1 does include installation of AMP vaults along the wharf and the addition of 23.5 acres of additional backlands (addition of the 1.5-acre area at the southern end of the terminal and the 22-acre backland expansion area) to improve efficiency (these improvements could occur absent a federal permit).

The NEPA baseline assumes that by 2038 the terminal would handle up to approximately 1,818,000 TEUs annually, accommodate 208 annual ship calls at two existing berths, and utilize eight cranes.

## 7.3.1.4 Thresholds of Significance

Section 15131 of the CEQA Guidelines states that social and economic effects shall not be treated as significant effects on the environment. However, an EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes. Therefore, a socioeconomic significance conclusion under NEPA does not necessarily require a significance conclusion under CEQA unless those socioeconomic effects could be traced to a physical change in the environment.

There are no federal significance threshold standards for socioeconomic impacts. However, NEPA considers social effects that have causal relationships to the environment, which may be direct, indirect, and cumulative. Socioeconomic effects are most often indirect, growth-inducing effects that induce changes in the patterns of land use, population density, or growth rate. The primary catalyst is a change in economic activity (i.e., employment, income, and tax revenues). Displacement of people or housing could also result in changes to patterns of land use, population density, or growth rate. However, because no people or housing would be displaced as a result of the

1 proposed Project or alternatives, this issue is not discussed further; and the following 2 criteria are evaluated herein: 3 1. Direct or Indirect Inducement of Substantial Population Growth: The proposed 4 Project/alternative would have a socioeconomic effect if it would induce 5 substantial population growth in an area, either directly (for example, by 6 proposing new homes and businesses) or indirectly (for example, through 7 extension of roads or other infrastructure). 8 9 2. Changes to the Local Employment or Labor Force: The proposed 10 Project/alternative would have a socioeconomic effect if it would cause substantial change in the local employment or labor force. 11 12 13 3. Property Values: The proposed Project/alternative would have a socioeconomic 14 effect if it would cause a substantial decrease in property values. 7.3.2 **Impact Determination** 15 7.3.2.1 **Proposed Project** 16 17 The proposed Project would deepen Berths 226-229 and 230-232 with dredging, stabilize 18 existing wharves with pile installation, raise up to five existing cranes and install five 19 new cranes, add five AMP vaults, develop new backlands, improve existing and add new 20 infrastructure, and amend and extend the lease. Under this alternative, up to five existing 21 cranes would be raised and five new cranes would be added to the wharves for a total of 22 11 operating cranes. Total terminal acreage would increase by approximately 48.5 acres 23 of terminal backlands comprised of approximately 25 acres of existing developed 24 terminal backlands currently under space assignment, and the 23.5 acres (1.5 plus 22 25 acres) of new backland area, for a total terminal acreage of approximately 229 acres. 26 The proposed Project is expected to operate at a throughput capacity of 2,379,525 TEUs 27 in 2038. This would require 208 annual ship calls. 28 The following presents direct and secondary employment, income (wages), and local and 29 state tax revenues for construction and operations of the proposed Project, as derived 30 using the IMPLAN model and Cargo Impact Model (discussed in Section 7.3.1.3). It is 31 anticipated that effects associated with construction and operation of the proposed Project 32 would be experienced mostly in the five-county Southern California region, and it is this 33 geographical area for which effects are reported. 34 Implementation of the proposed Project would involve improvements to Port facilities in 35 one phase, with construction commencing in early 2017 and lasting for approximately 24 36 months, until early 2019. Construction of the proposed Project would entail expenditures 37 of approximately \$96,115,000 over a 24-month period, commencing with project approval, during which time purchases of construction labor, materials, supplies, 38

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**Direct or Indirect Inducement of Substantial Population Growth** 

The proposed Project would not induce substantial direct population growth through

construction of new homes or new businesses that would encourage large numbers of

services, and equipment would be made.

 new workers to migrate to the region, nor would it induce substantial indirect population growth through extension of roads or other supporting infrastructure that support new development in previously undeveloped areas.

During construction, the proposed Project would generate approximately 930 direct and secondary jobs. Operation of the proposed Project would result in an increase of approximately 11,550 net jobs in the year 2038 relative to the CEQA baseline (jobs associated with existing terminal operations in 2013) and 5,690 net jobs relative to the NEPA baseline 2038 (jobs in 2038 associated with future operation of the existing terminal with expanded backlands), which represents a very small portion (up to 0.1 percent) of overall regional employment. As discussed in greater detail below, given the large existing labor pool in the region, regional transportation infrastructure, and the highly integrated nature of the Southern California economy, there is a prevalence of cross-county and inter-community commuting by workers between their places of work and places of residence. Therefore, it is unlikely that many of the new construction or operations workers would change their places of residence in response to employment opportunities associated with the proposed Project. Thus, in the absence of changes in places of residence by a substantial number of new employees, distributional effects to population are not likely to occur.

The proposed Project would stimulate a certain amount of economic growth in the immediate area through both direct and indirect construction and operational effects. For example, the proposed Project would indirectly increase earnings to businesses and households throughout the region as proposed Project expenditures are spent throughout the region and new employee wages are spent. While this increase in earnings may contribute to the expansion of existing or creation of new businesses, this growth would occur in a highly urbanized area with a large and integrated economy and local workforce. Overall, the long-term effects would be small relative to the size of the regional economy, and they would not significantly affect population distribution in the local area and region as a whole. Therefore, the proposed Project would not be associated with directly or indirectly inducing substantial population growth.

#### **CEQA Impact Determination**

Since the proposed Project would not induce substantial population growth directly or indirectly, no physical changes to the adjacent communities are anticipated as a result of the proposed Project; therefore, the impact would be less than significant under CEQA.

### **NEPA Impact Determination**

Since the proposed Project would not induce substantial population growth directly or indirectly, no physical changes to the adjacent communities are anticipated as a result of the proposed Project; therefore, the impact would be less than significant under NEPA.

# Changes to the Local Employment or Labor Force

Construction of the proposed Project would generate approximately 510 direct temporary construction jobs over the 24-month construction period. With the ramp-up and ramp-down and the completion of different tasks at different times, the construction workforce at any one time would vary. As shown in Table 7-16, construction would also generate approximately 416 secondary (i.e., indirect and induced) jobs. Together, direct and

secondary jobs would total 926 jobs associated with the proposed Project during the construction period.

Table 7-16: Proposed Project: Direct and Secondary Construction Employment Over the Construction Period

Period	Employment (Number of Jobs)
Direct	510
Secondary	420
Grand Total	930

Impacts to regional employment associated with construction activity can be assessed by comparing existing regional employment and effects of the proposed Project. For instance, the 930 jobs added would represent less than 0.1 percent of the projected number of 8,312,000 jobs in 2020, and 9,319,000 jobs in the five-county region in 2035. The construction workforce would be composed primarily of people already living in the Los Angeles Basin, given the large existing construction industry workforce, the highly integrated nature of the Southern California economy, and the prevalence of cross-county and inter-community commuting by workers between their places of work and places of residence. Much of the indirect workforce would also likely come from within the Los Angeles Basin. The proposed Project, therefore, is not anticipated to result in either inmigration or relocation of construction employees to satisfy the need for increased temporary, construction-related employment.

As shown in Table 7-17, the proposed Project is estimated to create 4,230 net direct jobs (relative to the CEQA baseline) attributable to operations in 2038. Linkages among economic sectors would result in the creation of additional secondary jobs in related sectors. The net secondary jobs (relative to the CEQA baseline) in 2038 are projected to be 7,310, for a total of 11,550 jobs at build-out. The proposed Project is estimated to create 2,090 net direct jobs (relative to the NEPA baseline) attributable operations in 2038 and 3,610 secondary jobs for a total of 5,690 jobs at build-out. Tables 7-17 and 7-18 present the number of net (CEQA and NEPA) and gross employment. Total gross jobs under the proposed Project would number 13,160 in 2019, 18,690 in 2026, and 24,120 in 2038.

Similar to the short-term construction employees discussed above, the workforce would likely come from within the Los Angeles Basin and no significant influx of employees into the local communities is anticipated. Most of the direct jobs generated by operations at the Project site would be in the transportation and public utilities industry sectors of the regional economy. Secondary jobs would be generated in all industry sectors.

Effects to regional employment associated with implementation of the proposed Project are assessed through a comparison between baseline conditions and proposed Project effects. The net increase in employment attributable to the proposed Project (direct and indirect) would be 11,550 jobs in the year 2038. This compares to a projected number of jobs in the five-county region of approximately 9,319,000 in 2035 (see Table 7-2). Thus, the proposed Project represents approximately 0.1 percent of projected regional employment at build-out.

Table 7-17: Proposed Project: Net Direct and Secondary Operations Employment

		Employ	ment (Number of J	obs)*
		2019	2026	2038
	Direct	210	2,240	4,230
CEQA	Secondary	370	7,230	7,310
	Total	580	9,470	11,550
	Direct	70	1,540	2,090
NEPA	Secondary	130	2,660	3,610
	Total	200	4,190	5,690

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-18: Proposed Project: Gross Direct and Secondary Operations Employment

	Emp	Employment (Number of Jobs)*		
	2019 2026 2038			
Direct	4,820	6,850	8,840	
Secondary	8,330	11,840	15,280	
Total	13,160	18,690	24,120	

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Thus, while the proposed Project would provide new job opportunities, it represents a very small portion (approximately 0.1 percent) of overall projected regional employment. Given the large labor pool found throughout the region, the proposed Project is not anticipated to result in substantial in-migration or relocation of employees. Therefore, the proposed Project would not cause substantial change in the local employment or labor force.

#### **CEQA Impact Determination**

Since the proposed Project would not cause substantial change in the local employment or labor force, no physical changes to the adjacent communities are anticipated as a result of the proposed Project; therefore, the impact would be less than significant under CEQA.

#### **NEPA Impact Determination**

Since the proposed Project would not cause substantial change in the local employment or labor force, no physical changes to the adjacent communities are anticipated as a result of the proposed Project; therefore, the impact would be less than significant under NEPA.

#### **Property Values**

The proposed Project would not displace any housing and does not propose construction of housing or development of a previously undeveloped area, nor would it result in major infrastructure improvements that could provide for future housing development. As discussed above, the direct and secondary jobs during the construction period and long-term increases in direct and secondary employment from operation of the proposed Project would not change existing population in-migration and relocation patterns because of the large existing labor pool in the region. The proposed Project would stimulate a certain amount of economic growth in the immediate area. However, as

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discussed above, the effects of this economic growth would not significantly affect employment levels or population distribution in the local area and region as a whole. No measurable change in population distribution is likely to occur as a result of the proposed Project; thus, no change to housing demand on a regional or local scale would occur. Therefore, the proposed Project would result in negligible changes in demand for additional housing and it is unlikely that the proposed Project would exert upward pressure on property values in the local communities.

Should some relocation of new employees occur within the local communities or the region as a whole, existing housing stock would be available as shown in Table 7-11. Between 2009 and 2013, approximately 6.4 percent of housing units (or 91,032 units) in the City of Los Angeles were vacant. In 2038, 8,840 direct and 15,280 secondary jobs are expected as a result of the proposed Project, which represents a net increase of 11,550 direct and secondary jobs compared to the CEQA baseline, and a net increase of 5,690 direct and secondary jobs compared to the NEPA baseline. Given the large size of the existing workforce in the area, it is anticipated that the workers would already be living in the area and would not result in workers relocating from elsewhere. However, any workers that do relocate as a result of new jobs generated by the proposed Project could be accommodated by the existing housing stock without affecting the demand for housing or property values. Further, as indicated in Tables 7-11 and 7-14, the housing stock in the region includes units of varying sizes and price ranges to meet a variety of income levels.

Changes in property value are dependent on numerous factors unrelated to the Port, including monetary interest rates, ease of access to employment centers, availability of quality education, and historic and existing land uses. While proximity of the Port may historically have contributed to lower residential property values in communities nearest the Port compared to other communities in the area such as Redondo Beach and Rancho Palos Verdes, residential property values in communities near the Port grew through the early 2000s. As shown in Table 7-14, home prices increased in all communities regardless of price levels between 2003 and 2007. Those communities with the highest growth rates were often communities with the lowest home prices. However, a housing market slump occurring in the late 2000s led to decreased property values throughout California, a trend mirrored in the study area and the nearby communities. The proposed Project would involve improving an existing container terminal over one mile from the nearest residential community within a working port environment, and it is not anticipated that the proposed Project would change residential property trends in the areas immediately adjacent to the Port. Further, the proposed Project would not cause building code violations, dilapidation and deterioration, defective design or physical construction adjacent to residential communities, faulty or inadequate utilities, or other similar factors that could lead to a lowering of property values. Additionally, LAHD has implemented a number of projects and programs designed to enhance community quality of life and provide public access to visually stimulating and historically relevant developments within and adjacent to the Port.

The proposed Project would increase the number of jobs and income in the region and result in other economic benefits, and it would not adversely influence residential property values in the areas immediately adjacent to the Port. Therefore, no substantial decrease to property values would occur.

#### **CEQA Impact Determination**

Since the proposed Project would not cause a substantial change in local property values, no physical changes to the adjacent communities are anticipated as a result of the proposed Project; therefore, the impact would be less than significant under CEQA.

# **NEPA Impact Determination**

Since the proposed Project would not cause a substantial decrease in local property values, no physical changes to the adjacent communities are anticipated as a result of the proposed Project; therefore, the impact would be less than significant under NEPA.

# 7.3.2.2 Alternative 1 – No Federal Action

Alternative 1 is a NEPA-required no-action alternative for purposes of this Draft EIS/EIR. This alternative (which also represents the NEPA baseline) includes the activities that would occur absent a USACE permit and could include improvements that require a local permit. Absent a USACE permit, no dredging, dredged material disposal, in-water pile installation, or raising existing or new crane installations would occur. The No Federal Action Alternative includes development of additional backlands (addition of the 1.5-acre and 22-acre expansion areas) to improve efficiency. Five additional AMP vaults would also be added to the wharf under the No Federal Action Alternative. The additional backland areas not change the throughput capacity of the existing terminal because the terminal would be berth-constrained.

The site would continue to operate as an approximately 229-acre container terminal where cargo containers are loaded to/from vessels, temporarily stored on backlands, and transferred to/from trucks or on-dock rail. Based on the throughput projections, the Everport Container Terminal under Alternative 1 is expected to operate at its capacity of approximately 1,818,000 TEUs by 2038.

#### **Direct or Indirect Inducement of Substantial Population Growth**

Under Alternative 1, the backland improvements would not affect the throughput capacity of the terminal. However there would be an increase in throughput from the 2013 levels up to existing terminal maximum throughput capacity as demands increase through 2038. As discussed in greater detail below, this would be accompanied by modest increases in direct and indirect employment. As with the proposed Project, new employees are expected to be hired from the local area; thus, Alternative 1 would not result in large numbers of new workers migrating to the region. The growth in terminal operations would also stimulate economic growth in the immediate area, though to a lesser degree than the proposed Project. As with the proposed Project, the long-term effects to population growth would be small relative to the size of the regional economy and they would not significantly affect population distribution in the local area and region as a whole. Therefore, Alternative 1 would not be associated with substantial population growth.

#### **CEQA Impact Determination**

Since Alternative 1 would not induce substantial population growth directly or indirectly, no physical changes to the adjacent communities are anticipated as a result of Alternative 1. Alternative 1 would not have a significant impact under CEQA.

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#### **NEPA Impact Determination**

The No Federal Action Alternative would have the same impact as the NEPA baseline, as explained in Section 2.7.2 in Chapter 2. There would be no incremental difference between Alternative 1 and the NEPA baseline. As a consequence, Alternative 1 would result in no impact under NEPA.

# Change in the Local Employment or Labor Force

Construction of Alternative 1 would generate approximately 340 direct temporary construction jobs over the construction period. As shown in Table 7-19, construction would also generate approximately 280 secondary jobs. Together, direct and secondary jobs would total 610 jobs associated with Alternative 1 during the construction period. As shown in Table 7-20, the proposed Project is estimated to create 2,140 net direct jobs (relative to the CEQA baseline) attributable to operations in 2038. The net secondary jobs (relative to the CEQA baseline) in 2038 are projected to be 3,710, for a total of 5,850 jobs at build-out. Table 7-21 shows the gross increase in jobs from Alternative 1 operations, which would total 12,960 jobs in 2019 and 18,430 jobs in 2038.

Table 7-19: Alternative 1: Direct and Secondary Construction Employment Over the Construction Period

	Employment (Number of Jobs)*	
Direct	340	
Secondary	280	
Total	610	

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-20: Alternative 1: Net Direct and Secondary Operations Employment

		Emplo	Employment (Number of Jobs)*	
		2019	2026	2038
	Direct	140	700	2,140
CEQA	Secondary	240	1,220	3,710
	Total	380	1,920	5,850
NEPA	Direct	0	0	0
	Secondary	0	0	0
	Total	0	0	0

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-21: Alternative 1: Gross Direct and Secondary Operations Employment

	Employment (Number of Jobs)*		
	2019	2026	2038
Direct	4,750	5,310	6,750
Secondary	8,210	9,180	11,680
Total	12,960	14,500	18,430

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Although Alternative 1 would provide new job opportunities at reduced levels compared to the proposed Project, it would represent a very small portion (less than 0.1 percent) of overall regional employment. Given the large labor pool throughout the region, Alternative 1 is not anticipated to result in substantial in-migration or relocation of employees.

As with the proposed Project, Alternative 1 would not cause substantial change in the local employment or labor force, and impacts would be less than significant.

#### **CEQA Impact Determination**

Since Alternative 1 would not cause substantial change in the local employment or labor force, no physical changes to the adjacent communities are anticipated as a result of Alternative 1. Alternative 1 would not have a significant impact under CEQA.

#### **NEPA Impact Determination**

The No Federal Action Alternative would have the same impact as the NEPA baseline, as explained in Section 2.7.2 in Chapter 2; therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline. Alternative 1 would result in no impact under NEPA.

#### **Property Values**

Alternative 1 would not displace any housing, nor would it involve construction of housing, develop a previously undeveloped area, or result in major infrastructure improvements that could provide for future housing development. Job growth and economic growth occurring under Alternative 1 would be similar to but reduced from that of the proposed Project. As such, Alternative 1 would not change residential property trends in the areas immediately adjacent to the Port, and thus would not adversely affect property values.

Additionally, as discussed for the proposed Project, Alternative 1 would involve improvements to an existing container terminal over one mile from the nearest residential community within a working port environment. Therefore, it is not anticipated that Alternative 1 would change residential property trends in the areas immediately adjacent to the Port, nor would it cause building code violations, dilapidation and deterioration, defective design or physical construction near residential communities, faulty or inadequate utilities, or other similar factors that could lead to a lowering of property values. Therefore, no substantial decrease to property values would occur.

#### CEQA Impact Determination

Since Alternative 1 would not cause a substantial change in local property values, no physical changes to the adjacent communities are anticipated as a result of Alternative 1. Alternative 1 would not have a significant impact under CEQA.

### **NEPA Impact Determination**

The No Federal Action Alternative would have the same impact as the NEPA baseline, as explained in Section 2.7.2 in Chapter 2; therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline. Alternative 1 would result in no impact under NEPA.

# 7.3.2.3 Alternative 2 – No Project

Alternative 2 is a CEQA-only alternative. The No Project Alternative is not evaluated under NEPA because NEPA requires an evaluation of the No Federal Action Alternative. Under Alternative 2, none of the proposed construction activities would occur in water or in water-side or backland areas. LAHD would not implement any terminal improvements or increases in backland acreage. No cranes would be raised and no new cranes would be added, as well as no dredging would occur. Further, the current lease that expires in 2028 has an option for a 10-year extension, which would mean the terminal could operate through 2038.

Under the No Project Alternative, the existing Everport Container Terminal would continue to operate as an approximately 205-acre container terminal. Based on the throughput projections for the Port, the Everport Container Terminal is expected to operate at its existing capacity of approximately 1,818,000 TEUs in 2038.

The No Project Alternative would not preclude future improvements to the Project site. However, any future changes in use or new improvements with the potential to significantly impact the environment would be analyzed in a separate environmental document.

# **Direct or Indirect Inducement of Substantial Population Growth**

Under Alternative 2, no new construction or other improvements would occur; however, there would be an increase in container terminal operations (relative to 2013 baseline levels) to the terminal's maximum capacity of 1,818,000 TEUs, as throughput demands increase over time. As discussed in greater detail below, this increase in container terminal operations would be accompanied by modest increases in direct and indirect employment. As with the proposed Project, new employees are expected to be hired from the local area; thus, Alternative 2 would not result in large numbers of new workers migrating to the region. The growth in terminal operations would also stimulate economic growth in the immediate area, though to a lesser degree than the proposed Project. As with the proposed Project, the long-term effects in population growth would be small relative to the size of the regional economy and it would not significantly affect population distribution in the local area and region as a whole. Therefore, Alternative 2 would not be associated with substantial population growth.

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#### **CEQA Impact Determination**

Since Alternative 2 would not induce substantial population growth directly or indirectly, no physical changes to the adjacent communities are anticipated as a result of Alternative 2. Alternative 2 would not have a significant impact under CEQA.

#### **NEPA Impact Determination**

The analysis of this alternative is not required under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 1 in this document).

# Changes to the Local Employment or Labor Force

No construction would occur under Alternative 2; thus, there would be no construction jobs would be created. Growth in annual TEUs for Alternative 2 that would occur under existing terminal capacity would represent 76 percent of the throughput under the proposed Project in 2038 (1,818,000 TEUs under Alternative 2 versus 2,379,525 TEUs under the proposed Project). The relatively small increase in throughput under Alternative 2 would result in increases in direct and indirect jobs relative to 2013 conditions. As shown in Table 7-22, Alternative 2 is estimated to create 2,140 net direct jobs (relative to the CEQA baseline) attributable to operations in 2038. Table 7-23 presents the gross increase in jobs, which totals 12,960 jobs in 2019 and 18,430 jobs in 2038.

Table 7-22: Alternative 2: Net Direct and Secondary Operations Employment

		Emplo	yment (Number o	f Jobs)
		2019	2026	2038
	Direct	140	700	2,140
CEQA	Secondary	240	1,220	3,710
	Total	380	1,920	5,850
NEPA	Direct	N/A	N/A	N/A
	Secondary	N/A	N/A	N/A
	Total	N/A	N/A	N/A

\*Due to rounding, some totals may not correspond with the sum of the separate figures N/A = Not Applicable

Table 7-23: Alternative 2: Gross Direct and Secondary Operations Employment

		Employment (Number of Jobs)		
	2019	2026	2038	
Direct	4,750	5,310	6,750	
Secondary	8,210	9,180	11,680	
Total	12,960	14,500	18,430	

\*Due to rounding, some totals may not correspond with the sum of the separate figures

Alternative 2 would provide new job opportunities at reduced levels compared to the proposed Project, and would represent a very small portion (less than 0.1 percent) of overall regional employment. Given the large labor pool throughout the region, Alternative 2 is not anticipated to result in substantial in-migration or relocation of employees.

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As with the proposed Project, Alternative 2 would not cause substantial change in the local employment or labor force, and impacts would be less than significant.

# **CEQA Impact Determination**

Since Alternative 2 would not cause substantial change in the local employment or labor force, no physical changes to the adjacent communities are anticipated as a result of Alternative 2. Alternative 2 would not have a significant impact under CEQA.

#### **NEPA Impact Determination**

The analysis of this alternative is not required under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 1 in this document).

# **Property Values**

Under Alternative 2, no new construction or other improvements would occur at the terminal; however, there would be an increase in container terminal operations as throughput demands increase. Alternative 2 would not displace any housing, develop a previously undeveloped area, or result in major infrastructure improvements that could provide for future housing development. New employees are expected to be hired from the local area to meet the modest increases in direct and indirect employment resulting from increased terminal operations, similar to the proposed Project, as discussed in Section 7.3.2.1. As such, Alternative 2 would not change residential property trends in the areas immediately adjacent to the Port, and thus would not adversely affect property values. Further, Alternative 2 would not cause building code violations, dilapidation and deterioration, defective design or physical construction near residential communities, faulty or inadequate utilities, or other similar factors that could lead to a lowering of property values. Therefore, no substantial decrease to property values would occur.

#### **CEQA Impact Determination**

Since Alternative 2 would not cause a substantial change in local property values, no physical changes to the adjacent communities are anticipated as a result of Alternative 2. Alternative 2 would not have a significant impact under CEQA.

#### **NEPA Impact Determination**

The analysis of this alternative is not required under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 1 in this document).

# 7.3.2.4 Alternative 3 – Reduced Project: Reduced Wharf Improvements

Under Alternative 3, there would be two operating berths after construction, similar to the proposed Project; but Berths 230-232 would remain at the existing depth (-45 feet plus two feet of overdepth), which would eliminate the need for sheet pile placement at this operating berth. Under this alternative, dredging along Berths 226-229 would occur as described for the proposed Project. This alternative would require less dredging (by approximately 8,000 cubic yards for a total of about 30,000 cubic yards) and less sheet pile driving and a slightly shorter construction period than the proposed Project. Based on the throughput projections, this alternative is expected to operate at its capacity of approximately 2,225,000 TEUs by 2038, similar to the proposed Project. However,

while the terminal could handle similar levels of cargo, the reduced project alternative would not achieve the same level of efficient operations as achieved by the proposed Project. This alternative would include the raising of up to five existing cranes and five new cranes. Berths 226-229 would accommodate the largest vessels (16,000 TEUs). The existing design depth that would remain at Berths 230-232 would only be capable of handling vessels up to 8,000 TEUs. Other proposed Project elements, such as installation of AMP and backland improvements would be implemented under this alternative. Under this alternative, 208 vessels would call on the terminal by 2038, which is the same number or annual vessel calls as the proposed Project.

# **Direct or Indirect Inducement of Substantial Population Growth**

As discussed in greater detail below, direct and indirect employment would increase under Alternative 3. As with the proposed Project, new employees are expected to be hired from the local area; thus, Alternative 3 would not result in large numbers of new workers migrating to the region. The growth in terminal operations would also stimulate economic growth in the immediate area similar to the proposed Project. As with the proposed Project, the long-term effects to population growth would be small relative to the size of the regional economy, and they would not significantly affect population distribution in the local area and region as a whole. Therefore, Alternative 3 would not be associated with substantial population growth.

# **CEQA Impact Determination**

Alternative 3 would not induce substantial population growth directly or indirectly, and no physical changes to the adjacent communities are anticipated; therefore, Alternative 3 would not have a significant impact under CEQA.

#### **NEPA Impact Determination**

Alternative 3 would not induce substantial population growth, directly or indirectly; therefore, the impact would be less than significant under NEPA.

#### Change in the Local Employment or Labor Force

Under Alternative 3, construction activities would result in approximately 460 direct jobs and 370 secondary jobs (Table 7-24). As shown in Table 7-25, during Alternative 3 operations, 90 net direct jobs (relative to the CEQA baseline) and 150 net secondary jobs (240 total) would be added to the regional economy in 2019, and 3,750 net direct jobs and 6,480 secondary jobs (10,230 total) would be added in 2038. In 2019, Alternative 3 would have a lower throughput as compared to the NEPA baseline because construction activities in 2017 and 2018 would result in a higher level of disruption to terminal operations and require a higher degree of throughput recovery in subsequent years; therefore, Alternative 3 would result in 50 fewer net direct jobs and 90 fewer secondary jobs (140 total) in 2019 relative to the NEPA baseline.

By 2038 Alternative 3 would add 1,610 net direct jobs (relative to the NEPA baseline) and 2,780 secondary jobs (4,380 total). As shown in Table 7-26, total gross jobs are estimated to be 12,820 in 2019 and 22,810 in 2038.

Table 7-24: Alternative 3: Direct and Secondary Construction Employment Over the Two-Year Construction Period

	Employment (Number of Jobs)
Direct	460
Secondary	370
Total	830

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-25: Alternative 3: Net Direct and Secondary Operations Employment

		Empl	oyment (Number	of Jobs)
		2019	2026	2038
	Direct	90	1,890	3,750
CEQA	Secondary	150	3,270	6,480
	Total	240	5,150	10,230
NEPA	Direct	-50	1,190	1,610
	Secondary	-90	2,050	2,780
	Total	0	3,240	4,380

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-26: Alternative 3: Gross Direct and Secondary Operations Employment

		Employment (Number of Jobs)		
	2019	2026	2038	
Direct	4,700	6,500	8,360	
Secondary	8,120	11,230	14,450	
Total	12,820	17,730	22,810	

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Alternative 3 new job opportunities would be at reduced levels compared to the proposed Project. These job opportunities would represent a very small portion (less than 0.1 percent) of overall regional employment. Given the large labor pool throughout the region, Alternative 3 is not anticipated to result in substantial in-migration or relocation of employees. As with the proposed Project, Alternative 3 would not cause substantial change in the local employment or labor force, and impacts would be less than significant.

#### **CEQA Impact Determination**

As Alternative 3 would not cause substantial change in the local employment or labor force, no physical changes to the adjacent communities are anticipated as a result of Alternative 3; therefore, the impact would be less than significant under CEQA.

#### **NEPA Impact Determination**

Alternative 3 would not cause substantial change in the local employment or labor force; therefore, the impact would be less than significant under NEPA.

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# **Property Values**

Alternative 3 would not displace any housing, nor would it involve construction of housing, develop a previously undeveloped area, or result in major infrastructure improvements that could provide for future housing development. Job growth and economic growth occurring under Alternative 3 would be similar to but reduced from that of the proposed Project. As such, Alternative 3 would not change residential property trends in the areas immediately adjacent to the Port, and thus would not adversely affect property values.

Additionally, as discussed for the proposed Project, Alternative 3 would involve improvements to an existing container terminal over one mile from the nearest residential community within a working port environment. Therefore, it is not anticipated that Alternative 3 would change residential property trends in the areas immediately adjacent to the Port, nor would it cause building code violations, dilapidation and deterioration, defective design or physical construction near residential communities, faulty or inadequate utilities, or other similar factors that could lead to a lowering of property values. Therefore, no substantial decrease to property values would occur.

# **CEQA Impact Determination**

As Alternative 3 would not cause substantial change in local property values, no physical changes to the adjacent communities are anticipated as a result of Alternative 3; therefore, the impact would be less than significant under CEQA.

#### **NEPA Impact Determination**

Alternative 3 would not cause substantial decrease in local property values; therefore, the impact would be less than significant under NEPA.

# 7.3.2.5 Alternative 4 – Reduced Project: No Backlands Improvements

Under Alternative 4 there would be two operating berths after construction which is similar to the proposed Project. This alternative would require the same dredging as the proposed Project. Up to five of the existing cranes would be raised and five new cranes installed, as well as AMP. This alternative would not include any backland expansion. Based on the throughput projections, this alternative is expected to operate at its capacity of 2,115,133 TEUs by 2038, slightly less than the proposed Project. However, while the terminal could handle similar levels of cargo, this reduced project alternative would not achieve the same level of efficient operations as achieved by the proposed Project. This alternative would accommodate the largest vessels (16,000 TEUs) at Berths 226-229. The new design depth at Berths 230-232 would be capable of handling vessels up to 10,000 TEUs. Under this alternative, 208 vessels would call on the terminal in 2038, which is the same as the proposed Project.

# **Direct or Indirect Inducement of Substantial Population Growth**

As discussed in greater detail below, direct and indirect employment would increase under Alternative 4. As with the proposed Project, new employees are expected to be hired from the local area; thus, Alternative 4 would not result in large numbers of new workers migrating to the region. The growth in terminal operations would also stimulate economic growth in the immediate area similar to the proposed Project. As with the

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proposed Project, the long-term effects to population growth under Alternative 4 would be small relative to the size of the regional economy, and they would not significantly affect population distribution in the local area and region as a whole. Therefore, Alternative 4 would not be associated with substantial population growth.

#### **CEQA Impact Determination**

Alternative 4 would not induce substantial population growth directly or indirectly, and no physical changes to the adjacent communities are anticipated; therefore, Alternative 4 would not have a significant impact under CEQA.

## **NEPA Impact Determination**

Alternative 4 would not induce substantial population growth, directly or indirectly; therefore, the impact would be less than significant under NEPA.

# **Change in the Local Employment or Labor Force**

Under Alternative 4, construction activities would result in approximately 216 direct jobs and 176 secondary jobs (Table 7-27). Under Alternative 4, throughput would be lower in 2019 as compared to the NEPA and CEQA baseline because construction activities under in 2018 and 2019 would disrupt terminal operations and require a throughput recovery in subsequent years. Therefore, as shown in Table 7-28, during Alternative 4 operations, approximately 50 net direct jobs (relative to the CEQA baseline) and 90 secondary jobs (130 total) would be removed from the regional economy in 2019, but 3,250 net direct jobs and 5,620 net secondary jobs (8,870 total) would be added in 2038. Alternative 4 would result in 190 net direct jobs (relative to the NEPA baseline) and 330 secondary jobs (520 total) being removed from the regional economy in 2019. In 2038, 1,100 net direct jobs and 1,910 net secondary jobs would be added. As shown in Table 7-29, total gross jobs are estimated to be 12,450 in 2019 and 21,440 in 2038.

Table 7-27: Alternative 4: Direct and Secondary Construction Employment Over the Two-Year Construction Period

	Employment (Number of Jobs)
Direct	220
Secondary	180
Total	390

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-28: Alternative 4: Net Direct and Secondary Operations Employment

		Emplo	Employment (Number of Jobs)		
		2019	2019 2026 2038		
	Direct	-50	1,520	3,250	
CEQA	Secondary	-90	2,630	5,620	
	Total	-130	4,140	8,870	
NEPA	Direct	-190	820	1,110	
	Secondary	-330	1,410	1,910	
	Total	-520	2,230	3,010	

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-29: Alternative 4: Gross Direct and Secondary Operations Employment

	Employment (Number of Jobs)				
	2019 2026 2038				
Direct	4,560	6,130	7,860		
Secondary	7,880	10,590	13,590		
Total	12,450	16,723	21,440		

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Project. These job opportunities would represent a very small portion (less than 0.1 percent) of overall regional employment. Given the large labor pool throughout the region, Alternative 4 is not anticipated to result in substantial in-migration or relocation of employees. As with the proposed Project, Alternative 4 would not cause substantial change in the local employment or labor force, and impacts would be less than significant.

Alternative 4 new job opportunities would be at reduced levels compared to the proposed

#### **CEQA Impact Determination**

As Alternative 4 would not cause substantial change in the local employment or labor force, no physical changes to the adjacent communities are anticipated as a result of Alternative 4; therefore, the impact would be less than significant under CEQA.

# **NEPA Impact Determination**

 Alternative 4 would not cause substantial change in the local employment or labor force; therefore, the impact would be less than significant under NEPA.

# **Property Values**

Alternative 4 would not displace any housing, nor would it involve construction of housing, develop a previously undeveloped area, or result in major infrastructure improvements that could provide for future housing development. Job growth and economic growth occurring under Alternative 4 would be similar to but reduced from that of the proposed Project. As such, Alternative 4 would not change residential property trends in the areas immediately adjacent to the Port, and thus would not adversely affect property values.

Additionally, as discussed for the proposed Project, Alternative 4 would involve improvements to an existing container terminal over one mile from the nearest residential community within a working port environment. Therefore, it is not anticipated that Alternative 4 would change residential property trends in the areas immediately adjacent to the Port, nor would it cause building code violations, dilapidation and deterioration, defective design or physical construction near residential communities, faulty or inadequate utilities, or other similar factors that could lead to a lowering of property values. Therefore, no substantial decrease to property values would occur.

# **CEQA Impact Determination**

 As Alternative 4 would not cause substantial change in local property values, no physical changes to the adjacent communities are anticipated as a result of Alternative 4; therefore, the impact would be less than significant under CEQA.

#### **NEPA Impact Determination**

Alternative 4 would not cause substantial decrease in local property values; therefore, the impact would be less than significant under NEPA.

# 7.3.2.6 Alternative 5 – Expanded On-Dock Railyard: Wharf and Backland Improvements with an Expanded TICTF

Alternative 5 would be the same as the proposed Project but with an additional on-dock rail track at the TICTF. Under Alternative 5, there would be two operating berths after construction and the terminal would add 23.5 acres of backlands, similar to the proposed Project. This alternative would require the same dredging as the proposed Project. This alternative would accommodate the largest vessels (16,000 TEUs) at Berths 226-229. The new design depth at Berths 230-232 would be capable of handling vessels up to 10,000 TEUs. Based on the throughput projections, this alternative is expected to operate at its capacity of 2,379,525 TEUs by 2038. Under this project alternative, the terminal could handle the same level of cargo as the proposed Project but would have added capacity at the TICTF and be able to transport a greater number of containers via rail than the proposed Project. Under this alternative, 208 vessels would call on the terminal in 2038, which is the same as the proposed Project.

# **Direct or Indirect Inducement of Substantial Population Growth**

As discussed in greater detail below, direct and indirect employment would increase under Alternative 5. As with the proposed Project, new employees are expected to be hired from the local area; thus, Alternative 5 would not result in large numbers of new workers migrating to the region. The growth in terminal operations would also stimulate economic growth in the immediate area similar to the proposed Project. As with the proposed Project, the long-term effects to population growth would be small relative to the size of the regional economy, and they would not significantly affect population distribution in the local area and region as a whole. Therefore, Alternative 5 would not be associated with substantial population growth.

#### **CEQA Impact Determination**

Since Alternative 5 would not induce substantial population growth directly or indirectly, no physical changes to the adjacent communities are anticipated as a result of Alternative 5; therefore, Alternative 5 would not have a significant impact under CEQA.

#### **NEPA Impact Determination**

Alternative 5 would not induce substantial population growth, directly or indirectly; therefore, the impact would be less than significant under NEPA.

# Change in the Local Employment or Labor Force

Under Alternative 5, construction activities would result in approximately 530 direct jobs and 430 secondary jobs (960 total) (Table 7-30). As shown in Table 7-31, Alternative 5 is estimated to create 4,230 net direct jobs (relative to the CEQA baseline) attributable to operations in 2038 and 7,320 net secondary jobs, for a total of 11,550 jobs at build-out. The proposed Project is estimated to create 2,090 net direct jobs (relative to the NEPA baseline) attributable operations in 2038 and 3,610 secondary jobs for a total of 5,690

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jobs at build-out. As shown in Table 7-32, total gross jobs are estimated to be 13,160 in 2019 and 24,120 in 2038.

Table 7-30: Alternative 5: Direct and Secondary Construction Employment Over the Two-Year Construction Period

	Employment (Number of Jobs)		
Direct	530		
Secondary	430		
Total	960		

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-31: Alternative 5: Net Direct and Secondary Operations Employment

		Employment (Number of Jobs)			
		2019	2019 2026 2038		
CEQA	Direct	210	2,240	4,230	
	Secondary	370	7,230	7,320	
	Total	580	9,470	11,550	
NEPA	Direct	70	1,540	2,090	
	Secondary	130	2,660	3,610	
	Total	200	4,190	5,690	

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Table 7-32: Alternative 5: Gross Direct and Secondary Operations Employment

	Employment (Number of Jobs)				
	2019 2026 2038				
Direct	4,820	6,850	8,840		
Secondary	8,330	11,840	15,280		
Total	13,160	18,690	24,120		

<sup>\*</sup>Due to rounding, some totals may not correspond with the sum of the separate figures

Alternative 5 would provide new construction-related job opportunities at slightly higher levels compared to the proposed Project while providing the same level of new operations-related job opportunities as the proposed Project due to similar levels of terminal operations at build-out. These job opportunities would represent a very small portion (approximately 0.1 percent) of overall regional employment. Given the large labor pool throughout the region, Alternative 5 is not anticipated to result in substantial in-migration or relocation of employees. As with the proposed Project, Alternative 5 would not cause substantial change in the local employment or labor force, and impacts would be less than significant.

# **CEQA Impact Determination**

As Alternative 5 would not cause substantial change in the local employment or labor force, no physical changes to the adjacent communities re anticipated as a result of Alternative 5; therefore, the impact would be less than significant under CEQA.

#### NEPA Impact Determination

Alternative 5 would not cause substantial change in the local employment or labor force; therefore, the impact would be less than significant under NEPA.

# **Property Values**

Alternative 5 would not displace any housing, nor would it involve construction of housing, develop a previously undeveloped area, or result in major infrastructure improvements that could provide for future housing development. Job growth and economic growth occurring under Alternative 5 would be similar to but reduced from that of the proposed Project. As such, Alternative 5 would not change residential property trends in the areas immediately adjacent to the Port, and thus would not adversely affect property values.

Additionally, as discussed for the proposed Project, Alternative 5 would involve improvements to an existing container terminal over one mile from the nearest residential community within a working port environment. Therefore, it is not anticipated that Alternative 5 would change residential property trends in the areas immediately adjacent to the Port, nor would it cause building code violations, dilapidation and deterioration, defective design or physical construction near residential communities, faulty or inadequate utilities, or other similar factors that could lead to a lowering of property values. Therefore, no substantial decrease to property values would occur.

#### **CEQA Impact Determination**

As Alternative 5 would not cause substantial change in local property values, no physical changes to the adjacent communities are anticipated as a result of Alternative 5; therefore, the impact would be less than significant under CEQA.

#### **NEPA Impact Determination**

Alternative 5 would not cause substantial decrease in local property values; therefore, the impact would be less than significant under NEPA.

# 7.3.3 Summary of Impact Determinations

Table 7-33 summarizes the CEQA and NEPA impact determinations of the proposed Project and alternatives related to socioeconomics, as described in the detailed discussion above. This table is meant to allow easy comparison between the potential impacts of the proposed Project and alternatives with respect to socioeconomics. Identified potential impacts may be based on federal, state, City of Los Angeles or Port significance criteria and/or the scientific judgment of the report preparers. For each impact threshold, the table describes the impact, notes the CEQA and NEPA impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table. Note that impact descriptions for each of the alternatives are the same as for the proposed Project, unless otherwise noted.

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Table 7-33: Summary Matrix of Potential Impacts and Mitigation Measures for Socioeconomics Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
Proposed Project	The proposed Project would not result in direct or indirect inducement of substantial population growth.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	The proposed Project would not cause substantial change in the local employment or labor force.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	The proposed Project would not displace any housing and does not propose construction of housing or development of a previously undeveloped area, nor would it result in major infrastructure improvements that could provide for future housing development.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
Alternative 1 – No Federal Action	Alternative 1 would not result in direct or indirect inducement of substantial population growth.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required	NEPA: No impact
	Alternative 1 would not cause substantial change in the local employment or labor force.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required	NEPA: No impact
	Alternative 1 would not displace any housing and does not propose construction	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant

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	of housing or development of a previously undeveloped area, nor would it result in major infrastructure improvements that could provide for future housing development.	NEPA: No impact	NEPA: No mitigation is required	NEPA: No impact
Alternative 2 – No Project	Alternative 2 would not result in direct or indirect inducement of substantial	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
	population growth.	NEPA: Not applicable	NEPA: Mitigation not applicable	NEPA: Not applicable
	Alternative 2 would not cause substantial change in the local employment or labor	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
	force.	NEPA: Not applicable	NEPA: Mitigation not applicable	NEPA: Not applicable
	Alternative 2 would not displace any housing and does not propose construction	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
	of housing or development of a previously undeveloped area, nor would it result in major infrastructure improvements that could provide for future housing development.	NEPA: Not applicable	NEPA: Mitigation not applicable	NEPA: Not applicable
Alternative 3 – Reduced Project: Reduced Wharf Improvements	Alternative 3 would not result in direct or indirect inducement of substantial population growth.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	Alternative 3 would not cause substantial change in the local employment or labor force.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	Alternative 3 would not displace any housing and does not propose construction of housing or development of a previously undeveloped area, nor would it result in major infrastructure improvements that could provide for future housing development.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
Alternative 4 – Reduced		CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant

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Project: No Backlands Improvements	Alternative 4 would not result in direct or indirect inducement of substantial population growth.	NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	Alternative 4 would not cause substantial change in the local employment or labor force.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	Alternative 4 would not displace any housing and does not propose construction of housing or development of a previously undeveloped area, nor would it result in major infrastructure improvements that could provide for future housing development.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
Alternative 5 – Expanded On-	Alternative 5 would not result in direct or indirect inducement of substantial population growth.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
Dock Railyard: Wharf and Backland		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
Improvements with an Expanded TICTF	Alternative 5 would not cause substantial change in the local employment or labor force.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant
	Alternative 5 would not displace any housing and does not propose construction of housing or development of a previously undeveloped area, nor would it result in major infrastructure improvements that could provide for future housing development.	CEQA: Less than significant	CEQA: No mitigation is required	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required	NEPA: Less than significant

Note: Except where specified, the Impact Determination is applicable for both construction and operation impacts.