Chapter 4
Socioeconomics

Chapter Summary

This chapter characterizes the existing socioeconomic setting of the Proposed Project area and vicinity, as well as the factors contributing to positive or adverse conditions affecting that setting. The potential socioeconomic outcomes are evaluated in terms of the effects of the Proposed Project and each of the alternatives on employment, population, and housing characteristics directly and indirectly related to construction and operation.

Chapter 4, Socioeconomics, provides the following:

- Population and employment conditions at the regional and county levels;
- A brief account of the Port of Los Angeles' economic 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 4

The Proposed Project would include construction and operation of a new Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS)-compliant berthing facility at Berths 150-151 and associated landside improvements (see Section 2.5 for a complete description of the Proposed Project).

Short-term (i.e., construction) jobs would employ up to 80 one-year-equivalent direct workers and 56 one-year-equivalent secondary workers during a period of approximately six years. Long-term (i.e., operational) employment associated with the Proposed Project would total approximately 13 jobs, including those directly related to operating the facility (eight direct jobs) and five secondary jobs (i.e., off-site jobs created by the purchases of goods and services associated with the Proposed Project's direct jobs) throughout the Southern California region comprising Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties.

While the economic impacts of the Proposed Project would be beneficial, the increase in jobs, output, and tax revenues attributable to the Proposed Project would be small compared to current and projected future employment in the larger economic region. Similarly, because the number of jobs involved would be small relative to regional employment, the effect of the Proposed Project on housing supply and values would likewise be insubstantial.

4.1 Introduction

The California Environmental Quality Act (CEQA) is primarily concerned with disclosing and mitigating the significant environmental effects of constructing and operating a project. However, the Los Angeles Harbor Department (LAHD)'s practice is to disclose the greater impacts of a project on the community, specifically effects related to socioeconomics and environmental quality. Consequently, this chapter provides a discussion of the Proposed Project's potential effects on socioeconomics.

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, either temporary, as in the case of short-lived construction activity, or permanent, as in long-term operational 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.

4.2 Socioeconomics

Socioeconomics encompasses a number of areas, including population, employment, income, and housing. The environmental setting includes existing or baseline conditions as of 2021 (see Section 4.3.2) and describes attributes of the socioeconomic environment in the region of California most closely affected by the Port of Los Angeles (Port). 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.

4.2.1 Population

According to the Census Bureau (AFF 2023a, b), between 2000 and 2020, the number of residents in the five-county region increased by about 3,245,739, or an average annual rate of 1 percent (Table 4-1). The most rapid rate of change and the largest numeric increase took place in Riverside County (2.8 percent annual average and just under 1,000,000 people) and Los Angeles County had the third-largest numeric increase but the smallest annual percentage increase. The population of the City of Los Angeles increased over the same time at about the same pace as Los Angeles County.

Population projections prepared by the California Department of Finance (DOF 2021) forecast an increase in population in the five-county region of approximately 833,000 residents by 2060. The highest growth rates are projected for Riverside and San Bernardino counties. Conversely, the population of Los Angeles County is projected to decrease by nearly 500,000 residents.

Table 4-1: Population by Region, County, and City of Los Angeles (2000–2020)

	2000 (Census)	2010 (Census)	2020 (Census Estimate)	Change Between Years 2000–2020		
				Numeric	Total Percent	Annual Average Percent
Southern California (Five-County Region)	16,373,645	17,877,006	19,619,384	3,245,739	19.8	1.0
Counties						
Los Angeles County	9,519,338	9,818,605	9,992,236	472,898	4.9	0.2
Orange County	2,846,289	3,010,232	3,185,516	339,227	11.9	0.5
Riverside County	1,545,387	2,189,641	2,422,847	877,460	56.8	2.8
San Bernardino County	1,709,434	2,035,210	2,183,239	473,805	27.7	1.4
Ventura County	753,197	823,318	843,310	90,113	12.0	0.6
Local Jurisdictions						
City of Los Angeles	3,694,820	3,792,621	3,895,836	201,016	5.4	0.2

Source: AFF 2023a, b

4.2.2 Employment

Employment in the five-county region in 2021 (Table 4-2) totalled approximately 8.4 million jobs (CA EDD 2023). The largest employment sectors are retail trade, manufacturing, health care and social services, administrative support and waste services, and accommodation and food services, which combined account for approximately 60 percent of employment in the region. Between 2000 and 2016, employment increased by approximately 13 percent, an annualized rate of 0.8 percent. That low rate of increase is attributable to job losses during the 2008-2009 recession. Employment in the five-county region is forecasted to expand over the next decades (Table 4-3), increasing by approximately 14 percent by 2045. Growth is forecasted to be particularly strong in San Bernardino and Riverside counties, where employment is expected to increase by around 30 percent by 2045 in the transportation and warehousing industry sector (SCAG 2020). Unemployment rates in the region have fluctuated substantially between 2000 and 2021, from 5-6 percent in the early 2000s to over 10 percent in 2010, down to 4-5 percent in 2016-2017, back up to nearly 20 percent in early 2020 (BLS 2023) as a consequence of the COVID-19 pandemic, and down to approximately 8 percent in 2021 (CA EDD 2023) as the economy began to recover from the pandemic.

The employment generated by cargo activity at the Port's marine terminals falls largely into the Southern California Association of Governments (SCAG)'s transportation and warehousing category. A study commissioned by the Port in 2007 found that approximately 43,000 jobs were directly generated by Port activity (Martin and Associates 2007); the 2021 figure is likely somewhat higher, given the growth in cargo volumes since 2007. The study found that approximately 40 percent of those employees resided near the Port (i.e., Wilmington, San Pedro, and Long Beach) and another 50 percent elsewhere in Los Angeles County.

Table 4-2: Employment by County (2021)

County	Labor Force	Employed	Unemployed	Rate
Los Angeles	4,993,500	4,547,600	445,900	8.9%
Orange	1,560,700	1,467,300	93,400	6.0%
Riverside	1,133,000	1,050,000	83,000	7.3%
San Bernardino	992,200	918,600	73,600	7.4%
Ventura	407,500	382,200	25,200	6.2%
Southern California (Five-County Region)	9,086,900	8,365,700	721,100	7.9%

Source: CA EDD 2023

Table 4-3: Total Employment Projection by County (2030–2045)

	2030	2045
Southern California (Five-County Region)	9,201,000	9,919,000
County		
Los Angeles County	5,060,000	5,382,000
Orange County	1,886,000	1,980,000
Riverside County	961,000	1,243,000
San Bernardino County	926,000	1,064,000
Ventura County	369,000	389,000

Source: SCAG 2020

4.2.3 Income

The 2017-2021 average of median household income (income received by all members of a household, 16 years old and over) reported by the U.S. Census Bureau (2023) for Los Angeles County was $76,367. Riverside and San Bernardino counties had similar values, while the value for Orange County was $100,485 and for Ventura County was $94,150.

4.2.4 Housing

Residential housing construction in California varies considerably over time in response to local, regional, and national economic conditions and trends. For example, in California as a whole, permits for new private housing have ranged from over 20,000 per month in 1988-1989 to approximately 2,700 per month in mid-2009 (associated with the recession of 2008-2009), and in 2021 averaged approximately 10,000 permits per month (Federal Reserve St Louis 2023). This long-term, state-wide temporal pattern is generally true for the five-county region, as well.

The share of new housing in the five-county region accounted for by each county has also varied over time as population growth and economic factors have driven new settlement. In 2021, however, Los Angeles County accounted for approximately half of the new housing units authorized in the five-county region (US Census Bureau 2022).

Residential property values in the five-county region have generally risen over time since 2010, following the 2008-2009 recession (LAEDC 2015). In 2021, the median listing price for homes for sale in Los Angeles County was $718,521 (LAEDC 2021).

4.3 Effects Related to Socioeconomics

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

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. Evidence of economic and social impacts that do not contribute to or are not caused by physical changes in the environment is not substantial evidence that the project may have a significant effect on the environment (CEQA Guidelines §§15064(e) and (f)(6) and §15131). Therefore, the potential for physical changes as a result of socioeconomic changes are 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.

4.3.1 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. 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 within the five-county Southern California region.

4.3.1.1 CEQA Baseline

The CEQA baseline represents the setting at a fixed point in time. The CEQA baseline differs from the No Project Alternative (Alternative 1) in that the No Project Alternative (Alternative 1) 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. For this analysis, the No Project Alternative (Alternative 1) and the CEQA baseline are functionally identical because the No Project Alternative (Alternative 1) does not envision any growth or other activity at the site.

As described in Section 2.6, calendar year 2021 is the baseline used in this Draft Environmental Impact Report (Draft EIR). In 2021, throughput at the Phillips 66 Marine Oil Terminal (MOT) (Table 2-1) totaled approximately 6.4 million barrels of product conveyed by 15 oceangoing tanker ships and 276 tanker barge calls and 1,605 truck trips, and eight direct jobs.

4.3.1.2 Proposed Direct, Indirect, and Induced Jobs

The new jobs associated with the construction and operation of the Proposed Project 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, direct jobs are those jobs created by

operational activities that would not exist if the Proposed Project did not occur, indirect jobs are created throughout the region as the result of purchases of goods and services by the firms directly impacted by the Proposed Project, and induced jobs are jobs created in the region by the purchases of goods and services by those individuals directly employed by the Proposed Project.

The employment effects of the Proposed Project relative to construction are presented in terms of direct and secondary (indirect and induced) one-year-equivalent jobs during the construction period.

The employment effects of the Proposed Project relative to operation are presented in terms of direct and secondary one-year-equivalent jobs at full operation in 2027.

4.3.1.3 Economic Modeling

Construction and Operational Impacts: IMPLAN Model

The economic impact analysis of the Proposed Project was prepared using the IMPLAN model to evaluate potential changes in regional economic activity. Originally developed by the U.S. Department of Agriculture, the IMPLAN model is a widely used model employed to assess the regional economic impacts of private and public projects. IMPLAN is an input-output model in which 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 (indirect purchases).

Creating input-output models requires a tremendous amount of data, and the costs of deriving that data directly 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 (MIG 2011) and the rectangular format recommended by the United Nations.

The IMPLAN model used by LAHD is based on 2016 data for the five-county region (Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties). 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 noted that the model results represent a snapshot at a specific time. In this case, the technical coefficients are based on 2016 data, and because the relationships between industries in an economy change and their dependencies on each other shift, those results are an approximation of future conditions.

4.3.1.4 Thresholds of Significance

CEQA Guidelines §15131 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.

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 Proposed Project or alternatives, this issue is not discussed further, and the following criteria are evaluated here:

1. *Direct or Indirect Inducement of Substantial Population Growth:* The Proposed Project/alternative would have a socioeconomic effect if it would induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
2. *Changes to the Local Employment or Labor Force:* The Proposed Project/alternative would have a socioeconomic effect if it would cause substantial change in the local employment or labor force.
3. *Property Values:* The Proposed Project/alternative would have a socioeconomic effect if it would cause a substantial decrease in property values.

4.4 Socioeconomic Effects of the Proposed Project and Alternatives

4.4.1 Proposed Project

The analysis of potential effects of the Proposed Project includes the construction phase (2024-2029) and the operational phase (2027-2067). (As described in Section 2.5.1, these assumed dates are for analytical purposes only and mean that the analysis is conservative, as a later start date would result in cleaner construction and operational equipment being used.) The Proposed Project (see Section 2.5 for more detail) would construct and operate a new, MOTEMS-compliant berthing facility at Berths 150-151. Landside facilities, including piping, vapor recovery systems, support systems, and tankage, would be modified and upgraded. The existing wharf at Berths 148-149 would be used as an MOT while the new facilities at Berths 150-151 are being built, and its future uses would be limited to non-MOT uses.

Effects associated with construction and operation of the Proposed Project would be experienced mostly in the five-county Southern California region, and it is this geographical area for which effects are evaluated.

Construction of the Proposed Project is assumed to commence in 2024 and last approximately six years, during which time labor would be employed and purchases of materials, supplies, services, and equipment would occur. The first year of Proposed Project operation would begin in 2027, assumed to be at the full capacity of approximately 23.8 million barrels of product per year.

4.4.1.1 Effects on Employment

Construction of the Proposed Project would involve up to 26 construction workers on-site at any one time. The IMPLAN model estimates that construction would generate an estimated 80 direct and another 56 indirect and induced (i.e., secondary) one-year-

equivalent jobs during the construction period. Those jobs would represent much less than 0.01 percent of the approximately 8.4 million jobs in the five-county region in 2021 (Table 4-2). The construction workforce would likely be composed entirely of people already living in Los Angeles and Orange Counties, 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 residence. Most of the indirect workforce would likely come from within the five-county region. The Proposed Project, therefore, is not anticipated to result in either in-migration or relocation of construction employees to satisfy the need for increased temporary, construction-related employment.

The Proposed Project is estimated to support a total of eight direct jobs at full operation. Linkages among economic sectors would result in the creation of five additional secondary (indirect and induced) jobs in related sectors. Accordingly, at full operation the Proposed Project's - employment would represent much less than 0.01 percent of the projected regional employment of nearly 10 million in 2045 (Table 4-3). As with the construction workforce, the operational workforce would come largely from Los Angeles County, similar to employees already working at the facility, and no substantial influx of employees into the local communities is anticipated.

4.4.1.2 Effects on Local Businesses

Existing businesses in the vicinity of the of the project site include the TraPac container terminal to the north, the Shell and Rio Tino terminals to the east, the Evergreen terminal to the south, and the Yang Ming and China Shipping terminals to the west. None of the adjacent or nearby businesses would be adversely affected by construction of the Proposed Project, which would occur entirely at Berth 148-151. Construction would not cause any loss of revenues or increased costs to those entities. Similarly, operation of the Proposed Project would not adversely affect the operations of nearby businesses because the only off-site activity would be truck traffic on established roads.

4.4.1.3 Effects on Population

The Proposed Project does not include the construction of new housing or infrastructure that would directly induce population growth. Therefore, no shifts in residential population would be expected as a result of the Proposed Project. Because construction workers tend to commute to job sites they are unlikely to relocate as a result of the Proposed Project. Operation of the Proposed Project would continue with the existing on-site workforce and would not result in an increase of direct employment at the site.

4.4.1.4 Effects on Housing and 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 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 discussed above, the effects of this economic growth would not substantially affect employment levels or population distribution in the local area and region. Given the large size of the existing workforce in the area, it is anticipated that the

most if not all workers would already be living in the area, meaning that there would be no substantial relocation of workers and families and that no measurable change in population distribution is likely to occur as a result of the Proposed Project. Accordingly, 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.

Because of the small number of jobs relative to regional employment, the Proposed Project would not change residential property trends in the areas immediately adjacent to the Port or in the region. 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.

Since implementation of the Proposed Project would not induce substantial population growth directly or indirectly, substantially change local employment, or cause a substantial change in local property values, no physical changes to adjacent communities are anticipated as a result of the Proposed Project. The overall economic effects of the Proposed Project locally and on the Southern California region would be insubstantial.

4.4.2 Analysis of Alternatives

Under the No Project Alternative (Alternative 1), no construction would occur. Because the facility would not be MOTEMS-compliant, the tenant (Phillips 66) would cease operations and termination clauses associated with existing entitlement would be carried out. Accordingly, there would be no construction or operational jobs. Changes in employment would occur, but because those changes would be small relative to regional employment and population, the No Project Alternative (Alternative 1) would have no substantial adverse socioeconomic effects on population growth, jobs, or housing in the region.

Under the Reduced Project Alternative (Alternative 2; see Section 2.7.1.2) all of the elements of the Proposed Project described above would be built with the exception of the refurbishment of 11 idle storage tanks. Project operations would remain the same as described for the Proposed Project. Construction employment and spending would be very similar to the Proposed Project, and operational throughput and employment would be the same as the Proposed Project. Accordingly, as with the Proposed Project, the Reduced Project Alternative (Alternative 2) would not induce substantial direct or indirect population growth and would not change residential property trends in the region.

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