

The Economics of Land Use



Report

Economic Impacts of the San Diego Unified Port District

Prepared for:

San Diego Unified Port District

Prepared by:

Economic & Planning Systems, Inc.

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*Economic & Planning Systems, Inc.
One Kaiser Plaza, Suite 1410
Oakland, CA 94612-3604
510.841.9190 tel
510.740.2080 fax*

EPS #141091

*Oakland
Sacramento
Denver
Los Angeles*

www.epsys.com

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1. INTRODUCTION AND KEY FINDINGS

Purpose

The San Diego Unified Port District (District) retained Economic & Planning Systems to update an economic impacts analysis of all 2011 operations on Port property.¹ This update to that analysis – which involved the work of three consultants and a significant level of Port District staff involvement – is based on 2013 data and relies on much of the methodological work done previously. This analysis updates all data based on available information, but does not replicate some of the detailed tenant survey work done in the prior analysis. If needed, the Port District may elect to conduct a comprehensive economic impacts analysis in subsequent years.

This economic impact analysis is an evaluation of sales, spending, and other economic activities conducted on District property. In addition to capturing the direct economic activities on District property, related spending and activities (such as purchases by businesses as inputs to their production and all spending by employees) directly tied to the economic activities taking place on District property are also included.

Background

The District is a public benefit corporation and regional government agency. It controls about 2,500 acres of land and 3,400 acres of water spread across its five-member city jurisdictions of Chula Vista, Coronado, Imperial Beach, National City, and San Diego. With control of more than 33 of the 54 total miles along the San Diego Bay, the District plays an important role in administering a unique maritime, visitor-serving, environmental, and recreational asset while protecting the tidelands and San Diego Bay and the people who live, work and visit there. The bay and its waterfront are essential elements of the San Diego geography, economy, and culture, serving as:

- A strategically located harbor for trade, cruise, and military uses;
- A workplace for marine cargo, ship building and repair, commercial fishing, boat tours and other water-dependent industries;
- An important recreational and environmental asset for urban residents;
- A national and international destination for visitors and convention attendees; and
- A venue for special events, drawing tens of thousands of people to the waterfront for the July 4th Big Bay Boom, San Diego Bay Parade of Lights, and the San Diego Summer Pops series, to name just a few.

¹ See *San Diego Unified Port District: Economic Impact on San Diego County and the State of California*, prepared by Economic & Planning Systems, Martin Associates, and BREA, September 9, 2013.

By virtue of its size and responsibility for administering the scenic, strategic, and economically crucial San Diego bayfront, the District plays an important role in the regional economy and its provision of recreational opportunities and environmental stewardship. Through the San Diego Harbor Police Department, the District serves as a key public safety agency and partner to local, state and federal entities in the security of San Diego Bay and high-value assets that include maritime cargo terminals, major shipyards, Navy installations and vessels, a convention center and prominent visitor-serving establishments. To balance competing demands for scarce space along the bayfront, the District must allocate its resources among commerce, industry, navigation, fisheries, tourism, environmental and recreational needs, responding to changing demands on an ongoing basis.

As part of its effort to understand how the District can best utilize Port assets for the benefit of the region, the District retained EPS to analyze the impacts businesses and other entities located within the District's jurisdiction have on the regional economy. The District commissioned similar studies in 2013 (2011 data), 2007, 2003, 1999, and 1992; all of which were reviewed as part of this analysis.

The Report measures jobs and economic activity:

- Originating on Port District property in 2013
- Categorized into two industry groupings:
 - (1) Tourism and Commercial
 - (2) Industrial and Maritime Commerce
- Within the County's economy.

Scope of the Analysis

The study analyzes impacts by geographic area for a specific point in time and assesses impacts by type of establishment. The categorization of establishments is consistent with those used in previous Port District analyses. These categories have been continued in this report to more readily allow comparability.

Geographic Area **Figure 1** provides a map of the land and water within the Port District's jurisdiction. The analysis examines all of the jobs and economic activities (sales and purchases) that take place on land or water administered by the District, with the exception of military installations.²

Timeframe The report focuses on economic activity in 2013, the last complete calendar year for which data was available at the start of the analysis, to allow for collection of consistent data from tenants and other sources.

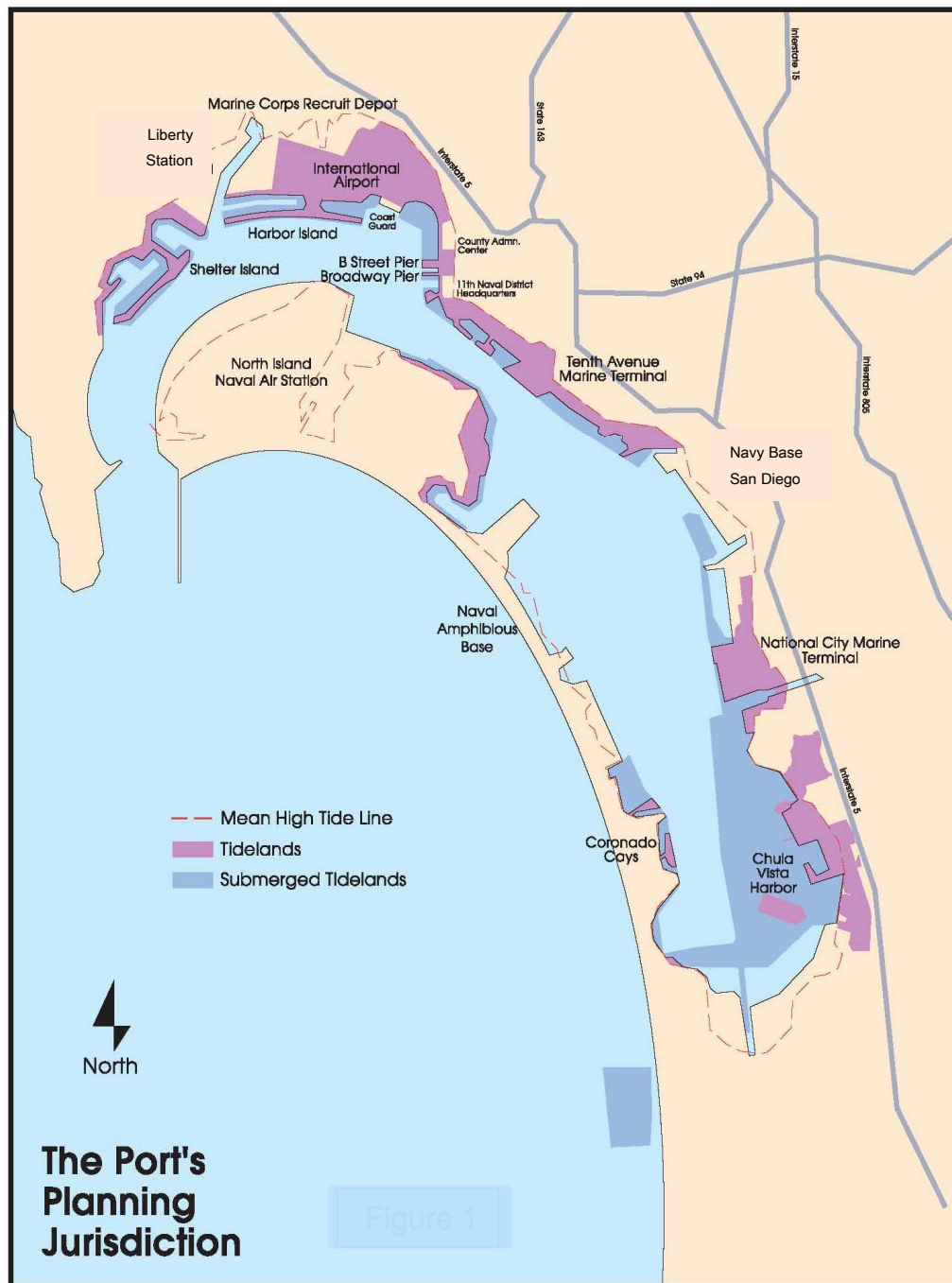
² As a federal entity, military uses are not subject to local controls; thus, the Port has limited influence over their economic activities. Note that the military's role in the regional economy is frequently examined by many sources, including a periodic report called the San Diego Military Economic Impact Study published by the San Diego Military Advisory Council (SDMAC). Also, the San Diego International Airport is not part of the analysis; it is governed by the San Diego County Regional Airport Authority, an agency that was created when the airport was separated from the Port District in 2003.

**Business
Categories**

Previous Port economic analyses have reported results for two categories of establishments: (1) Tourism and Commercial and (2) Industrial and Maritime Commerce. The Tourism and Commercial category includes retail, recreation and hospitality establishments, as well as cruise industry spending.³ The Industrial and Maritime Commerce sector includes maritime cargo operations, manufacturing, ship repair, marine terminal and cargo-related firms, and wholesalers as well as water-dependent establishments that serve tourists and recreational customers like boat charters, sport fishing, and marinas.

³ Cruise industry spending and impacts are split approximately 70 percent to Tourism and Commercial and 30 percent to Industrial and Maritime Commerce sectors.

Figure 1 Illustration of Port District's Jurisdiction



Note that San Diego International Airport and military establishments are not analyzed in this report.
Source: Port District Master Plan

Summary of Methodology

Economic Impacts Analysis Overview

The core economic impacts of the Port District are derived from the economic activities—sales, employment, and operating expenditures (purchases of goods and services)—that occur on Port District property. The analysis of these activities includes estimates of on-site employment and/or sales (revenues) of businesses and organizations located on Port property. This on-site economic activity and the inflow of spending dollars attracted by activities in the District constitute the **direct effect** of the District.

A second type of economic impact - directly tied to Port tenants - is spending by cruise passengers/crew and convention center attendees, that occurs off of Port property (spending from these groups on Port property is captured in “direct effects”, above). This effect, called **off-site direct effects** in this Report, is estimated by summing spending by these groups and allocating spending to on-Port and off-Port hotels, retail stores, restaurants, and among others.⁴

The final part of the economic impacts estimate is quantifying the ‘ripple’ or multiplier effects that result from the direct effects. The ripple effects are categorized as **indirect** or **induced** effects. Indirect effects represent economic impacts on upstream businesses that supply inputs (goods and services) to on-site businesses. Induced effects represent economic impacts that are generated by the consumption expenditures of employees supported by their employment in the on-site and supplier businesses. As a final measure, EPS made deductions from the overall economic impacts results to account for overlaps or double-counting.

Summary of Tasks

The work to complete the economic analysis is described below. It included efforts to collect data, apply the methodologies developed in the 2011 impact analysis to the 2013 data, and use an economic model and analyze and document findings.

Collect Data

- **Review District data.** The Port District provided tenant databases, information on gross sales (for tenants operating under leases which require reports of sales), and detailed information about its own employees, expenditure patterns, and compensation. In addition, publicly available documents, including the District budget, the Port Master Plan, and statistics on the marine terminals and land use designations, provided important background for the report.
- **Other tenant research.** In addition to information provided by the District on tenants, EPS reviewed the websites of major tenants and used recent news about tenants to mine information about workers, sales, and customers targeted by Port tenants.

⁴ The allocation of spending is based on prior work conducted in the prior study San Diego Unified Port Direct: Economic Impact on San Diego County and the State of California. That work included estimates of: cruise passenger and employees by zip code, estimates of convention attendee hotel stays on Port property, and other assumptions.

- **Secondary source data collection.** As a final source of information about tenants, EPS purchased datasets from a proprietary business data provider, Dun & Bradstreet.⁵ The datasets provided information on number of employees and estimated sales, among other metrics.
- **Collect economic indicators about the San Diego region.** To provide context for the economic impact information, EPS collected and analyzed selected economic metrics for the region.

Apply Methodologies Developed in 2011 to 2013 Data

- **Adjust data to avoid double-counting.** The previous analysis developed mechanisms to avoid double-counting of sales. Double-counting would occur if the analysis counted a sale twice. For example, counting all of the sales from hotels at the Port and counting all of the convention center attendees' and cruise passengers' spending on hotel rooms would be a double count of hotel sales. This analysis assumes that the spending overlaps in place in 2011 were still in place in 2013 and makes deductions accordingly.
- **Integrate marine terminals data appropriately.** The 2011 work included a stand-alone report focused on the marine terminals (Tenth Avenue and National City Terminals). This updated analysis relies on the relationships between cargo throughput and jobs among others, developed in the 2011 study and applies them to 2013 cargo information. This assumes no significant changes have occurred in cargo handling since 2011.
- **Account for off-Port spending of convention attendees and cruise ship passengers and staff as part of an off-site direct effects category.** Direct effects are defined as gross sales⁶ and gross employment on Port property. The total economic impacts of the convention center and cruise ship terminal include spending by visitors to locations both on-Port property and off-Port property. Rather than counting the off-Port spending in the 'direct' effect category, which would alter the definition of 'direct' effect as sales on-Port property, the off-Port spending by cruise and convention center visitors is counted in this separate category of impacts.

Run Economic Model, Analyze, and Document Findings

- **Develop and run economic model.** With almost 600 tenants and subtenants, this task included defining the regional economic model, inputting information into the appropriate industry sectors, running the model, and evaluating results to identify input or analytic errors.
- **Based on review of model results, draft findings.** This task included documenting the findings on impacts and segmenting results by appropriate industry groupings.

⁵ D&B contacts establishments on a regular basis and mines telephone directories, public records, and internet research to maintain records on business establishments throughout the country.

⁶ Note that the term 'gross sales' also means the total amount spent by public sector uses on Port property (equal the annual operating budgets of public tenants).

- **Compare results to 2011.** This analysis differs from the previous report in two primary ways: (1) 2013 data is the basis for the impacts, instead of 2011 data and (2) an updated 2012 regional model is used in place of the 2010 model used in the previous report. This updated regional model includes current business linkages in the County, i.e., includes the proportion of purchases made within the County versus outside the County by business sector. In addition, the new model has updated multiplier factors.

Key Findings

1. The District is an important location for employment in the region, with 33,000 jobs located on the tidelands, generating \$4.4 billion in economic output.⁷

Establishments located on District property are very diverse, with the District's portion of the San Diego Bayfront host to:

- Cargo terminals and surface transportation (trucks and railways) processing almost 390,000 cars annually;
- Major industrial users including shipbuilding and repair and turbine manufacturing;
- A cruise ship terminal through which more than 204,000 passengers embarked, disembarked, or were in San Diego in-transit in 2013;
- Maritime activities ranging from commercial fishing enterprises to pleasure cruises and all of the needed support services from boat sales, insurance, and repair to fishing and boat suppliers; and
- Visitor and hospitality activities including hotels/resorts, the San Diego Convention Center, and visitor-oriented retail, restaurants, and recreational and cultural activities.

These diverse uses support a broad range of employment opportunities. Employees at businesses and organizations within the District work with heavy industrial equipment (ship repair and cargo and container processing); provide professional services (vessel insurance brokers, boat brokers, marketers, attorneys, etc.); provide government services (Port District administration); perform manual labor (loading/unloading cruise passenger luggage, setting up vast convention shows, providing services); interact with visitors and customers in upscale stores, boutiques, and mobile street carts; and take clients on excursions in the San Diego Bay and the ocean for fishing, whale watching, and dinner cruises.

2. An additional 24,600 jobs and \$3.2 billion in output are generated in San Diego County based on the goods and services purchased by businesses and organizations located on District property and their employees.

Table 1 and **Figure 2** illustrate the results of the overall economic analysis for the Tourism and Commercial and Industrial and Maritime Commerce categories. All establishments in an economy have two primary multiplier effects based on their operational expenditures:

⁷ Tidelands refers to the area within the historic, mean high tide-line of the San Diego Bay, including underwater lands.

(1) Indirect effects. Spending on goods and services required to run the establishment (non-labor inputs) and

(2) Induced effects. Workers from the firms being studied and the workers from those in the 'indirect' category spend a portion of their wages on consumer goods and services, supporting still more jobs.

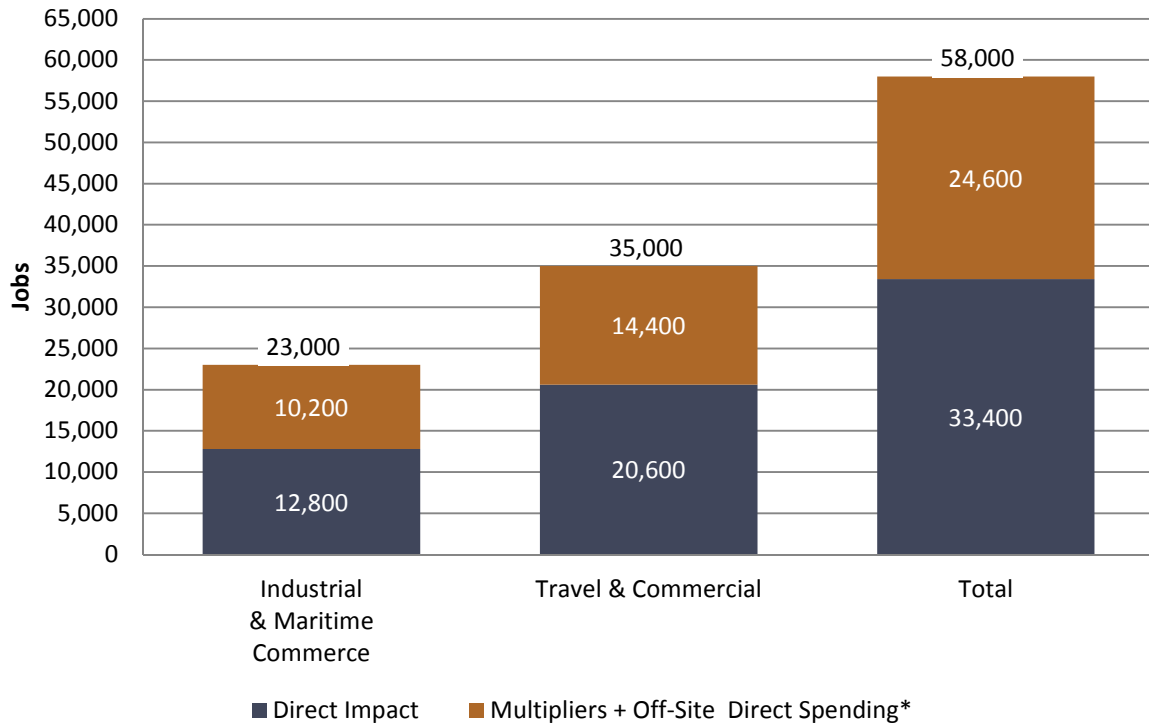
Adding off-Port direct spending by cruise and convention center-related spending to the direct, indirect, and induced impacts generate \$7.6 billion in total economic output.

Table 1 Economic Output on Port District

Impact Type	Industrial & Maritime Commerce	Tourism & Commercial	Total Business Establishments
Direct Economic Impacts			
Employment (Jobs)	12,800	20,600	33,400
Labor Income (\$'millions)	\$913	\$821	\$1,734
Economic Output (\$'millions)	\$2,548	\$1,861	\$4,409
Average Wage and Benefits	\$71,000	\$40,000	\$52,000
Off-Site Direct Spending			
Employment (Jobs)	0	6,200	6,200
Labor Income (\$'millions)	\$0	\$260	\$260
Economic Output (\$'millions)	\$0	\$688	\$688
Indirect & Induced Impacts			
Employment (Jobs)	10,200	8,200	18,400
Labor Income (\$'millions)	\$569	\$431	\$1,000
Economic Output (\$'millions)	\$1,429	\$1,121	\$2,550
Total Economic Impacts			
Employment (Jobs)	23,000	35,000	58,000
Labor Income (\$'millions)	\$1,483	\$1,512	\$2,994
Economic Output (\$'millions)	\$3,978	\$3,670	\$7,647

Source: Economic & Planning Systems.

Figure 2 Economic Impacts of Establishments by Sector: Jobs



* Off-site Direct Spending refers to spending captured off of Port property by cruise-related visitors and Convention Center attendees.

3. Direct economic output from Port tenants increased by about 8 percent and direct jobs on Port property increased by about 9 percent since the last analysis (see Figure 3).

Increases in direct output and jobs on Port property are consistent with nationwide trends during the (slow but steady) economic recovery since 2009. While two years is a relatively small period of time to track trends, job growth on the Port during this period was higher than the County overall, which experienced a 4.7 percent increase in total jobs over the same period. See **Figure 4** for selected economic indicators.

Figure 3 2013 and 2011: Direct Jobs and Economic Output on Port Tidelands

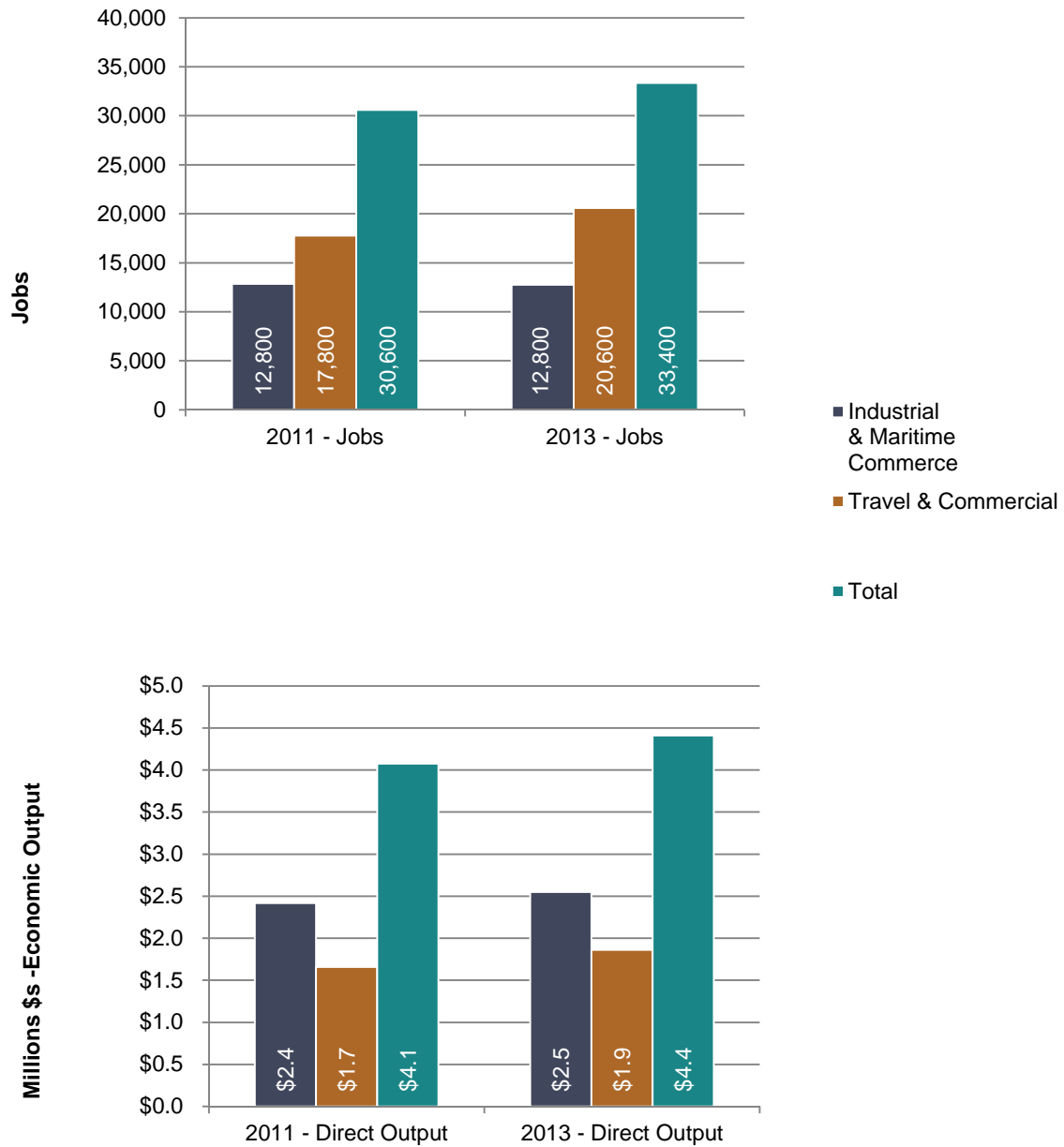
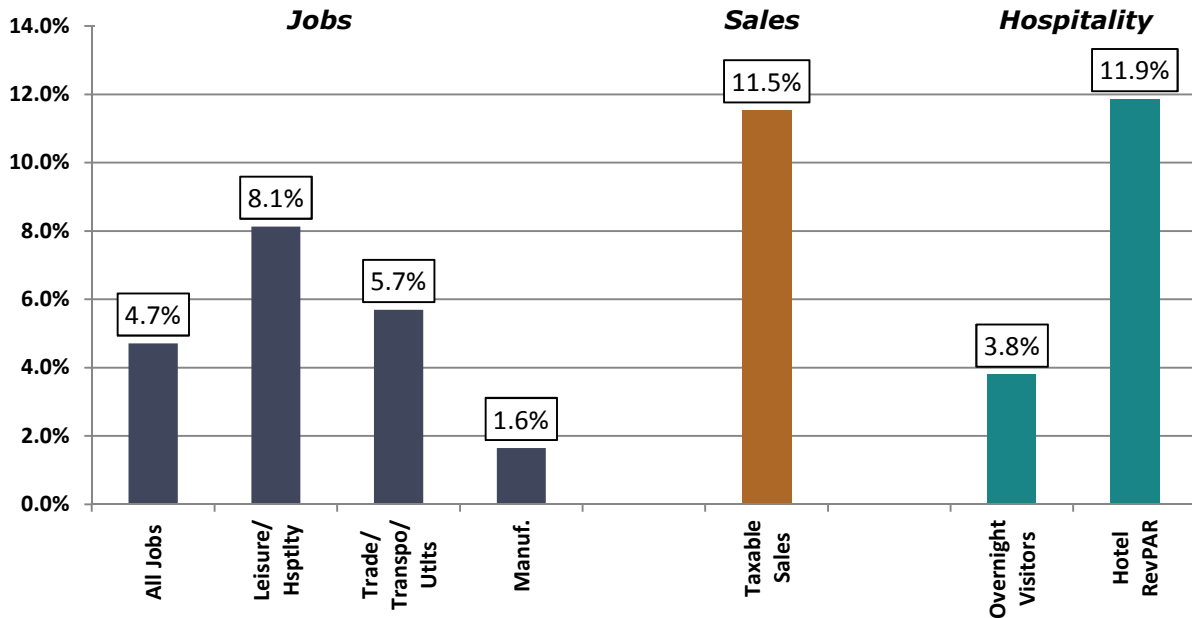


Figure 4 Percentage Change from 2011 to 2013 for Selected Economic Indicators in San Diego County



Sources: California Economic Development Department; Caltrans Long-Term Socioeconomic Forecasts; City of San Diego Fiscal Year Budget 2014/15 which reports findings from the San Diego Tourism Authority's Quarterly Travel Forecast. Note that that hotel rooms located on Port property make up about 13 percent of roughly 56,600 total hotel rooms in the County.

4. Economic multiplier and off-site direct effects have decreased since the 2011 analysis (see Figure 5). This means that, although direct economic output increased by 8 percent, total output (with multipliers with off-site direct effects) decreased by approximately 2 percent.

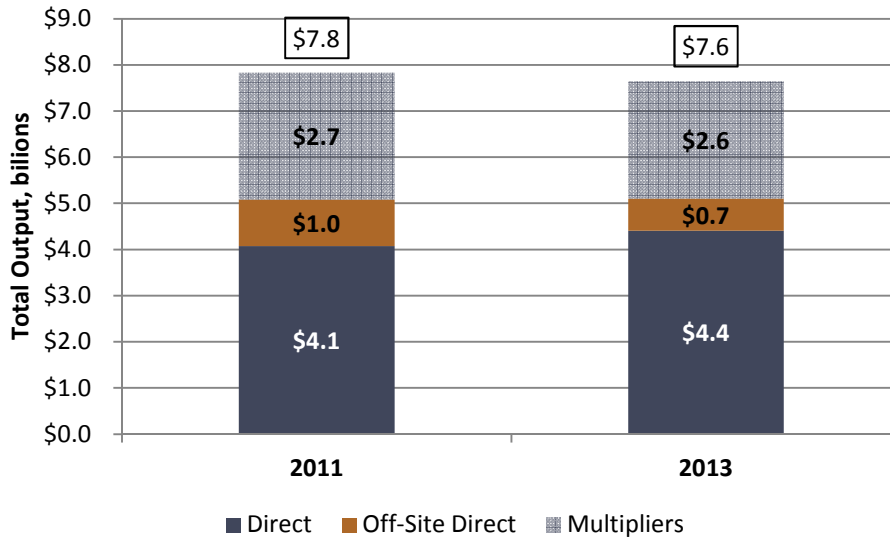
Direct economic output from economic activity on Port property in 2013 sums to an estimated \$4.4 billion - 8 percent higher than the comparable 2011 output. However, adding in off-site direct spending and multiplier effects indicates that 2013 effects are lower than 2011 effects. This decrease is due to two factors:

- **Multipliers across nearly all sectors have decreased in the newest regional model.** This reflects less overall indirect spending (i.e., less spending on business inputs, attributed to higher productivity), higher proportions of indirect spending outside of the County (attributed to growth in foreign imports), and overall lag in wage growth despite increased output.⁸

⁸ See additional discussion of the change in multipliers from the last analysis to this analysis in **Chapter 4.**

- **Lower numbers of convention center attendees and cruise passengers.** Compared to 2011, the number of convention center attendees and cruise passengers in San Diego has decreased significantly (5 and 35 percent, respectively).

Figure 5 Direct and Total Economic Output, 2011 and 2013 Data

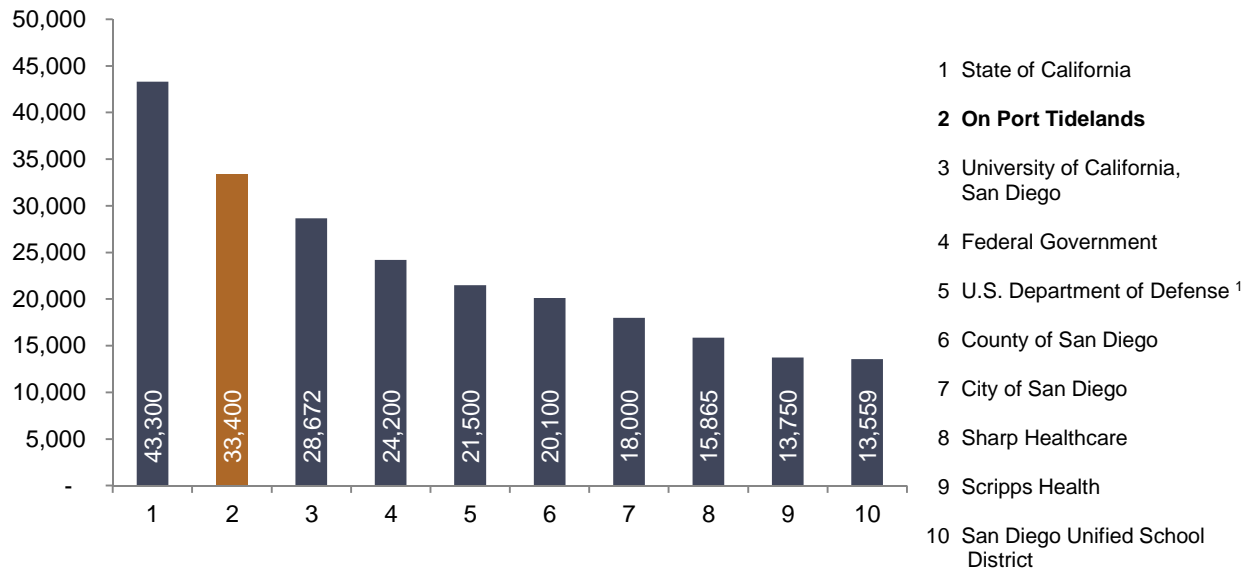


Sources: IMPLAN; Economic and Planning Systems, Inc.

5. If all jobs located on District-administered lands were compared to the largest employers in San Diego County, jobs located on Port property would rank second in terms of total employment.

To illustrate the magnitude of employment on the Tidelands, the number of employees at establishments on Port property is compared to that of large employers in the County in **Figure 6**. Not surprisingly, the other entities on the list include other government agencies and large institutional users with multiple locations or campuses. Within this group, the employment located on District property ranks below the State, and above UCSD, San Diego County, Sharp Healthcare, and Scripps Health, among others. Note that federal government employment counts vary widely depending on how on-base personnel are accounted for. The source used in the figure below separates Department of Defense personnel from other Federal employees and does not account for on-base personnel in the total.

Figure 6 Largest Employers in San Diego County



[1] Department of defense employee count does not include personnel on bases.

Source: San Diego Sourcebook; Economic and Planning Systems, Inc.

6. *Tourism, maritime, recreation, and retail/restaurant uses are the primary sources of economic impacts.*

The Industrial and Maritime Commerce sector makes up about 52 percent of the Port's total economic impact on the County - equal to about \$3.9 billion in total output, while the Tourism and Commercial sector contributes the other 48 percent. Meanwhile, the Tourism and Commercial sector makes up 62 percent of jobs at the District and the Industrial and Maritime Commerce sector makes up the other 38 percent. This means that the typical job in the Industrial and Maritime Commerce sector produces higher total output than a typical job in the Tourism and Commercial sector.

7. *With most jobs on Port District land in the visitor-service sector and the manufacturing/repair sector, average annual wages per worker cluster in ranges above and below the average County wage.*

The average wages, including benefits in the County was \$53,000 in 2013 for all workers. In comparison, jobs located on the Port District's land averaged \$40,000 for workers in the Tourism and Commercial industry group and \$72,000 for workers in the Industrial and Maritime Commerce industry group. This distribution of average wages indicates that jobs at the Port District include relatively high-wage, water-dependent types of work and relatively low-wage, tourism-oriented employment.

A 2008 SANDAG report notes that although the San Diego region has a strong and diverse economy, higher-paid positions have not grown as quickly as lower wage jobs and public policy should be aimed at "identifying and investing in public resources in areas that support

trade clusters that offer higher pay jobs and require higher levels of education, skill and training.”⁹

8. The San Diego Bay and the City’s successful tourist attractions will continue to drive the San Diego area as a competitive location for water-dependent industries and tourism service jobs.

As manufacturing jobs in the United States—which are desirable because of their relatively high-wages for blue-collar work and high economic multipliers —continue to decline, cities across the nation are attempting to attract and retain manufacturing companies. Many coastal cities are unable to compete with inland locations for manufacturing jobs due to high real estate costs, limited land supply, and high wage requirements. The District has been able to leverage its unique waterfront location with its natural harbor, deep-water port, significant investments in waterside improvements, and its proximity to a skilled labor force, to maintain a critical cluster of manufacturing and industrial firms. Attractive urban locations like the San Diego area tend to have bifurcated employment bases with a combination of high-wage professional service firms and low-wage service jobs. District facilities which house maritime, manufacturing/industrial, and water-dependent businesses provide a critical class of middle-income jobs that high-cost coastal cities often struggle to attract.

San Diego has and will continue to be a very attractive place for visitors. With its exceptional weather, scenery, and cultural and recreational attractions the region can expect to remain a competitive destination. Port properties are appropriate locations for these uses, due to the many spectacular visitor attractions and services and to State restrictions on the use of Port property.

⁹ See *Building a Foundation to Achieve Global Competitiveness – San Diego Regional Economic Prosperity Strategy*, SANDAG, Volume I. Quotation from page 14 of the report.

2. PORT DISTRICT OVERVIEW

Overview of Port District Tidelands and Submerged Lands

The San Diego Unified Port District (District) was created in 1962 by the California State Legislature to serve as the San Diego Bay tidelands public steward. It is governed by a seven member Board of Port Commissioners, appointed by the District's constituent cities' elected bodies.¹⁰ The District includes historic tidelands and submerged lands in the five member cities: Chula Vista, Coronado, Imperial Beach, National City, and San Diego. The District oversees two marine cargo terminals, two cruise ship terminals, 20 public parks, the Harbor Police Department, and the leases of almost 600 tenants and subtenants all along San Diego Bay. The District is the fourth largest of the 11 ports in the State. See **Figure 1** for a map of the District.

The Port is responsible for the development, operation, maintenance, control, regulation, and management of the tidelands and navigable waters of San Diego Bay for the promotion of commerce, navigation, fisheries, and recreation.

- San Diego Unified
Port District Compass Strategic
Plan 2012-2017

While the entire San Diego Bay Tidelands encompass about 4,400 acres of land and 10,500 acres of water, that area is divided among federal, state, local, and District control. Overall, the State is the largest owner, with about 42 percent of the total—almost all of which is water—followed by the District (38 percent) and Federal military agencies (19 percent). The District controls the largest portion of land of those entities, with almost 2,500 acres or 56 percent of the total. The District also controls more than 60 percent of the Bay shoreline, with more than 33 of the 54 total miles (see **Tables 2 and 3**).

¹⁰ The city councils of Chula Vista, Coronado, Imperial Beach and National City appoint one commissioner each and the San Diego City Council appoints three commissioners.

Table 2 Distribution of San Diego Bay Tidelands by Agency

Agency	Land		Water		Total Tidelands ¹	
	Acres	Percent	Acres	Percent	Acres	Percent
Federal (military)	1,882	43%	1,050	10%	2,932	19%
State	12	0%	6,490	59%	6,502	42%
County and City	34	1%	0	0%	34	0%
Unified Port District	<u>2,450</u>	<u>56%</u>	<u>3,416</u>	<u>31%</u>	<u>5,866</u>	<u>38%</u>
Total	4,378	100%	10,956	100%	15,334	100%

[1] Note that totals differ somewhat from Port Master Plan Chapter 1 estimates. Specifically, the Land and Water acres for the Unified Port District match the total acres derived by summing the land and water in each member city. Different chapters in the Master Plan have been updated at different times, which means that Chapter 1 totals may not be as up to date as chapters focusing on particular Precise Plan areas.

Source: Port Master Plan - October 2012 print; Economic & Planning Systems.

Table 3 San Diego Bay Shoreline, by Agency

Agency	Miles	%
Federal	20.0	37%
State	0.5	1%
City of Coronado	0.5	1%
Unified Port District	<u>33.1</u>	<u>61%</u>
Total	54.0	100%

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Source: Port Master Plan - Oct 2012 print; EPS

The District's nearly 5,500 acres of tidelands and submerged lands and 33 acres of shoreline are spread among its five member cities as shown in **Table 4**. The tidelands and submerged lands are separated by designated use in **Table 5** and **Figure 7**.¹¹

District Mission Statement

The San Diego Unified Port District will protect the Tidelands Trust resources by providing economic vitality and community benefit through a balanced approach to maritime industry, tourism, water and land recreation, environmental stewardship and public safety.

¹¹ Designated uses are those uses listed in the Port Master Plan. Note that these totals do not necessarily reflect the reality of uses on the ground as the Master Plan is a document guiding future uses; in cases where non-conforming uses exist, the Master Plan does not direct the Port to relocate or move those non-conforming uses. Rather, as existing uses cease operations or decide to move, the new uses will conform to the Master Plan's designated uses.

Over 40 percent of the District's land is used for industrial purposes, about 50 percent of the land is split roughly evenly among conservation, commercial, and public recreation uses, while about 10 percent is for public facilities and military uses. The vast majority of District water property—62 percent—is designated for conservation or public recreation uses. The remaining 38 percent is split primarily among commercial and public facility uses. Military and industrial uses make up only about 10 percent of the water acreage total.

Table 4 Port District Shoreline, Land and Water by Member City

City	Bay Shoreline		Land		Water	
	miles	%	acres	%	acres	%
San Diego	16.6	50%	1,551	63%	868	25%
National City	2.8	8%	369	15%	286	8%
Chula Vista	4.8	15%	210	9%	1,480	43%
Coronado	8.9	27%	313	13%	379	11%
Imperial Beach		<u>n/a</u>	<u>7</u>	<u>0%</u>	<u>403</u>	<u>12%</u>
Total	33.1	100%	2,450	100%	3,416	100%

Source: Port Master Plan - October 2012 print; Economic & Planning Systems.

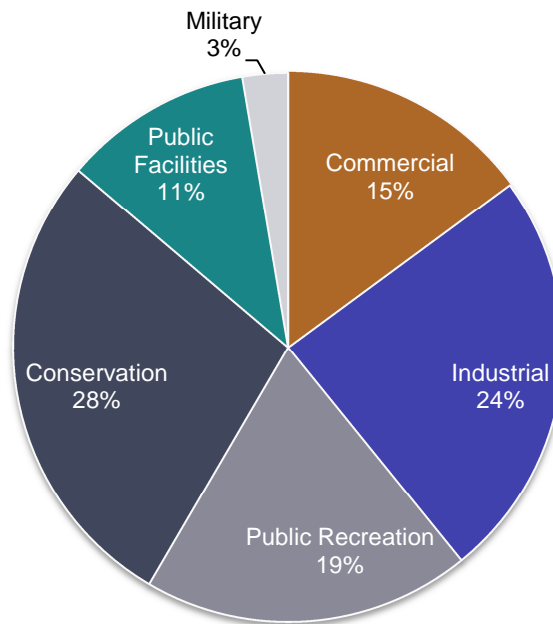
Table 5 District Land and Water by Designated Use

Use ¹	Land		Water		Total	
	acres	%	acres	%	acres	%
Commercial	402	16%	461	13%	863	15%
Industrial	1,022	42%	251	7%	1,274	22%
Public Recreation	361	15%	808	24%	1,169	20%
Conservation	428	17%	1,287	38%	1,715	29%
Public Facilities	214	9%	460	13%	674	11%
Military	<u>23</u>	<u>1%</u>	<u>149</u>	<u>4%</u>	<u>172</u>	<u>3%</u>
Total	2,450	100%	3,416	100%	5,866	100%

[1] Figures derived from Table 4 in the Port District Master Plan, but adjusted slightly to account for the fact that Table 4 includes only land plus water *covered* in the Master Plan document (5,657 total acres) which is less than the total acreage under the District's jurisdiction (5,866 total acres).

Source: Port Master Plan - October 2012 print; Economic & Planning Systems.

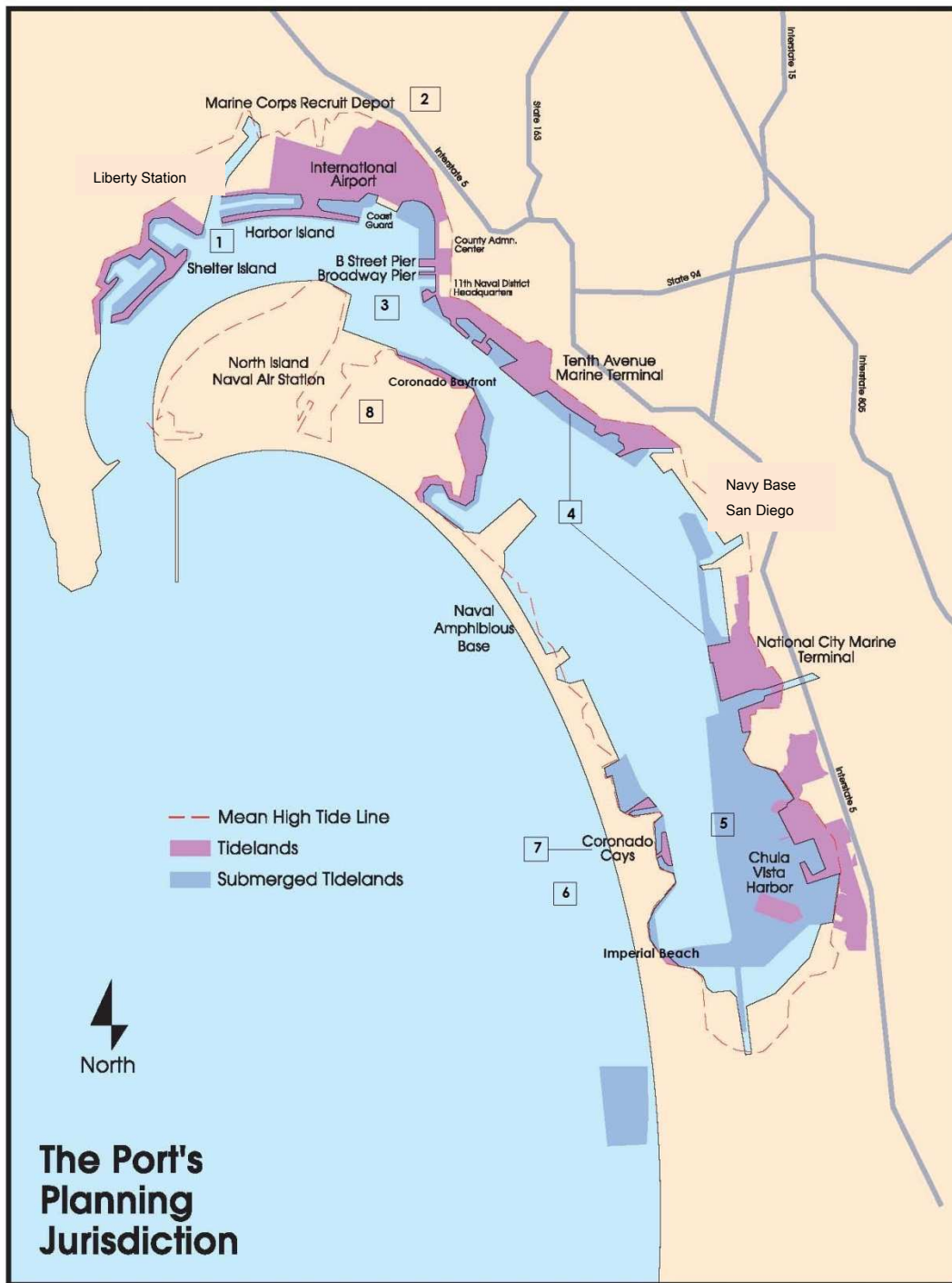
Figure 7 Allocation of District Land by Designated Land Use



Prominent Uses along the Tidelands

Figure 8 provides an illustration of the prominent uses along the San Diego Bay Tidelands. Except for the Airport and the military installations, all of the general locations shown on the map and described below are included in the economic analysis.

Figure 8 Illustration of Port District's Jurisdiction, with Sub-Areas Designated



c11 San Diego Unified Port District

Source: Port Master Plan

- 1. Shelter Island and Harbor Island.** Tenants include hotels, restaurants, marinas, car rental agencies, commercial sport fishing, and other tourist-oriented entities like boat tours.
- 2. San Diego International Airport.** The San Diego County Regional Airport Authority was created in 2003 to manage the operations of the Airport. As the airport administration is controlled by another entity, economic impacts associated with the airport are not included in the Report.
- 3. B Street Cruise Ship Terminals and Port Pavilion on Broadway Piers Area and Centre City Embarcadero.** This area contains some of the most dense uses in the District including:
 - Miles of scenic pedestrian promenades
 - High-rise hotels with marina space
 - Cruise, boat excursion, and ferryboat facilities at the B Street and Broadway piers
 - The USS Midway Museum
 - Tuna Harbor with commercial fishing and a restaurant and fish market
 - Seaport Village and The Headquarters, centers for specialty shopping and dining
 - The San Diego Convention Center
 - Popular waterfront parks and open space
- 4. Marine Cargo Terminals**
 - Tenth Avenue Marine Terminal (TAMT) is a 96-acre omni-terminal that handles refrigerated containers, bulk commodities, and break-bulk cargo. The Dole Fresh Fruit Company imports nearly 100 million bananas per month through this terminal. Bananas and other fresh fruit are distributed from TAMT to stores between San Diego and the Canadian border, and east to the Rockies. Free flowing bulk products handled at TAMT include bauxite, cement products, soda ash and fertilizers used in the local construction industry. Break-bulk cargo such as steel and large finished products used in shipbuilding, windmill components, and turbines are handled in the open areas of the terminal. Liquid fuel tanks provide storage and distribution for petroleum products to the San Diego Regional Airport, as well as ocean-going vessels, tug boats and other support vessels. TAMT is also the homeport facility for the National Oceanic and Atmospheric Administration's (NOAA) research vessel, Reuben Lasker.
 - National City Marine Terminal (NCMT). The NCMT is the Port of San Diego's roll-on/roll-off terminal, operated by Pasha Automotive Services. NCMT processes automobiles and other rolling vehicles for import and export, including approximately one out of every 10 imported cars sold in the US, as well as lumber for Southern California from the Pacific Northwest. Pasha Hawaii Transport Lines also moves automobiles, household goods and other specialty cargoes on a bi-weekly, US Flagged vessel service between Hawaii and NCMT.

- Together the two marine terminals serve as one of 17 Strategic Ports under an agreement with the Department of Defense administered by the Department of Transportation. These facilities provide the port infrastructure and services to support the deployment of U.S. military equipment and vehicles during times of national emergency. Both terminals have on-dock rail capability with BNSF Railway.
- 5. Coronado Cays/Chula Vista Bayfront.** This area is developed into parks, boat ramps, a recreational vehicle (RV) park, marinas, a boatyard, and a recreated wildlife habitat island.¹²
- 6. Imperial Beach.** This area contains largely recreation-oriented development, including the Imperial Beach Pier on the Pacific Ocean, Portwood Pier Plaza, ancillary restaurants, and retail stores.
- 7. Silver Strand South.** This portion of Coronado—separated from the Coronado Bayfront by the Navy Amphibious Base—is occupied by a residential community with the Port-administered portion of the area largely in commercial recreational use (marinas) and public park and recreation use.
- 8. Coronado Bayfront.** The Port-administered areas of the Coronado Bayfront contain hotels, retail, piers, and public parks.
- 9. Military.** While most of the military uses along the waterfront are located on federal land (not District land), a small amount of District land (about 26 acres) is used by the U.S. Navy. Given the size and economic importance of the military presence in San Diego, many analyses have examined the economic contribution of this sector. In addition, local influence on these uses is limited. Therefore, the small amount of military uses on District property is not included in this analysis.

¹² Note that the recently approved Chula Vista Bayfront Master Plan will facilitate a major transformation of 556 acres of this area into a resort-conference center hotel with retail and restaurants surrounded by a signature park and some industrial and office park uses. Hundreds of acres are also designated for wetlands and habitat replacement. Only those activities in place in 2011, however, are included in the economic analysis.

3. *ECONOMIC IMPACTS METHODOLOGY*

This chapter defines economic impacts, discusses the analysis methodology, details a selection of the major District users, and provides a detailed report of the results of the economic analysis. Information on tax revenues is provided in the next chapter.

Description of Economic Impacts

The core economic impacts of the Port District are derived from the economic activities—sales, employment, and operating expenditures (purchases of goods and services)—that occur on Port District property. The analysis of these activities includes estimates of on-site employment and/or sales (revenues) of businesses and organizations located on Port property. This on-site economic activity and the inflow of spending dollars attracted by activities in the District constitute the direct effect of the District.

The next step in estimating economic impacts is accounting for the ‘ripple’ or multiplier effects that result from the direct effects. The ripple effects are categorized as indirect or induced effects. Indirect effects represent economic impacts on upstream businesses that supply inputs (goods and services) to on-site businesses. In contrast, induced effects represent downstream economic impacts that are generated by the consumption expenditures of employees supported by their employment in the on-site and supplier businesses. In this report, direct, off-site direct, indirect, and induced effects are defined as follows:

- The **Direct Effect** is a measure of the economic impacts that occur within the District as reflected in the revenues generated and employment supported by business establishments located in the District.¹³
- **Off-site Direct Effects** include spending by cruise- and Convention Center-related visitors occurring off of Port property.
- The **Indirect Effect** is a measure of the economic impacts generated by “upstream” industry-to-industry transactions that supply inputs to the production of goods and services consumed by businesses and other economic activities in the District.
- The **Induced Effect** is a measure of the economic impacts generated when employees from the direct and indirect effects above spend their labor income.
- The **Total Impact** is the sum of the direct, indirect, and induced effects. The total impact measures the overall impact of District activities on the San Diego and California economies.

This report measures economic impact using common economic metrics, including employment, labor income, and output as defined below.

¹³ The only exception to this definition is the categorization of a few hundred jobs—which are technically located outside of Port property—as direct effects. These jobs are tied to the Port’s marine cargo terminals and the International Longshore and Warehouse Union.

- **Employment** measures the number of jobs, a count that includes part-time and full-time workers.
- **Labor Income** represents the payments to labor in the form of both wages or salaries and benefits paid by the employer (e.g., health, retirement benefits). It also includes proprietor income for self-employed individuals.
- **Economic Output** is equivalent to sales or revenues of businesses in the County and the rest of the State.

Data Collection and Analysis

This section describes the overall data collection and analysis process used to generate estimates of the direct impacts of economic activity in the District. The goal of the data collection process was to quantify the direct impacts by collecting data on the number of employees and/or the revenue generated by business establishments located on Port Tidelands. The study also collected and analyzed expenditure data to quantify the economic impact of inflows of dollars into the County's economy from 1) business expenditures by cruise lines, 2) cruise passengers and crew expenditures, and 3) expenditures by visitors and organizers of events at the San Diego Convention Center.

Overview of Input-Output Methodology

Input-Output (I/O) analysis is premised on the concept that industries in a geographic region are interdependent in the sense that they purchase outputs from and supply inputs to other industries within and outside the region. For example, consider the implications of an operating expenditure by a hotel establishment. Hotels purchase goods from producers, who in turn purchase raw materials from suppliers. Thus, an increase/decrease in the demand for hotel services will stimulate an increase/decrease in output and employment in the interdependent secondary industries.

Regional economic impact analysis and I/O models in particular provide a means to quantify economic effects stemming from a particular industry or economic activity. Specifically, I/O models produce quantitative estimates of the magnitude of regional economic activity resulting from some initial activity (e.g., hotel or manufacturing operations). I/O models rely on economic multipliers that mathematically represent the relationship between the initial change in one sector of the economy and the effect of that change on economic output, employment, and income in other industries. These economic data provide a quantitative estimate of the magnitude of shifts in jobs and revenues within a regional or state economy.

This study uses the IMPLAN model to analyze economic impacts generated by business activities located in the Port District in San Diego County and in the rest of California. IMPLAN (Impact Analysis for Planning) software is an I/O modeling system developed by Minnesota IMPLAN Group, Inc. (MIG) that utilizes data collected from several state and federal agencies, including the Bureau of Economic Analysis, Bureau of Labor Statistics (BLS), and the Census Bureau. The model is widely used in the U.S. for estimating economic impacts across a wide array of industries and economic settings.

4. ECONOMIC IMPACTS RESULTS

Summary of Economic Impacts

Summary of Total Impacts: Direct Plus Multipliers

This section provides quantitative estimates of the District's economic impacts in San Diego. The business revenues and expenditure estimates for the various entities, adjusted for double-counting, as described in the Data Collection and Analysis section, form the basis upon which the economic impacts of the District were estimated. The direct revenues and expenditures were translated into quantifiable economic metrics, including jobs, labor income, and economic output as defined in the first section of this Chapter.

Table 6 summarizes the economic impacts of economic activity in the District, including direct, indirect and induced (multiplier effects), and total effects on employment, labor income, and output as defined earlier in this Chapter.

- **Direct impacts.** As shown, the sum of economic activity generated by business establishments in the District directly produced an estimated \$4.4 billion in output (sales/gross revenues) and supported about 33,400 jobs. These workers are estimated to receive approximately \$1.7 billion in income which includes wages and employment benefits.
- **Off-site direct impacts.** Spending by cruise passengers, cruise crew, and convention center attendees off of Port property generated an estimated \$688 million in annual economic output in San Diego County which supports 6,200 jobs. These jobs are estimated to receive approximately \$260 million in annual labor income.
- **Multiplier effects.** The business expenditures of establishments in the District on purchases of intermediate inputs (goods and services to support their operations). In addition, the expenditures of workers directly employed in the District and workers indirectly supported by economic activities in the District also generate additional impacts in the County. In total, these multiplier effects attributable to economic activities in the District generate an estimated \$2.5 billion in annual economic output in San Diego County which supports 18,400 jobs. These jobs are estimated to receive approximately \$1.0 billion in annual labor income.

Direct + Off-site + Multipliers. Together, the effects associated with economic activities in the District generate a total of \$7.6 billion of economic output in San Diego County, which supports a total of 57,900 jobs. **Figure 9** illustrates generally how the impacts from different sources were combined.

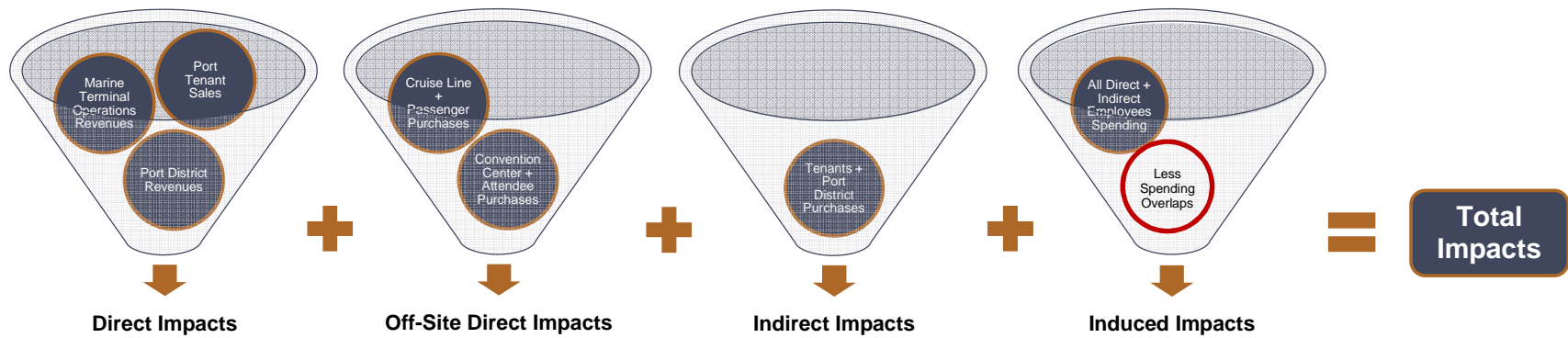
Table 6 Summary of Port District Total Economic Impacts in San Diego

Impact Type	Industrial & Maritime Commerce	Tourism & Commercial	Total Business Establishments
Direct Economic Impacts			
Employment (Jobs)	12,800	20,600	33,400
Labor Income (\$'millions)	\$913	\$821	\$1,734
Economic Output (\$'millions)	\$2,548	\$1,861	\$4,409
Average Wage and Benefits	\$71,000	\$40,000	\$52,000
Off-Site Direct Spending			
Employment (Jobs)	0	6,200	6,200
Labor Income (\$'millions)	\$0	\$260	\$260
Economic Output (\$'millions)	\$0	\$688	\$688
Indirect & Induced Impacts			
Employment (Jobs)	10,200	8,200	18,400
Labor Income (\$'millions)	\$569	\$431	\$1,000
Economic Output (\$'millions)	\$1,429	\$1,121	\$2,550
Total Economic Impacts			
Employment (Jobs)	23,000	35,000	58,000
Labor Income (\$'millions)	\$1,483	\$1,512	\$2,994
Economic Output (\$'millions)	\$3,978	\$3,670	\$7,647

Source: Economic & Planning Systems.

Figure 9 Illustration of Economic Impact Analysis

Treatment of Marine Cargo Terminals, Convention Center, and Cruise Industries Noted



Changes in Multipliers Over Time

The total economic impact in 2013 is below the 2011 estimate, though the direct effects increased during the period. This is caused in part by a significant reduction in multiplier factors in the updated regional model. The reduction in multipliers is due to a number of factors including 1) increased productivity, 2) growth of foreign imports, and 3) a less robust increase in payroll expenses in comparison to overall output. Furthermore, due to the nature of many Port Tidelands' businesses, many of which fall into industry sectors that have shown above-average reductions in multipliers, effects from reduced multipliers have been especially prominent. Sectors with significant reductions in multipliers over the time period include:

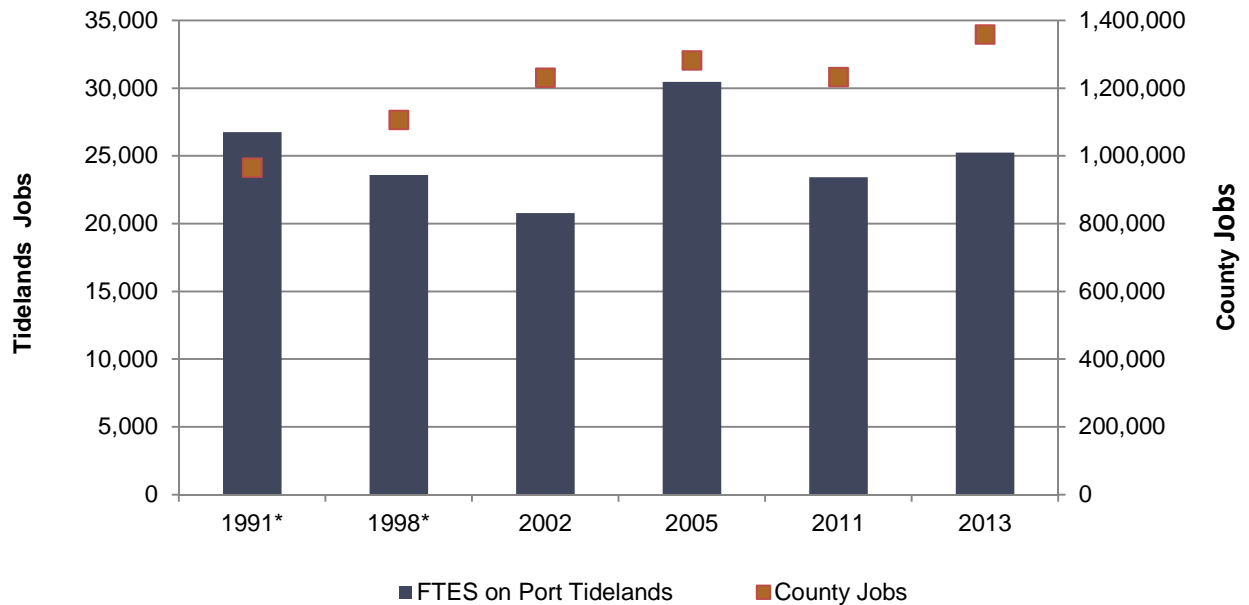
- Ship Building and Repairing - 13 percent reduction
- Wholesale Trade Businesses- 14 percent reduction
- Motor Vehicle and Parts retail sales (which is the IMPLAN sector that includes yacht sales and large boat part retail sales) - 55 percent reduction
- Other Support Services (which includes all banquet and event services as well as certain towing services) - 43 percent reduction
- Other retail sale reductions: Gasoline Stations -54 percent, Clothing and Clothing Accessories -59 percent, Electronics and Appliances -77 percent and Miscellaneous retail store sales - 70 percent; Food and Beverage retail sales -32 percent
- Hotels and Motels - 18 percent reduction

In total, the average reduction for the largest industry sectors (greater than \$50 million in annual output) located on the Port Tidelands between 2011 and 2013 is nearly 20 percent.

Employment on Port Land Compared to Countywide, Selected Years 1991-2013

The period economic impact analyses undertaken by the Port over time are thorough indicators of economic performance of establishments and agencies on Port property. They are subject, however, to the availability and reliability of the data available at the time of the study. While every effort is made to include accurate counts of jobs, sales, and other metrics, each accounting of economic effects contains some level of error. **Figure 10** provides job counts on Port land by year of economic study with accompanying Countywide job counts. These varying counts compared to the steadier, Countywide counts are not unexpected given that the Port tidelands represent a sub-set of the County with a much smaller geography and less diversified set of business establishments. The last three economic study-years do show close similarities with Countywide trends.

Figure 10 Full-Time Equivalent (FTE) Jobs on Port Tidelands Compared to County



**Studies in these years included airport jobs but these jobs are excluded from this chart for comparability.*

Sources: EPS, CA EDD for San Diego County; Previous Port economic studies.

Analysis of Economic Impact by Major Sector

This section provides further analysis of the economic impacts of establishments in the District, excluding the Port, and the San Diego Convention Center.¹⁴ Of the total estimated 33,300 jobs in the District, about 97 percent or 32,500 jobs are at such establishments. Because the majority of businesses in the District have either an industrial or tourism-related orientation, this analysis classified the businesses into two broad sectors that encompass these business orientations, namely industrial and maritime commerce; and tourism and commercial. This classification is also consistent with prior economic impact studies:

- **Industrial and Maritime Commerce** includes establishments in manufacturing, maritime trade, water transportation and support activities, construction, truck transportation and warehousing, marinas, and other related support establishments providing professional, business, and commercial services. Notable establishments include General Dynamics NASSCO, Solar Turbines, and BAE Systems Ship Repair.
- **Tourism and Commercial** includes hotels, specialty retail, restaurants, and a variety of commercial service establishments, nonprofit organizations and public agencies.

The number of establishments, direct jobs, and revenues generated by sector are summarized in **Table 7**. While establishments classified in the Industrial and Maritime Commerce sector accounted for about 42 percent of total establishments, they generated about 58 percent of

¹⁴ Impacts related to these specific entities are discussed further in the next section.

the revenues (output) and about 38 percent of the direct jobs in the District. Establishments in the Tourism and Commercial sector make up the majority of businesses in the District, 58 percent but they support a comparatively lower share of total revenues, 42 percent, an indication that businesses in this sector are generally smaller on average, in terms of revenues, than businesses in the industrial and maritime commerce sector. On the other hand, businesses in the Tourism and Commercial sector account for a relatively larger share of workers, 62 percent compared to 38 percent in the Industrial and Maritime Commerce sector.

Table 7 Direct Jobs and Revenues of Business Establishments by Sector

Establishment	No. of Establishments	Direct Jobs	Sales/Revenue (\$million)
Industrial and Maritime	257	12,761	\$2,548.3
Tourism and Commercial	362	20,594	\$1,860.5
All Establishments	619	33,355	\$4,408.8

Source: Port of San Diego; D&B; and Economic & Planning Systems.

Note: "Sales/Revenue" is equivalent to Output. "Direct Jobs" may not match previous tables due to rounding.

Table 6 shows the total economic impacts generated in San Diego County by establishments and associated activities in each sector. Businesses establishments in the Industrial and Maritime Commerce sector generate an additional \$1.4 billion in output through multiplier effects, which supports 10,200 additional jobs. Business establishments in the Tourism and Commercial sector generate an additional \$1.8 billion in output through off-site direct and multiplier effects, which supports 14,300 additional jobs. In total, this analysis estimates that of the total output of \$7.6 billion attributable to economic activities in the District, the Industrial and Maritime Commerce sector accounts for \$4.0 billion (52 percent), while the Tourism and Commercial sector accounts for \$3.7 billion (48 percent).

These total impacts imply employment multipliers of 1.44 for the Industrial and Maritime Commerce sector and 1.28 for Tourism and Commercial sector. The output multipliers are relatively similar for the two sectors (1.36 and 1.38, respectively, for Industrial and Maritime Commerce and Tourism and Commercial sectors).

5. KEY SECTORS AND WORKER PLACE OF RESIDENCE

This chapter describes the economic effects of particular sectors along the Port and reports cities where workers of establishments along the Port reside.

Key Sectors

Detailed results for the Port's key tenants and tenant types are provided below, in the following order:

- Marine Cargo Terminals
- San Diego Convention Center
- Cruise Terminal

Marine Cargo Terminals

The Port has two marine cargo terminals, Tenth Avenue and National City, which processed about 1.6 million tons of cargo in 2013 including automobiles, agricultural commodities, lumber, and wind energy components. Four key economic sectors are involved in providing cargo and vessel handling services at the Port:

- Surface transportation sector
- Maritime services sector
- Shippers/consignees using the Port
- Maritime Operations Department of the Port of San Diego

The marine cargo terminals are key conduits for commodities important to many industries in San Diego. For example, a large shipment of steel for use in the construction of two shipping container vessels was recently processed through the Tenth Avenue Marine Terminal, bound for General Dynamics NASSCO's shipyard on Port property. Marine terminal businesses account for about 1,400 direct jobs and 2,800 total jobs (including multiplier effects) in San Diego County. Total economic output sums to \$457 million, representing a 17 percent increase over the 2011 estimate. **Table 8** summarizes impacts for marine terminals.

Table 8 Economic Impacts of Marine Cargo Terminals 2013

Type of Impact	San Diego County
Direct Economic Impact	
Employment	1,410
Personal Income (millions)	\$92.4
Economic Output (millions)	\$275.5
Avg. Annual Personal Income	\$66,000
Indirect+Induced Economic Impact	
Employment	1,415
Personal Income (millions)	\$77.4
Economic Output (millions)	\$181.7
Total Economic Impact	
Employment	2,825
Personal Income (millions)	\$169.8
Economic Output (millions)	\$457.2

Source: IMPLAN 2012; and Economic & Planning Systems.

San Diego Convention Center (SDCC)

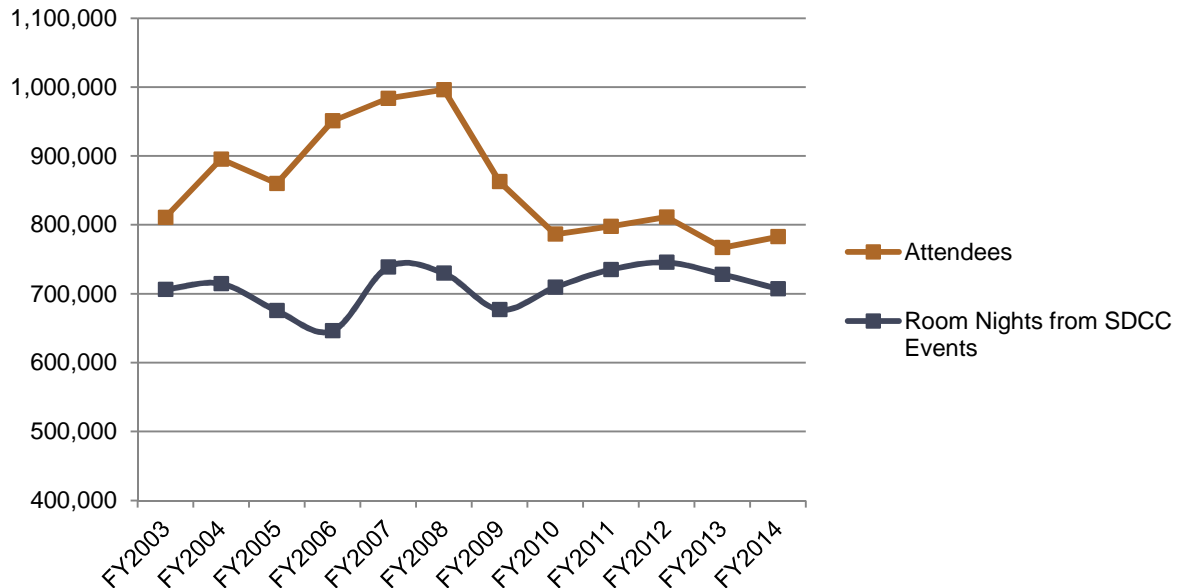
The San Diego Convention Center (SDCC) operates a world-class venue for hosting major conventions, trade shows, meetings and special events. According to its annual report for fiscal year 2013, SDCC hosted 148 events attracting over 765,000 attendees in 2013. The operations of SDCC as well as the expenditures of out-of-town visitors (which include attendees, exhibitors and event organizers) generate significant economic impacts in the County's economy. The FY 2013 annual report shows that SDCC generated annual revenues of \$30.6 million in FY 2013.¹⁵ In addition, visitors spent a total of approximately \$536 million on goods and services in the County, of which \$136 million is estimated to have occurred within the District.¹⁶ **Figure 11**

¹⁵ Data for the Convention Center revenues, employment, attendee/exhibitor spending and data on expenditures by event organizers in 2013 was obtained from the Convention Center's Annual Report for Fiscal Year 2013. The Convention Center revenues used for impact analysis in this study as shown in **Table 10** are less than total revenues in the Center's Annual Report. This is because transfers from the City and donations were excluded as they likely do not reflect payment for services provided. Economic impact analysis attempts to measure the value of services produced as reflected in revenues received.

¹⁶ The impacts of the San Diego Convention Center were estimated based on its own business activity and based on the personal consumption expenditures of attendees and exhibitors at Convention Center events and the business expenditures of organizations that sponsor events held at the Convention Center. Consequently, data was collected and analyzed for each of these sources of spending to determine economic impacts in the County attributable to the Convention Center.

charts the attendee and hotel stays from SDCC events. As shown, after declines in FY 2008 through FY 2010, attendance stabilized in FY 2011 and remained around 800,000 annual visitors over the past three fiscal years.

Figure 11 Selected Attendees and Room Nights from SDCC Events



Note: All data includes national and corporate conventions and excludes attendees and room-nights from consumer shows, local trade shows, small meetings and community events. Room nights only include those booked through room-blocks held by groups

Sources: AECOM 2010 Refined Analysis of Additional Business Capture Derived from a Potential Expansion of the San Diego Convention Center; San Diego Convention Center's Annual Report for Fiscal Year 2013.

Total annual expenditures in San Diego County by attendees, exhibitors and event organizers were estimated at \$535 million in 2013. As shown in **Table 9**, about 29 percent or \$136 million of this spending was estimated to have occurred at establishments within the District, while the remaining \$400 million in spending occurred in businesses off-tidelands. The expenditures made within the District are included in this analysis as revenues of business establishments in the District.

The direct impacts as shown are based on the direct operations and employment at SDCC. Multiplier effects of SDCC as well as visitor spending impacts are reflected in the indirect/induced impacts of SDCC. Please note that this estimate does not include impacts generated by event-related visitor spending within the District.¹⁷

¹⁷ Estimates of impact within the District are not shown separately but are accounted for in the impacts of business establishments discussed earlier in this report. This was done to avoid double-counting when impacts from various entities in the District are added to obtain the District's total impact.

Table 9 Convention Center Operations and Events-Related Expenditures

Entity/Activity	Direct Jobs	Sales/ Revenue (\$'million)		
Convention Center Operations	327	\$26.8		
Events-Related Expenditures (\$'million)		<u>On-Tidelands¹</u>	<u>Off-Tidelands</u>	<u>Total</u>
Attendees	-	\$122.4	\$278.9	\$401.4
Event Organizers/Exhibitors	-	\$13.4	\$120.8	\$134.3
Total	-	\$135.8	\$399.8	\$535.6

[1] Economic impacts of on-tideland spending are estimated from the sell-side, i.e., based on sales of businesses located on the Tidelands to avoid double-counting.

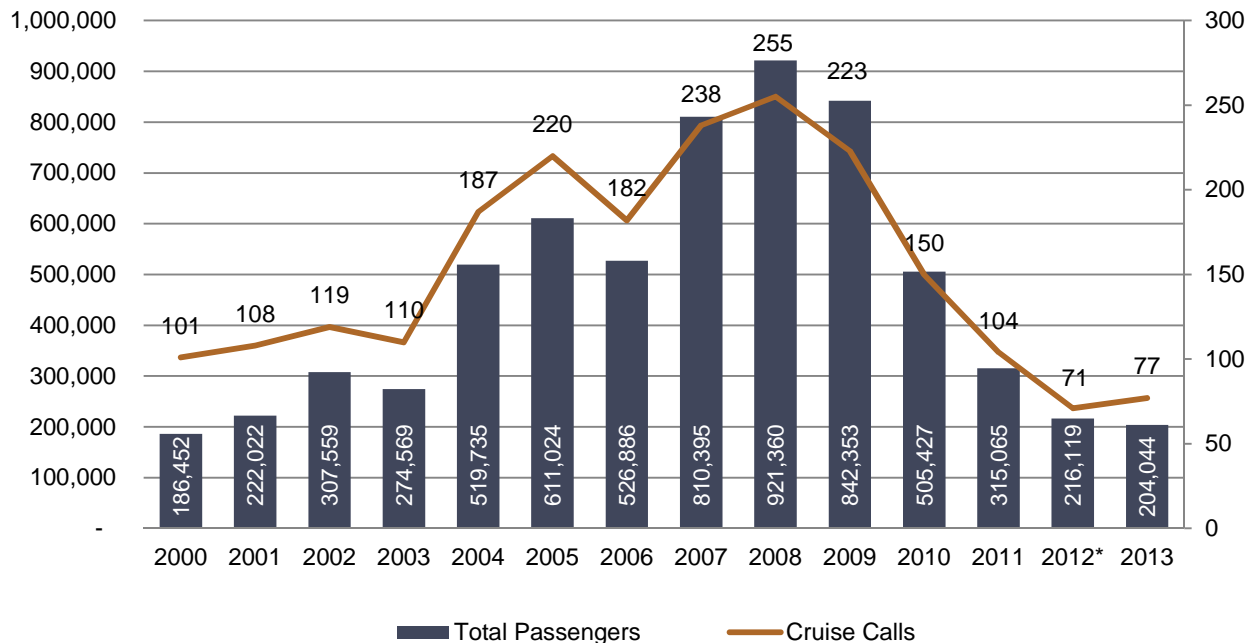
Source: San Diego Convention Center FY13 Annual Report, FY15 Budget; and Economic & Planning Systems.

Cruise Industry

The Port of San Diego receives cruise ships at the B Street Cruise Terminal and Broadway Pier locations. Cruise ships making calls in San Diego have declined from a high in 2008 of 255 to 2013, when 77 ships stopped in San Diego. While this is a significant decline (see **Figure 12**) in cruise calls to the city, the recent report commissioned by the Port to study cruise trends forecasts increases in cruise calls in the next few years.¹⁸

¹⁸ See Port District's maritime news website's discussion of recent study <https://www.portofsandiego.org/maritime/3367-port-of-san-diego-launches-free-cruise-schedule-app.html> (accessed November 26, 2014).

Figure 12 San Diego Cruise Passengers and Cruise Calls, 2000-2013



Source: Business Research & Economic Advisors and Port of San Diego

Based on annual cruise-related expenditures that flowed into the San Diego County economy in 2013, the cruise industry generated approximately \$48 million in economic output for businesses outside of the Port District which supported about 400 jobs countywide. The cruise industry generates economic impacts in San Diego County based on expenditures made by cruise lines, passengers, and cruise ship crews. While the annual number of cruise passengers boarding or exiting cruise ships in San Diego and the number of cruise calls to San Diego has declined significantly since the peak of 2008, cruise ships still bring hundreds of thousands of people to San Diego each year. Simultaneously, cruise lines spend millions of dollars in San Diego on supplies for their ships.

Cruise lines make expenditures to support their cruise ship operations in the County, while passengers and crew from outside the County spend their money in the County either before embarkation or during stopovers while in-transit, when they purchase lodging, meals, tours, souvenirs, etc. This update relies on previous research conducted for the 2011 report which provides spending rates per passenger, per crew member, and per ship (by cruise lines for supplies), by County zip code.

Table 10 summarizes estimated economic impacts for cruises stopping in San Diego in 2013. Cruise lines are estimated to have spent approximately \$11 million in San Diego County. In addition, passengers and crew spent approximately \$20 million in San Diego on personal consumption expenditures before embarkation, after disembarkation, and while in-transit through San Diego.

Based on the analysis of spending by zip code in 2011, about 12 percent or \$4 million of cruise line and passenger expenditures in San Diego are estimated to be at business establishments in the District. As in the case with Port expenditures and Convention Center attendees and event organizers described above, such expenditures were excluded from impact analysis to avoid double-counting since they are reflected in the revenues/sales of business establishments in the District.

Table 10 Expenditures Related to Cruise Line Operations in San Diego

Expenditure Category/Location	Annual Expenditures (\$'million)
<u>Cruise Lines Spending in Support of San Diego Operations</u>	
San Diego	\$11.1
California	\$20.5
Passengers and Crew Spending in San Diego	\$20.1
<u>Total Expenditures</u>	
San Diego	\$31.2
California	\$20.5
Total	\$51.7

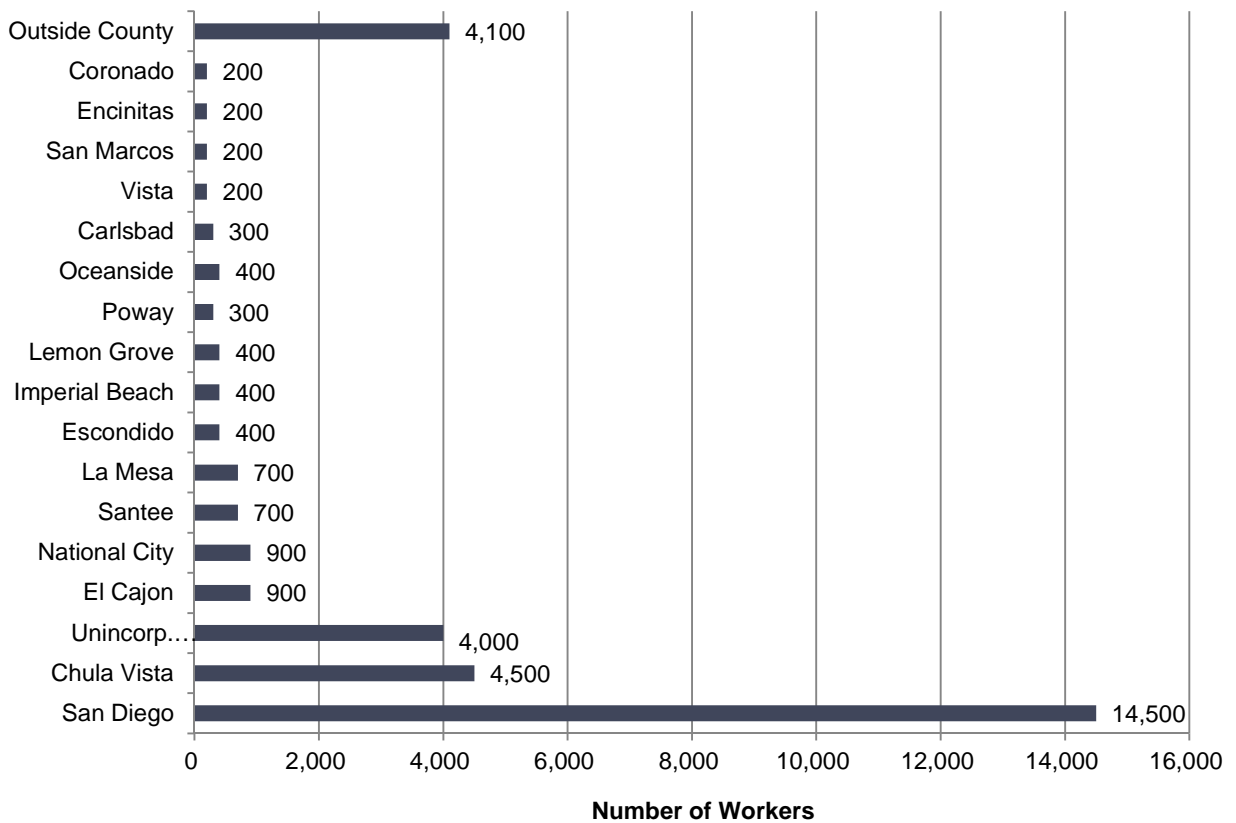
Source: Economic & Planning Systems.

Distribution of District Jobs' Induced Economic Impacts by Place

The distribution of induced impacts is largely based on where employees reside, since employees tend to spend the majority of their disposable income close to their place of residence on such items as housing, utilities, education and health services, food and groceries. While the input-output model used to estimate induced impacts does not provide data on the spatial distribution of these induced impacts, EPS used data from the U.S. Census Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics to show the places of residence for workers in the District. By showing the distribution of places where workers live, this analysis shows the likely distribution of induced economic impacts generated by expenditures of workers in the District.

Figure 13 provides a graphical illustration of the distribution of workers across the County's cities. As expected, the majority of workers, about 74 percent, live in the five cities that overlap the District's territory. This means that in addition to the direct impacts, businesses in these cities also benefit the most from worker expenditures. However, almost every city in the County benefits to some degree from housing employees who work in the District.

Figure 13 Distribution of Direct Workers by Place of Residence



Source: Distribution of employees by place of residence are rounded to nearest hundred. Information for graphic is based on LEHD Origin-Destination Employment Statistics accessed via the OnTheMap application published by U.S Census Bureau. (<http://onthemap.ces.census.gov/>, accessed November 2014)