

The Local and Regional Economic Impacts of the Port of Hueneme



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I. INTRODUCTION AND OVERVIEW

The Port of Hueneme, located in Ventura County, California, is one of eleven California deep water seaports. Located just 60 miles north of Los Angeles, the Port of Hueneme is the only deep water-draft port located between Los Angeles and the San Francisco Bay. The Port of Hueneme is located on 120 acres and has 6 berths, offering 4,250 Linear Feet of berth space. There is also a shallow draft berth, 320 Linear Feet in length. The Port of Hueneme and the U.S. Navy share one berth measuring 1,000 Linear Feet used by Roll-on Roll-off vessels calling the Port of Hueneme. The main channel has a maximum draft of 35 feet.

The Port of Hueneme has direct access to and from highway 101 via Hueneme Road and Rice Avenue. Highway 101 connects to the 126, 232, 118 and 405 transportation corridors. Convenient near dock rail connects to the Union Pacific Railroad in downtown Oxnard to and from destinations throughout North America via a 12-mile loop of track operated by Genesee and Wyoming Railroad.

The Port of Hueneme marine terminals handle automobiles, containerized cargo (primarily fruit imported by Chiquita and Del Monte), break bulk fruit, and general cargo such as project cargo, military cargo and liquid fertilizer. The automobiles include imported Hyundai, Kia, BMW, Jaguar, Volvo, and Mitsubishi vehicles that are received and processed at the automobile processors located at the Port. The vehicles then move by truck and to a lesser degree rail to auto dealers, both local and regional dealers, as well as dealers throughout the western states. Exported autos are also handled at the Port. These vehicles arrive at the Port by truck and rail, are processed, and then loaded onto vessels for the voyage to Asia.

The Port of Hueneme is the leading West Coast port handling bananas. Chiquita and Del Monte import more than 30 million boxes of bananas annually. Bananas as well as other fresh fruits arrive at the Port in containers as well as in break bulk form. At the Port the bananas and fresh fruit are stored in temperature controlled warehouses, and then distributed to local and regional grocery stores and distribution centers. Containerized bananas are transloaded from the marine containers into temperature controlled domestic truck trailers for delivery to the retail outlets.

In addition, the Port is home to Oxnard Unloading handling squid and fish for Monterey, SoCal and Suncoast fish companies. OST Truck and Crane and T&T Truck and Crane provide support to oil platforms in the Santa Barbara channel by loading support vessels with equipment and supplies at the Port of Hueneme. Irwin Industries fabricates equipment and pieces for the off-shore oil platforms located in the Santa Barbara Channel. In fiscal year 2015, about 1.5 million tons of ocean cargo moved via these terminals and were produced and consumed by exporters and importers located within the metropolitan region, the state of California, as well as throughout the Southwest and the Western States. In addition to ocean freight, the Port of Hueneme handled 55,511 tons of offshore oil equipment and supplies, 15,825 tons of fish, and 12,823 tons of vessel fuel. It is the purpose of this study to quantify the regional economic impacts generated by the cargo and vessel activity at the Port of Hueneme marine

terminals.

Each stage of the import and export process, from the vessel entering or leaving the port, the discharge and loading of cargo, the handling of the cargo on the port terminals, and the inland transportation of an import or export cargo, creates local economic activity. It is the purpose of this report to quantify the economic impacts supported by the cargo and vessel activity at the Port of Hueneme. Martin Associates was retained by the Oxnard Harbor District to measure the local and regional economic impacts generated by maritime activity at the Port's marine terminals. It is to be emphasized that all cargo considered in this analysis is handled at facilities owned and leased by the Port of Hueneme. Impacts are estimated in terms of jobs, personal earnings, business revenue and state and local taxes. The impacts are estimated for marine cargo activity in fiscal year 2015. In addition to the baseline impact estimates, a computer model specific to the Port's marine terminals has been prepared which can be used in evaluating the sensitivity of impacts to changes in tonnage, labor productivity, labor work rules, commodity mix, inland origins/destinations of commodities and vessel size. The model can also be used to evaluate the impacts of new terminal development, navigational projects, new markets, and to rank master plan investment projects.

This chapter presents an overview of the economic impact analysis by defining the following:

- The types of economic impacts estimated;
- The economic sectors for which impacts have been estimated; and
- The commodities/commodity types for which impacts have been estimated.

In addition, a summary of the data sources used in the analysis is presented.

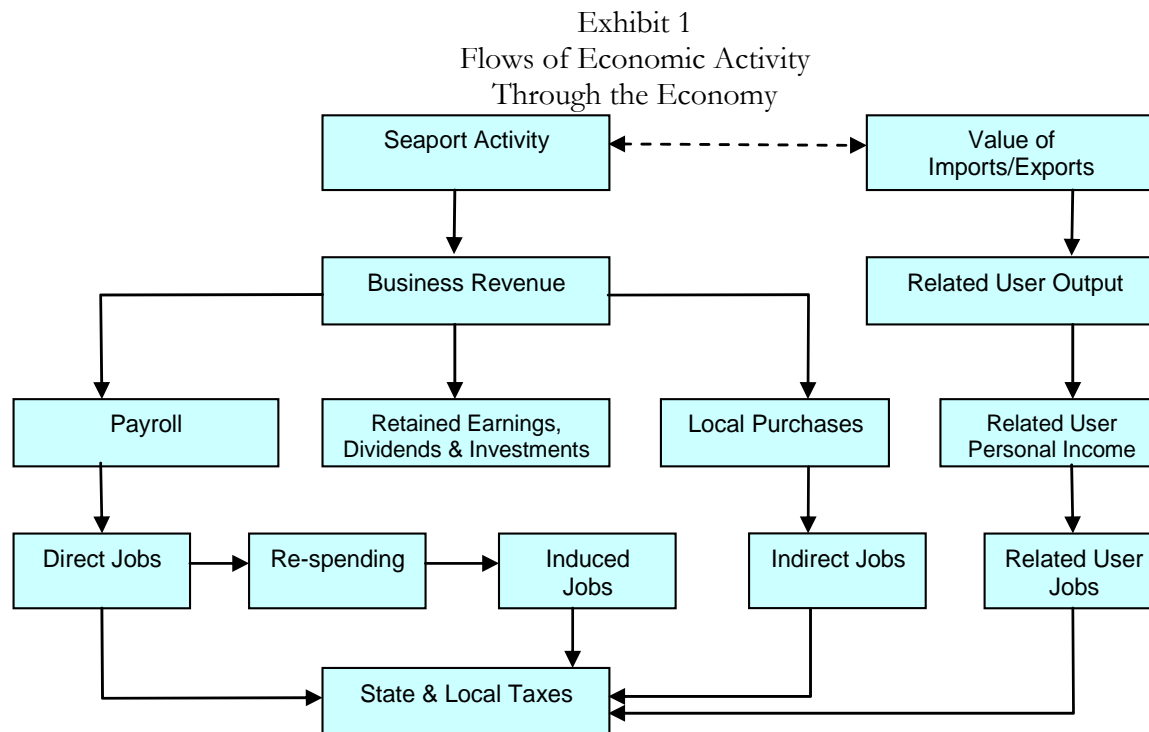
1. ECONOMIC IMPACT STRUCTURE

A deep water port such as the Port of Hueneme contributes to the local, regional, and national economies by providing employment and income to individuals, tax revenues to local and state governments, customs fees to the federal government, and revenue to businesses engaged in handling, shipping and receiving cargo via the port. Exhibit 1 illustrates the flows of economic impacts throughout the economy. As this exhibit shows, activity at a seaport (i.e., the handling of cargo and the servicing of vessels) initially creates business revenue to firms providing those cargo handling and vessel services. This revenue is in turn used for several purposes:

- To hire employees to provide the services;
- To pay stockholders dividends, retire debt, and invest;
- To buy goods from other firms; and
- To pay federal, state and local taxes.

The hiring of employees generates personal income. This personal income is spent throughout the local, state and national economy to purchase goods and services. This re-spending of income is known as the multiplier effect, which in turn creates induced jobs throughout the economy. Finally, state and local taxes are paid by those employed due to port activity.

As can be seen from Exhibit 1, the flow of economic impacts throughout an economy creates four separate and non-additive types of impacts.



These four types of impacts are:

- Employment Impact - the number of full-time equivalent jobs generated by activity at the Port of Hueneme marine terminals. This consists of jobs directly generated by port activity as well as induced jobs, or jobs created in-state due to the purchase of goods and services by those individuals directly dependent upon port activity. In addition, indirect jobs, or those jobs generated in the local economy due to the local purchases of goods and services by firms directly dependent upon maritime activity in the marine terminals are also measured as part of the employment impact;
- Personal Income Impact - the level of payroll/earnings associated with the jobs created by port

activity, and adjusted to reflect re-spending throughout the economy;

- Revenue Impact - the sales generated by firms engaged in handling and transporting cargo through the Port of Hueneme marine terminals. This impact includes national as well as local and state revenue. The value of shipments through the Port is not included as a direct revenue impact for the purpose of this analysis; and
- Tax Impacts - the state and local tax revenues generated by port activity. These are taxes paid by individuals and firms directly dependent upon the maritime activity.

In addition to the direct, induced and indirect impacts, the seaport activity also supports activity with regional exporters and importers using the Port of Hueneme marine terminals. These impacts are classified as *related user impacts* in that the exporters and importers using the marine terminals can and do use other ports for the shipment and receipt of cargo. The influenced impacts measure the impact, or influence, of the Port's marine terminals at a given point in time, and if the Port's terminals were no longer used, these influenced users would use other ports to export and import cargo. Unlike the direct, induced and indirect impacts, the related impacts would not necessarily be dislocated from the economy – instead, the impacts would no longer be influenced by the Port of Hueneme, but by another port.

The Port of Hueneme marine terminals generate economic activity in various business sectors of the state and local economy. The following economic sectors are involved in providing cargo and vessel handling services at the Port of Hueneme. These are the:

- Surface Transportation Sector;
- Maritime Service Sector;
- Shippers/Consignees using the Port;
- Port Tenants; and
- Port of Hueneme/Oxnard Harbor District employees.

Within each sector, various participants are involved. Separate impacts are estimated for each of the participants. A discussion of each of the economic impact sectors is provided below, including a description of the major participants in each sector.

(1) The Surface Transportation Sector

The surface transportation sector consists of both the railroad and trucking industries. These sectors are responsible for moving the various cargoes between the terminals and their inland origins and destinations. The railroads are most involved in moving exported autos to the Port.

Many local and national trucking firms serve the marine terminals at the Port of Hueneme, as do numerous individual owner-operators. The trucking industry's major involvement is in moving containerized bananas and fruit to grocery distribution centers, delivering the imported autos to the dealers, and moving export autos from the rail head in Mira Loma to the marine terminals. Also, trucks are used in moving fertilizer received at the Ports' marine terminals to the region's farming community.

(2) The Maritime Service Sector

This sector consists of numerous firms and participants performing functions related to the following maritime services:

- Cargo Marine Transportation;
- Vessel Operations;
- Cargo Handling; and
- Federal, State, and Local Government Agencies.

A brief description of the major participants in each of these categories is provided below:

- Cargo Marine Transportation - Participants in this category are involved in arranging for inland and water transportation for export or import freight through the Port of Hueneme marine terminals. The freight forwarder/customhouse broker is the major participant in this category. The freight forwarder/customhouse broker arranges for the freight to be delivered between the marine terminals and inland destinations, as well as the ocean transportation. This function performed by freight forwarders and customhouse brokers is most prevalent for general cargo commodities. For bulk cargo, arrangements are often made by the shipper/receiver.
- Vessel Operations - This category consists of several participants. The steamship agents provide a number of services for the vessel as soon as it enters the Port; the agents arrange for pilot services and towing, for medical and dental care of the crew, and for ship supplies. The agents are also responsible for vessel documentation. In addition to the steamship agents arranging for vessel services, those providing the services include:
 - Chandlers - supply the vessels with ship supplies (food, clothing, nautical equipment, etc.);
 - Pilots - provide navigation services to ensure safe transit of vessels between the harbor entrance and docks;

- Towing firms - provide the tug service to guide the vessel to and from the marine terminals;
- Bunkering firms - provide fuel to the vessels;
- Marine surveyors - inspect the vessels and the cargo;
- Launch services - provide transportation for the crew between land and vessel;
- Shipyards/marine construction firms - provide repairs, either emergency or scheduled, as well as marine pier construction and dredging. Also included in this category are one-time impacts generated by the construction/repair of marine facilities.
- Cargo Handling - This category involves the physical handling of the cargo at the terminals between the land and the vessel. Included in this category are the following participants:
 - Longshoremen - are members of the International Longshore and Warehouse Union, and are involved in the loading and unloading of cargo from the vessels, as well as handling the cargo prior to loading and after unloading;
 - Stevedoring firms - manage the longshoremen and cargo-handling activities;
 - Terminal operators - are often stevedoring firms who operate the maritime terminals where cargo is loaded and off-loaded;
 - Warehouse operators - store cargo after discharge or prior to loading and consolidate cargo units into shipment lots. Also included in the warehousing operations are container freight station operations, where containerized cargoes such as bananas are devanned from the marine containers and reloaded into domestic trucks for further distribution to grocery distribution centers;
 - Container leasing and repair firms - provide containers to steamship lines and shippers/consignees and repair damaged containers;
 - Container consolidators - consolidate containerized cargo as well as full containers in order to achieve favorable transportation rates for their customers;
 - Automobile service firms - service new automobiles after they are off-loaded from the vessels and are often terminal operators as well. These firms also provide processing services;

- Government Agencies - This service sector involves federal, state and local government agencies that perform services related to cargo handling and vessel operations at the Port. U.S. Customs, Bureau of Immigration, U. S. Coast Guard, U.S. Department of Labor, U.S. Department of Agriculture, and U.S. Department of Commerce employees are involved.

(3) Shippers/Consignees

Two categories of shippers and consignees were considered in the analysis: those that are totally dependent on the use of the marine terminals and located in proximity to the terminals, and those located throughout the Southwestern California region and other West Coast states whose business is only influenced by the cargo and vessel activity in the Port's marine terminals. Those in the first category would most likely shut down operations if the marine terminals were not available for their use, while those in the second category would ship or receive materials via another port, and are considered influenced shippers/consignees or port users.

(4) Port Tenants

Port Tenants are tenants of the Port of Hueneme that are not involved in commercial marine cargo activity moving via the Port but are dependent on the water location of the Port land. These tenants include OST Truck & Crane, T&T Truck and Crane, Irwin Industries and Oxnard Unloading.

(5) Port of Hueneme/Oxnard Harbor District

The Port of Hueneme/Oxnard Harbor District includes those individuals employed by the Port of Hueneme whose purpose is to oversee port activity.

2. COMMODITIES INCLUDED IN THE ANALYSIS

A major use of an economic impact analysis is to provide a tool for port development planning. As a port grows, available land and other resources for port facilities become scarce, and decisions must be made as to how to develop the land and utilize the resources in the most efficient manner. Various types of facility configurations are associated with different commodities. For example, automobiles require a large area for storage; break bulk fresh fruit requires temperature controlled warehouses; containerized cargo requires outside storage and terminal handling equipment, while liquid bulk cargoes require tanks for storage.

An understanding of the commodity's relative economic value in terms of employment and income to the local community, the cost of providing the facilities, and the relative demand for the

different commodities is essential in making future port development plans. Because of this need for understanding relative commodity impacts, economic impacts are estimated for the following commodities handled via the marine terminals:

- Containerized cargo;
- Automobiles;
- RoRo;
- Miscellaneous break bulk cargoes such as project cargo and military cargo;
- Break bulk fresh fruit; and
- Fertilizer.

It should be emphasized that commodity-specific impacts are not estimated for each of the economic sectors described in the last section. Specific impacts could not be allocated to individual commodities with any degree of accuracy for the marine construction and the government sectors.

3. DATA COLLECTION

This Economic Impact Study of the maritime cargo activity at the Port of Hueneme marine terminals is based on personal and telephone interviews with members of each of the economic sectors. Participants were identified from the Port of Hueneme Directory of Service Providers. Further participants were provided through interviews with tenants and terminal operators during the interview process. Telephone and personal interviews were used to achieve a 100 percent response rate in all sectors. A total of 47 firms were interviewed.

In addition to data collected from the 47 interviews, published data was collected from several sources. These publications include:

- Census of Wholesale Trade;
- Census of Retail Trade;
- Census of Construction;
- Census of Service Industries; and
- Annual Survey of Manufacturers.

Other published data was obtained from the U.S. Bureau of Census, County Business Patterns; U.S. Bureau of Economic Analysis, Regional Income Division; and U.S. Bureau of Labor Statistics, "Consumer Expenditure Survey, 2013-2014".

The economic relationships and methodology have been modeled using Microsoft Excel software. This model has been designed to update the port impact assessment on an annual basis, as well as to test sensitivities of impacts to changes in commodity tonnage, labor productivity, labor work

rules, vessel calls (by type of vessel), pilotage and tug assist assumptions. Also, the model is designed to test the impacts of new facilities development and new markets.

The impacts of the Port of Hueneme marine terminals are summarized in Table E-1.

Table E-1
Economic Impacts of the Port of Hueneme Marine Terminals
Fiscal Year 2015

	ECONOMIC IMPACTS
JOBS	
DIRECT	2,524
INDUCED	2,651
INDIRECT	<u>1,239</u>
TOTAL	6,415
PERSONAL INCOME/LOCAL CONSUMPTION (\$1,000)	
DIRECT	\$142,146
RE-SPENDING/LOCAL CONSUMPTION	\$328,898
INDIRECT	<u>\$61,562</u>
TOTAL	\$532,606
BUSINESS REVENUE (\$1,000)	\$344,255
STATE AND LOCAL TAXES (\$1,000)	\$60,717
LOCAL PURCHASES (\$1,000)	\$138,530
RELATED USER IMPACTS	
USER JOBS	7,218
TOTAL VALUE OF OUTPUT (\$1,000)	\$848,569
USER INCOME (\$1,000)	\$284,777
USER STATE/LOCAL TAXES (\$1,000)	\$32,465

In fiscal year 2015, the Port of Hueneme supported 13,633 jobs in the state of California. Of these jobs, 2,524 jobs are directly created by port activities, while another 2,651 induced jobs are generated in the Hueneme area as a result of local purchases made by those directly employed due to port activity. In addition, there are 1,239 indirect jobs supported in the Port Hueneme area as the result of \$138.5 million of local purchases by directly dependent firms. In addition, the cargo moving via Port of Hueneme terminals supports 7,218 related jobs throughout the state of California.

The 2,524 direct jobs received \$142.1 million of direct wage and salary income, for average earnings of \$56,315 per direct employee. As a result of local purchases with this \$142.1 million of direct wages and salaries, an additional \$328.9 million of income and local consumption expenditures were created in the state. It is this re-spending impact that supported the 2,651 induced jobs.¹ The indirect jobs holders received \$61.6 million in personal income. In total, \$817.4 million of personal income was supported by marine cargo operations at the Port of Hueneme, including the \$284.8 million received by those employed with the related users of the marine terminals.

Local businesses received \$344.3 million of sales revenue from providing services to the ocean cargo activity. As a result of the cargo activity at the Port of Hueneme, a total of \$60.7 million of state and local tax revenue was generated.

The total economic value of the marine cargo and vessel activity at the Port of Hueneme including the revenue and value added at each stage of moving an export to the Port or an import from the marine terminals is estimated at \$1.5 billion. The total economic value consists of monetary measures that are independent of each other and combining these measures does not result in double counting of the impacts. This includes the \$344.3 million of direct business revenue received from businesses providing cargo and vessels services at the port and moving the cargo to and from inland destinations and origins; \$328.9 million of re-spending and local personal consumption impact; and the \$848.6 million of value of output supported by the related users. This \$848.6 million includes the revenue and value added at each stage of production, including support firms providing goods and services during the production of the export. The total economic value with users of import cargo includes the economic value of the imported cargo moving through the seaport to final consumption either by individuals or industry. It is to be emphasized that the \$848.6 million of output with related users would not disappear from the U.S. economy should the cargo move through another port, as it is the demand for the export and import cargo that drives the value of the cargo and generates the user economic value. If the cargo were to move to another port, the logistics cost of moving the imports and exports would increase, but the value would still be generated in other regions and/or other states due to the demand for the export and import products; however, the \$344.3 million of direct business revenue and the \$328.9 million of re-spending and local consumption expenditures would be lost from the local economy. The related economic value demonstrates at a given point of time, the magnitude of the influence of the Port of Hueneme public and private marine terminals. It is to be emphasized that these components of the total economic value are non-additive.

¹The induced income impact also includes local consumption expenditures and should not be divided by induced jobs to estimate the average salary per induced job. This re-spending throughout the region is estimated using a regional personal earnings multiplier, which reflects the percentage of purchases by individuals that are made within the state. Hence, the average salary would be overestimated.

The last economic impact study of the Port of Hueneme was conducted in 2012 by Martin Associates and uses the same methodology as this current study. Therefore, direct comparisons can be made. Between 2012 and 2015, cargo activity at the marine terminals increased by 271.1 thousand tons. As a result, the overall economic impact of the port operations increased. Direct, induced and indirect jobs grew by 791 jobs; total supported jobs grew by 4,185 direct, induced, indirect and related jobs; and overall economic value of the Port grew from \$1.0 billion in 2012 to \$1.5 billion in 2015.

The fact that the Port of Hueneme continues to increase its importance in the local economy as a major source of job creation, particularly of jobs with an average annual salary of \$56,315, underscores the importance of the Port as a major catalyst in Ventura County and the state of California economies. In order to sustain this growth as an economic engine, it is critical that the Port continues to invest in terminal, rail and highway access infrastructure to meet future demand, and to continue to attract tenants to stimulate further economic development in Southern California. This suggests that the future growth of the Port will result in further job, income and tax growth for the region.

II. EMPLOYMENT IMPACTS

In this chapter, the employment generated by maritime activity at the Port of Hueneme marine terminals is documented. The chapter is organized as follows:

- First, the total employment that is in some way influenced by the activities at the Port of Hueneme marine terminals is estimated;
- Second, the subset of total employment that is judged to be totally dependent on maritime activity is analyzed in the following ways:
 - ✓ Direct jobs are estimated in terms of key economic sectors, e.g., surface transportation sector;
 - ✓ Direct jobs are estimated for each of the key commodities/commodity groups;
- Third, the direct jobs are estimated by place of residence;
- Fourth, induced jobs generated by local purchases made by those directly employed as a result of port activity are described;
- Fifth, indirect jobs created by local purchases by the firms directly dependent on maritime activity at the Port of Hueneme are defined;
- Finally, jobs influenced by the cargo activity are discussed.

The impacts presented in this chapter are for fiscal year 2015.

1. TOTAL EMPLOYMENT IMPACT

It is estimated that 13,633 jobs are in some way supported by the maritime cargo activity at the Port of Hueneme marine terminals:

- 2,524 direct jobs are generated by cargo moving over Port of Hueneme marine terminals. These jobs are classified as direct jobs and if activity at the Port of Hueneme marine terminals were to cease, these jobs would be discontinued over the short term.
- 2,651 residents are employed by providing goods and services to the 2,524 individuals directly involved with marine cargo activity. Consequently, employment in this group is as directly dependent upon port activity as the first group.

- Firms directly dependent on maritime activity at the marine terminals made \$138.5 million of local purchases for office supplies, parts and equipment, maintenance and repair services, business services, utilities, communications services and fuel. These local purchases supported 1,239 indirect jobs in the local economy.
- An additional 7,218 jobs are with firms that ship and receive cargo via the marine terminals. These jobs are considered to be influenced by activities at the marine terminals, but the degree of dependency on the Port of Hueneme marine terminals is difficult to estimate. The majority of these influenced jobs are related to the retail and wholesale distribution of containerized fruit and break bulk fresh fruit; also, jobs with retail auto dealers selling the imported automobiles are included. If the marine terminals were not available to these organizations, they would suffer an economic penalty over the longer term. Such a penalty would vary from a loss of employment opportunities in some cases, to an increase in total transportation costs in other cases, which could in turn, result in employment reductions.

The next section of this chapter is dedicated to the direct impact category of the 2,524 direct jobs for Port Hueneme area residents.

2. DIRECT JOB IMPACTS

As a result of cargo and vessel activity, 2,524 full-time jobs were directly created by activity at the Port of Hueneme marine terminals.

In this section the direct jobs are analyzed in terms of:

- Distribution by economic sector;
- Distribution by commodity group; and
- Distribution per ton.

These distributions are developed in more detail below.

2.1 Job Impacts by Sector

Table II-1 presents the distribution of the 2,524 direct jobs by job category. As this table shows, the largest job impacts are with truckers moving the automobiles and containerized and break bulk fruit handled at the marine terminals; followed by the terminal operators, including auto processors and warehousing activity. Port tenants make up the third largest job impacts by category followed by members of the International Longshore and Warehouse Union handling the cargo from vessel to land.

Table II-1
Employment Impacts by Job Category

IMPACT CATEGORY	DIRECT JOBS
SURFACE TRANSPORTATION	
RAIL	16
TRUCK	778
SUBTOTAL	794
MARITIME SERVICES	
TERMINALS/WAREHOUSE	697
ILWU	290
TUG ASSISTS/PILOTS	11
MARITIME SERVICES/AGENTS/CONSTRUCTION	36
FORWARDERS	50
GOVERNMENT	23
SUBTOTAL	1,107
TENANTS	596
PORT AUTHORITY	28
TOTAL	2,524

Totals may not add due to rounding

2.2 Job Impacts by Commodity

Most of the 2,524 jobs considered to be generated by port activity can be related to the handling of specific commodities or commodity groups. Employment with certain types of firms and organizations such as local, state and federal government agencies, marine construction firms, and the dependent non-cargo related Port tenants are not assigned to a specific commodity group. As a result, employment in these groups (675) was not allocated to commodity groups. Table II-2 presents the

direct employment impacts in terms of commodity/commodity group.

Table II-2
Distribution of Direct Job Impact by Commodity

COMMODITY	JOBS
CONTAINERS	363
AUTOMOBILES	1,093
OTHER VEHICLES	38
BANANAS BREAK BULK	209
FRESH FRUIT	50
GENERAL CARGO	69
LIQUID BULK FERTILIZER	27
NON-ALLOCATED	675
TOTAL	2,524

This table indicates that in fiscal year 2015, the handling of autos created the largest number of direct jobs, 1,093 jobs, followed by the handling of containerized cargo. The handling of break bulk bananas and break bulk fresh fruit created 209 and 50 direct jobs respectively.

Automobiles, containerized cargo and break bulk fresh fruit and bananas tend to generate the greatest employment impacts among firms in the maritime service sector, such as with longshoremen, terminal operators/warehousing and processing and stevedoring firms. In contrast, the majority of impacts generated by liquid fertilizer are concentrated with ground transportation.

2.3 Job Impacts per Ton

The assessment of the job impacts on a per ton basis provides a tool for port planners to use in evaluating the relative importance of different commodities as economic generators. Table II-3 shows the direct job impacts per 1,000 tons for each commodity moving via the Port of Hueneme marine terminals. The handling of automobiles generates the greatest direct jobs on a per 1,000 ton basis, which reflects the number of autos handled at the Port of Hueneme and the labor intensive processing associated with the automobiles, followed by break bulk fresh fruit, other vehicles and containerized cargo. Liquid bulk fertilizer produces the lowest jobs per 1,000 tons reflecting the less-labor intensive requirements to unload a vessel.

Table II-3
Job Impacts per 1,000 Tons

COMMODITY	JOBS PER 1,000 TONS
CONTAINERS	0.71
AUTOMOBILES	3.40
OTHER VEHICLES	0.87
BANANAS BREAK BULK	0.85
FRESH FRUIT	0.98
GENERAL CARGO	0.39
LIQUID BULK FERTILIZER	0.20

3. GEOGRAPHIC DISTRIBUTION OF DIRECT JOB IMPACTS

The distribution of the direct jobs by place of residence is a useful measure of the geographic importance of the seaport to the local economy. The majority of the firms responding to the interviews provided Martin Associates with the zip code distribution of the residency of their respective workforce. Based on these zip codes, the direct jobs were allocated to specific jurisdictions within Ventura County and the state, based on place of residency.

Table II-4 shows the distribution of the direct jobs by place of residence. Ninety-seven percent of the direct job holders reside in Ventura County, with the majority residing in Oxnard, followed by Ventura and Port Hueneme.

Table II-4
Distribution of Direct Jobs by Place of Residence

MUNICIPALITIES	PERCENT	DIRECT JOBS
PORT HUENEME	16.37%	413
OXNARD	38.57%	973
VENTURA	17.47%	441
CAMARILLO	10.60%	267
THOUSAND OAKS	1.43%	36
MOORPARK	2.52%	64
SIMI VALLEY	1.43%	36
SANTA PAULA	2.13%	54
OJAI	2.13%	54
OTHER VENTURA CO.	4.85%	122
LOS ANGELES CO.	1.56%	39
OTHER CALIFORNIA	0.96%	24
TOTAL	100.00%	2,524

4. INDUCED JOBS

The regional purchases by the 2,524 direct job holders with the direct income earned from port activity creates additional jobs throughout the Port Hueneme area. In fiscal year 2015, \$142.1 million was received by those 2,524 directly employed by activity at the Port's marine terminals. As the result of the re-spending of a portion of this income for purchases in the Port Hueneme area, an additional 2,651 induced jobs were generated in the local economy.

These induced jobs are estimated based on the current expenditure profile of residents in the Port Hueneme area, as estimated by the U.S. Bureau of Labor Statistics, "Consumer Expenditure Survey". This survey indicates the distribution of consumer expenditures over key consumption categories for Port Hueneme area residents. The consumption categories are:

- Housing;
- Food at Restaurants;
- Food at Home;
- Entertainment;
- Health Care;
- Home Furnishings; and
- Transportation Equipment and Services.

The estimated consumption expenditures generated as a result of the re-spending impact is distributed across these consumption categories. Associated with each consumption category is the relevant retail and wholesale industry. Jobs to sales ratios in each industry are then computed for the Port Hueneme metropolitan area, and induced jobs are estimated for the relevant consumption categories. It is to be emphasized that induced jobs are only estimated at the retail and wholesale level, since these jobs are most likely generated in the Port Hueneme metropolitan area. Further levels of induced jobs are not estimated since it is not possible to defensibly identify geographically where the subsequent rounds of purchasing occur.

"The Consumer Expenditure Survey" does not include information to estimate the job impact with supporting business services, legal, social services and educational services. To estimate this induced impact, a ratio of state of California employment in these key service industries to total state employment is developed. This ratio is then used with the direct and induced consumption jobs to estimate induced jobs with business/financial services, legal, educational and other social services.

5. INDIRECT JOBS

The firms directly dependent upon the vessel and cargo activity at the marine terminals made \$138.5 million of purchases from local suppliers of parts and equipment, business services, maintenance

and repair services, communications and utilities, office equipment and fuel. These local purchases supported 1,239 local indirect jobs. If maritime activity at the Port's terminals were to cease, these indirect jobs would also be lost. To estimate these indirect jobs, actual local expenditures by port-dependent firms were estimated from the in-person and telephone surveys. To estimate the indirect jobs, the local expenditures were used as inputs into a regional input-output model developed for the State for Martin Associates by the U.S. Bureau of Economic Analysis, Regional Input-Output Modeling System.

6. RELATED JOBS

Related jobs are jobs with users of the Port of Hueneme marine terminals. These users include local retail and wholesale grocery stores/chains receiving the fruit moving via the Port's marine terminals; and the local auto dealers selling the imported automobiles. It is to be emphasized that these users are related to the Port of Hueneme's marine terminals in that if these facilities were not available, the users could ship and receive cargo via other ports. In fact, the majority of these users currently use multiple ports for export and import. However, if these facilities were not available the users would incur higher transportation costs and could suffer longer term dislocations.

To estimate the related user impact, the average value per ton of each commodity type was estimated using U.S. Bureau of Census, Foreign Trade Statistics as well as price information collected from the terminal operators and importers. Employment to value of output coefficients for the import consuming industries related to the specific import cargo moving via the Port of Hueneme marine terminals were then computed from Bureau of Economic Analysis, Regional Input-Output Model for Ventura County. The job coefficients corresponding to the commodities consumed in the region were next multiplied by the local share of the cargo to estimate the related jobs with the cargo moving over the Port's marine terminals. Using this methodology, it is estimated that 7,218 jobs with area exporters and importers are related to the cargo moving via the Port of Hueneme marine terminals.

III. ECONOMIC VALUE, REVENUE, INCOME AND TAX IMPACTS

The movement of cargo via the Port of Hueneme marine terminals generates revenue for firms in each of the economic sectors. For example, revenue is received by surface transportation firms (both railroads and trucks) as a result of moving export cargo to the marine terminals and distribution of the imported commodities inland after receipt at the marine terminals. The firms in the maritime service sector receive revenue from arranging for transportation services, cargo handling, providing services to vessels in port and repairs to vessels calling the terminals. The Port of Hueneme receives revenue from leases, wharfage, and dockage for the use of the terminals the Port owns. In addition, revenue is received by shippers/consignees from the sales of cargo shipped or received via the marine cargo facilities and from the sales of products made with raw materials received through these terminals. Since this chapter is concerned with the revenue generated from providing maritime services, the shipper/consignee revenue (i.e., the value of the cargo shipped or received through the terminals) will be excluded from the remaining discussion.

The revenue generated by maritime activity consists of many components. For example, gross revenue is used to pay employee salaries and taxes, it is distributed to stockholders, and it is used for the purchases of equipment and maintenance services. Of these components, only three can be isolated geographically with any degree of accuracy. The personal income component of revenue can be traced to geographic locations based on the residence of those receiving the income. The local purchases by firms dependent upon maritime activity at marine terminals are identified through the interviews and used to estimate the indirect job impacts. Finally, state and local taxes paid by individuals and businesses can be traced to a geographic location based on the residency of the individuals directly employed and the location of the firms dependent on maritime activity. The balance of the revenue is distributed in the form of non-local payments to firms providing goods and services to the different sectors, for the distribution of company profits to shareholders and to payment of federal taxes. Many of these firms and owners are located outside of the Port Hueneme region, and, thus, it is difficult to trace the ultimate location of the distributed revenue (other than personal income, taxes and local purchases).

The value of output created by users of the Port's marine terminals is attributed to the region and the local purchases from other firms within the region are also included in this user output measure, as defined by the in-state output coefficients (for the user industries) developed from the U.S. Bureau of Economic Analysis, Regional Input-Output Modeling System (RIMS II).

1. TOTAL ECONOMIC ACTIVITY

The revenue impact is a measure of the total economic activity in the State that is generated by the cargo moving via the Port of Hueneme's marine terminals. In fiscal year 2015, marine cargo activity at the Port's terminals supported a total of \$1.2 billion of total economic activity in the region. Of the \$1.5 billion, \$344.3 million is the direct business revenue received by the firms directly dependent upon

the Port’s marine terminals and providing maritime services and inland transportation services to the cargo handled at the marine terminals and the vessels calling the terminals. The remaining \$848.6 million represents the value of the output to the State that is created due to the cargo moving via the Port of Hueneme marine terminals. This includes the value added at each stage of the supply chain associated with automobiles and containerized and break bulk fruit that flow via the marine terminals and are consumed within the region.

The balance of the discussion focuses on the \$344.3 million of direct business revenue generated from the provision of services to the cargo and vessels.

Table III-1 shows the \$344.3 million revenue impact generated by impact category for maritime activity at the marine terminals.

Table III-1
Distribution of Direct Revenue by Impact Category

IMPACT CATEGORY	REVENUE (\$1,000)
SURFACE TRANSPORTATION	
RAIL	\$9,873
TRUCK	<u>\$134,701</u>
SUBTOTAL	\$144,574
MARITIME SERVICES	
TERMINALS/WAREHOUSE	\$145,368
TUG ASSISTS/PILOTS	\$7,364
MARITIME SERVICES/AGENTS/CONSTRUCTION	\$3,043
FORWARDERS	\$9,961
GOVERNMENT	<u>NA</u>
SUBTOTAL	\$165,736
TENANTS	\$18,078
PORT AUTHORITY	\$15,868
TOTAL	\$344,255

Firms in the surface transportation sector received \$144.6 million of revenue. The revenue generated by the surface transportation sector is based on the relevant modal (rail or truck) rate for a commodity multiplied by the tonnage of that commodity moved to and from the marine terminals by the specified mode. The share of each commodity transported by rail and truck was estimated from interviews with the terminal operators handling the respective commodities, as well as from steamship

lines. The relative modal shares were then applied to the port tonnage (or units) of the specific cargo. Average rail rates and truck rates were obtained from the importers/exporters. These rates were multiplied by the tonnage of each commodity carried by truck or rail to estimate revenue accruing to these modes.

Firms in the maritime services sector received \$165.7 million of revenue. The majority of this revenue is received from the terminal operations.

The Port of Hueneme/Oxnard Harbor District received about \$15.9 million in revenues from Port tariffs and leases.

Table III-2 shows the revenue impact by commodity, while Table III-3 shows the revenue impact per ton. In terms of total revenue, autos generate the largest total revenue impact, followed by containerized cargo.

Table III-2
Revenue Impact

COMMODITY	REVENUE (\$1,000)
CONTAINERS	\$79,454
AUTOMOBILES	\$157,871
OTHER VEHICLES	\$24,606
BANANAS BREAK BULK	\$17,958
FRESH FRUIT	\$4,358
GENERAL CARGO	\$19,787
LIQUID BULK FERTILIZER	\$4,021
NON-ALLOCATED	\$36,200
TOTAL	\$344,255

Table III-3 shows the revenue impact per ton. Autos generate the largest impact per ton, reflecting the processing charges. Bulk cargoes generate relatively low business revenue impacts per ton reflecting the less-labor intensive handling process associated with bulk cargoes.

Table III-3
Revenue Impacts per Ton of Cargo

COMMODITY	REVENUE PER 1,000 TONS
CONTAINERS	\$155
AUTOMOBILES	\$492
OTHER VEHICLES	\$565
BANANAS BREAK BULK	\$73
FRESH FRUIT	\$85
GENERAL CARGO	\$112
LIQUID BULK FERTILIZER	\$29

2. PERSONAL INCOME IMPACTS

In the previous section of this chapter, the total revenue generated by port activity was identified. As described earlier, the personal income received by those directly dependent upon port activity is one of the components of revenue that can be traced to the Port Hueneme area. The income impact is estimated by multiplying the average annual earnings of each port participant, i.e., railroad employees, truckers, steamship agents, freight forwarders, bankers, insurance agents, etc., by the corresponding number of jobs in each category. The individual annual earnings in each category multiplied by the corresponding job impact resulted in nearly \$142.1 million in direct personal income. This represents an average salary of \$56,315.

Based on data developed by the U.S. Bureau of Economic Analysis, it is assumed that for every one dollar earned by Port Hueneme area residents as a result of jobs directly generated by port activity, an additional \$2.31 of income would be created as a result of re-spending the income for purchases of Port Hueneme area-produced goods and services. This re-spending generated an additional \$328.9 million of local personal income and consumption expenditures with local business and service providers. This additional re-spending of the direct income generates the induced job impact, 2,651 jobs, described in the previous chapter. It is to be emphasized that the \$328.9 million of re-spending and consumption impact includes consumption expenditures by those directly employed. Therefore, the \$328.9 million of re-spending and consumption impact cannot be divided by the 2,651 induced job holders to estimate an average induced salary, as this would result in an overestimation of induced wages and average salary income per induced job.

The indirect jobholders received \$61.6 million of personal wages and salaries. Combining the direct, induced and indirect income impacts, maritime cargo activity at the Port of Hueneme marine terminals created \$532.6 million of wages and salaries and local consumption expenditures.

The 7,218 jobs with the influenced users of the Port of Hueneme marine terminals received

\$284.8 million of wages and salaries.

3. LOCAL PURCHASES

The firms directly dependent upon the maritime activity at the Port's marine terminals made \$138.5 million of local purchases. These local purchases were for maintenance and repair services, utilities, communications services, office products, parts and equipment, fuel, etc. The \$138.5 million of local purchases generated the 1,239 indirect jobs.

4. TAX IMPACTS

State and local tax impacts are based on state and local tax burdens for California, which are developed from data provided by the Tax Foundation. The tax burdens are the total state and local taxes collected divided by total state income.

The state and local taxes for which estimates have been developed include:

- State and local personal and corporate income tax;
- Gross receipts/sales taxes;
- Property taxes;
- License taxes/fees;
- Gift tax; and
- State fuel tax.

Maritime activity at the Port of Hueneme marine terminals generated \$60.7 million of state and local taxes. The state of California received \$39.5 million of tax revenue, while \$21.2 million was generated for county and municipal entities in fiscal year 2015. An additional \$32.5 million of state and local tax revenue was generated by the related shippers/consignees.

IV. COMPARISONS WITH FISCAL YEAR 2012 IMPACTS

The purpose of this chapter is to provide a comparison of the fiscal year 2015 economic impacts generated by the Port of Hueneme terminals with the impacts generated by maritime activity at the Port of Hueneme in fiscal year 2012. The methodology used by Martin Associates to measure the local and regional economic impacts generated by the Port in fiscal year 2015 is, for the most part, identical to the methodology used to measure the direct impacts generated by maritime activity at the Port of Hueneme in fiscal year 2012. However, there is one key structural change to the analysis. The jobs to sales ratios for industries providing induced and indirect jobs have been updated and reflect the growth in labor productivity over time. In general, fewer jobs are required to produce the induced and indirect services and goods to support the port industry in Port of Hueneme.

1. COMPARISON OF TONNAGE

Table IV-1 shows that the total ocean tonnage handled at the Port of Hueneme terminals grew by 271,089 tons since fiscal year 2012. As this table further shows, the increase in tonnage was driven by the 93,937 tons in general cargo and 80,422 units of automobiles. Over the period, bananas and fresh fruit grew 40,055 and 53,796 tons respectively. Other vehicles were the only commodity to experience a decline in tonnage between fiscal year 2012 and fiscal year 2015.

Table IV-1
Tonnage Comparison

COMMODITY	FY 2015	FY 2012	CHANGE
AUTOMOBILES	321,083	240,661	80,422
OTHER VEHICLES	43,553	45,734	-2,181
BANANAS	655,643	615,588	40,055
FRESH FRUIT	154,581	100,785	53,796
GENERAL CARGO	176,133	82,196	93,937
LIQUID BULK FERTILIZER	<u>140,000</u>	<u>134,939</u>	<u>5,061</u>
TOTAL	1,490,993	1,219,904	271,089

2. COMPARISON OF TOTAL IMPACTS

Table IV-2 shows that between fiscal year 2012 and fiscal year 2015 the number of direct jobs generated by activity at the Port of Hueneme increased by 247, reflecting the increase in automobiles, general cargo, and fruit moving via the Port. Direct personal income grew by \$18.2 million while business revenue grew by nearly \$63.1 million. Indirect jobs grew by 619 jobs, reflecting the increase of local purchase by the firms providing the marine cargo services which increased by \$80.6 million. As noted, due to a change in jobs to sales ratios for industries providing induced jobs, although re-spending increased \$31.4 million between fiscal year 2012 and fiscal year 2015, induced jobs declined by 76 jobs over this period. State and local taxes increased by \$9.9 million.

Table IV-2
Comparison of Port of Hueneme Impacts

	FY 2015	FY 2012	CHANGE
JOBS			
DIRECT	2,524	2,277	247
INDUCED	2,651	2,727	-76
INDIRECT	<u>1,239</u>	<u>620</u>	<u>619</u>
TOTAL	6,415	5,624	791
PERSONAL INCOME/LOCAL CONSUMPTION (\$1,000)			
DIRECT	\$142,146	\$123,913	\$18,233
RE-SPENDING/LOCAL CONSUMPTION	\$328,898	\$297,540	\$31,358
INDIRECT	<u>\$61,562</u>	<u>\$31,962</u>	<u>\$29,600</u>
TOTAL	\$532,606	\$453,415	\$79,191
BUSINESS REVENUE (\$1,000)	\$344,255	\$281,203	\$63,052
STATE AND LOCAL TAXES (\$1,000)	\$60,717	\$50,782	\$9,935
LOCAL PURCHASES (\$1,000)	\$138,530	\$57,979	\$80,551
RELATED USER IMPACTS			
USER JOBS	7,218	3,824	3,394
TOTAL VALUE OF OUTPUT (\$1,000)	\$848,569	\$442,589	\$405,980
USER INCOME (\$1,000)	\$284,777	\$114,720	\$170,057
USER STATE/LOCAL TAXES (\$1,000)	\$32,465	\$12,849	\$19,616

Note: Totals may not add due to rounding

3. COMPARISON OF DIRECT JOB IMPACTS

Table IV-3 shows the direct job impacts generated by job category. Direct jobs increased in nearly every category, reflecting the growth of 271,089 tons of cargo at the Port of Hueneme. The largest gain was with jobs in trucking industry and terminal operators. The growth in trucking and terminal/processing jobs reflects the growth in automobiles handled at the Port of Hueneme. The increase in terminal/processing jobs reflects the increased number of employees needed to process the increased number of automobiles. The increased jobs associated with trucking jobs are related to the number of trucks needed to move the automobiles to dealerships throughout the western United States. In addition, one importer has needed off-site storage for automobiles increasing trucking jobs to and from the Port and the off-site storage areas.

The major decline in direct jobs was the reduction in jobs with tenants. This reduction is driven by off-shore oil support. The closure of the Plains All American pipeline has had a significant impact on oil-production in the Santa Barbara Channel. In addition to the pipeline closure, crude oil prices have dropped precipitously during this time. The combination of the closure of the pipeline and a drop in oil prices has halted production at several off-shore oil platforms in the Santa Barbara Channel.

Table IV-3
Comparison of Direct Jobs by Job Category

IMPACT CATEGORY	FY 2015	FY 2012	CHANGE
SURFACE TRANSPORTATION			
RAIL	16	12	4
TRUCK	<u>778</u>	<u>528</u>	<u>250</u>
SUBTOTAL	794	540	254
MARITIME SERVICES			
TERMINALS/WAREHOUSE	697	454	244
ILWU	290	227	63
TUG ASSISTS/PILOTS	11	11	0
MARITIME SERVICES/AGENTS/CONSTRUCTION	36	33	3
FORWARDERS	50	34	16
GOVERNMENT	<u>23</u>	<u>22</u>	<u>1</u>
SUBTOTAL	1,107	780	327
TENANTS	596	931	-335
PORT AUTHORITY	28	26	2
TOTAL	2,524	2,277	247

Note: Totals may not add due to rounding

4. *SUMMARY OF IMPACT COMPARISONS*

Between 2012 and 2015, cargo activity at the marine terminals increased by 271.1 thousand tons. As a result, the overall economic impact of the port operations increased. Direct, induced and indirect jobs grew by 791 jobs; total supported jobs grew by 4,185 direct, induced, indirect and related jobs; and overall economic value of the Port grew from \$1.0 billion to \$1.5 billion in 2015.

The fact that the Port of Hueneme continues to increase its importance in the local economy as a major source of job creation, particularly of jobs with an average annual salary of \$56,315 underscores the importance of the Port as a major catalyst in Ventura County and the state of California economies. In order to sustain this growth as an economic engine, it is critical that the Port continues to invest in terminal, rail and highway access infrastructure to meet future demand, and to continue to attract tenants to stimulate further economic development in Southern California. This suggests that the future growth of the Port will result in further job, income and tax growth for the region.