

Trade Impact Study Final Report

PREPARED FOR

**Port of Los Angeles
Port of Long Beach
Alameda Corridor Transportation Authority**



PREPARED BY

**BST Associates
18414 103rd Ave NE
Suite A
Bothell, WA 98011
(425) 486-7722
bstassoc@seanet.com**

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BST Associates
Market Research & Strategic Planning

Trade Impact Study

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Trade Impact Study

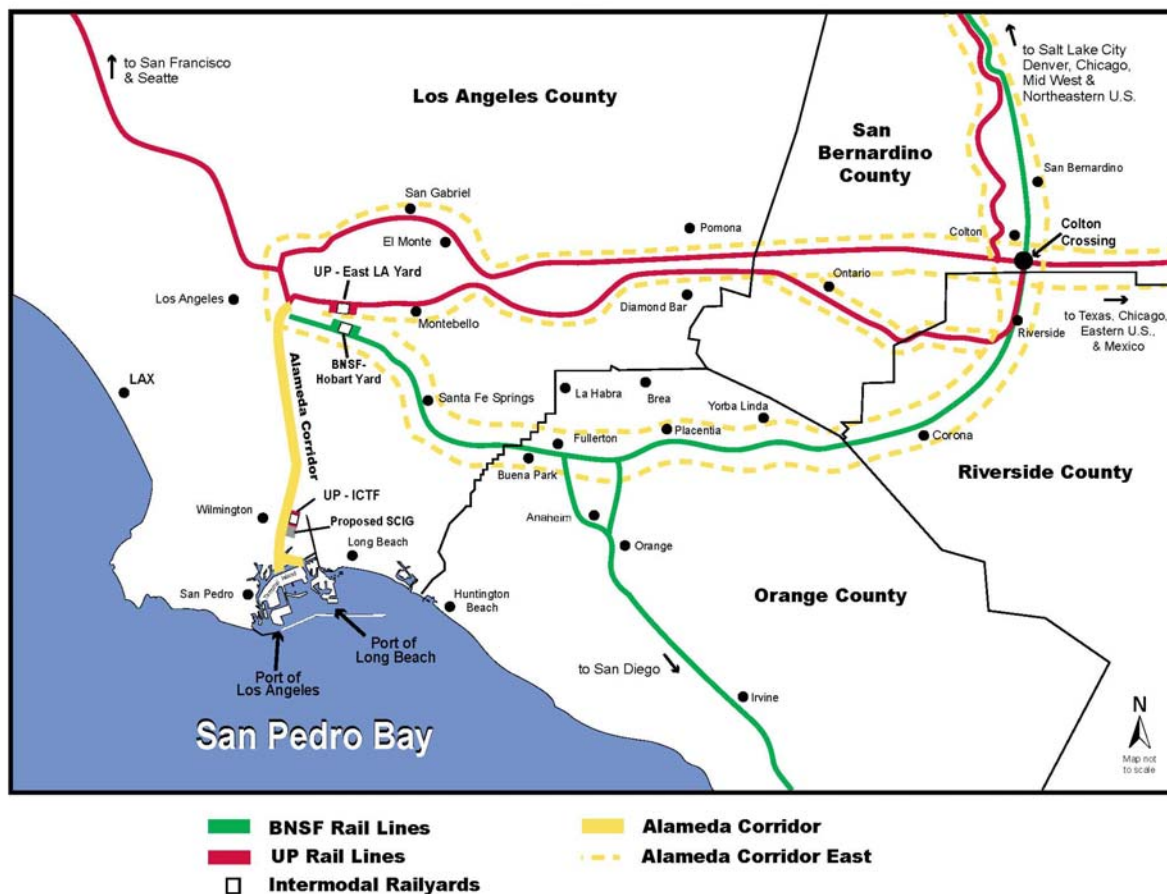
Executive Summary

Introduction

BST Associates was retained by the Alameda Corridor Transportation Authority, the Port of Long Beach, and the Port of Los Angeles to estimate the economic impact of containerized trade that moves through the two ports. This study updates two similar analyses performed previously by BST Associates.

The first of these studies was undertaken in 1995 as part of the original Alameda Corridor project. The information was used to highlight the national importance of the Alameda Corridor project and resulted in the Corridor being declared a Project of National Significance. The second analysis, undertaken in 2001, was an update of the first, and was part of the Orange North-American Trade Rail Access Corridor project (OnTrac). In this case, the purpose was again to highlight the national importance of the Southern California rail network to secure federal funding for much needed grade separations.

Figure 1 – Southern California's Trade Network



Since the last update of this analysis the amount of containerized cargo moving through the Ports of Los Angeles and Long Beach has continued to climb. The two ports are truly national ports, handling exports of products from throughout the country while also processing imports bound for every state. The cargo moving through these two ports generates jobs, income, and taxes in every state in the United States; assuring that the road and rail system is robust enough to freely move these goods should be a regional, state, and national priority.

The Big Picture

Southern California has become a leading global trade and transshipment center because of its world-class infrastructure and a massive local market, which results in more favorable costs for delivering cargo through these ports to the rest of the nation as well. The region has evolved into a distribution center for U.S. trade with Pacific Rim nations partly because of its geographic location, but also because such a large portion of the trade is consumed locally. The population of Southern California is larger than most states and is growing fast. The rapidly increasing population will demand ever more imported goods and the region's manufacturing sector – one of the largest in the nation – will continue to require components, parts and other inputs. With structural trends in the U.S. and world economies driving international trade flows from Asia to the United States, container traffic at the Ports of Los Angeles and Long Beach is set to rise dramatically over the next 20 years.

National Impact

The Ports of Los Angeles and Long Beach are already first and second in the nation, respectively, in container volumes and together they handle more than one third of all full international container traffic in the United States. Full international container traffic at the ports was 9.2 million Twenty-Foot Equivalent Units (TEUs) in 2005, including 2.0 million TEU of export traffic and 7.2 million of import traffic. The ports accounted for 24.2% of all U.S. export container traffic and 40.6% of import container traffic in 2005.

The astounding amount of containerized traffic moving through Southern California impacts the economy throughout the United States, and this impact has grown tremendously since this analysis was first performed. As shown in Table 1, the value of containerized trade moving through the Ports of Los Angeles and Long Beach jumped from \$74 billion in 1994 to \$256 billion in 2005, or total growth of 246%.

**Table 1 – Growth in the National Impact of Trade, 1994-2005
For Goods Using Southern California's Trade Infrastructure Network**

	1994	2000	2005	% Change		
				1994-2000	2000-2005	1994-2005
Total Trade	\$74 billion	\$196 billion	\$256.0 billion	165%	31%	246%
State and Local Taxes	\$6.0 billion	\$16.4 billion	\$28.1 billion	173%	71%	368%
Jobs (Full Time Equivalents)	1.1 million	2.0 million	3.3 million	82%	65%	200%

Source: BST Associates

The impacts on both jobs and taxes have also been impressive. Job growth related to this trade was estimated at 200%, or from 1.1 million jobs in 1994 to 3.3 million jobs in 2005. The state and local taxes (excluding income taxes) that this trade generated grew from an estimated \$6 billion in 1994 to more than \$28 billion in 2005, although it must be noted that modifications to the methodology used for estimating jobs and taxes may account from some of this growth. A more detailed explanation of methodology is presented in the body of the report.

Exports

The economic impact of exports shipped through the Ports of Los Angeles and Long Beach was determined in terms of output, employment, income, and taxes. “Output” refers to the value of the production (or sales) created within the economy by exports, “Employment” refers to the number of jobs created by exports, and “Income” refers to the earnings of employees whose jobs are sustained by exports (includes direct, indirect, and induced job impacts). “Taxes” are the state and local level sales taxes, public utility taxes, property taxes, motor vehicle fees and severance taxes, among others.

Nationwide, the \$35.4 billion in exports through the Ports of Los Angeles and Long Beach in 2005 generated a total of \$78.7 billion of **output**. Exports have a derived output multiplier of 2.23, which means that for every \$1.00 of exports, additional output (indirect and induced) of \$1.23 was generated in the United States. The \$35.4 billion in export trade also resulted in an estimated \$18.8 billion in total **income**, with a derived income multiplier of 0.53. This means that every \$1.00 of export trade generated \$0.53 of income. Exports generated an estimated 465,660 total **jobs**, based on an employment multiplier of 13.17 (including direct, indirect, and induced effects). That is, for every \$1 million in export sales, an estimated 13.17 jobs were created in the United States. Finally, waterborne exports through the Ports of Los Angeles and Long Beach generated an estimated \$2.0 billion in state and local **taxes**, for an effective tax rate of 5.6%.

Imports

As with exports, imports also create output, income, employment and tax impacts. However, care must be taken to ensure that only the domestic component of imports is counted, since imported products are manufactured in economies outside the U.S. This means import impacts were calculated based **only** on the share of imports associated with the wholesale and retail industries in America. In order to calculate the impacts of imports, the import value was first converted into wholesale and retail values, and then the impact calculations performed on the new values.

For the year 2005, the total **output** associated with imports moving through the Ports of Los Angeles and Long Beach, for all states combined, was estimated to be \$285.2 billion. The total **income** impact was estimated to be \$88.8 billion, and the total employment impact was estimated to be 2.84 million (full-time equivalent) **jobs**. The state and local **taxes** associated with imports were also calculated, and were estimated to total approximately \$26.3 billion.

National Significance

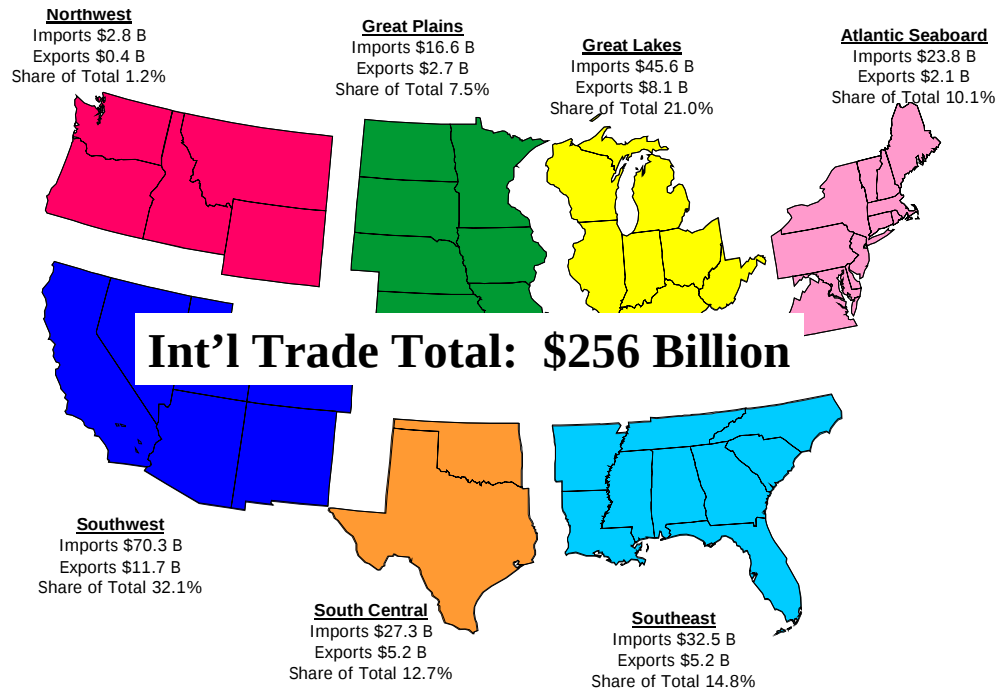
Value of Trade

The economic impact (jobs, income, output, and state and local taxes) of the containerized trade moving through Southern California was calculated using the Regional Input-Output Modeling System (RIMS II) input-output model. The economic impact of exports was determined by combining the value of port trade associated with each state with input/output multipliers from the Bureau of Economic Analysis RIMS II model. The economic impact of imports was calculated similarly, with the proviso that only the domestic component was included (i.e., the share of imports associated with the wholesale and retail industries). The trade figures for the wholesale and retail industries were estimated by multiplying the import trade value by the wholesale and retail margins for each industry. Economic impact multipliers were then applied to these wholesale and retail values to estimate the economic impacts. Impacts were calculated for output, employment and income.

Figure 2 summarizes the estimated regional impacts of containerized imports and exports that moved through the Ports of Los Angeles and Long Beach in 2005.

- The Southwest region imported \$70.3 billion and exported \$11.7 billion worth of containerized goods through the Ports of Los Angeles and Long Beach in 2005.
- The Great Lakes region imported \$45.6 billion and exported \$8.1 billion.
- The Atlantic Seaboard region imported \$23.8 billion and exported \$2.1 billion.
- The Southeast region imported \$32.5 billion and exported \$5.2 billion.
- The South Central region imported \$27.3 billion and exported \$5.2 billion.
- The Great Plains region imported approximately \$16.6 billion worth of goods and exported \$2.7 billion.
- The Northwest region imported approximately \$2.8 billion worth of goods through these ports in 2005 and exported \$0.4 billion worth of goods.

**Figure 2 – Total Value of Containerized Trade
Moving through the Ports of Los Angeles and Long Beach, 2005**



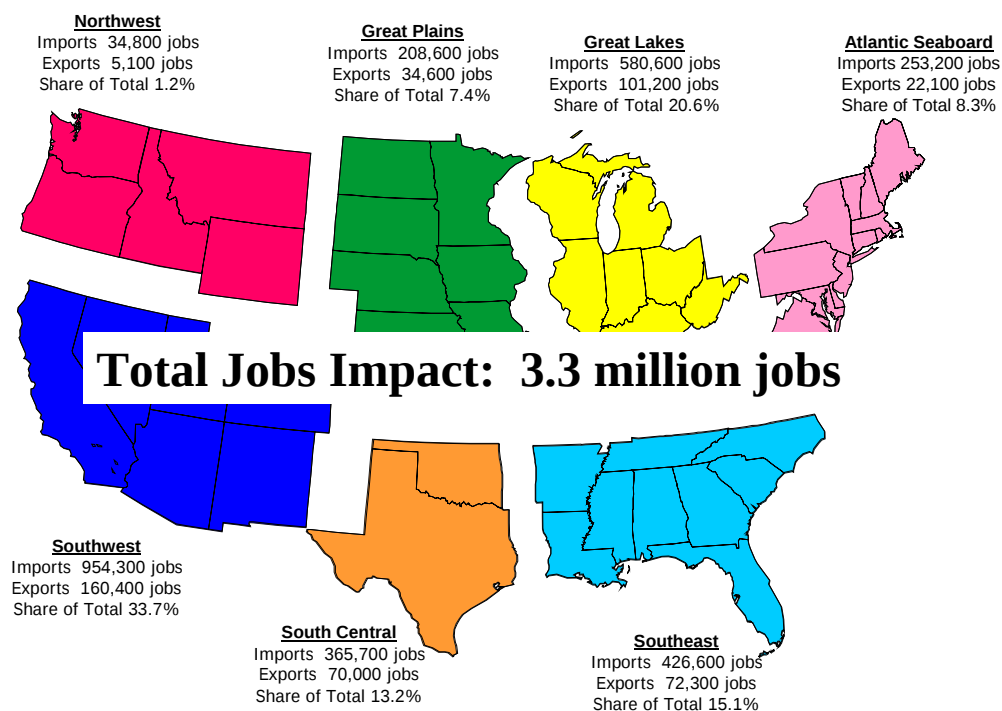
Source: BST Associates

Note: Alaska and Hawaii not shown

Employment

Figure 3 shows the number of jobs that are generated in each region of the United States by the containerized trade moving through the Ports of Los Angeles and Long Beach. In total, this containerized trade generated an estimated 3.3 million jobs nationwide, representing approximately 2.5% of all jobs.

Figure 3 - Jobs Related to Trade Flowing Through the Ports of Los Angeles and Long Beach, 2005



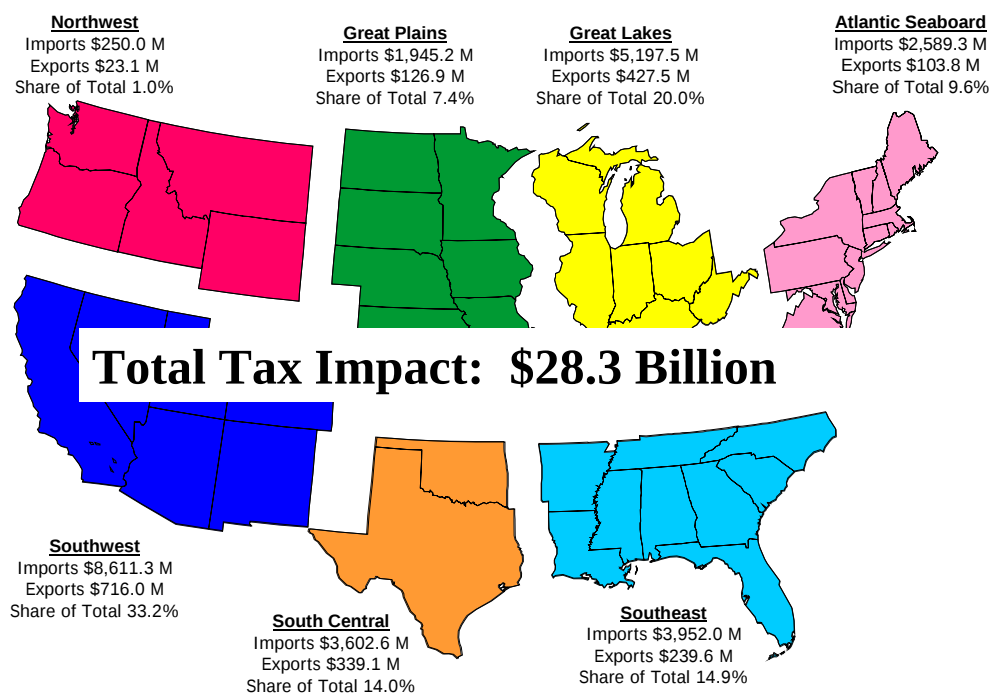
Source: BST Associates

Note: Alaska and Hawaii not shown

State and Local Taxes

The \$256 billion in containerized goods that are imported and exported through the Ports of Los Angeles and Long Beach generate more than \$28 billion in state and local taxes throughout the United States. The tax impact of imports is especially important, accounting for more the \$26 billion of the \$28 billion, or 93% of the total. The effective tax rate on exports averages 5.6% nationwide while the effective tax rate on imports averages 18.9%.

Figure 4 - Taxes Related to Trade Flowing Through the Ports of Los Angeles and Long Beach, 2005



Source: BST Associates

Note: Alaska and Hawaii not shown

Regional Summary

The containerized trade that moves through the Ports of Los Angeles and Long Beach impacts every region of the United States. This impact is greatest in the Southwest region, which includes California. However, the impact of these ports is significant in every other region, and Table 2 illustrates the national importance of the trade. Some areas receive more trade than others, due largely to the rail network serving Southern California.

**Table 2 - Summary of Impacts by Region in 2005 (\$ millions)
Ranked by Trade Value**

Rank	Region	States	Trade Value (\$ millions)	Jobs	Income (\$ millions)	Taxes (\$ millions)
1.	Southwest	AZ, CA, CO, NV, NM, UT	\$82,050	1,114,660	\$39,240	\$9,330
2.	Great Lakes	IL, IN, KY, MI, OH, WV, WI	\$53,640	681,860	\$21,370	\$5,630
3.	Southeast	AL, AR, FL, GA, LA, MS, NC, SC, TN	\$37,780	498,900	\$14,840	\$4,190
4.	South Central	OK, TX	\$32,580	435,710	\$14,450	\$3,940
5.	Atlantic Seaboard	CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT, VA	\$25,940	275,230	\$9,070	\$2,690
6.	Great Plains	IA, KS, MN, MO, NE, ND, SD	\$19,260	243,220	\$7,010	\$2,070
7.	Northwest	ID, MT, OR, WA, WY	\$3,190	39,920	\$1,130	\$270
8.	Alaska Hawaii	AK, HI	\$1,520	16,220	\$450	\$140
		Grand Total	\$255,950	3,305,720	\$107,550	\$28,270

Source: BST Associates

Introduction

The Southern California trade gateway is a vital component of the nation's economy. More than \$256 billion in containerized trade flowed through this gateway in 2005. This floodtide of trade moves between our overseas trade partners, particularly China and other Pacific Rim countries, and every state in the lower 48, via the twin ports of Los Angeles and Long Beach. It is critical to the economy of the United States that these ports and the road and rail networks serving them continue to function efficiently. The ports have been successful in adding capacity to meet the demand for marine terminals. However, solving problems with inland transportation system is more complicated, involving more players and directly affecting the everyday lives of Southern California residents.

One project that has been successful in reducing the negative local impacts from the increasing trade is the Alameda Corridor, a twenty-mile, completely grade-separated corridor that links the Ports of Los Angeles and Long Beach to the intercontinental rail network that begins east of downtown Los Angeles. The Alameda Corridor, however, is only the first link in the rail system. Beyond downtown Los Angeles the rail system branches into three main routes into and out of the area, and hundreds of roads are crossed at-grade by the rail lines in each of these corridors creating congestion, delay and air pollution at these crossings while trains pass.

BST Associates was retained by the Alameda Corridor Transportation Authority, the Port of Long Beach, and the Port of Los Angeles to estimate the economic impact throughout the United States of containerized trade that moves through the two ports. The results are intended to be used in demonstrating to state and national leaders the importance of funding transportation system improvements in Southern California. This study represents an update of two similar analyses performed previously by BST Associates. The first of these studies was undertaken in 1995 as part of the original Alameda Corridor project. The second analysis, undertaken in 2001, was an update of the first, and was part of the OnTrac project.

Since the 2001 update of this analysis, the amount of containerized cargo moving through the Ports of Los Angeles and Long Beach has continued to climb. The two ports are truly national ports, handling exports of products from throughout the country while also processing imports bound for every state. The cargo moving through these two ports generates jobs, income, and taxes in every state in the United States. Assuring that the road and rail system is robust enough to freely move goods to and from the ports must be a regional, state, and national priority.

The Big Picture

Southern California has become a leading global trade and transshipment center because of its combination of a massive internal market, large manufacturing sector, and heavy investment in world-class infrastructure. The region has evolved into a distribution center for U.S. trade with Pacific Rim nations partly because of its geographic location, but also because one-third of the import trade remains here in Southern California while two-thirds are destined for the rest of the nation, the population of Southern California is larger than most states and is growing fast. The rapidly increasing population will demand ever more imported goods and the region's manufacturing sector – one of the largest in the nation – will continue to require components, parts and other inputs. With structural trends in the U.S. and world economies driving international trade flows from Asia to the United States, container traffic at the Ports of Los Angeles and Long Beach is set to rise dramatically over the next 20 years.

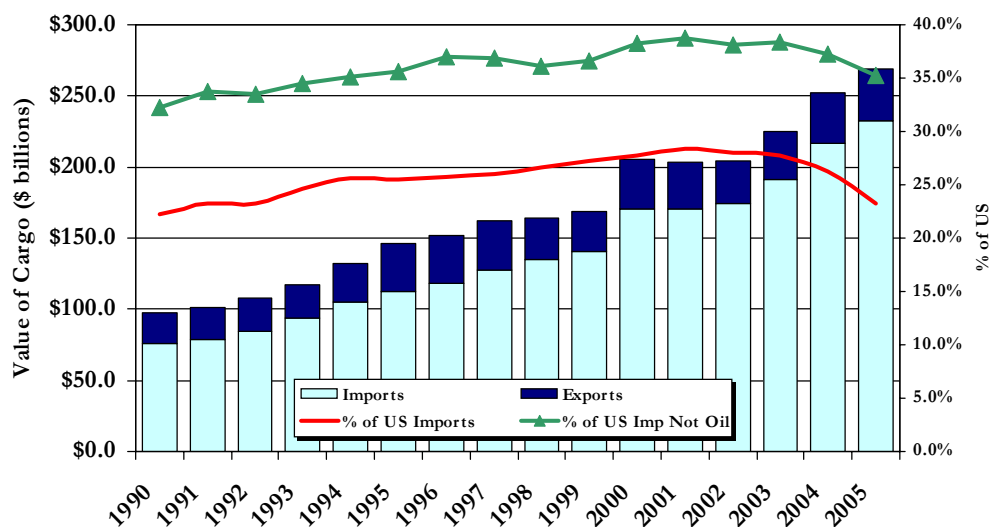
Overview of National Impacts

The following section presents trade data illustrating the role that the Ports of Los Angeles and Long Beach play in U.S. international trade, and demonstrates the importance of the transportation system in the region.

Share of U.S. Trade

Waterborne trade via the Los Angeles Customs District¹ grew from \$97 billion in 1990 to nearly \$269 billion in 2005 (not adjusted for inflation), which translates to an average annual growth rate of 7.0%. Between 1990 and 2000 the value of waterborne cargo moving through the Los Angeles district grew by an average of 7.8% per year. Between 2000 and 2005 the annual increase in value slowed to an average of 5.6% due to a lack of growth between 2000 and 2002. Since 2002, however, annual growth in trade value has averaged 9.6%.

Figure 5 – Value of Waterborne Trade via the LA Customs District



Source: BST Associates, U.S. Department of Commerce All Modes data

The share of U.S. waterborne trade value that moves through the Los Angeles Customs District peaked in 2001 at 28.4%. In the four years following this peak the share of value moving through the Los Angeles district declined to 23.3%, even though the value of trade was growing by nearly 10% per year. The primary reason for this decline was the rapid increase in the price of crude oil, most of which is imported into the Gulf Coast. In addition, however, the growth in all-water routing of cargo to the East and Gulf Coast, as well as competition from other West Coast regions impacted the Southern California market share.

As shown in Figure 5, most of the growth in value has occurred in imports: In 1990 imports accounted for 79% of the value of waterborne cargo moving through the Los Angeles Customs District, but by 2005 this share increased to 86%. Exports represented the remaining 14% of international trade value in 2005.

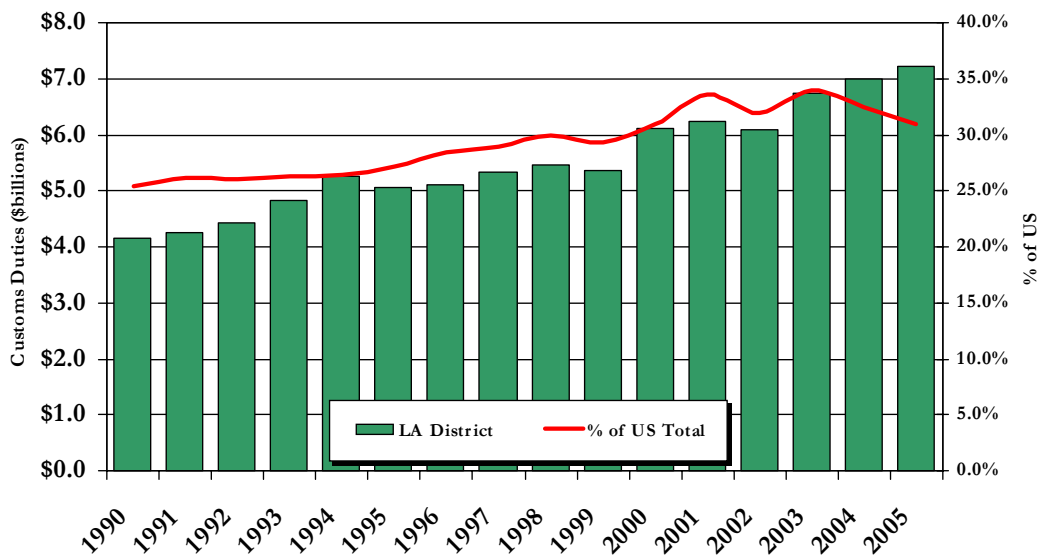
¹ The LA Customs District also includes Port Hueneme, but trade via this Port represents less than 3% of the value of waterborne traffic through the LA Customs District. The source of this data is U.S. Department of Commerce. All values are presented in current dollars (i.e. not adjusted for inflation).

Despite the declining share of trade accounted for by exports, the value of export trade has grown steadily, nearly doubling between 1990 and 2005. Between 1990 and 2000 the average annual growth in the value of exports was 4.9%. This dropped to an average of just 1.5% per year between 2000 and 2005, due to a decline in value between 2000 and 2002. However, since 2002 the value of exports has grown at an average of 6.3% per year.

Share of U.S. Customs Duties

In 2005, the waterborne cargo imported into the Los Angeles Customs District generated an estimated collected \$7.2 billion in customs duties, up from \$4.2 billion in 1990. Waterborne imports through the L.A. Customs District accounted for approximately 31% of all customs duties collected on trade moving via all modes in the entire U.S.

Figure 6 – Estimated Duties Collected on Waterborne Trade via the LA Customs District



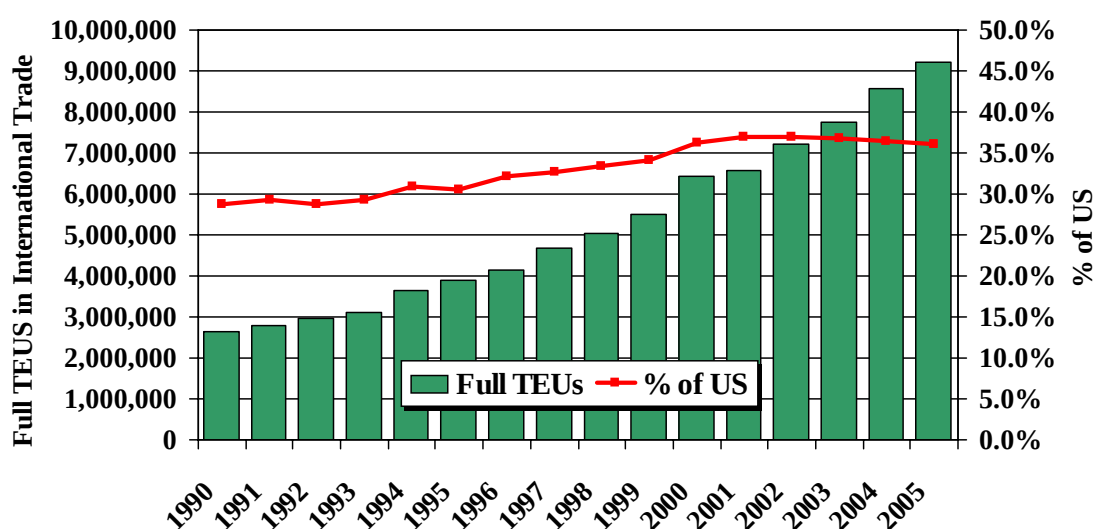
Source: BST Associates, U.S. Department of Commerce All Modes data

Container Traffic Trends

Most of the growth in traffic through the Ports of Los Angeles and Long Beach has been fueled by containerized cargo. As shown in Figure 7, the number of full international containers moving through the Ports of Los Angeles and Long Beach grew from 2.6 million twenty-foot equivalent units (TEU) in 1990 to 9.2 million TEU in 2005. This translates to average annual growth of 8.7% from 1990 through 2005

As a result of the sustained growth at these ports, their share of the U.S. container trade grew from 28.8% in 1990 to a high of 36.9% in 2001 and 2002, before settling slightly, to 36.0% of the entire U.S. container trade in 2005 (and more than 42% of import containers). The total market share gain between 1990 and 2005 was 7.2%.

**Figure 7 – Container Traffic Trends for the Ports of Los Angeles and Long Beach
Full International Containers**



Source: BST Associates, PIERS Global Container Report

Trade Value by State

The estimates of the economic impacts of containerized trade presented later in this document are based on the value of containerized trade moving through the Ports of Los Angeles and Long Beach. These estimated values are presented in the following table.

**Table 3 – Trade Value via the Ports of Los Angeles and Long Beach
by State in 2005 (\$ millions)**

State	Exports	Imports	Total	State	Exports	Imports	Total
Alabama	\$390	\$2,240	\$2,630	Montana	\$10	\$510	\$520
Alaska	\$0	\$570	\$570	Nebraska	\$290	\$1,040	\$1,330
Arizona	\$340	\$8,610	\$8,950	Nevada	\$60	\$3,660	\$3,730
Arkansas	\$430	\$3,130	\$3,560	New Hampshire	\$20	\$490	\$510
California	\$10,430	\$52,100	\$62,530	New Jersey	\$540	\$2,930	\$3,470
Colorado	\$280	\$2,630	\$2,910	New Mexico	\$30	\$1,880	\$1,910
Connecticut	\$80	\$1,270	\$1,350	New York	\$510	\$6,190	\$6,700
Delaware	\$20	\$300	\$320	North Carolina	\$360	\$4,280	\$4,640
Dist. of Columbia	\$20	\$160	\$180	North Dakota	\$20	\$360	\$380
Florida	\$120	\$7,680	\$7,810	Ohio	\$1,450	\$10,240	\$11,690
Georgia	\$380	\$4,200	\$4,570	Oklahoma	\$250	\$3,650	\$3,900
Hawaii	\$0	\$950	\$950	Oregon	\$100	\$440	\$540
Idaho	\$20	\$830	\$850	Pennsylvania	\$490	\$4,530	\$5,020
Illinois	\$2,840	\$10,850	\$13,700	Rhode Island	\$20	\$380	\$400
Indiana	\$790	\$5,990	\$6,780	South Carolina	\$220	\$2,080	\$2,300
Iowa	\$520	\$2,730	\$3,250	South Dakota	\$20	\$450	\$470
Kansas	\$590	\$2,440	\$3,040	Tennessee	\$1,610	\$2,910	\$4,520
Kentucky	\$690	\$3,680	\$4,380	Texas	\$4,990	\$23,690	\$28,680
Louisiana	\$1,480	\$4,630	\$6,110	Utah	\$560	\$1,460	\$2,020
Maine	\$10	\$470	\$490	Vermont	\$0	\$240	\$240
Maryland	\$100	\$1,890	\$1,990	Virginia	\$80	\$2,720	\$2,790
Massachusetts	\$200	\$2,270	\$2,470	Washington	\$220	\$730	\$950
Michigan	\$1,110	\$8,890	\$10,000	West Virginia	\$390	\$640	\$1,030
Minnesota	\$500	\$4,600	\$5,100	Wisconsin	\$790	\$5,280	\$6,070
Mississippi	\$240	\$1,390	\$1,630	Wyoming	\$10	\$320	\$330
Missouri	\$730	\$4,970	\$5,700	United States	\$35,360	\$220,600	\$255,960

Source: BST Associates using data from U.S. Department of Commerce, PIERS, WISERTrade

The export values presented above are based on data from World Institute for Strategic Economic Research (WISERTrade). WISERTrade was formerly known as “MISER”, or the Massachusetts Institute for Social and Economic Research. The organization was formerly based at the University of Massachusetts, but is now part of Holyoke Community College in Massachusetts. WISERTrade produces estimates of exports for each state based on detailed analysis of the U.S. Department of Commerce’s Export Declarations.

Two data sets from WISERTrade were used to estimate the economic impact of each state's exports through the Ports of Los Angeles and Long Beach. The first set of data included the total value of trade moving from each state through each port, without commodity detail. This is reported in Table 3 on the previous page. The second set included the total value exported through each state, with commodity detail, but without port details. The port export shares from the first table were used to allocate the export values by commodity group for each state.

For imports, BST Associates estimated the value of imports moving to each state based on data from PIERS, the Corps of Engineers, the Department of Commerce, the Bureau of Labor Statistics, the Intermodal Association of North America and the U.S. Census Bureau. PIERS data includes estimates of the value of cargo moving in containers, as well as an address associated with each shipment. However, after testing this address information BST Associates concluded that it was not reliable enough for use in producing regional impact estimates. Problems with this address information included foreign addresses, unknown addresses, locations of company headquarters rather than shipping locations, and other problems. As a result, BST devised an alternate method for estimating trade value for each region.

This alternate method was based on estimating the demand for wholesale and retail goods in each region. Imported commodities were first coded as being destined for retail markets or for inputs to manufacturing (intermediate products and raw materials). Approximately 95% of the containerized imports moving through the Ports of Los Angeles and Long Beach originate in Pacific Rim countries, and the model assumes that the demand for goods from the Pacific Rim is consistent across regions. Reported cargo volumes to regional rail hubs were compiled and then retail goods were allocated to states within regions based on population, while manufacturing inputs were allocated to regions based on manufacturing employment. Containerized cargo imported from non-Pacific Rim countries accounts for less than 5% of the total volume at these two ports, and was assumed to stay in the Southwest region.

Overview of Trade Impacts

Description of Trade Impacts

A port complex generates several levels of economic impact. At the local level, the port directly impacts transportation services and other related businesses, such as steamship agents, stevedores, customs brokers, truck drivers, warehousemen, and other service providers. The revenues and employment associated with these transportation-related providers could cease to exist if the port were to close down or become less efficient and lose its cargo base. Hence, this employment base, which is primarily located in the immediate area or region, is directly impacted by port activities.

A much larger group of businesses that is less directly related to the port includes the businesses that produce or consume the products that move through the port - the importers and exporters. These businesses use the port facilities because they are the most efficient and thus reduce transportation costs.

Summary of Impacts in 2005

Table 4 summarizes the national trade impacts² associated with imports and exports flowing through the Ports of Los Angeles and Long Beach. The total value of international trade via the Ports of Los Angeles and Long Beach to/from U.S. importers and exporters was \$256.0 billion in 2005³, with \$35.4 billion in exports and \$220.6 billion in imports. The trade impacts associated with international containerized trade via the Ports of Los Angeles and Long Beach included:

- Total output of approximately \$364.0 billion in 2005, including export value of \$78.7 billion and import value of \$285.2 billion.
- Income of \$107.5 billion in the U.S. economy, with \$18.8 billion from exports and \$88.8 billion from imports.
- Approximately 3.3 million total jobs (0.47 million jobs tied to exports and 2.84 million jobs tied to imports).
- \$28.3 billion in state and local taxes (\$2.0 billion associated with exports and \$26.3 billion associated with imports).

Table 4 – Summary of Trade Impacts for Containerized Trade via the Ports of Los Angeles and Long Beach in 2005 (\$ billions)

Item	Exports	Imports	Total
Trade Value	\$35.4	\$220.6	\$256.0
Economic Impacts:			
Output	\$78.7	\$285.2	\$364.0
Income	\$18.8	\$88.3	\$107.5
Total Jobs	466,000	2,840,000	3,306,000
State & Local Taxes	\$2.0	\$26.3	\$28.3

Source: BST Associates, PIERS, US Department of Commerce, U.S. Bureau of Economic Analysis, WISERTrade,

² All trade impacts presented in this study are for year 2005.

³ A small portion of trade through the Ports is in-transit trade, which passes through the U.S. on its way to another country (usually to Mexico from the Ports of Los Angeles and Long Beach). The impacts of in-transit trade are not included in this analysis.

Comparison of 2005 Trade Impacts with Trade Impacts in 1994 and 2000

Table 5 compares the employment impacts estimated in the current analysis with those from earlier studies completed in 1994 and 2000. The first analysis was conducted for the Alameda Corridor project using 1994 data, while the second analysis was a part of the OnTrac project, using year 2000 data. The value of international trade via the Ports of Los Angeles and Long Beach to/from U.S. importers and exporters increased from \$74 billion in 1994 to \$256 billion dollars in 2005, which represented a gain of 246%.

The number of jobs associated with this trade grew from approximately 1.1 million in 1994 to 3.3 million in 2005, representing an increase of more than 200%. The number of jobs has undoubtedly grown significantly, however, a change in methodology in the current study accounts for some of the increase in jobs. In the 2000 analysis, it was assumed that only 33% of the imports were destined for retail markets. In the current analysis, after detailed assessment of commodity descriptions, it is estimated that 75% of imports are destined for retail markets. As a result, the 2000 impact assessment underestimated the impacts of imports, resulting in an undercount of the employment impact.

Table 5 – Comparison of Impacts from International Containerized Trade via the Ports of Los Angeles and Long Beach in 1994, 2000, and 2005

	Trade Value (\$ billions)				Jobs		
	Exports	Imports	Total		Exports	Imports	Total
Value							
1994	\$23	\$51	\$74		325,000	745,000	1,070,000
2000	\$31	\$166	\$196		494,000	1,528,000	2,022,000
2005	\$35	\$221	\$256		466,000	2,840,000	3,306,000
Change							
1994-2000	\$8	\$115	\$122		169,000	783,000	952,000
2000-2005	\$4	\$55	\$60		-28,000	1,312,000	1,284,000
1994-2005	\$12	\$170	\$182		141,000	2,095,000	2,236,000
% Change							
1994-2000	32%	225%	165%		52%	105%	89%
2000-2005	14%	33%	31%		-6%	86%	64%
1994-2005	54%	333%	246%		43%	281%	209%

Source: BST Associates

Detailed Results at the State Level

Exports

Methodology

For every state the value of trade was summarized by industry group, and then economic impact multipliers were applied to the trade value to generate impact estimates. The primary sources of data for the export analysis were WISERTrade export data and Bureau of Economic Analysis RIMS II impact multipliers.

Trade value data was obtained from WISERTrade. WISERTrade, formerly known as MISER, works with the U.S. Department of Commerce to develop a summary of export declaration data at the state level. Two data sets from WISERTrade were used in this analysis, one of which reports the total value of exports moving through each U.S. port from each state, and the other that reports total export value for each state and commodity. BST Associates created a concordance between the commodity codes in the WISERTrade data and the industry groups used in the RIMS II multipliers. State export values from the second WISERTrade data set were summarized by industry group, then allocated to the Ports of Los Angeles and Long Beach based on the first WISERTrade data set.

For each state and commodity group, the economic impact of exports moving through the Ports of Los Angeles and Long Beach were estimated combining the value estimates derived from the WISERTrade data and economic impact multipliers from the U.S. Bureau of Economic Analysis Regional Input-Output Modeling System (RIMS II) model. Impacts were calculated for output, income, and employment.

Details for each state and each type of impact are presented in the following sections.

Please note that totals may not add due to rounding.

Output

Output refers to the value of production (or sales) that is created within the economy by export trade. In addition to the direct impact of export sales, exports have broad impacts on the economy: export firms purchase inputs (materials, components, equipment) from their suppliers, and the value of these purchases constitutes the indirect impact of exports. In addition, employees of the exporter and supplier firms purchase consumer goods and services. The value of these purchases comprises the induced impact of exports. In this study, the total impact associated with exports (including direct, indirect and induced impacts) of exports was estimated using RIMS II multipliers, which are prepared by state and by industry sector.

The State of California is used as an example to illustrate the methodology. As shown in Table 6 on the next page, the WISERTrade data indicates that \$10.4 billion of goods produced in California were exported in containers through the Ports of Los Angeles and Long Beach in 2005. The export data are arrayed by industry sector in the table. In the aggregate, these products have an average multiplier of 2.2188, and exports of these goods create a total output impact of \$23.2 billion.

Table 6 – Containerized California Exports through the Ports of Los Angeles and Long Beach - Output Impacts by Industry Sector in 2005 (\$ millions)

Sector/Product	Exports (\$ millions)	Output Multipliers	Total Output (\$ millions)
Crop and animal production	\$1,234.2	2.07	\$2,553.1
Forestry, fishing, and related activities	\$70.0	2.38	\$166.7
Oil and gas extraction	\$0.2	1.86	\$0.3
Mining, except oil and gas	\$15.8	2.30	\$36.3
Wood product manufacturing	\$36.7	2.09	\$76.6
Nonmetallic mineral product manufacturing	\$88.8	2.16	\$191.6
Primary metal manufacturing	\$165.7	1.90	\$315.2
Fabricated metal product manufacturing	\$307.7	2.17	\$666.5
Machinery manufacturing	\$1,432.6	2.31	\$3,304.3
Computer and electronic product manufacturing	\$954.9	2.58	\$2,459.4
Electrical equipment and appliance manufacturing	\$325.6	2.10	\$685.2
Motor vehicle, body, trailer, and parts	\$772.4	1.99	\$1,538.8
Furniture and related product manufacturing	\$35.4	2.27	\$80.4
Miscellaneous manufacturing	\$405.3	2.29	\$928.5
Food, beverage, and tobacco product manufacturing	\$1,198.1	2.36	\$2,831.0
Textile and textile product mills	\$77.5	2.05	\$159.0
Apparel, leather, and allied product manufacturing	\$228.0	2.25	\$513.9
Paper manufacturing	\$178.6	2.05	\$365.6
Petroleum and coal products manufacturing	\$25.5	1.84	\$47.0
Chemical manufacturing	\$1,491.8	2.18	\$3,257.4
Plastics and rubber products manufacturing	\$231.5	2.02	\$466.7
Publishing including software	\$1.4	2.43	\$3.5
Unknown	\$1,156.4	2.17	\$2,504.6
Total	\$10,434.1	2.22	\$23,151.6

Source: BST Associates using data from WISERTrade and U.S. Bureau of Economic Analysis

A similar analysis was performed for each state, and Table 7 on the following page provides a summary estimate of the total output impact associated with export trade through the Ports of Los Angeles and Long Beach. The \$35.4 billion of containerized exports in 2005 generated an estimated \$78.7 billion in total output nationwide, with an average output multiplier of 2.23. In other words, for every \$1.00 in export trade, there was \$2.23 in total output.



**Table 7 – Output Estimates for Containerized Exports through the Ports of
Los Angeles and Long Beach - By State in 2005 (\$ millions)**

State	Exports (\$ millions)	Output Multiplier	Total Output (\$ millions)	State	Exports (\$ millions)	Output Multiplier	Total Output (\$ millions)
Alabama	\$393.4	2.17	\$851.9	Montana	\$10.0	1.90	\$18.9
Alaska	\$1.6	1.78	\$2.8	Nebraska	\$291.4	2.38	\$693.3
Arizona	\$341.0	1.93	\$659.1	Nevada	\$63.1	1.75	\$110.5
Arkansas	\$432.4	2.16	\$932.7	New	\$23.2	1.96	\$45.4
California	\$10,434.1	2.22	\$23,151.6	New Jersey	\$537.0	2.11	\$1,135.1
Colorado	\$282.6	2.21	\$623.2	New Mexico	\$25.7	1.84	\$47.3
Connecticut	\$77.3	1.93	\$149.5	New York	\$509.6	1.87	\$950.7
Delaware	\$16.3	1.87	\$30.5	North Carolina	\$357.4	2.18	\$779.7
Dist. of Columbia	\$22.9	1.19	\$27.2	North Dakota	\$19.2	1.86	\$35.6
Florida	\$124.3	1.91	\$237.3	Ohio	\$1,446.8	2.33	\$3,372.0
Georgia	\$377.4	2.20	\$830.4	Oklahoma	\$245.5	2.14	\$526.1
Hawaii	\$1.3	1.66	\$2.2	Oregon	\$96.7	2.01	\$194.1
Idaho	\$20.0	2.11	\$42.2	Pennsylvania	\$487.0	2.27	\$1,106.3
Illinois	\$2,842.5	2.39	\$6,781.2	Rhode Island	\$17.5	1.79	\$31.2
Indiana	\$789.9	2.12	\$1,670.7	South Carolina	\$216.1	2.14	\$462.1
Iowa	\$520.8	2.12	\$1,103.3	South Dakota	\$15.8	2.23	\$35.2
Kansas	\$592.4	2.22	\$1,312.4	Tennessee	\$1,613.6	2.17	\$3,494.4
Kentucky	\$693.9	2.14	\$1,486.4	Texas	\$4,992.5	2.43	\$12,155.3
Louisiana	\$1,476.0	2.14	\$3,156.7	Utah	\$560.3	2.20	\$1,230.0
Maine	\$14.5	2.12	\$30.8	Vermont	\$2.5	1.84	\$4.6
Maryland	\$100.4	1.86	\$186.6	Virginia	\$78.1	2.03	\$158.3
Massachusetts	\$200.1	1.99	\$397.6	Washington	\$220.9	1.99	\$440.0
Michigan	\$1,108.3	2.17	\$2,401.7	West Virginia	\$388.1	1.89	\$735.0
Minnesota	\$496.2	2.17	\$1,078.0	Wisconsin	\$792.8	2.19	\$1,733.2
Mississippi	\$241.0	2.02	\$487.8	Wyoming	\$13.2	1.89	\$24.9
Missouri	\$728.6	2.16	\$1,572.4	United States	\$35,357.2	2.23	\$78,725.7

Source: BST Associates using data from WISERTrade and U.S. Bureau of Economic Analysis

Income

Total income impacts (direct, indirect and induced) were estimated using the RIMS II earnings multipliers for each state and industry group.

The State of California is used as an example to illustrate the methodology. As shown in Table 8 the RIMS II input-output model estimates that there is \$0.57 in total income in crop and animal production industry for every \$1.00 in sales. In 2005 an estimated \$1.23 billion worth of products from the crop and animal production industry group were produced in California and exported through the Ports of Los Angeles and Long Beach. The total income associated with the crop and animal production industry exports is \$709 million.

Table 8 – Income Impacts for Containerized California Exports through the Ports of Los Angeles and Long Beach by Industry Sector in 2005 (\$ millions)

Sector/Product	Exports (\$ millions)	Earnings Multiplier	Total Income (\$ millions)
Crop and animal production	\$1,234.2	0.57	\$709.4
Forestry, fishing, and related activities	\$70.0	0.95	\$66.4
Oil and gas extraction	\$0.2	0.43	\$0.1
Mining, except oil and gas	\$15.8	0.59	\$9.3
Wood product manufacturing	\$36.7	0.53	\$19.4
Nonmetallic mineral product manufacturing	\$88.8	0.58	\$51.4
Primary metal manufacturing	\$165.7	0.43	\$71.6
Fabricated metal product manufacturing	\$307.7	0.60	\$184.6
Machinery manufacturing	\$1,432.6	0.61	\$878.5
Computer and electronic product manufacturing	\$954.9	0.76	\$724.2
Electrical equipment and appliance manufacturing	\$325.6	0.57	\$185.8
Motor vehicle, body, trailer, and parts	\$772.4	0.45	\$349.4
Furniture and related product manufacturing	\$35.4	0.62	\$22.0
Miscellaneous manufacturing	\$405.3	0.72	\$291.6
Food, beverage, and tobacco product manufacturing	\$1,198.1	0.53	\$638.2
Textile and textile product mills	\$77.5	0.51	\$39.5
Apparel, leather, and allied product manufacturing	\$228.0	0.66	\$149.4
Paper manufacturing	\$178.6	0.50	\$88.8
Petroleum and coal products manufacturing	\$25.5	0.33	\$8.5
Chemical manufacturing	\$1,491.8	0.50	\$744.3
Plastics and rubber products manufacturing	\$231.5	0.47	\$109.7
Publishing including software	\$1.4	0.71	\$1.0
Unknown	\$1,156.4	0.57	\$663.6
Total	\$10,434.1	0.58	\$6,006.8

Source: BST Associates using data from WISERTrade and U.S. Bureau of Economic Analysis

Table 9 provides a summary estimate of the total income effects associated with export trade through the Ports of Los Angeles and Long Beach for each state. The value of trade exports, which was \$35.3 billion in 2005, generated an estimated \$18.8 billion in total income, with an earnings multiplier of 0.53 (i.e., for every \$1.00 in export trade, there was \$0.53 in total income effects).

**Table 9 – Income Estimates for Containerized Exports
via the Ports of Los Angeles and Long Beach by State in 2005 (\$ millions)**

State	Exports (\$ millions)	Earnings Multiplier	Total Income (\$ millions)	State	Exports (\$ millions)	Earnings Multiplier	Total Income (\$ millions)
Alabama	\$393.4	0.49	\$191.9	Montana	\$10.0	0.41	\$4.1
Alaska	\$1.6	0.38	\$0.6	Nebraska	\$291.4	0.48	\$140.6
Arizona	\$341.0	0.50	\$170.4	Nevada	\$63.1	0.44	\$27.7
Arkansas	\$432.4	0.47	\$203.3	New	\$23.2	0.48	\$11.2
California	\$10,434.1	0.58	\$6,006.8	New Jersey	\$537.0	0.46	\$246.5
Colorado	\$282.6	0.55	\$154.5	New Mexico	\$25.7	0.51	\$13.0
Connecticut	\$77.3	0.47	\$36.6	New York	\$509.6	0.44	\$223.5
Delaware	\$16.3	0.33	\$5.5	North Carolina	\$357.4	0.52	\$186.2
Dist. of Columbia	\$22.9	0.04	\$1.0	North Dakota	\$19.2	0.39	\$7.5
Florida	\$124.3	0.49	\$60.8	Ohio	\$1,446.8	0.56	\$808.6
Georgia	\$377.4	0.51	\$194.1	Oklahoma	\$245.5	0.49	\$121.0
Hawaii	\$1.3	0.40	\$0.5	Oregon	\$96.7	0.49	\$47.4
Idaho	\$20.0	0.51	\$10.1	Pennsylvania	\$487.0	0.53	\$258.0
Illinois	\$2,842.5	0.57	\$1,619.2	Rhode Island	\$17.5	0.42	\$7.3
Indiana	\$789.9	0.47	\$374.1	South Carolina	\$216.1	0.50	\$107.2
Iowa	\$520.8	0.44	\$231.4	South Dakota	\$15.8	0.43	\$6.8
Kansas	\$592.4	0.43	\$252.2	Tennessee	\$1,613.6	0.49	\$788.3
Kentucky	\$693.9	0.45	\$310.3	Texas	\$4,992.5	0.56	\$2,814.4
Louisiana	\$1,476.0	0.47	\$700.8	Utah	\$560.3	0.52	\$289.1
Maine	\$14.5	0.54	\$7.8	Vermont	\$2.5	0.50	\$1.2
Maryland	\$100.4	0.41	\$41.1	Virginia	\$78.1	0.47	\$36.7
Massachusetts	\$200.1	0.47	\$94.8	Washington	\$220.9	0.48	\$106.2
Michigan	\$1,108.3	0.53	\$584.4	West Virginia	\$388.1	0.37	\$141.8
Minnesota	\$496.2	0.53	\$265.0	Wisconsin	\$792.8	0.53	\$417.6
Mississippi	\$241.0	0.43	\$103.8	Wyoming	\$13.2	0.45	\$6.0
Missouri	\$728.6	0.45	\$329.5	United States	\$35,357.2	0.53	\$18,768.4

Source: BST Associates using data from WISERTrade and U.S. Bureau of Economic Analysis

Jobs

Total employment impacts (direct, indirect and induced) were also estimated using RIMS II employment multipliers. Employment is measured in full-time equivalent jobs (FTEs).

Again, using California as an example, the RIMS II input-output model estimates that there are 18.58 jobs in the crop and animal production industry for every \$1,000,000 in sales. As shown in Table 10, there were \$1.23 billion of export sales from crop and animal production in 2005, which generated nearly 23,000 jobs. Across all sectors the Ports of Los Angeles and Long Beach handled \$10.43 billion in California exports, with a total employment impact of more than 143,000 jobs.

Table 10 - Employment Impacts for Containerized California Exports through the Ports of Los Angeles and Long Beach by Industry Sector in 2005

Sector/Product	Exports (\$ millions)	Employment Multiplier	Total Jobs
Crop and animal production	\$1,234.2	18.58	22,940
Forestry, fishing, and related activities	\$70.0	35.43	2,480
Oil and gas extraction	\$0.2	7.98	-
Mining, except oil and gas	\$15.8	12.99	200
Wood product manufacturing	\$36.7	15.12	550
Nonmetallic mineral product manufacturing	\$88.8	13.47	1,200
Primary metal manufacturing	\$165.7	9.66	1,600
Fabricated metal product manufacturing	\$307.7	14.47	4,450
Machinery manufacturing	\$1,432.6	13.21	18,930
Computer and electronic product manufacturing	\$954.9	14.62	13,960
Electrical equipment and appliance manufacturing	\$325.6	12.51	4,070
Motor vehicle, body, trailer, and parts	\$772.4	10.19	7,870
Furniture and related product manufacturing	\$35.4	17.15	610
Miscellaneous manufacturing	\$405.3	15.34	6,220
Food, beverage, and tobacco product manufacturing	\$1,198.1	13.46	16,130
Textile and textile product mills	\$77.5	14.84	1,150
Apparel, leather, and allied product manufacturing	\$228.0	19.67	4,490
Paper manufacturing	\$178.6	11.22	2,000
Petroleum and coal products manufacturing	\$25.5	5.80	150
Chemical manufacturing	\$1,491.8	10.05	14,990
Plastics and rubber products manufacturing	\$231.5	11.92	2,760
Publishing including software	\$1.4	15.37	20
Unknown	\$1,156.4	14.23	16,450
Total	\$10,434.1	13.73	143,220

Source: BST Associates using data from WISERTrade and U.S. Bureau of Economic Analysis



Table 11 provides a summary of the estimated total employment effects with export trade flowing via the Ports of Los Angeles and Long Beach for each state. The value of trade exports, which was \$35.4 billion in 2005, generated nearly 466,000 total jobs, with an employment multiplier of 13.17 (including direct, indirect and induced effects). This means that, on average, every \$1,000,000 of containerized exports moving through the Ports of Los Angeles and Long Beach generates 13.17 jobs (FTE) in the United States.

Table 11 – Employment Estimates for Containerized Exports via the Ports of Los Angeles and Long Beach by State in 2005 (FTE)

State	Direct Output (\$ millions)	Emp. Multiplier	Total Jobs	State	Direct Output (\$ millions)	Emp. Multiplier	Total Jobs
Alabama	\$393.4	12.84	5,053	Montana	\$10.0	12.87	128
Alaska	\$1.6	14.23	23	Nebraska	\$291.4	14.61	4,257
Arizona	\$341.0	12.65	4,315	Nevada	\$63.1	10.32	651
Arkansas	\$432.4	13.69	5,918	New	\$23.2	11.36	263
California	\$10,434.1	13.73	143,222	New Jersey	\$537.0	10.19	5,472
Colorado	\$282.6	13.13	3,710	New Mexico	\$25.7	14.33	368
Connecticut	\$77.3	10.17	787	New York	\$509.6	9.83	5,011
Delaware	\$16.3	7.12	116	North Carolina	\$357.4	13.38	4,784
Dist. of Columbia	\$22.9	0.86	20	North Dakota	\$19.2	12.84	246
Florida	\$124.3	13.18	1,638	Ohio	\$1,446.8	13.55	19,600
Georgia	\$377.4	12.60	4,756	Oklahoma	\$245.5	14.44	3,546
Hawaii	\$1.3	12.00	16	Oregon	\$96.7	15.57	1,506
Idaho	\$20.0	14.78	296	Pennsylvania	\$487.0	12.38	6,030
Illinois	\$2,842.5	12.67	36,001	Rhode Island	\$17.5	11.06	193
Indiana	\$789.9	11.47	9,060	South Carolina	\$216.1	13.33	2,880
Iowa	\$520.8	12.48	6,499	South Dakota	\$15.8	13.98	220
Kansas	\$592.4	13.30	7,877	Tennessee	\$1,613.6	12.91	20,832
Kentucky	\$693.9	11.69	8,113	Texas	\$4,992.5	13.31	66,427
Louisiana	\$1,476.0	15.86	23,414	Utah	\$560.3	14.46	8,100
Maine	\$14.5	18.61	270	Vermont	\$2.5	12.77	32
Maryland	\$100.4	9.50	954	Virginia	\$78.1	11.90	930
Massachusetts	\$200.1	9.92	1,984	Washington	\$220.9	13.70	3,027
Michigan	\$1,108.3	12.26	13,584	West Virginia	\$388.1	9.12	3,538
Minnesota	\$496.2	13.34	6,619	Wisconsin	\$792.8	14.28	11,318
Mississippi	\$241.0	12.67	3,054	Wyoming	\$13.2	10.53	139
Missouri	\$728.6	12.16	8,861	United States	\$35,357.22	13.17	465,660

Source: BST Associates, using data from WISERTrade and U.S. Bureau of Economic Analysis

Tax Revenues

The international trade moving through the Ports of Los Angeles and Long Beach generates state and local taxes in the states and localities where the goods are shipped or received. These taxes include: sales taxes (including general, gasoline, alcoholic beverages, tobacco, public utilities, insurance receipts and other taxes), local taxes (including property, general, public utilities, and other taxes), motor vehicle licenses, and other taxes.

Table 12 provides a summary estimate of the state and local taxes associated with export trade flowing via the Ports of Los Angeles and Long Beach. The value of trade exports, which was \$35.4 billion in 2005, generated \$1.9 billion in state and local taxes, with an effective tax rate of 5.6%.

Table 12 – Estimated State and Local Taxes for Containerized Exports through the Ports of Los Angeles and Long Beach in 2005

State	Direct Output (\$millions)	Tax Rate	Total S & L Taxes (\$ millions)	State	Direct Output (\$millions)	Tax Rate	Total S & L Taxes (\$ millions)
Alabama	\$393.4	4.4%	\$17.4	Montana	\$10.0	4.7%	\$0.5
Alaska	\$1.6	5.6%	\$0.1	Nebraska	\$291.4	4.4%	\$12.7
Arizona	\$341.0	7.8%	\$26.6	Nevada	\$63.1	6.0%	\$3.8
Arkansas	\$432.4	4.0%	\$17.2	New Hampshire	\$23.2	6.5%	\$1.5
California	\$10,434.1	6.1%	\$641.3	New Jersey	\$537.0	4.0%	\$21.3
Colorado	\$282.6	6.0%	\$16.8	New Mexico	\$25.7	14.5%	\$3.7
Connecticut	\$77.3	5.1%	\$4.0	New York	\$509.6	6.7%	\$34.0
Delaware	\$16.3	3.3%	\$0.5	North Carolina	\$357.4	3.7%	\$13.1
Dist. of Columbia	\$22.9	5.3%	\$1.2	North Dakota	\$19.2	6.0%	\$1.1
Florida	\$124.3	6.7%	\$8.3	Ohio	\$1,446.8	5.5%	\$79.3
Georgia	\$377.4	4.5%	\$16.8	Oklahoma	\$245.5	6.0%	\$14.7
Hawaii	\$1.3	7.4%	\$0.1	Oregon	\$96.7	4.9%	\$4.7
Idaho	\$20.0	7.5%	\$1.5	Pennsylvania	\$487.0	4.7%	\$22.7
Illinois	\$2,842.5	5.4%	\$152.3	Rhode Island	\$17.5	5.1%	\$0.9
Indiana	\$789.9	4.9%	\$38.6	South Carolina	\$216.1	4.8%	\$10.4
Iowa	\$520.8	3.7%	\$19.4	South Dakota	\$15.8	5.0%	\$0.8
Kansas	\$592.4	5.7%	\$33.6	Tennessee	\$1,613.6	4.9%	\$78.6
Kentucky	\$693.9	4.8%	\$33.3	Texas	\$4,992.5	6.5%	\$324.4
Louisiana	\$1,476.0	4.3%	\$63.8	Utah	\$560.3	4.2%	\$23.7
Maine	\$14.5	5.9%	\$0.9	Vermont	\$2.5	16.1%	\$0.4
Maryland	\$100.4	4.9%	\$4.9	Virginia	\$78.1	3.6%	\$2.8
Massachusetts	\$200.1	4.3%	\$8.6	Washington	\$220.9	7.1%	\$15.7
Michigan	\$1,108.3	5.7%	\$63.5	West Virginia	\$388.1	5.4%	\$20.8
Minnesota	\$496.2	6.3%	\$31.1	Wisconsin	\$792.8	5.0%	\$39.7
Mississippi	\$241.0	5.8%	\$14.1	Wyoming	\$13.2	6.0%	\$0.8
Missouri	\$728.6	3.9%	\$28.1	United States	\$35,357.2	5.6%	\$1,976.1

Source: BST Associates, using data from WISERTrade and U.S. Bureau of Economic Analysis

Imports

Methodology

The methodology used for estimating the economic impact of imports was similar to that used for exports, in that RIMS II multipliers were used to convert the value of trade goods into jobs, income, and output. However, there are also important differences in the methodology used in determining the values used as inputs to the impact calculations.

For exports, the total value of the goods exported was used. Imports tend to have a more limited impact on a per-dollar basis, because they do not require as many inputs as exports. For example, exports require the purchase of raw materials, transportation of materials to the manufacturer, labor and capital to manufacture the goods, and transportation of finished goods from the manufacturer. In contrast, imports primarily require wholesale distribution to retailers or manufacturers, and labor and capital associated with retail sales.

Wholesale & Retail Margins

In order to assure that the impact estimates for imports focused on just wholesale and retail trade, two steps were used to convert the value of containerized imports into wholesale and retail figures. The first step was to classify imports as being destined for retail trade or for use in the production of goods. Then, margins were applied to determine the share of import value associated with retail and production uses. Specifically, the wholesale margin was applied to all commodities, while the retail margin was applied to only those goods destined for retail trade.

In order to estimate state level economic impacts from wholesale and retail trade, it is necessary to distinguish the value created by the retailer and wholesaler from that of the manufacturer that made the item. In an input-output model, this is accomplished by adding appropriate margins to the producer price (price at the factory) to yield the price paid by the consumer (purchaser price). The purchaser price = producer price + transportation margin + wholesale margin + retail margin. (This will help in understanding Table 13).

To estimate multiplier effects of retail purchases, the portion of the sale accruing to the retailer, wholesaler, shipper and manufacturer must be separated. The retail margin goes to the retail trade sector, while the producer price accrues to the manufacturer of the item. Imports are manufactured overseas and thus only the retail, wholesale and transportation margins will accrue to the state as direct sales. In this analysis, only wholesale and retail output was included. Most of the transportation activity associated with port activity in Los Angeles and Long Beach is local, accruing to the counties immediately surrounding the ports. These impacts have been calculated separately by the Ports of Los Angeles and Long Beach.

Wholesale & Retail Direct Output

Table 13 on the next page presents a summary of the combined wholesale and retail margins associated with containerized imports moving through the Ports of Los Angeles and Long Beach. The resulting direct output values are the figures used as inputs to the economic impact calculations. For example, the total value of imports destined for California was estimated to be \$52.1 billion in 2005. The average combined wholesale and retail margin for these goods is 0.73, so the resulting direct output value is \$37.9 billion.

The margin in California is relatively high, because of the larger share of wholesale activity that occurs in California relative to other states. Nationally, the average margin is 0.63, and the \$220.6 billion in imported goods create a calculated direct output of \$139.4 billion.

Table 13 – Direct Output from Retail and Wholesale Activity Associated with Imports via the Ports of Los Angeles and Long Beach by State in 2005 (\$ millions)

State	Imports (\$ millions)	Margin	Direct Output (\$ millions)	State	Imports (\$ millions)	Margin	Direct Output (\$ millions)
Alabama	\$2,239.2	0.60	\$1,338.2	Montana	\$505.3	0.57	\$287.1
Alaska	\$568.8	0.47	\$269.6	Nebraska	\$1,042.5	0.53	\$555.0
Arizona	\$8,610.1	0.57	\$4,903.9	Nevada	\$3,664.7	0.55	\$2,027.4
Arkansas	\$3,126.0	0.60	\$1,866.1	New Hampshire	\$491.4	0.56	\$274.8
California	\$52,097.9	0.73	\$37,852.7	New Jersey	\$2,931.0	0.60	\$1,756.4
Colorado	\$2,629.6	0.55	\$1,449.7	New Mexico	\$1,881.1	0.65	\$1,222.9
Connecticut	\$1,269.3	0.57	\$726.3	New York	\$6,192.5	0.62	\$3,819.3
Delaware	\$302.0	0.58	\$173.9	North Carolina	\$4,283.4	0.60	\$2,553.6
Dist. of Columbia	\$160.5	0.66	\$105.7	North Dakota	\$364.3	0.55	\$198.7
Florida	\$7,684.1	0.65	\$4,968.4	Ohio	\$10,238.6	0.60	\$6,184.2
Georgia	\$4,195.8	0.62	\$2,600.6	Oklahoma	\$3,650.2	0.63	\$2,297.2
Hawaii	\$951.7	0.53	\$499.7	Oregon	\$439.3	0.63	\$274.7
Idaho	\$829.5	0.54	\$448.1	Pennsylvania	\$4,533.7	0.57	\$2,580.0
Illinois	\$10,854.1	0.62	\$6,760.4	Rhode Island	\$384.7	0.58	\$221.7
Indiana	\$5,985.2	0.58	\$3,471.1	South Carolina	\$2,082.5	0.60	\$1,247.4
Iowa	\$2,725.4	0.59	\$1,617.6	South Dakota	\$452.0	0.54	\$243.6
Kansas	\$2,443.0	0.61	\$1,478.7	Tennessee	\$2,910.5	0.60	\$1,746.1
Kentucky	\$3,683.2	0.61	\$2,241.2	Texas	\$23,691.8	0.63	\$14,844.8
Louisiana	\$4,634.4	0.63	\$2,924.1	Utah	\$1,460.4	0.53	\$778.8
Maine	\$471.7	0.58	\$272.1	Vermont	\$236.9	0.55	\$131.4
Maryland	\$1,889.6	0.60	\$1,129.8	Virginia	\$2,716.8	0.57	\$1,561.5
Massachusetts	\$2,269.0	0.58	\$1,314.3	Washington	\$730.6	0.64	\$467.2
Michigan	\$8,894.9	0.61	\$5,426.7	West Virginia	\$640.6	0.58	\$372.4
Minnesota	\$4,603.0	0.60	\$2,773.2	Wisconsin	\$5,279.9	0.58	\$3,063.2
Mississippi	\$1,388.1	0.61	\$846.3	Wyoming	\$321.2	0.51	\$163.9
Missouri	\$4,968.0	0.62	\$3,080.4	United States	\$220,600.1	0.63	\$139,411.9

Source: BST Associates, using data from PIERS and U.S. Bureau of Economic Analysis

Total Output

Output refers to the value of production (or sales) that is created within the domestic economy by import trade. The estimated direct output associated with import trade was estimated by applying wholesale and retail trade margins to the import value in the previous step. Applying RIMS II multipliers to this direct output produces an estimate of the total output associated with the imports. As described previously in this document, the total output combines direct output with indirect and induced outputs. The value of other purchases by firms using inputs (such as materials, components, and equipment) comprises the indirect impact of imports. In addition, when employees of the importing firms and their suppliers spend wages on consumer goods and services this creates induced impacts.

As shown in Table 14, the \$139.4 billion in direct output creates total output nationwide of \$285.2 billion, with an average output multiplier of 2.05.

Table 14 – Total Output from Retail and Wholesale Activity Associated with Imports via the Ports of Los Angeles and Long Beach by State in 2005 (\$ millions)

State	Direct Output (\$ millions)	Output Multiplier	Total Output (\$ millions)	State	Direct Output (\$ millions)	Output Multiplier	Total Output (\$ millions)
Alabama	\$1,338.2	1.89	\$2,529.4	Montana	\$287.1	1.73	\$497.9
Alaska	\$269.6	1.69	\$454.5	Nebraska	\$555.0	1.89	\$1,047.1
Arizona	\$4,903.9	1.94	\$9,493.4	Nevada	\$2,027.4	1.79	\$3,622.9
Arkansas	\$1,866.1	1.83	\$3,405.9	New Hampshire	\$274.8	1.85	\$508.2
California	\$37,852.7	2.18	\$82,662.9	New Jersey	\$1,756.4	2.05	\$3,599.9
Colorado	\$1,449.7	2.14	\$3,105.8	New Mexico	\$1,222.9	1.76	\$2,147.4
Connecticut	\$726.3	1.86	\$1,351.5	New York	\$3,819.3	1.90	\$7,270.4
Delaware	\$173.9	1.73	\$301.0	North Carolina	\$2,553.6	1.99	\$5,079.3
Dist. of Columbia	\$105.7	1.33	\$140.1	North Dakota	\$198.7	1.74	\$344.9
Florida	\$4,968.4	1.99	\$9,883.3	Ohio	\$6,184.2	2.05	\$12,656.2
Georgia	\$2,600.6	2.15	\$5,602.9	Oklahoma	\$2,297.2	1.97	\$4,529.3
Hawaii	\$499.7	1.90	\$950.6	Oregon	\$274.7	1.92	\$528.8
Idaho	\$448.1	1.83	\$821.0	Pennsylvania	\$2,580.0	2.08	\$5,367.7
Illinois	\$6,760.4	2.20	\$14,839.9	Rhode Island	\$221.7	1.77	\$393.2
Indiana	\$3,471.1	1.90	\$6,599.8	South Carolina	\$1,247.4	1.87	\$2,336.8
Iowa	\$1,617.6	1.82	\$2,951.5	South Dakota	\$243.6	1.74	\$424.4
Kansas	\$1,478.7	1.86	\$2,747.9	Tennessee	\$1,746.1	2.02	\$3,532.3
Kentucky	\$2,241.2	1.86	\$4,176.1	Texas	\$14,844.8	2.18	\$32,405.9
Louisiana	\$2,924.1	1.83	\$5,349.8	Utah	\$778.8	2.09	\$1,629.6
Maine	\$272.1	1.82	\$496.1	Vermont	\$131.4	1.67	\$220.0
Maryland	\$1,129.8	1.92	\$2,174.4	Virginia	\$1,561.5	1.97	\$3,080.0
Massachusetts	\$1,314.3	1.94	\$2,554.3	Washington	\$467.2	1.98	\$924.6
Michigan	\$5,426.7	1.93	\$10,473.7	West Virginia	\$372.4	1.63	\$606.8
Minnesota	\$2,773.2	2.02	\$5,592.1	Wisconsin	\$3,063.2	1.92	\$5,879.3
Mississippi	\$846.3	1.77	\$1,496.0	Wyoming	\$163.9	1.58	\$259.5
Missouri	\$3,080.4	2.01	\$6,191.6	United States	\$139,411.9	2.05	\$285,238.0

Source: BST Associates, using data from PIERS and U.S. Bureau of Economic Analysis

Income

Table 15 presents a summary of the total income from wholesale and retail activity associated with containerized imports moving via the Ports of Los Angeles and Long Beach, by state. For example, in California the income multiplier of 0.69 means that for every \$1.00 in direct output, \$0.69 of income is generated. Applying this multiplier to the estimated direct output of wholesale and retail trade activity associated with imports of \$37.9 billion, the total estimated income impact in California is \$26.2 billion.

Nationwide the income multiplier is 0.64, and the \$139.4 billion in direct output is estimated to generate \$88.8 billion of income.

Table 15 – Total Income from Retail and Wholesale Activity Associated with Imports via the Ports of Los Angeles and Long Beach by State in 2005 (\$ millions)

State	Direct Output (\$ millions)	Income Multiplier	Total Income (\$ millions)	State	Direct Output (\$ millions)	Income Multiplier	Total Income (\$ millions)
Alabama	\$1,338.2	0.59	\$789.1	Montana	\$287.1	0.56	\$159.9
Alaska	\$269.6	0.53	\$142.4	Nebraska	\$555.0	0.58	\$323.4
Arizona	\$4,903.9	0.62	\$3,036.3	Nevada	\$2,027.4	0.56	\$1,142.9
Arkansas	\$1,866.1	0.57	\$1,055.3	New Hampshire	\$274.8	0.54	\$147.9
California	\$37,852.7	0.69	\$26,212.9	New Jersey	\$1,756.4	0.60	\$1,045.1
Colorado	\$1,449.7	0.68	\$983.2	New Mexico	\$1,222.9	0.56	\$683.6
Connecticut	\$726.3	0.56	\$406.7	New York	\$3,819.3	0.55	\$2,109.2
Delaware	\$173.9	0.45	\$77.8	North Carolina	\$2,553.6	0.62	\$1,589.9
Dist. of Columbia	\$105.7	0.12	\$12.9	North Dakota	\$198.7	0.52	\$102.7
Florida	\$4,968.4	0.64	\$3,193.0	Ohio	\$6,184.2	0.63	\$3,910.2
Georgia	\$2,600.6	0.67	\$1,738.5	Oklahoma	\$2,297.2	0.62	\$1,417.1
Hawaii	\$499.7	0.61	\$305.9	Oregon	\$274.7	0.58	\$160.7
Idaho	\$448.1	0.58	\$261.3	Pennsylvania	\$2,580.0	0.63	\$1,626.5
Illinois	\$6,760.4	0.67	\$4,559.0	Rhode Island	\$221.7	0.51	\$113.5
Indiana	\$3,471.1	0.58	\$2,023.1	South Carolina	\$1,247.4	0.58	\$721.9
Iowa	\$1,617.6	0.56	\$902.6	South Dakota	\$243.6	0.54	\$131.8
Kansas	\$1,478.7	0.53	\$783.0	Tennessee	\$1,746.1	0.61	\$1,061.0
Kentucky	\$2,241.2	0.55	\$1,228.2	Texas	\$14,844.8	0.68	\$10,102.1
Louisiana	\$2,924.1	0.58	\$1,693.6	Utah	\$778.8	0.66	\$515.5
Maine	\$272.1	0.58	\$159.1	Vermont	\$131.4	0.50	\$65.8
Maryland	\$1,129.8	0.57	\$642.3	Virginia	\$1,561.5	0.58	\$911.6
Massachusetts	\$1,314.3	0.59	\$776.0	Washington	\$467.2	0.62	\$289.5
Michigan	\$5,426.7	0.62	\$3,363.5	West Virginia	\$372.4	0.48	\$178.7
Minnesota	\$2,773.2	0.63	\$1,751.9	Wisconsin	\$3,063.2	0.60	\$1,852.6
Mississippi	\$846.3	0.54	\$460.9	Wyoming	\$163.9	0.50	\$81.7
Missouri	\$3,080.4	0.58	\$1,782.7	United States	\$139,411.9	0.64	\$88,786.0

Source: BST Associates, using data from PIERS and U.S. Bureau of Economic Analysis

Jobs

Table 16 presents a summary of the total employment associated with wholesale and retail activity from imports moving via the San Pedro Bay ports by state. For example, in California the total employment from wholesale and retail trade activity is estimated at 743,111 jobs. The multiplier of 50.94 means that for every \$1 million in direct output, 50.94 FTE jobs are created.

Nationally, the employment multiplier is 49.09, and the \$139.4 billion in direct output produced an estimated 2.84 million jobs in 2005.

Table 16 – Total Employment from Retail and Wholesale Activity Associated with Imports via the Ports of Los Angeles and Long Beach by State in 2005 (\$ millions)

State	Direct Output (\$ millions)	Emp. Multiplier	Total Jobs	State	Direct Output (\$ millions)	Emp. Multiplier	Total Jobs
Alabama	\$1,338.2	46.67	28,671	Montana	\$287.1	42.69	6,725
Alaska	\$269.6	52.96	5,090	Nebraska	\$555.0	43.33	12,809
Arizona	\$4,903.9	50.26	97,577	Nevada	\$2,027.4	55.27	36,679
Arkansas	\$1,866.1	46.10	40,480	New Hampshire	\$274.8	60.09	4,573
California	\$37,852.7	50.94	743,111	New Jersey	\$1,756.4	56.04	31,340
Colorado	\$1,449.7	45.33	31,980	New Mexico	\$1,222.9	47.34	25,833
Connecticut	\$726.3	59.67	12,172	New York	\$3,819.3	59.61	64,066
Delaware	\$173.9	68.67	2,532	North Carolina	\$2,553.6	47.15	54,159
Dist. of Columbia	\$105.7	240.68	439	North Dakota	\$198.7	46.85	4,242
Florida	\$4,968.4	47.13	105,413	Ohio	\$6,184.2	46.53	132,912
Georgia	\$2,600.6	47.83	54,370	Oklahoma	\$2,297.2	42.00	54,698
Hawaii	\$499.7	45.04	11,094	Oregon	\$274.7	50.23	5,470
Idaho	\$448.1	43.57	10,284	Pennsylvania	\$2,580.0	48.74	52,929
Illinois	\$6,760.4	48.33	139,892	Rhode Island	\$221.7	59.91	3,701
Indiana	\$3,471.1	46.48	74,676	South Carolina	\$1,247.4	46.94	26,576
Iowa	\$1,617.6	46.02	35,151	South Dakota	\$243.6	44.89	5,426
Kansas	\$1,478.7	49.17	30,074	Tennessee	\$1,746.1	50.41	34,638
Kentucky	\$2,241.2	48.64	46,075	Texas	\$14,844.8	47.73	311,042
Louisiana	\$2,924.1	45.66	64,047	Utah	\$778.8	40.75	19,110
Maine	\$272.1	45.17	6,024	Vermont	\$131.4	54.19	2,425
Maryland	\$1,129.8	56.23	20,093	Virginia	\$1,561.5	52.37	29,815
Massachusetts	\$1,314.3	57.01	23,055	Washington	\$467.2	52.23	8,944
Michigan	\$5,426.7	48.71	111,409	West Virginia	\$372.4	51.45	7,238
Minnesota	\$2,773.2	48.00	57,768	Wisconsin	\$3,063.2	44.76	68,437
Mississippi	\$846.3	46.44	18,223	Wyoming	\$163.9	48.16	3,404
Missouri	\$3,080.4	48.77	63,166	United States	\$139,411.9	49.09	2,840,058

Source: BST Associates, using data from PIERS and U.S. Bureau of Economic Analysis

Tax Revenues

As indicated previously, state and local taxes include sales taxes and property taxes, among others. Using California as an example, the estimated state and local tax associated with imports was \$6.3 billion in 2005, as shown in Table 17. The estimated tax rate of all state and local taxes associated with containerized imports for California was 16.8% of output.

The combined state and local tax rate varies widely among the states, from a low of 3.8% in Oregon and 4.0% in Delaware, to a high of 24.2% in Louisiana and 23.7% in Tennessee, which depends on relative sales tax policies. The national average is 18.9%, and the \$139.4 billion of direct output associated with imports in 2005 produced an estimated \$26.2 billion in state and local taxes.

Table 17 – Total Tax Revenue from Retail and Wholesale Activity Associated with Imports via the Ports of Los Angeles and Long Beach by State in 2005 (\$ millions)

State	Direct Output (\$ millions)	Estimated Tax Rate	S & L Tax. (\$ millions)	State	Direct Output (\$ millions)	Estimated Tax Rate	S & L Tax. (\$ millions)
Alabama	\$1,338.2	19.8%	\$264.3	Montana	\$287.1	6.3%	\$18.0
Alaska	\$269.6	21.8%	\$58.9	Nebraska	\$555.0	22.9%	\$127.3
Arizona	\$4,903.9	22.2%	\$1,090.1	Nevada	\$2,027.4	21.1%	\$428.4
Arkansas	\$1,866.1	19.4%	\$362.1	New Hampshire	\$274.8	5.5%	\$15.1
California	\$37,852.7	16.8%	\$6,363.8	New Jersey	\$1,756.4	18.2%	\$319.0
Colorado	\$1,449.7	20.2%	\$292.9	New Mexico	\$1,222.9	22.8%	\$278.4
Connecticut	\$726.3	17.2%	\$124.8	New York	\$3,819.3	22.3%	\$850.5
Delaware	\$173.9	4.0%	\$6.9	North Carolina	\$2,553.6	18.2%	\$464.4
Dist. of Columbia	\$105.7	17.6%	\$18.6	North Dakota	\$198.7	23.3%	\$46.3
Florida	\$4,968.4	19.6%	\$973.9	Ohio	\$6,184.2	18.3%	\$1,133.4
Georgia	\$2,600.6	14.6%	\$380.9	Oklahoma	\$2,297.2	23.0%	\$528.2
Hawaii	\$499.7	17.1%	\$85.5	Oregon	\$274.7	3.8%	\$10.4
Idaho	\$448.1	17.0%	\$76.1	Pennsylvania	\$2,580.0	20.3%	\$523.0
Illinois	\$6,760.4	23.0%	\$1,556.1	Rhode Island	\$221.7	20.8%	\$46.1
Indiana	\$3,471.1	17.3%	\$599.3	South Carolina	\$1,247.4	16.9%	\$210.7
Iowa	\$1,617.6	17.2%	\$278.8	South Dakota	\$243.6	20.2%	\$49.2
Kansas	\$1,478.7	21.4%	\$317.0	Tennessee	\$1,746.1	23.7%	\$414.0
Kentucky	\$2,241.2	17.5%	\$393.0	Texas	\$14,844.8	20.7%	\$3,074.4
Louisiana	\$2,924.1	24.2%	\$707.6	Utah	\$778.8	20.2%	\$157.7
Maine	\$272.1	17.2%	\$46.9	Vermont	\$131.4	18.7%	\$24.5
Maryland	\$1,129.8	16.1%	\$182.4	Virginia	\$1,561.5	14.8%	\$231.6
Massachusetts	\$1,314.3	15.2%	\$199.8	Washington	\$467.2	23.1%	\$107.9
Michigan	\$5,426.7	17.4%	\$946.9	West Virginia	\$372.4	20.2%	\$75.3
Minnesota	\$2,773.2	20.1%	\$558.0	Wisconsin	\$3,063.2	16.1%	\$493.7
Mississippi	\$846.3	20.6%	\$174.0	Wyoming	\$163.9	23.0%	\$37.6
Missouri	\$3,080.4	18.5%	\$568.6	United States	\$139,411.9	18.9%	\$26,292.3

Source: BST Associates, using data from Ernst & Young, Tax Policy Institute and Tax Foundation

Congressional District Trade Value

BST Associates prepared an analysis of trade moving through the Ports of Los Angeles and Long Beach for all 435 U.S. Congressional districts. This analysis included an estimate of the value of both exports and imports moving through the two ports, by firms in each district. It also includes information on individual shippers where possible: data was provided on names of shippers, lines of business, number of employees, total sales, and value of trade through the Ports of Los Angeles and Long Beach.

Methodology

The methodology used in this analysis is substantially different than that used for calculating statewide economic impacts. As a result, the results are not directly comparable.

Although the allocations by state methodology employed in the analysis produces valid statewide results, the same allocation methodology becomes far less accurate when applying it to smaller geographic areas.

The primary difference in methodology is that the statewide economic impact calculations were based on 1) estimated demand for imports in each state, and 2) allocated export values. The congressional district values in this section are not based on any allocation to states, but are instead based on the address information included in the PIERS data. **At the Congressional District level, firms are identified that are engaged in the container transaction but this does not imply that the product in the container is consumed or used in that District.** As a result, adding the congressional district total for each state will not produce the same trade figures as those used in the impact estimates.

This analysis was developed by combining PIERS containerized trade volume with value information from the Department of Commerce/Corps of Engineers waterborne trade data. As discussed earlier in this report, the address information in PIERS contains a number of problems that make it difficult to determine where firms are located. In addition to the foreign addresses and missing addresses noted previously, another significant problem is that the same firm is often described in different ways for the same location.

PIERS assigns a 14-digit company number to every company that appears in the import and export data. Theoretically, the first eight digits of this code refer to the parent company and the remaining six digits refer to specific locations of that company. One significant problem is that different spellings will be used for the same company at the same location, resulting in different 14-digit company numbers. Another common problem is that a company may have a street address missing, but it shares the same city, state, zip code, and name as another firm in the database. Given that there are more than 1.8 million records in the import database alone, it would be impossible to check each individual record for accuracy. Instead, a database of company numbers, names, and address was created from the database, and a significant effort was made to edit this for accuracy.

Once the database of names was complete, the address information contained in it was used to assign latitude and longitude coordinates. The latitude and longitude are a necessary part in determining congressional districts. Two different programs were used for this geo-coding step in order to obtain as many matches as possible.

Next, GIS software was used to create a map that contained congressional districts for the 109th Congress, as well as the geo-coded importer and exporter data from the previous step. The GIS software was then used to append the congressional district name to each geocoded record.

The final step was obtaining contact information for firms in each congressional district, using Dun and Bradstreet as the source for contact. The goal of this step was to deliver a list of people to contact at 10 firms in every district. Using the geocoded exporters and importer data, a list was created of the top exporting and importing firms in each congressional district, based on value of trade. This list was uploaded to Dun and Bradstreet, where that firm matched the submitted data to their database of companies. The result of these steps are the maps of containerized international trade that moves between the Ports of Los Angeles and Long Beach and each congressional district, as well as a separate file listing company contacts in every district.

Results

The House of Representatives is made up of 435 elected representatives, apportioned based on population, with every state guaranteed at least one representative. At the time of apportionment, the average congressional district has a population of approximately 647,000, based on the 2000 census. However, this varies substantially. Seven states have only one representative, and the population of these states varies from a current low of 493,782 for Wyoming to a high of 902,195 for Montana.

Figure 8 – Location of Shippers Using the Ports of Los Angeles and Long Beach in 2005

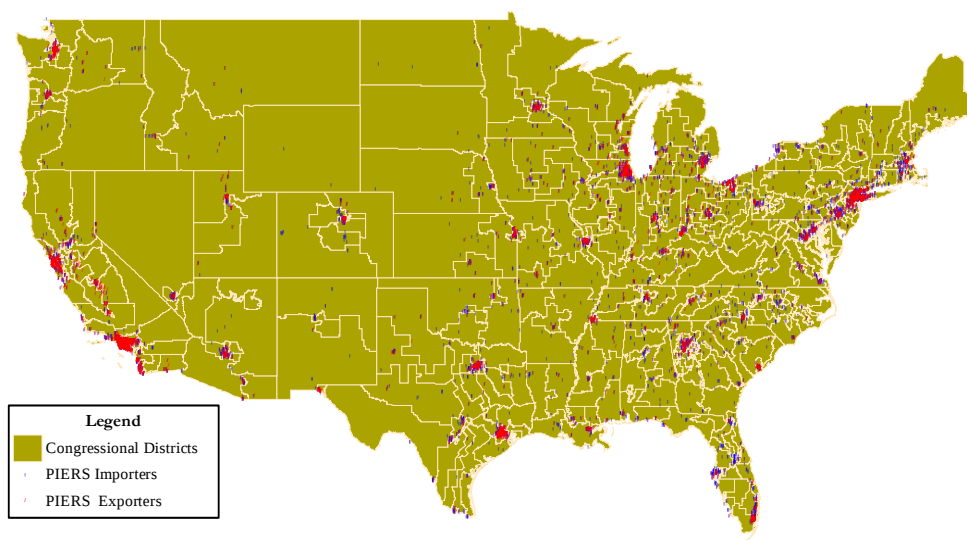


Figure 8 presents a geocoded map of importers and exporters that use the Ports of Los Angeles and Long Beach, by congressional district. There is at least one firm in every congressional district in the United States that ships goods in or out of the Ports of Los Angeles and Long Beach. While this map shows more than 5,000 exporters and 5,000 importers, for the sake of clarity, many more were not shown. Even with just this subset presented, it can be seen that every district has at least one importer, and nearly every district has at least one exporter.

Figures 9 through 11 demonstrate just how geographically diverse the hinterland is for these two ports. A detailed file with the names, addresses and phone numbers of importers and exporters is also being provided to ACTA and the Ports of Los Angeles and Long Beach.

Figure 9 presents total trade value by congressional district.

**Figure 9 – Value of All Trade Moving Through the Los Angeles-Long Beach Ports,
by Congressional District**

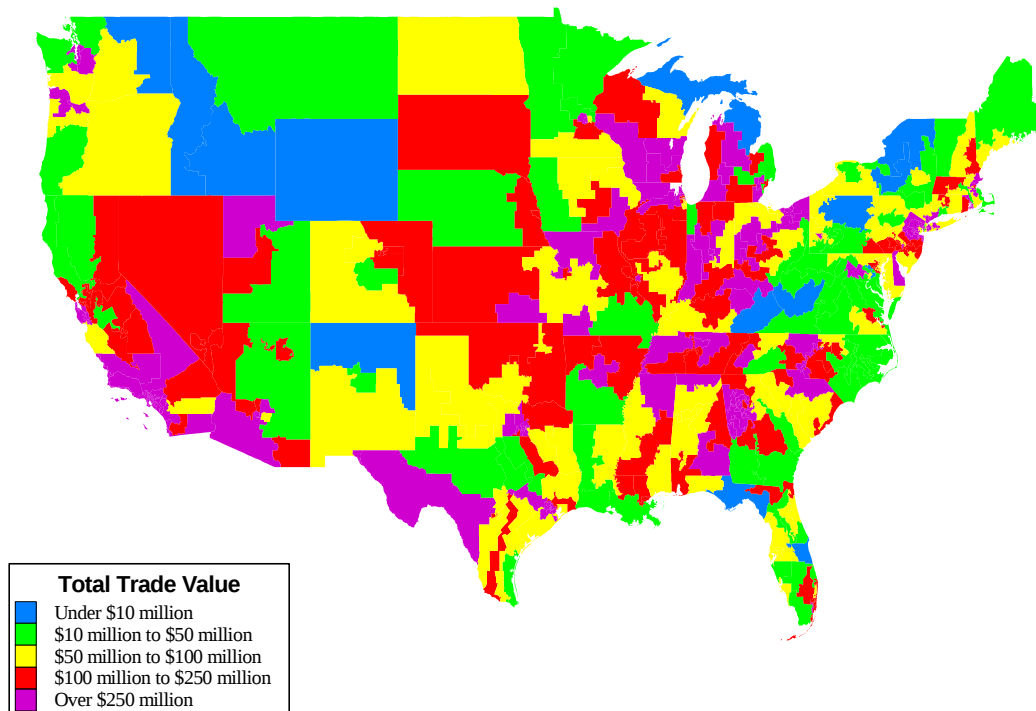


Figure 10 presents the value of imports by congressional district.

**Figure 10 – Value of Imports Moving Through the Los Angeles-Long Beach Ports,
by Congressional District**

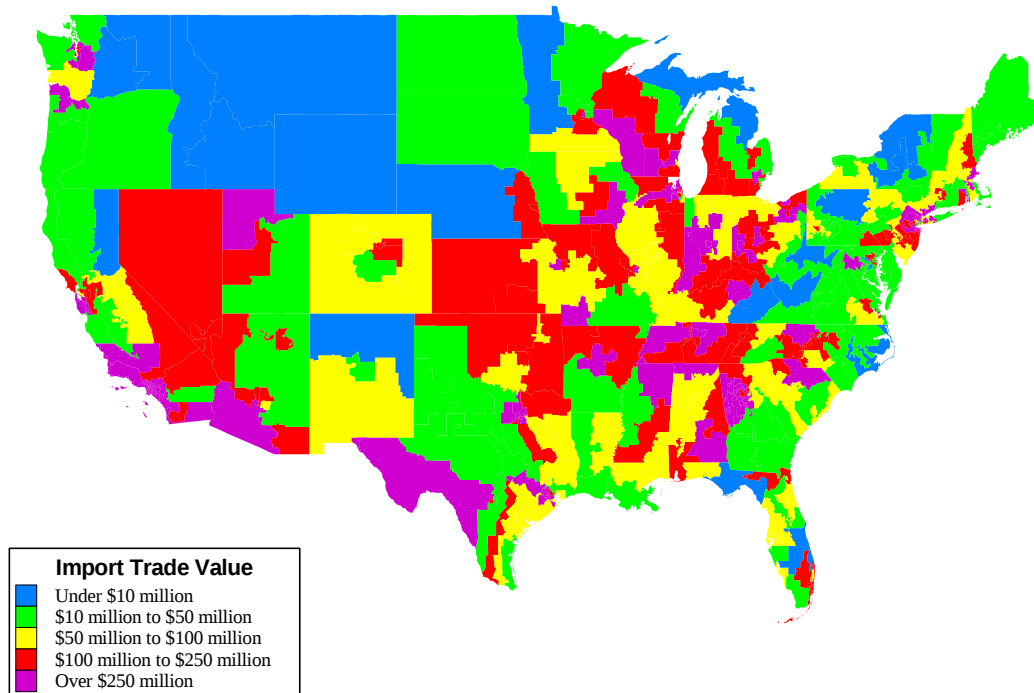
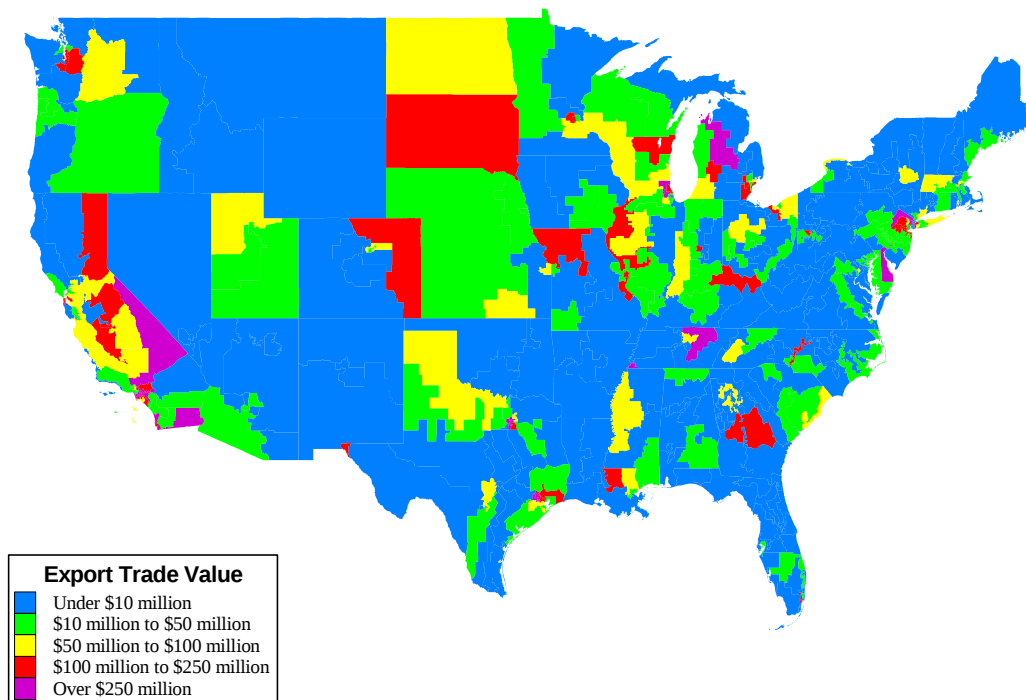


Figure 11 presents the value of exports by congressional district.

**Figure 11 – Value of Exports Moving Through the Los Angeles-Long Beach Ports,
by Congressional District**

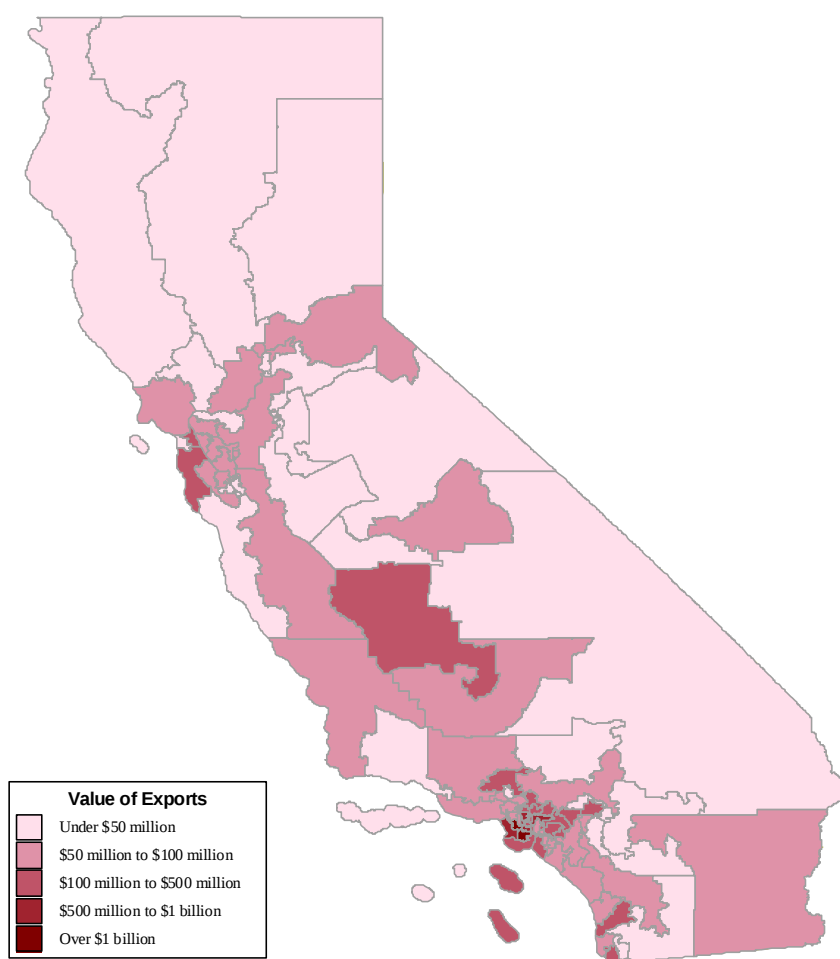


State Assembly and State Senate District Trade Value

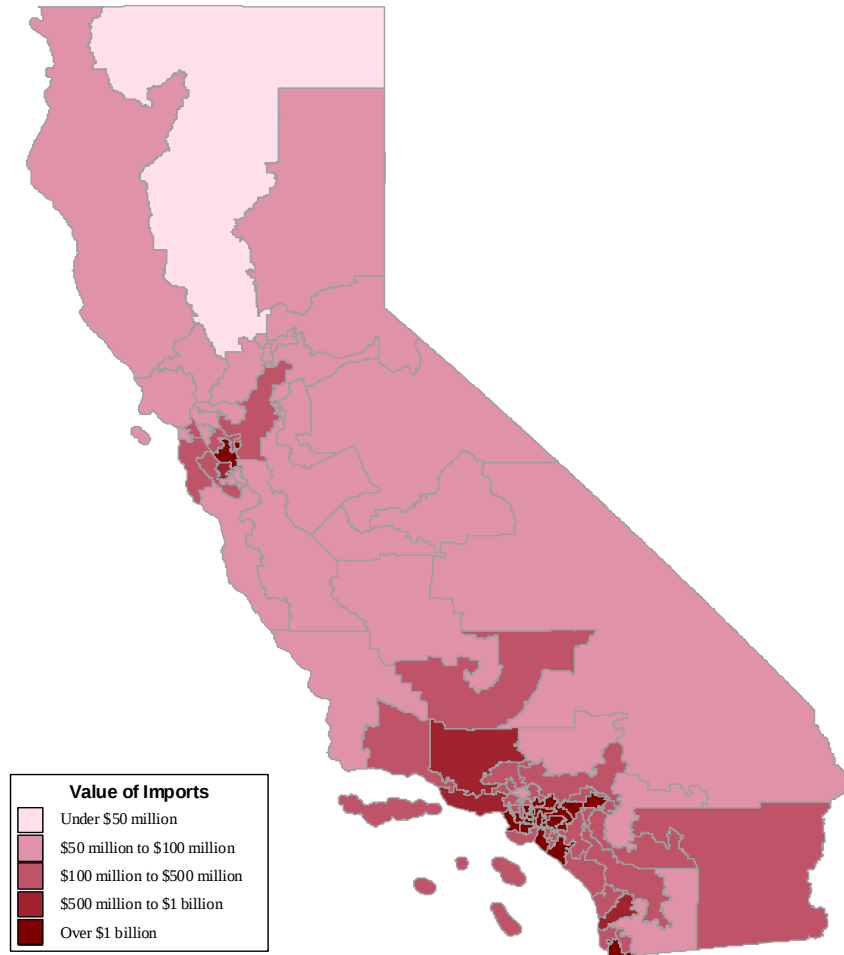
Similar to the analysis of U.S. congressional districts, BST Associates prepared an analysis of trade moving through the Ports of Los Angeles and Long Beach for all state assembly and state senate districts in California. The methodology used was the same as that used for congressional districts, and is explained in the preceding section.

State Assembly

Figure 12 – Value of Exports Moving Through the Los Angeles-Long Beach Ports, by State Assembly District



**Figure 13 – Value of Imports Moving Through the Los Angeles-Long Beach Ports,
by State Assembly District**

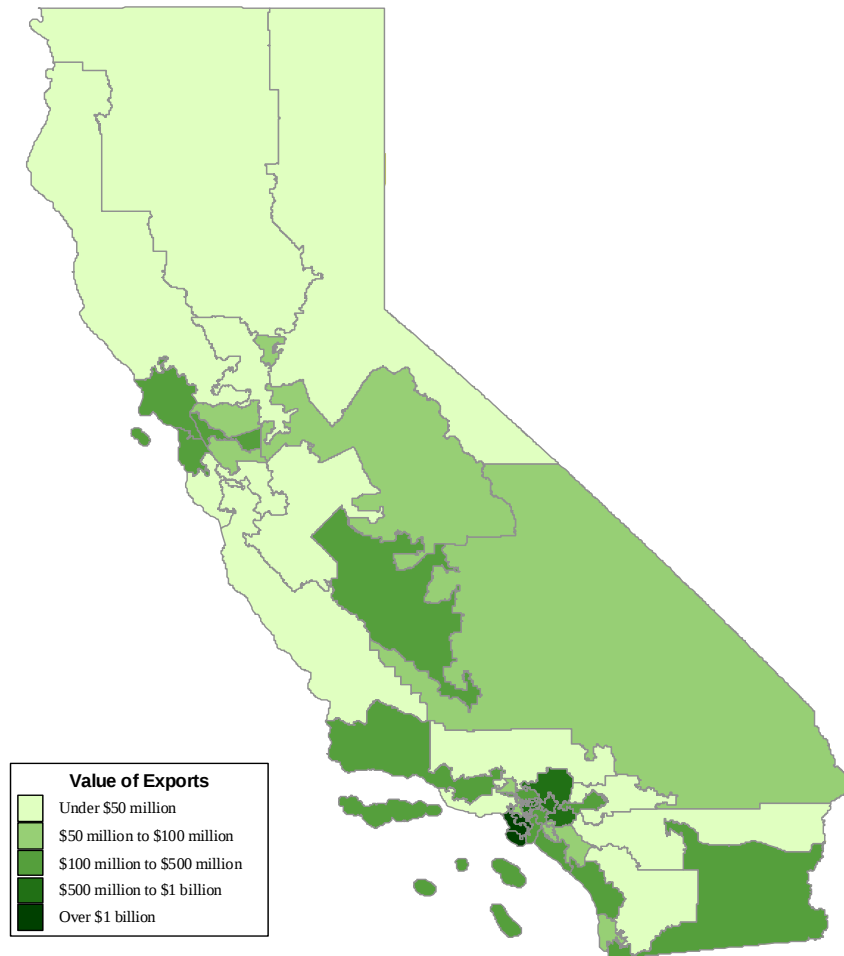


**Figure 14 – Value of All Trade Moving Through the Los Angeles-Long Beach Ports,
by State Assembly District**

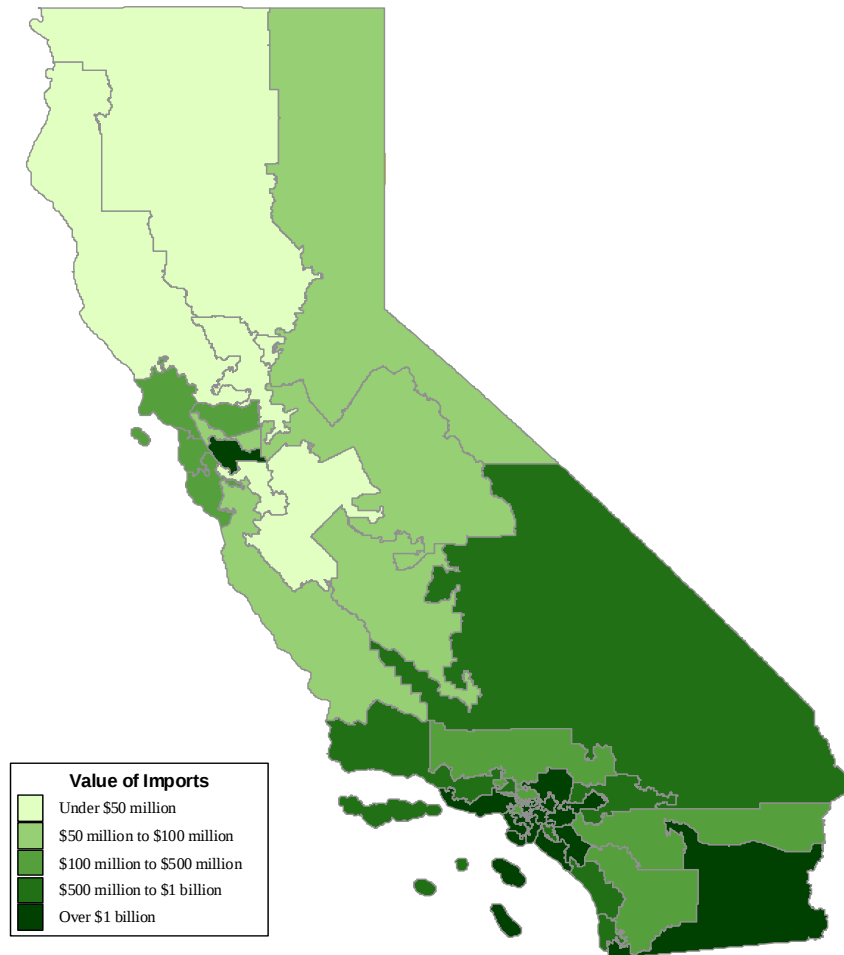


State Senate

**Figure 15 – Value of Exports Moving Through the Los Angeles-Long Beach Ports,
by State Senate District**



**Figure 16 – Value of Imports Moving Through the Los Angeles-Long Beach Ports,
by State Senate District**



**Figure 17 – Value of All Trade Moving Through the Los Angeles-Long Beach Ports,
by State Senate District**

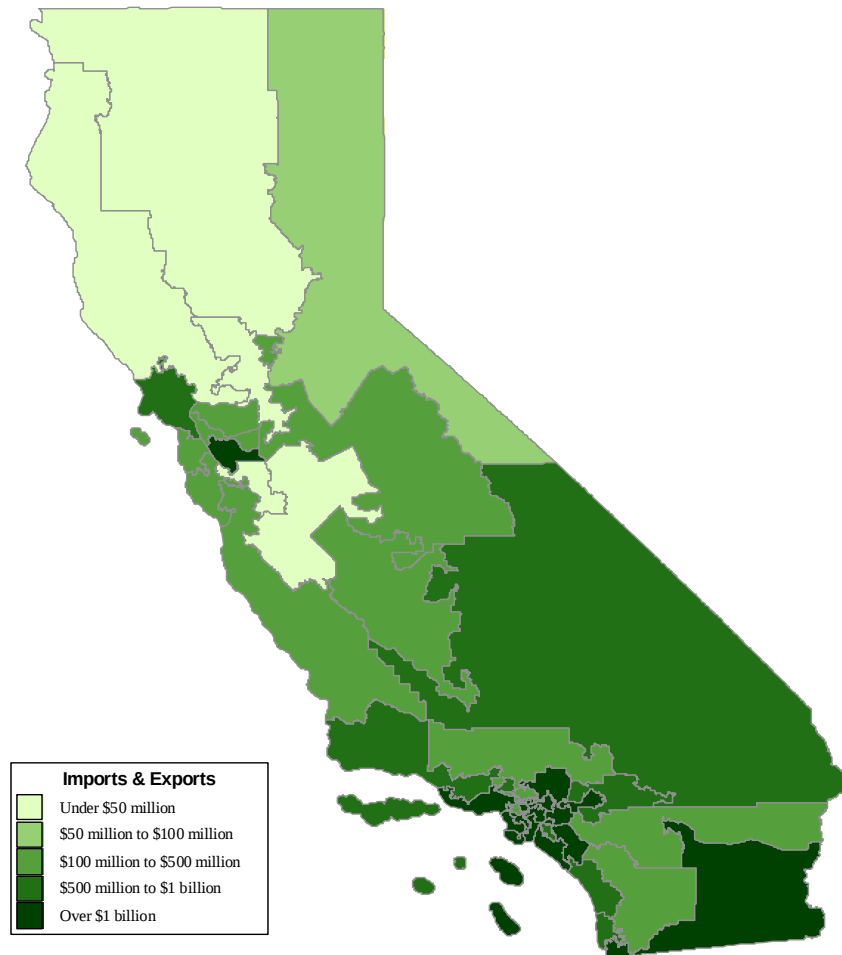




Table 18 – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Alaska	At Large	\$1,400	\$800	\$2,200
Alabama	1st District	\$4,100	\$225,400	\$229,500
Alabama	2nd District	\$47,500	\$276,000	\$323,500
Alabama	3rd District	\$2,600	\$240,600	\$243,200
Alabama	4th District	\$300	\$83,100	\$83,400
Alabama	5th District	\$20,200	\$418,900	\$439,000
Alabama	6th District	\$0	\$57,700	\$57,700
Alabama	7th District	\$1,300	\$91,800	\$93,100
Arkansas	1st District	\$1,700	\$175,500	\$177,200
Arkansas	2nd District	\$900	\$267,500	\$268,400
Arkansas	3rd District	\$1,500	\$143,400	\$144,900
Arkansas	4th District	\$2,000	\$45,900	\$47,900
Arizona	1st District	\$400	\$29,800	\$30,100
Arizona	2nd District	\$1,400	\$181,200	\$182,600
Arizona	3rd District	\$500	\$148,300	\$148,800
Arizona	4th District	\$21,900	\$405,100	\$427,000
Arizona	5th District	\$19,200	\$245,900	\$265,100
Arizona	6th District	\$2,400	\$88,200	\$90,600
Arizona	7th District	\$30,400	\$294,900	\$325,300
Arizona	8th District	\$400	\$111,500	\$111,900
California	1st District	\$8,600	\$13,800	\$22,400
California	2nd District	\$3,500	\$10,500	\$13,900
California	3rd District	\$94,900	\$72,600	\$167,500
California	4th District	\$204,400	\$9,700	\$214,100
California	5th District	\$200	\$45,400	\$45,600
California	6th District	\$26,800	\$134,500	\$161,300
California	7th District	\$13,700	\$27,700	\$41,400
California	8th District	\$115,900	\$318,900	\$434,800
California	9th District	\$120,100	\$83,800	\$203,900
California	10th District	\$64,100	\$104,700	\$168,800
California	11th District	\$51,100	\$105,700	\$156,800
California	12th District	\$233,900	\$590,700	\$824,700
California	13th District	\$98,700	\$674,700	\$773,400
California	14th District	\$7,800	\$366,100	\$373,900



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
California	15th District	\$19,800	\$1,041,400	\$1,061,200
California	16th District	\$25,900	\$318,000	\$343,900
California	17th District	\$64,400	\$27,400	\$91,700
California	18th District	\$4,200	\$15,600	\$19,800
California	19th District	\$113,000	\$70,300	\$183,200
California	20th District	\$160,200	\$48,600	\$208,800
California	21st District	\$59,000	\$65,900	\$124,900
California	22nd District	\$83,200	\$503,100	\$586,300
California	23rd District	\$4,200	\$413,900	\$418,100
California	24th District	\$37,500	\$640,300	\$677,800
California	25th District	\$306,000	\$150,300	\$456,400
California	26th District	\$235,700	\$1,268,500	\$1,504,200
California	27th District	\$47,800	\$442,100	\$489,900
California	28th District	\$60,200	\$430,100	\$490,300
California	29th District	\$281,600	\$556,300	\$837,900
California	30th District	\$32,100	\$1,289,000	\$1,321,100
California	31st District	\$42,500	\$471,700	\$514,200
California	32nd District	\$339,300	\$1,793,100	\$2,132,400
California	33rd District	\$46,100	\$304,000	\$350,100
California	34th District	\$776,500	\$4,264,200	\$5,040,800
California	35th District	\$1,119,100	\$901,500	\$2,020,600
California	36th District	\$1,087,000	\$3,183,600	\$4,270,600
California	37th District	\$4,446,400	\$5,886,500	\$10,332,900
California	38th District	\$993,700	\$6,967,400	\$7,961,100
California	39th District	\$211,600	\$1,852,900	\$2,064,500
California	40th District	\$221,900	\$2,703,900	\$2,925,800
California	41st District	\$3,300	\$142,300	\$145,600
California	42nd District	\$350,300	\$2,158,300	\$2,508,600
California	43rd District	\$383,400	\$3,491,000	\$3,874,400
California	44th District	\$20,800	\$849,300	\$870,100
California	45th District	\$15,300	\$40,800	\$56,100
California	46th District	\$96,700	\$899,600	\$996,200
California	47th District	\$73,500	\$444,200	\$517,700
California	48th District	\$154,500	\$3,796,700	\$3,951,200
California	49th District	\$23,000	\$251,500	\$274,400
California	50th District	\$320,900	\$547,300	\$868,100
California	51st District	\$344,000	\$2,808,900	\$3,152,900
California	52nd District	\$12,200	\$148,000	\$160,200
California	53rd District	\$130,800	\$1,235,400	\$1,366,300



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Colorado	1st District	\$14,600	\$135,500	\$150,200
Colorado	2nd District	\$2,500	\$97,500	\$99,900
Colorado	3rd District	\$0	\$99,100	\$99,100
Colorado	4th District	\$117,000	\$79,000	\$196,100
Colorado	5th District	\$0	\$34,700	\$34,800
Colorado	6th District	\$2,600	\$233,900	\$236,600
Colorado	7th District	\$69,400	\$102,900	\$172,400
Connecticut	1st District	\$500	\$118,600	\$119,100
Connecticut	2nd District	\$10,100	\$46,000	\$56,100
Connecticut	3rd District	\$2,000	\$40,900	\$43,000
Connecticut	4th District	\$87,200	\$527,400	\$614,600
Connecticut	5th District	\$9,100	\$83,700	\$92,800
Dist. Of Columbia	At Large	\$60,100	\$17,000	\$77,100
Delaware	At Large	\$479,200	\$22,700	\$501,900
Florida	1st District	\$1,400	\$57,600	\$59,000
Florida	2nd District	\$1,000	\$6,800	\$7,800
Florida	3rd District	\$300	\$85,200	\$85,500
Florida	4th District	\$0	\$103,200	\$103,300
Florida	5th District	\$100	\$73,100	\$73,100
Florida	6th District	\$1,000	\$19,400	\$20,400
Florida	7th District	\$100	\$83,000	\$83,100
Florida	8th District	\$100	\$46,300	\$46,400
Florida	9th District	\$0	\$88,800	\$88,800
Florida	10th District	\$2,200	\$91,100	\$93,400
Florida	11th District	\$17,100	\$56,700	\$73,800
Florida	12th District	\$5,000	\$62,900	\$67,900
Florida	13th District	\$0	\$29,100	\$29,200
Florida	14th District	\$1,100	\$76,500	\$77,600
Florida	15th District	\$900	\$3,500	\$4,400
Florida	16th District	\$13,100	\$6,700	\$19,700
Florida	17th District	\$22,500	\$145,900	\$168,300
Florida	18th District	\$4,900	\$125,700	\$130,600
Florida	19th District	\$21,800	\$52,000	\$73,800
Florida	20th District	\$600	\$170,100	\$170,700
Florida	21st District	\$182,900	\$220,000	\$402,900
Florida	22nd District	\$2,500	\$146,200	\$148,700



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Florida	23rd District	\$4,600	\$133,200	\$137,800
Florida	24th District	\$400	\$19,000	\$19,400
Florida	25th District	\$3,700	\$34,000	\$37,600
Georgia	1st District	\$1,600	\$14,700	\$16,300
Georgia	2nd District	\$600	\$42,900	\$43,500
Georgia	3rd District	\$108,200	\$19,300	\$127,600
Georgia	4th District	\$800	\$205,400	\$206,200
Georgia	5th District	\$82,300	\$382,900	\$465,200
Georgia	6th District	\$9,600	\$253,900	\$263,600
Georgia	7th District	\$62,300	\$395,400	\$457,700
Georgia	8th District	\$3,700	\$394,400	\$398,100
Georgia	9th District	\$4,300	\$56,500	\$60,800
Georgia	10th District	\$8,700	\$139,200	\$147,900
Georgia	11th District	\$1,700	\$300,800	\$302,500
Georgia	12th District	\$3,800	\$20,200	\$24,000
Georgia	13th District	\$75,600	\$563,100	\$638,700
Hawaii	1st District	\$12,700	\$30,800	\$43,500
Hawaii	2nd District	\$2,400	\$10,900	\$13,300
Iowa	1st District	\$1,100	\$49,500	\$50,600
Iowa	2nd District	\$23,600	\$262,600	\$286,200
Iowa	3rd District	\$16,400	\$155,400	\$171,800
Iowa	4th District	\$900	\$68,600	\$69,500
Iowa	5th District	\$2,500	\$13,800	\$16,400
Idaho	1st District	\$1,000	\$4,500	\$5,400
Idaho	2nd District	\$2,700	\$7,100	\$9,700
Illinois	1st District	\$10,400	\$46,200	\$56,600
Illinois	2nd District	\$400	\$96,900	\$97,300
Illinois	3rd District	\$33,700	\$193,100	\$226,800
Illinois	4th District	\$300	\$77,800	\$78,100
Illinois	5th District	\$45,400	\$145,400	\$190,700
Illinois	6th District	\$1,846,000	\$1,559,200	\$3,405,300
Illinois	7th District	\$435,800	\$458,300	\$894,100
Illinois	8th District	\$356,600	\$24,273,700	\$24,630,300
Illinois	9th District	\$112,700	\$338,400	\$451,100
Illinois	10th District	\$147,600	\$1,418,600	\$1,566,200
Illinois	11th District	\$43,400	\$161,600	\$205,000



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Illinois	12th District	\$40,600	\$78,000	\$118,600
Illinois	13th District	\$64,600	\$311,200	\$375,800
Illinois	14th District	\$23,100	\$266,400	\$289,500
Illinois	15th District	\$4,400	\$108,600	\$113,000
Illinois	16th District	\$52,900	\$246,100	\$299,000
Illinois	17th District	\$121,200	\$77,700	\$198,900
Illinois	18th District	\$94,800	\$61,600	\$156,300
Illinois	19th District	\$12,600	\$56,900	\$69,500
Indiana	1st District	\$600	\$18,800	\$19,400
Indiana	2nd District	\$33,800	\$98,600	\$132,400
Indiana	3rd District	\$30,000	\$96,400	\$126,400
Indiana	4th District	\$44,100	\$258,300	\$302,400
Indiana	5th District	\$2,400	\$436,800	\$439,200
Indiana	6th District	\$8,800	\$58,400	\$67,200
Indiana	7th District	\$194,500	\$648,200	\$842,700
Indiana	8th District	\$55,500	\$350,700	\$406,200
Indiana	9th District	\$12,100	\$126,100	\$138,200
Kansas	1st District	\$18,300	\$106,400	\$124,700
Kansas	2nd District	\$1,300	\$87,300	\$88,500
Kansas	3rd District	\$89,200	\$418,100	\$507,300
Kansas	4th District	\$82,600	\$225,000	\$307,600
Kentucky	1st District	\$2,700	\$69,600	\$72,300
Kentucky	2nd District	\$16,000	\$145,400	\$161,400
Kentucky	3rd District	\$41,500	\$239,500	\$281,100
Kentucky	4th District	\$184,400	\$124,800	\$309,200
Kentucky	5th District	\$0	\$3,500	\$3,500
Kentucky	6th District	\$8,500	\$391,600	\$400,100
Louisiana	1st District	\$65,900	\$86,200	\$152,100
Louisiana	2nd District	\$19,900	\$96,400	\$116,400
Louisiana	3rd District	\$600	\$33,800	\$34,400
Louisiana	4th District	\$2,100	\$33,400	\$35,500
Louisiana	5th District	\$4,500	\$86,300	\$90,800
Louisiana	6th District	\$144,600	\$58,600	\$203,200
Louisiana	7th District	\$300	\$19,800	\$20,100
Massachusetts	1st District	\$81,600	\$81,100	\$162,700
Massachusetts	2nd District	\$19,700	\$40,300	\$60,100



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Massachusetts	3rd District	\$12,300	\$24,300	\$36,600
Massachusetts	4th District	\$5,300	\$65,100	\$70,300
Massachusetts	5th District	\$2,700	\$55,300	\$58,000
Massachusetts	6th District	\$33,500	\$254,700	\$288,200
Massachusetts	7th District	\$71,400	\$554,300	\$625,700
Massachusetts	8th District	\$28,800	\$71,900	\$100,700
Massachusetts	9th District	\$13,800	\$357,200	\$371,000
Massachusetts	10th District	\$4,600	\$37,800	\$42,400
Maryland	1st District	\$17,500	\$46,600	\$64,200
Maryland	2nd District	\$21,100	\$44,500	\$65,500
Maryland	3rd District	\$6,900	\$136,000	\$142,900
Maryland	4th District	\$200	\$3,000	\$3,200
Maryland	5th District	\$100	\$25,100	\$25,100
Maryland	6th District	\$8,900	\$44,100	\$53,000
Maryland	7th District	\$10,000	\$117,000	\$127,000
Maryland	8th District	\$1,800	\$18,600	\$20,500
Maine	1st District	\$32,500	\$39,600	\$72,100
Maine	2nd District	\$700	\$37,900	\$38,600
Michigan	1st District	\$1,400	\$4,100	\$5,400
Michigan	2nd District	\$22,800	\$103,600	\$126,500
Michigan	3rd District	\$173,000	\$199,700	\$372,700
Michigan	4th District	\$591,700	\$17,300	\$609,000
Michigan	5th District	\$2,500	\$105,100	\$107,600
Michigan	6th District	\$75,800	\$223,100	\$298,900
Michigan	7th District	\$6,100	\$105,600	\$111,600
Michigan	8th District	\$400	\$26,600	\$27,000
Michigan	9th District	\$30,100	\$509,300	\$539,300
Michigan	10th District	\$500	\$30,700	\$31,200
Michigan	11th District	\$129,700	\$452,200	\$581,900
Michigan	12th District	\$83,400	\$145,400	\$228,700
Michigan	13th District	\$179,200	\$26,800	\$206,000
Michigan	14th District	\$12,200	\$16,300	\$28,500
Michigan	15th District	\$130,700	\$169,300	\$300,000
Minnesota	1st District	\$7,700	\$50,300	\$58,000
Minnesota	2nd District	\$78,700	\$114,400	\$193,100
Minnesota	3rd District	\$191,200	\$163,700	\$354,800
Minnesota	4th District	\$27,800	\$34,000	\$61,700



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Minnesota	5th District	\$137,500	\$2,175,500	\$2,313,000
Minnesota	6th District	\$1,600	\$29,000	\$30,500
Minnesota	7th District	\$36,200	\$7,900	\$44,100
Minnesota	8th District	\$100	\$16,500	\$16,600
Missouri	1st District	\$201,900	\$719,500	\$921,500
Missouri	2nd District	\$46,200	\$117,700	\$163,900
Missouri	3rd District	\$114,300	\$96,000	\$210,300
Missouri	4th District	\$900	\$94,300	\$95,100
Missouri	5th District	\$26,700	\$149,800	\$176,400
Missouri	6th District	\$119,700	\$206,100	\$325,800
Missouri	7th District	\$20,800	\$368,800	\$389,600
Missouri	8th District	\$3,500	\$30,200	\$33,700
Missouri	9th District	\$1,200	\$227,900	\$229,100
Mississippi	1st District	\$5,600	\$586,400	\$592,000
Mississippi	2nd District	\$53,100	\$23,300	\$76,400
Mississippi	3rd District	\$3,900	\$206,400	\$210,300
Mississippi	4th District	\$18,800	\$61,100	\$79,900
Montana	At Large	\$1,300	\$9,200	\$10,400
North Carolina	1st District	\$1,700	\$42,500	\$44,200
North Carolina	2nd District	\$100	\$38,600	\$38,800
North Carolina	3rd District	\$25,000	\$6,900	\$32,000
North Carolina	4th District	\$1,600	\$102,800	\$104,300
North Carolina	5th District	\$6,100	\$719,300	\$725,400
North Carolina	6th District	\$400	\$141,300	\$141,700
North Carolina	7th District	\$3,700	\$38,300	\$41,900
North Carolina	8th District	\$14,200	\$93,300	\$107,500
North Carolina	9th District	\$25,900	\$243,700	\$269,600
North Carolina	10th District	\$2,300	\$136,400	\$138,800
North Carolina	11th District	\$100	\$26,800	\$26,900
North Carolina	12th District	\$132,000	\$247,700	\$379,800
North Carolina	13th District	\$7,800	\$47,300	\$55,100
North Dakota	At Large	\$65,200	\$10,700	\$75,900
Nebraska	1st District	\$22,000	\$106,400	\$128,400
Nebraska	2nd District	\$21,700	\$155,200	\$176,900
Nebraska	3rd District	\$11,000	\$9,200	\$20,200



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
New Hampshire	1st District	\$700	\$105,100	\$105,800
New Hampshire	2nd District	\$2,300	\$60,800	\$63,100
New Jersey	1st District	\$11,600	\$117,200	\$128,800
New Jersey	2nd District	\$3,400	\$64,800	\$68,200
New Jersey	3rd District	\$12,900	\$197,800	\$210,700
New Jersey	4th District	\$23,600	\$219,300	\$242,800
New Jersey	5th District	\$266,500	\$833,300	\$1,099,800
New Jersey	6th District	\$187,800	\$411,900	\$599,700
New Jersey	7th District	\$211,300	\$226,800	\$438,100
New Jersey	8th District	\$64,700	\$1,369,600	\$1,434,300
New Jersey	9th District	\$341,800	\$3,461,900	\$3,803,700
New Jersey	10th District	\$24,900	\$55,000	\$79,900
New Jersey	11th District	\$219,300	\$1,748,900	\$1,968,300
New Jersey	12th District	\$34,000	\$411,800	\$445,800
New Jersey	13th District	\$125,800	\$366,100	\$491,900
New Mexico	1st District	\$500	\$34,000	\$34,500
New Mexico	2nd District	\$1,200	\$67,900	\$69,100
New Mexico	3rd District	\$200	\$8,000	\$8,300
Nevada	1st District	\$3,000	\$123,100	\$126,100
Nevada	2nd District	\$4,100	\$177,900	\$182,000
Nevada	3rd District	\$2,500	\$135,400	\$137,900
New York	1st District	\$61,300	\$19,300	\$80,600
New York	2nd District	\$47,200	\$609,500	\$656,800
New York	3rd District	\$17,300	\$71,200	\$88,600
New York	4th District	\$93,500	\$455,400	\$548,900
New York	5th District	\$202,600	\$465,000	\$667,600
New York	6th District	\$377,600	\$203,800	\$581,400
New York	7th District	\$6,000	\$66,900	\$72,900
New York	8th District	\$176,600	\$2,108,600	\$2,285,100
New York	9th District	\$0	\$63,700	\$63,700
New York	10th District	\$0	\$12,700	\$12,700
New York	11th District	\$700	\$23,200	\$23,900
New York	12th District	\$5,000	\$288,800	\$293,800
New York	13th District	\$44,900	\$12,600	\$57,600
New York	14th District	\$190,600	\$3,439,500	\$3,630,000
New York	15th District	\$100	\$12,200	\$12,300
New York	16th District	\$100	\$26,400	\$26,500



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
New York	17th District	\$1,200	\$70,900	\$72,100
New York	18th District	\$43,100	\$603,500	\$646,600
New York	19th District	\$300	\$97,800	\$98,000
New York	20th District	\$4,300	\$44,800	\$49,000
New York	21st District	\$63,400	\$7,200	\$70,600
New York	22nd District	\$7,800	\$17,400	\$25,200
New York	23rd District	\$300	\$5,500	\$5,800
New York	24th District	\$600	\$2,600	\$3,200
New York	25th District	\$6,900	\$24,700	\$31,600
New York	26th District	\$700	\$39,400	\$40,100
New York	27th District	\$12,900	\$83,500	\$96,500
New York	28th District	\$64,400	\$24,600	\$89,000
New York	29th District	\$3,200	\$76,500	\$79,800
Ohio	1st District	\$1,100	\$149,100	\$150,100
Ohio	2nd District	\$2,500	\$206,100	\$208,600
Ohio	3rd District	\$24,000	\$477,300	\$501,300
Ohio	4th District	\$90,500	\$159,800	\$250,300
Ohio	5th District	\$7,300	\$91,900	\$99,200
Ohio	6th District	\$14,700	\$19,900	\$34,600
Ohio	7th District	\$8,800	\$103,300	\$112,100
Ohio	8th District	\$21,000	\$335,100	\$356,100
Ohio	9th District	\$7,600	\$61,300	\$69,000
Ohio	10th District	\$96,600	\$303,600	\$400,100
Ohio	11th District	\$21,900	\$366,500	\$388,500
Ohio	12th District	\$22,400	\$196,400	\$218,800
Ohio	13th District	\$167,200	\$186,800	\$354,000
Ohio	14th District	\$86,400	\$227,900	\$314,300
Ohio	15th District	\$29,500	\$406,800	\$436,300
Ohio	16th District	\$2,300	\$294,300	\$296,600
Ohio	17th District	\$78,000	\$312,100	\$390,000
Ohio	18th District	\$3,000	\$78,100	\$81,100
Oklahoma	1st District	\$9,500	\$80,500	\$90,000
Oklahoma	2nd District	\$900	\$136,000	\$136,900
Oklahoma	3rd District	\$1,700	\$171,600	\$173,300
Oklahoma	4th District	\$1,100	\$68,100	\$69,300
Oklahoma	5th District	\$300	\$192,400	\$192,700
Oregon	1st District	\$38,000	\$771,200	\$809,200
Oregon	2nd District	\$10,600	\$41,400	\$52,000



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Oregon	3rd District	\$6,200	\$482,100	\$488,300
Oregon	4th District	\$1,900	\$37,000	\$38,900
Oregon	5th District	\$22,700	\$39,000	\$61,700
Pennsylvania	1st District	\$146,700	\$74,600	\$221,300
Pennsylvania	2nd District	\$28,700	\$229,300	\$257,900
Pennsylvania	3rd District	\$6,800	\$44,600	\$51,400
Pennsylvania	4th District	\$7,700	\$71,500	\$79,200
Pennsylvania	5th District	\$500	\$8,300	\$8,700
Pennsylvania	6th District	\$11,100	\$158,700	\$169,800
Pennsylvania	7th District	\$27,900	\$84,600	\$112,500
Pennsylvania	8th District	\$11,700	\$180,300	\$192,000
Pennsylvania	9th District	\$3,600	\$18,900	\$22,500
Pennsylvania	10th District	\$2,600	\$56,900	\$59,500
Pennsylvania	11th District	\$14,000	\$20,400	\$34,400
Pennsylvania	12th District	\$500	\$21,000	\$21,500
Pennsylvania	13th District	\$17,100	\$82,500	\$99,600
Pennsylvania	14th District	\$153,800	\$108,300	\$262,100
Pennsylvania	15th District	\$31,700	\$61,700	\$93,500
Pennsylvania	16th District	\$6,100	\$102,700	\$108,800
Pennsylvania	17th District	\$25,600	\$48,100	\$73,700
Pennsylvania	18th District	\$17,300	\$74,500	\$91,800
Pennsylvania	19th District	\$3,800	\$239,800	\$243,600
Rhode Island	1st District	\$4,200	\$273,600	\$277,800
Rhode Island	2nd District	\$9,900	\$103,000	\$112,900
South Carolina	1st District	\$51,200	\$79,200	\$130,400
South Carolina	2nd District	\$13,600	\$84,600	\$98,200
South Carolina	3rd District	\$400	\$62,900	\$63,300
South Carolina	4th District	\$12,900	\$145,300	\$158,300
South Carolina	5th District	\$1,000	\$374,100	\$375,100
South Carolina	6th District	\$49,800	\$29,000	\$78,900
South Dakota	At Large	\$120,600	\$35,500	\$156,200
Tennessee	1st District	\$17,700	\$69,500	\$87,200
Tennessee	2nd District	\$97,100	\$184,700	\$281,800
Tennessee	3rd District	\$700	\$248,800	\$249,500
Tennessee	4th District	\$2,200	\$193,600	\$195,800
Tennessee	5th District	\$92,600	\$1,360,900	\$1,453,500



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Tennessee	6th District	\$267,100	\$602,100	\$869,200
Tennessee	7th District	\$2,000	\$114,100	\$116,100
Tennessee	8th District	\$2,600	\$423,100	\$425,700
Tennessee	9th District	\$444,400	\$1,449,200	\$1,893,600
Texas	1st District	\$5,100	\$77,000	\$82,100
Texas	2nd District	\$195,000	\$48,000	\$243,000
Texas	3rd District	\$98,600	\$1,359,900	\$1,458,400
Texas	4th District	\$1,000	\$164,300	\$165,300
Texas	5th District	\$20,000	\$69,300	\$89,300
Texas	6th District	\$5,800	\$239,900	\$245,700
Texas	7th District	\$324,200	\$365,600	\$689,900
Texas	8th District	\$45,100	\$53,100	\$98,100
Texas	9th District	\$50,100	\$477,400	\$527,500
Texas	10th District	\$8,700	\$1,405,600	\$1,414,300
Texas	11th District	\$2,700	\$21,500	\$24,200
Texas	12th District	\$35,200	\$475,800	\$511,000
Texas	13th District	\$74,700	\$13,900	\$88,500
Texas	14th District	\$26,300	\$60,100	\$86,400
Texas	15th District	\$600	\$54,800	\$55,300
Texas	16th District	\$129,900	\$985,300	\$1,115,200
Texas	17th District	\$300	\$45,400	\$45,700
Texas	18th District	\$533,800	\$882,500	\$1,416,300
Texas	19th District	\$23,200	\$34,500	\$57,700
Texas	20th District	\$3,200	\$213,800	\$217,100
Texas	21st District	\$54,300	\$31,200	\$85,500
Texas	22nd District	\$54,400	\$264,800	\$319,200
Texas	23rd District	\$1,100	\$369,400	\$370,500
Texas	24th District	\$351,600	\$1,156,200	\$1,507,700
Texas	25th District	\$4,400	\$187,000	\$191,400
Texas	26th District	\$15,000	\$407,700	\$422,600
Texas	27th District	\$2,900	\$37,100	\$40,000
Texas	28th District	\$13,300	\$38,700	\$52,000
Texas	29th District	\$135,500	\$211,400	\$347,000
Texas	30th District	\$119,100	\$389,400	\$508,500
Texas	31st District	\$400	\$32,800	\$33,100
Texas	32nd District	\$276,400	\$357,200	\$633,600
Utah	1st District	\$87,200	\$324,500	\$411,800
Utah	2nd District	\$12,900	\$35,600	\$48,500
Utah	3rd District	\$46,900	\$111,500	\$158,400



Table 18 (Continued) – Summary of Trade Impacts, Year 2005
Goods Shipped Through the Ports of Los Angeles and Long Beach

State	District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
Virginia	1st District	\$0	\$19,600	\$19,600
Virginia	2nd District	\$5,000	\$16,500	\$21,500
Virginia	3rd District	\$22,100	\$104,900	\$127,000
Virginia	4th District	\$3,300	\$50,700	\$54,000
Virginia	5th District	\$900	\$41,400	\$42,300
Virginia	6th District	\$400	\$28,600	\$29,000
Virginia	7th District	\$25,900	\$19,500	\$45,400
Virginia	8th District	\$24,200	\$33,700	\$57,900
Virginia	9th District	\$100	\$23,900	\$24,000
Virginia	10th District	\$21,300	\$274,900	\$296,200
Virginia	11th District	\$1,800	\$12,700	\$14,500
Vermont	At Large	\$200	\$15,700	\$15,900
Washington	1st District	\$37,900	\$264,300	\$302,200
Washington	2nd District	\$2,900	\$18,100	\$21,000
Washington	3rd District	\$700	\$89,500	\$90,100
Washington	4th District	\$63,000	\$5,900	\$68,900
Washington	5th District	\$800	\$2,400	\$3,200
Washington	6th District	\$3,800	\$15,900	\$19,700
Washington	7th District	\$141,300	\$151,900	\$293,200
Washington	8th District	\$171,900	\$573,200	\$745,000
Washington	9th District	\$159,400	\$250,200	\$409,600
Wisconsin	1st District	\$71,400	\$149,100	\$220,500
Wisconsin	2nd District	\$18,300	\$384,700	\$403,000
Wisconsin	3rd District	\$89,400	\$686,700	\$776,100
Wisconsin	4th District	\$78,900	\$98,700	\$177,600
Wisconsin	5th District	\$12,000	\$931,900	\$943,900
Wisconsin	6th District	\$112,800	\$137,900	\$250,700
Wisconsin	7th District	\$42,200	\$103,300	\$145,500
Wisconsin	8th District	\$37,800	\$43,800	\$81,600
West Virginia	1st District	\$4,200	\$9,400	\$13,600
West Virginia	2nd District	\$100	\$49,200	\$49,300
West Virginia	3rd District	\$0	\$500	\$600
Wyoming	At Large	\$0	\$5,300	\$5,300

Source: BST Associates using data from numerous sources



**Table 19 – Summary of Trade Impacts, Year 2005, by State Assembly District
Goods Shipped Through the Ports of Los Angeles and Long Beach**

Assembly District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
1	\$1,700	\$8,000	\$9,700
2	\$700	\$-	\$700
3	\$900	\$6,900	\$7,800
4	\$25,400	\$8,800	\$34,200
5	\$89,400	\$10,100	\$99,400
6	\$22,000	\$82,600	\$104,600
7	\$600	\$9,100	\$9,700
8	\$5,500	\$14,300	\$19,900
9	\$200	\$14,400	\$14,600
10	\$1,400	\$91,600	\$93,000
11	\$2,800	\$15,700	\$18,500
12	\$700	\$12,800	\$13,500
13	\$109,700	\$309,100	\$418,800
14	\$43,100	\$45,000	\$88,000
15	\$48,400	\$119,300	\$167,700
16	\$95,800	\$34,800	\$130,600
17	\$700	\$8,000	\$8,700
18	\$75,000	\$354,800	\$429,800
19	\$178,900	\$303,000	\$481,900
20	\$8,300	\$1,027,500	\$1,035,700
21	\$28,500	\$370,000	\$398,500
22	\$10,200	\$637,800	\$648,000
23	\$2,200	\$7,500	\$9,700
24	\$1,000	\$21,800	\$22,800
25	\$2,500	\$5,400	\$7,900
26	\$3,300	\$7,100	\$10,300
27	\$4,200	\$30,600	\$34,800
28	\$39,200	\$13,600	\$52,800
29	\$51,700	\$35,100	\$86,800
30	\$172,100	\$5,000	\$177,100
31	\$2,900	\$92,400	\$95,200
32	\$52,000	\$480,000	\$532,000
33	\$42,100	\$25,000	\$67,100
34	\$2,700	\$24,000	\$26,700
35	\$800	\$293,800	\$294,600
36	\$-	\$28,300	\$28,300
37	\$8,000	\$825,900	\$833,900
38	\$297,900	\$109,600	\$407,500
39	\$5,000	\$315,300	\$320,200
40	\$43,100	\$414,100	\$457,200



**Table 19 (continued) – Summary of Trade Impacts, Year 2005, by State Assembly District
Goods Shipped Through the Ports of Los Angeles and Long Beach**

Assembly District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
41	\$19,800	\$588,100	\$607,800
42	\$72,400	\$469,900	\$542,300
43	\$28,900	\$99,700	\$128,600
44	\$141,500	\$418,800	\$560,300
45	\$109,800	\$229,900	\$339,800
46	\$587,500	\$3,131,000	\$3,718,400
47	\$16,100	\$263,000	\$279,100
48	\$34,300	\$133,000	\$167,200
49	\$360,600	\$1,388,400	\$1,749,100
50	\$179,600	\$1,021,700	\$1,201,300
51	\$1,173,600	\$1,074,700	\$2,248,300
52	\$556,400	\$1,471,200	\$2,027,500
53	\$625,000	\$2,983,300	\$3,608,200
54	\$292,200	\$291,400	\$583,600
55	\$1,986,800	\$4,182,800	\$6,169,600
56	\$96,100	\$2,643,900	\$2,740,000
57	\$135,000	\$1,506,800	\$1,641,800
58	\$734,400	\$3,015,800	\$3,750,100
59	\$22,200	\$213,100	\$235,300
60	\$315,000	\$2,506,100	\$2,821,200
61	\$180,200	\$3,438,900	\$3,619,200
62	\$318,500	\$1,026,500	\$1,345,000
63	\$4,900	\$451,900	\$456,800
64	\$4,200	\$127,500	\$131,700
65	\$100	\$11,900	\$12,000
66	\$11,300	\$136,300	\$147,600
67	\$182,600	\$1,986,300	\$2,168,900
68	\$37,700	\$218,600	\$256,300
69	\$56,600	\$313,000	\$369,700
70	\$77,900	\$3,609,500	\$3,687,400
71	\$18,800	\$481,900	\$500,700
72	\$146,400	\$1,666,000	\$1,812,400
73	\$7,000	\$153,200	\$160,300
74	\$20,100	\$310,300	\$330,300
75	\$294,000	\$741,600	\$1,035,600
76	\$40,800	\$106,700	\$147,500
77	\$300	\$19,800	\$20,100
78	\$100	\$123,000	\$123,000
79	\$240,000	\$2,220,600	\$2,460,600
80	\$72,600	\$427,100	\$499,600

Source: BST Associates using data from numerous sources



**Table 20 – Summary of Trade Impacts, Year 2005, by State Senate District
Goods Shipped Through the Ports of Los Angeles and Long Beach**

Senate District	Export Value (\$1,000's)	Import Value (\$1,000's)	Total Value (\$1,000's)
1	\$26,500	\$69,600	\$96,200
2	\$2,400	\$18,900	\$21,200
3	\$131,700	\$392,100	\$523,800
4	\$1,600	\$7,500	\$9,100
5	\$6,000	\$27,200	\$33,200
6	\$89,600	\$46,900	\$136,500
7	\$82,900	\$137,200	\$220,100
8	\$179,600	\$315,800	\$495,400
9	\$107,500	\$82,100	\$189,500
10	\$84,200	\$2,007,400	\$2,091,700
11	\$14,600	\$389,700	\$404,300
12	\$38,500	\$9,600	\$48,100
13	\$6,500	\$10,800	\$17,300
14	\$55,800	\$64,100	\$119,900
15	\$42,000	\$73,200	\$115,300
16	\$174,900	\$74,700	\$249,600
17	\$600	\$237,300	\$237,900
18	\$53,200	\$504,300	\$557,500
19	\$331,700	\$593,600	\$925,400
20	\$50,300	\$620,800	\$671,000
21	\$156,000	\$339,300	\$495,200
22	\$706,700	\$3,523,000	\$4,229,700
23	\$24,600	\$1,456,600	\$1,481,200
24	\$860,800	\$4,466,500	\$5,327,300
25	\$2,553,500	\$2,866,100	\$5,419,500
26	\$52,600	\$325,300	\$377,900
27	\$338,100	\$1,545,400	\$1,883,500
28	\$1,831,000	\$6,807,600	\$8,638,600
29	\$827,800	\$4,729,500	\$5,557,200
30	\$302,300	\$3,327,200	\$3,629,500
31	\$14,700	\$807,100	\$821,700
32	\$453,700	\$3,729,900	\$4,183,600
33	\$54,200	\$2,393,600	\$2,447,800
34	\$93,200	\$870,900	\$964,100
35	\$239,900	\$4,152,400	\$4,392,400
36	\$20,600	\$226,700	\$247,300
37	\$7,100	\$230,900	\$237,900
38	\$291,100	\$511,800	\$802,900
39	\$61,500	\$717,200	\$778,700
40	\$312,600	\$2,711,100	\$3,023,700

Source: BST Associates using data from numerous sources

Glossary

Alameda Corridor - a 20-mile rail express line that connects the Ports of Los Angeles and Long Beach to the transcontinental rail network east of downtown Los Angeles. This Corridor eliminated the intersection of the railroad with roads at 200 locations, primarily by lowering the railroad grade below the road grade. The project is overseen by the Alameda Corridor Transportation Authority (ACTA), a joint-powers agency governed by the ports and cities of Los Angeles and Long Beach, as well as the Los Angeles County Metropolitan Transportation Agency.

Asian Financial Crisis - the financial crisis that erupted in Asia in mid-1997, which led to sharp declines in the currencies, stock markets, and other asset prices of a number of Asian countries.

BEA - U.S. Bureau of Economic Analysis

CFS – see “Commodity Flow Survey”

CIF - Cost, Insurance and Freight refers to pricing terms in international trade. When sold “CIF”, the cost of the delivery of goods to the buyer’s destination is paid by the seller. However, the buyer assumes the cargo insurance, import customs clearance, payment of customs duties and taxes, and other costs and risks.

Census - a complete counting taken by the U.S. Department of Commerce, Bureau of the Census, every 10 years which includes the number of people and housing units and various other highly detailed population, earnings, age, race and ethnic background, and housing characteristics. It is also referred to as the Decennial Census of Population and Housing.

Commodity Flow Survey - a survey conducted approximately every five years as part of the Economic Census by the U.S. Census Bureau and the Bureau of Transportation Statistics. The Commodity Flow Survey obtains origin and destination data on shipments by domestic establishments in manufacturing, wholesale, mining, and other selected industries.

Congressional District - the geographical region represented by a member of the U.S. House of Representatives.

Cost of Goods Sold - cost of goods sold is the expense a company incurred in order to manufacture, create, or sell a product. It includes the purchase price of the raw material as well as the expenses of turning it into a product.

Cross-reference - a type of database file used to convert data from one unit of measure into another. For instance, in this study a cross-reference file was used to convert commodity types into industry sectors.

Customs Duty - federal tax charged on goods imported into the United States

Direct Impact - employment, payroll, and revenue generated by services and goods sold. It is the initial, immediate effects caused by a specific activity, such as the manufacture of goods for export.

Economic Impact - the effects of a change in economic activity or policy action. “Total” impacts consist of “Direct” Impacts, which are the effects of the initial change in activity, “Indirect” Impacts, which consist of the effects on all sectors linked either directly or indirectly to the initiating sector, and “Induced” Impacts, which measure how a general change in overall economic spending and income patterns affects the household sector.

Export Declaration - the Shipper’s Export Declaration (SED) is the basic form that is used to report export transactions. It is prepared by the exporter or a forwarding agent and presented to the U.S. Customs Service at the port of export. The information contained in the export declaration is used by the Census Bureau to tabulate export statistics and by the Bureau of Export Administration to regulate the export of commodities subject to legal restrictions.

Employment Impact - the effect of a change in production or sales on the number of jobs in the various industry sectors impacted by the change.

Exports – goods shipped out of the United States to foreign countries

FAS - Free Alongside Ship refers to pricing terms in international trade. Goods sold “FAS” are placed in the dock shed or at the side of the ship, on the dock or lighter, within reach of its loading equipment so that they can be loaded aboard the ship, at the seller's expense. The buyer is then responsible for the loading fee, main carriage/freight, cargo insurance, and other costs and risks.

FTE - see “Full-Time Equivalent”

Full-Time Equivalent - a unit of measurement for employment that converts all full-time and part-time jobs into numbers of full-time jobs, based on the number of hours worked. For example, if two employees are reported as working 20 hours each per week, that is calculated as one FTE job, based on the average 40-hour work week.

Geo-coding - the process of appending latitude and longitude coordinates to address information, allowing the information to be displayed on GIS maps

GIS - Geographic Information System is a type of computer software that allows the user to manipulate geographic information and to produce maps of data

Harmonized System - an international commodity classification system developed under the auspices of the Customs Cooperation Council, and used for describing goods in international trade.

Imports - goods shipped into the United States from foreign countries

In-transit trade - goods imported into the United States from foreign countries that are destined for another country. For example, Southern California ports handle some cargo from Asia that is destined for Mexico.

Income Impact - the effect of a change in production or sales on wages and salaries of persons employed by the various industry sectors affected by the change.

Indirect Impact - the changes to production, employment, incomes, etc., which take place as a result of the direct effects. It includes the effects on industry sectors that may be directly or indirectly related to the initially impacted sector.

Induced Impact - the changes in spending by households in the regional economy as the result of Direct and Indirect Effects from some economic activity. The induced effects arise from a general change in the earnings and spending patterns of the household sector of an economy due to the direct and indirect effects.

Industry Sector - see “NAICS”

Input-Output Model - an analytical technique used to assess economic impacts, based on a mapping of the economic linkages among the various industry sectors of an economy. The fundamental premise of this technique is that changes in production levels of an economy's basic industries will produce an iterative process of spending, income creation, and re-spending, thereby changing the production levels of other, directly and indirectly related industries.

Los Angeles Customs District - the geographic grouping of ports of entry that includes the seaports of Los Angeles, Long Beach and Port Hueneme, as well as small boat harbors in the region. It also includes the airports in the region such as Los Angeles International and McCarran International in Las Vegas.

Margin - Margins split the price charged for a good into appropriate producer values, each value impacting a specific industry. For example, the purchase price of a tire at an automotive retailer includes the producer price at the factory door plus transportation costs, the wholesaler's markup, and the retailer's markup. The wholesaler's markup is known as the wholesale margin. The retailer's markup is known as the retail margin.

MISER - Massachusetts Institute for Social and Economic Research is an interdisciplinary research institute of the College of Social and Behavioral Sciences at the University of Massachusetts. MISER's research involves planning, strategy, and forecasting, with a focus on social, economic, and demographic issues. The foreign trade unit at MISER provides the state export data series used in this report. Work on this product has been shifted to Holyoke Community College in Massachusetts. WISERTrade now produces estimates of exports for each state based on detailed analysis of the U.S. Department of Commerce's Export Declarations.

Multiplier - a numeric measurement, expressed as a mathematical ratio, of the Total Effect, including the Direct, Indirect, and Induced Effects, to the direct effect associated with a specific activity, or a change in some activity.

NAICS - North American Industry Classification System is a system for classifying business establishments, adopted in 1997 to replace the old Standard Industrial Classification (SIC) system. It is the industry classification system currently used by the statistical agencies of the United States.

Output – the value of production or sales created within the economy by a given economic activity (international trade, for example).

Output Impact - the change in dollar value of output from all sectors that results from a change by one dollar in production or sales of any given single sector.

San Pedro Bay – the combined ports of Los Angeles and Long Beach.

PIERS - Port Import Export Reporting Service is the primary source for import and export data that includes shipper information, data not available from any government source. PIERS uses the Freedom of Information Act to obtain import and export documentation for all international waterborne shipments moving into and out of the United States, then creates a detailed database describing these movements.

Redistricting - the process of determining the new geographical boundaries of each U.S. Congressional District, based on the most recent Census data.

Regional Input-Output Modeling System (RIMS II) – a model for estimating economic impacts that accounts for the relationships among industries. This model, developed by the Bureau of Economic Analysis, produces a set of input-output (I-O) multipliers that are used to estimate how the economy responds to changes in economic activity. The model is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold.

RIMS II - see “**Regional Input-Output Modeling System**”

Total Impact - the sum of the Direct, Indirect, and Induced impacts.

Type II Multiplier - multipliers used in Input-Output (I-O) Models and Economic Impact Analysis normally consist of Type I multipliers, which assess the ratio of the direct and indirect effects to the direct effects, and Type II multipliers, which measure the ratio of the direct, indirect, and induced effects to the direct effects. This report uses Type II multipliers.