

**THE ECONOMIC IMPACTS OF THE
PORTS OF LOUISIANA AND THE
MARITIME INDUSTRY**

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EXECUTIVE SUMMARY

- The ports of Louisiana and the maritime industry are crucial parts of the Louisiana economy. The ports, which serve as the gateway to the rest of the world, are the largest in the world. Perhaps more significant is the impact of the ports and the maritime industry on the economy.
- The purpose of this report is to estimate the economic contribution of the ports and the maritime industry to the Louisiana economy for the year 1999. In order to gain information about the firms in the categories described above, the University of New Orleans conducted surveys in the New Orleans metro area and the rest of the state, which will be collectively referred to as "the survey." Questions about employment, sales, and the like were asked of the firms throughout the state of Louisiana. Based on the responses of the survey, we were able to estimate the total amount of spending and income generated from the activities of the ports. To supplement the survey results we used the following sources:
 - Louisiana Department of Labor data on total employment and total wages by three-digit Standard Industrial Classification (SIC) code;
 - Bureau of Economic Analysis data on total employment and total wages by two-digit SIC code;
 - Bureau of Economic Analysis regional multipliers for the state of Louisiana.
- The basic methodology employed was to use the survey results to calculate the average, or typical, spending or employment of a port-related firm. In order to estimate the total impact associated with **all** of the port-related firms in each area, it was necessary to develop some estimate of the total size of the industry in each case. This was done using the three sources cited above.
- Port industry refers to those firms that are located in Louisiana simply because of the existence of the ports. These firms include the ports themselves; large steamship companies such as Central Gulf lines; firms providing longshoremen services; railroads, tugboat, barge, and trucking companies that ship the goods to and from the port; freight forwarding companies; law firms that hire maritime attorneys to handle legal work for the maritime industry; insurance companies that write marine insurance; and various federal government agencies that support the movement of cargo through the ports. In 1999, the port industry contributed direct spending of \$4,063.18 million, or \$4.06 billion. The secondary spending created by this direct spending totaled \$6,582.15 million, or \$6.58 billion. The total economic impact of the port industry on the economy is the sum of the direct and secondary spending -- \$10,645.33 million, or \$10.65 billion.

- The largest part of the economic impact of the ports is related to the economic activities of port users -- consisting primarily of importers and exporters that utilize port facilities. Because of the existence of the Mississippi River and the Gulf of Mexico and the window they offer to the rest of the world, many manufacturing and warehousing firms have located in the state. The port users created primary spending in the state of \$6,258.95 million, which produced an additional \$12,850.33 million in secondary spending. Thus, the total economic impact of the port users in 1999 is \$19,109.28 million, or \$19.11 billion. The spending of the port users generated \$3,175.82 million in earnings and supports 151,055 permanent jobs.
- In 1999, the total economic impact of the Louisiana ports was \$29.75 billion. That impact consists of \$10.32 billion in direct spending and \$19.43 billion in secondary spending. The ports and related activities generate a total of \$5.12 billion in total income for Louisiana residents and support, in part or in whole, 243,621 jobs in the state.
- The economic impact of the ports constitutes 22.5 percent of total Louisiana gross state product, which is the total dollar value of the state's goods and services. The ports and related activities produced 5.1 percent of the entire personal income in the state. The economic activities of port-related firms support approximately one out of every eight jobs in the state.
- In 1999, the ports and their related economic activities generated a total of \$285.06 million in tax revenues for the state of Louisiana. In 1999, the ports and the firms located in the area because of the ports generated a total of \$137.92 million for hard-pressed local governments in the state. In total, the economic activities of the ports and the maritime industry created a total of \$422.97 million in state and local tax revenue in 1999. That is revenue that will recur every year and will increase as the activities of the maritime industry increase.
- Table S1 presents a comparison of the 1997 and 1999 economic impact estimates of the port and maritime industries in the state.

THE ECONOMIC IMPACT OF THE PORTS OF LOUISIANA AND THE MARITIME INDUSTRY

ECONOMIC IMPACT, 1997 And 1999 Comparison

CATEGORY	1997	1999	PERCENT CHANGE
CONTAINER CARGO (In tons)	3,603,131	3,368,607	-6.5%
BREAK BULK CARGO (In tons)	27,455,519	40,453,398	47.3%
BULK (In tons)	384,062,556	337,396,690	-12.2%
TOTAL CARGO (In tons)	415,121,206	381,396,690	-8.1%
DIRECT IMPACT (In millions)	\$9,698.40	\$10,322.13	6.4%
SECONDARY IMPACT (In millions)	\$18,381.60	\$19,432.48	5.7%
TOTAL IMPACT (In millions)	\$28,080.00	\$29,754.61	6.0%
EARNINGS (In millions)	\$4,785.10	\$4,813.52	5.9%
EMPLOYMENT	229,869	243,621	6.0%
STATE TAX REVENUE (In millions)	\$266.20	\$285.06	7.1%
LOCAL TAX REVENUE (In millions)	\$128.80	\$137.92	7.1%
TOTAL TAX REVENUE (In millions)	\$395.00	\$422.98	7.1%

Summary of Economic Impact Study conducted by Dr. Tim Ryan, Dean of the College of Business Administration and Professor of Economics, University of New Orleans, February 2001

INTRODUCTION

Given Louisiana's strategic location at the mouth of the Mississippi River and on the Gulf of Mexico, the port and maritime industry are one of the state's most important economic generators. The Louisiana port system serves as one of the major gateways not only to Louisiana but also to the entire mid section of the United States. The ports not only serve as the means by which cargo comes into and flows out of the country but they also serve as major economic catalysts for the economy of the state. The ports create a large number of economic opportunities related to the servicing of the vessels that call on the ports. They also act as magnets for attracting warehousing and manufacturing firms that use the ports to import raw materials into the area or export finished products out of the area. The Louisiana port system -- including both deepwater ports and shallow draft ports -- is one of the largest port systems in the world, bringing millions of tons of cargo into and out of the country.

Hundreds of firms are located in Louisiana simply because of the existence of these ports. These firms include large steamship companies such as Central Gulf Lines; firms providing longshoremens services; railroads, tugboat, barge, and trucking companies that ship the goods to and from the ports; freight forwarding companies; law firms that hire maritime attorneys to handle legal work for the maritime industry; and insurance companies that write marine insurance. These firms are referred to as the port industry, which includes the following kinds of businesses:

1. The ports themselves.
2. The companies engaged in ocean-going transportation -- i.e., the steamship companies.
3. Ship services:
 - a. Navigational services;
 - b. Customs and other government;
 - c. Loading and unloading cargo;
 - d. Ship's agents;
 - e. Ship supplies;
 - f. Ship repair;
 - g. Cargo packing;
 - h. Freight forwarding;
 - i. Marine insurance;

- j. Custom house brokers; and
- k. Other ship services.

4. Inland transportation:

- a. Railroads;
- b. Barge lines;
- c. Other River transportation;
- d. Drayage; and
- e. Long-haul truck transportation.

In addition to the port industry identified above, many firms use the ports as a means of transporting raw materials and finished products. These include warehouses that store goods for export or import and manufacturing firms that locate in Louisiana because they need the River and the ports to transport their goods out of the country or to more populated regions of the United States. These firms are referred to as port users.

The purpose of this report is to estimate the economic contribution of the ports of Louisiana and the maritime industry to the Louisiana economy for the year 1999. The economic impact as estimated in this study is made up of three components: the direct, or primary, spending; the indirect spending; and the induced spending. The direct spending is the initial increase in output, or total spending, of the port industry and port users.

This direct or primary spending produces additional spending in the economy, referred to as indirect and induced spending. Indirect spending includes the spending of local firms that provide inputs or supplies to the firms involved in the direct spending. The induced spending is a result of the income produced in the local area by the direct and indirect spending. When these dollars are spent, they produce income for someone else in the local economy. The recipients of that income then spend part of their new income in the local economy, thus producing income for still other local residents. The process continues to third, fourth, and further rounds of spending.

The indirect and induced spending are added together to produce secondary spending. The secondary spending is sometimes referred to as the "ripple effect" or the multiplier effect. The multipliers used in this study are calculated by the Bureau of Economic Analysis, U.S. Department of Commerce.¹ The multipliers are industry specific. Thus, each area of spending -- i.e., spending on

¹ Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II) (Washington: U.S. Government

wages and salaries, ship repair, ship services, manufacturing, etc. -- has a different multiplier. The BEA study cited above also estimates multipliers for earnings and employment related to the direct spending in each industry.

In order to gain information about the spending of firms in the categories described above, the University of New Orleans conducted surveys in the New Orleans metro area and the rest of the state, which will be collectively referred to as "the survey." Questions about employment, sales, and the like were asked of the firms throughout the state of Louisiana. Based on the responses of the survey, we were able to estimate the total amount of spending and income generated from the activities of the ports. To supplement the survey results we used the following sources:

1. Louisiana Department of Labor data on total employment and total wages by three-digit Standard Industrial Classification (SIC) code;
2. Bureau of Economic Analysis data on total employment and total wages by two-digit SIC code;
3. Bureau of Economic Analysis regional multipliers for the state of Louisiana.

The basic methodology employed was to use the survey results to calculate the average, or typical, spending or employment of a port-related firm. In order to estimate the total impact associated with **all** of the port-related firms in each area, it was necessary to develop some estimate of the total size of the industry in each case. This was done using the three sources cited above. The specific methodology employed differed for each of the port-related industries and will be explained in more detail in the text of that section. This information was supplemented by a separate questionnaire sent to all the ports in the state. From that questionnaire, we obtained data on cargo volume handled by each port, port direct spending, and capital projects of the ports over the past several years.

PORT INDUSTRY

1. THE PORTS

The first component of the port industry is the ports themselves. In 1999, the port had operational expenses of \$56.84 million on harbor police, fireboats, marketing, sales, administration, maintenance and other operations. In addition, the ports had capital and equipment expenditures of \$125.13 million in 1999. This information comes from the ports directly and is therefore not estimated. In total, the ports' direct spending was \$181.97 million in the Louisiana economy. The secondary effect adds another \$357.09 million, for a total impact of the ports themselves of \$539.06 million. The spending of the ports themselves on operations and construction generates \$126.94 million in earnings and supports 5,947 jobs in the state's economy. These figures are presented in Tables 5 and 6.

2. THE STEAMSHIP COMPANIES

Several large steamship companies either have headquarters or offices with significant operations in the state because of the ports. These firms have large numbers of employees in the area and large payrolls; in addition, they spend a great deal of money in the local area for purchases of goods and services relating to their local overhead.

In this section we account for the local payroll of these firms. According to the United States Bureau of the Census, steamship companies and other firms engaged in deep-sea freight transportation generated total direct spending in the state of \$327.12 million in 1999, including wages and salaries, rent, insurance, supplies, utilities and the like. From this spending comes an additional \$604.06 million in secondary spending, for a total of \$931.18 million in spending in the state. Exclusive of their purchases of services and the like for their vessels, the steamship companies generated \$251.89 million in earnings. This industry supports a total of 7,655 jobs in the Louisiana economy. These figures are presented in Tables 5 and 6.

3. SHIP SERVICES

Services provided to vessels as they call at the ports are a major part of the impact of the ports on the local area economy. These services include navigational services to get the ocean-going vessels from the Gulf of Mexico to the ports; the loading and unloading of the cargo itself; local arrangements, accounting, purchase of supplies and the like; the supplies themselves; fuel that is sold to the vessels; cargo packing services; and customs services of the federal government. Based on the survey, we were able to determine the average spending, per vessel call, for each of the services. These expenses, per ton, are presented in Tables 1 and 2 for international and domestic cargo. International cargo has greater costs associated with ship calls for several reasons; one, these cargoes tend to be carried on larger ships, necessitating greater ship services; two, domestic cargo is most often carried on barges, necessitating less ship services; three, international cargo involves longer journeys, requiring longer port-side stays, more repairs, and greater provisions. In order to apply the per-ton spending derived from the survey to the entire market, we adjusted the total spending per ton

on the questionnaires by total port tonnage in each category for the year. In 1999, there were a total of 381,396,690 tons of waterborne commerce that moved through the ports of Louisiana. In 1997, the last time this study was conducted, the total tonnage was 415,121,206. Over the last two years, total tonnage has decreased by 8.1% but the make-up of the cargo has changed. Of the 1999 total, 194,079,098 tons were international cargo (in 1997, the international cargo total was 198,312,024 tons indicating a slight 2.1% decrease) and 187,317,592 tons were domestic cargo (in 1997, the domestic cargo total was 216,809,182 indicating a 8.5% decrease). Even though overall cargo volume was down, break bulk cargo – the type of cargo that requires the most handling and is the most conducive of value added activities – was up by 47.3% from 27,455,519 tons to 40,453,398 tons. Total tonnage, broken down into three categories – container, break bulk, and bulk cargo, is used as the basis for the calculation of total ship services spending (Table 3).

TABLE 1

LOUISIANA SHIP SERVICES, EXPENSES AND TONNAGE INTERNATIONAL CARGO

CARGO TYPE	TOTAL EXPENSES PER TON	TOTAL TONNAGE
CONTAINER	\$19.12	3,368,607
BREAK BULK	\$24.06	29,631,539
BULK	\$5.77	161,078,952
TOTAL	NA	194,079,098

Source: Port of New Orleans Questionnaire and Individual Ports

TABLE 2

LOUISIANA SHIP SERVICES, EXPENSES AND TONNAGE DOMESTIC CARGO

<u>CARGO TYPE</u>	<u>TOTAL EXPENSES PER TON</u>	<u>TOTAL TONNAGE</u>
CONTAINER	\$5.74	0
BREAK BULK	\$7.22	10,821,859
BULK	\$1.73	176,495,733
TOTAL	NA	187,317,592

Source: Port of New Orleans Questionnaire and Individual Ports

TABLE 3

TOTAL VESSEL CALL EXPENDITURES (in millions of \$s)

<u>CARGO TYPE</u>	<u>INTERNATIONAL CARGO</u>	<u>DOMESTIC CARGO</u>	<u>TOTAL SPENDING</u>
BULK	\$929.74	\$305.62	\$1,235.36
BREAK BULK	\$712.96	\$78.11	\$791.07
CONTAINER	\$64.41	\$0.0	\$64.41
TOTAL	\$1,707.11	\$383.73	\$2,090.84

Source: University of New Orleans

Multiplying the relevant spending per ton in Tables 1 and 2 times the total cargo figures produces the estimates for total spending in the three categories of cargo. The total Louisiana direct spending

that results from these vessel calls was \$2,090.84 million or **\$2.09 billion**. This direct spending produces an additional \$3,029.53 million, or **\$3.03 billion**, in secondary spending in the local area. Thus, the total economic impact of the ship calls in the state related to the cargo moving through Louisiana ports in 1999 was \$5,120.37 million, or **\$5.12 billion**. The primary spending related to this category of spending generates \$805.56 million in earnings and supports 39,716 jobs, either in whole or in part, in the state's economy. These figures are presented in Tables 5 and 6.

Other, mostly financial, services related to vessel calls include marine insurance companies or marine insurance divisions in larger insurance companies; freight forwarding companies; marine consulting firms; cargo and custom house brokers; those divisions within local banks that handle the financial aspects of trade; admiralty law firms or admiralty law sections of law firms; and the like.

A separate questionnaire was sent to these firms to ascertain information on the average employment and sales directly related to port activities in each of these categories. These firms are referred to as supplying trade services. Relying on information from port officials, conversations with maritime officials, and Louisiana Department of Labor data, we were able to estimate total employment and total sales volume in these industries in the state. In 1999, there was a total of \$349.18 million of direct port-related sales of trade services in the state. That \$349.18 million was divided into the following industries: banking, cargo brokering, maritime insurance, freight consolidation, freight forwarding, customs house brokering, marine consulting, admiralty law, drawback specialists, and other related businesses. The direct spending creates secondary spending of \$424.05 million, for a total of \$773.23 million in total impact. The primary spending related to these trade services spending generates \$124.48 million in earnings and supports 7,193 jobs in the economy. These figures are presented in Tables 5 and 6.

The third component of the ship services category related to the vessel calls to the ports is repair services. There are two types of repair service work performed on vessels: first are emergency repairs that must be performed wherever they occur; second are more planned repair services that can be done anywhere the vessel can sail. Both types of repair work are performed at Louisiana shipyards. A separate questionnaire was sent to shipyards to elicit information about vessel repairs related to ships calling at the ports. In 1999, there was a total of \$124.58 million of direct port-related sales of vessel repair services in the state. The \$124.58 million of direct spending creates secondary spending of \$250.36 million, for a total of \$374.94 million in total impact. The primary spending related to these vessel repair services spending generates \$106.11 million in earnings and supports 9,082 jobs in the Louisiana economy. These figures are presented in Tables 5 and 6.

Finally, there are a host of federal government services provided in state related to the cargo that moves through the ports. These government agencies include: the United States Customs Service, the United States Department of Agriculture, the Army Corps of Engineers who are responsible for keeping the Mississippi River dredged, the United States Department of Commerce, the Maritime Administration, the United States Coast Guard, and the Federal Maritime Commission. A separate questionnaire was sent to these government agencies to elicit information about government services related to ships calling at the ports. In 1999, there was a total of \$167.24 million spent on direct port-related government services in the state of Louisiana. The \$167.24 million of primary spending

creates secondary spending of \$273.30 million, for a total of \$440.54 million in total impact. The primary spending related to these government services generates \$79.93 million in earnings and supports 2,910 jobs in the state's economy. These figures are presented in Tables 5 and 6.

Total ship services spending is the sum of the four categories described above: vessel call services, trade services, vessel repair services, and government services. It must be reiterated that we only include that portion of the above-mentioned services that are directly related to the ports and the cargo moving through the ports. Direct spending in these four categories is \$2,359.8 million, which produces secondary spending of \$3,430.2 million. The total economic impact of this category is the sum of the direct and secondary spending, or a total of \$5,789.0 million or \$5.79 billion. This total spending of \$5.79 billion creates \$978.5 million in earnings for people in the state and supports 52,684 permanent jobs in the state's economy. These figures are presented in Table 6.

TABLE 4

SHIP SERVICES SPENDING (in millions of \$s)

CATEGORY	DIRECT IMPACT	SECONDARY IMPACT	TOTAL IMPACT
VESSEL CALLS	\$2,090.84	\$3,029.53	\$5,120.37
TRADE SERVICES	\$349.18	\$424.05	\$773.23
REPAIR SERVICES	\$124.58	\$250.36	\$374.94
GOVERNMENT SERVICES	\$167.24	\$273.30	\$440.54
TOTAL	\$2,731.84	\$3,977.24	\$6,709.08

Source: University of New Orleans

4. INLAND TRANSPORTATION

The large volume of cargo moving through the port creates the need for a great variety of inland transportation services: Mississippi River transportation, including barges and other river vessels; railroad transportation; and various kinds of truck transportation. Based on the survey, we obtained information on total employment and total sales volume for average or representative firms in the port-related transportation industry on a per ton basis. Multiplying the per ton averages times the total port tonnage produces estimated total employment and total sales volume, or direct spending, for the entire port-related inland transportation industry in the state.

Inland transportation generated \$822.26 million in primary spending in 1999, which in turn produces an additional \$1,643.76 million in local secondary spending. The total economic impact of this category is the sum of the direct and secondary spending, or a total of \$2,466.02 million. In addition, inland transportation spending generates \$453.31 million in earnings and supports a total of 20,063 permanent jobs in the Louisiana economy. These figures are presented in Tables 5 and 6.

5. TOTAL PORT INDUSTRY

The total port industry consists of these four separate categories of firms that rely, wholly or in part, on the ports of Louisiana and the cargo moving through the port for their existence: the ports themselves, the steamship companies, firms that provide services to the vessels, and firms involved

in the inland transportation of the cargo. Table 5 presents the total spending for these four categories.

TABLE 5

LOUISIANA PORT INDUSTRY SPENDING (in millions of \$s)

CATEGORY	DIRECT IMPACT	SECONDARY IMPACT	TOTAL IMPACT
PORTS OPERATIONS	\$56.84	\$104.95	\$161.79
PORT CONSTRUCTION	\$125.12	\$252.13	\$377.25
STEAMSHIP COMPANIES	\$327.12	\$604.07	\$931.18
VESSEL SERVICES	\$2,731.84	\$3,977.24	\$6,709.08
INLAND TRANSPORTATION	\$822.26	\$1,643.76	\$2,466.02
TOTAL	\$4,063.18	\$6,582.15	\$10,645.33

Source: University of New Orleans

Port industry refers to those firms that are located in the state of Louisiana simply because of the existence of the ports. These firms include the ports; large steamship companies such as Central Gulf Lines; firms providing longshoremen services; railroads, tugboat, barge and trucking companies that ship the goods to and from the port; freight forwarding companies; law firms that hire maritime attorneys to handle legal work for the maritime industry; insurance companies that write marine insurance; and various federal government agencies that support the movement of cargo through the port area. In 1999, the port industry contributed direct spending of \$4,063.18 million, or **\$4.06 billion**. The secondary spending created by this direct spending totaled \$6,582.15 million, or **\$6.58 billion**. The total economic impact of the port industry on the Louisiana economy in 1999 is the sum of the direct and secondary spending -- \$10,645.33 million, or **\$10.65 billion**. Table 6 presents the data on earnings and employment related to the port industry.

TABLE 6

PORT INDUSTRY EARNINGS AND EMPLOYMENT (Earnings in millions of \$s)

CATEGORY	EARNINGS	EMPLOYMENT
PORT OPERATIONS	\$26.34	1,330
PORT CONSTRUCTION	\$100.60	4,617
STEAMSHIP COMPANIES	\$251.89	7,655
VESSEL SERVICES	\$1,116.08	58,901
INLAND TRANSPORTATION	\$453.31	20,063
TOTAL	\$1,948.22	92,566

Source: University of New Orleans

In 1999, the firms engaged in the port industry in Louisiana created a total of \$1,948.22 million in income or earnings for Louisiana residents. Those firms and the spending they generated also support the employment of 92,566 people in the state. It must be made clear that those 92,566 jobs are not all in maritime or maritime related firms. Those jobs are supported in whole or in part by the spending of the firms directly involved in the port industry.

PORT USERS

The largest part of the economic impact of the Louisiana ports is related to the economic activities of port users -- consisting primarily of importers and exporters that utilize port facilities. Because of the existence of the Mississippi River and the Gulf of Mexico and the window they offer to the rest of the world, many manufacturing and warehousing firms have located in the state. For example, a major reason we have a large chemical and petroleum refining complex in the state is that the River provides the means by which raw materials and finished products can be transported in and out of the facilities.

The largest port users in the New Orleans area are the coffee companies that import coffee beans through the port. Statewide, the largest port users are the petrochemical firms that utilize the ports for moving inputs and finished products. The other large port users are the state's warehousing and distribution operations. We did not include any retailers even if they imported goods through the port; the reason is that retailing operations in the state are tied to the local market, not the port. Information on importers and exporters obtained from the survey was extrapolated to the entire market on the basis of the proportion of their imports or exports that go through the port multiplied times the total employment in each industry. Total employment in each industry was obtained from Louisiana Department of Labor data.

The port users created primary spending in the state of \$6,258.95 million, which produced an additional \$12,850.33 million in secondary spending. Thus, the total economic impact of the port users in 1999 was \$19,109.28 million, or **\$19.11 billion**. Table 7 identifies the two components of the port user economic impact. The spending of the port users generated \$3,175.83 million in earnings and supports 151,055 permanent jobs in the state's economy (see Table 8).

TABLE 7

PORT USERS SPENDING (in millions of \$s)

CATEGORY	DIRECT IMPACT	SECONDARY IMPACT	TOTAL IMPACT
MANUFACTURING	\$5,836.87	\$11,858.49	\$17,695.36
WAREHOUSING AND DISTRIBUTION	\$422.08	\$991.84	\$1,413.92
TOTAL	\$6,258.95	\$12,850.33	\$19,109.28

Source: University of New Orleans

TABLE 8

PORT USERS EARNINGS AND EMPLOYMENT (Earnings in millions of \$s)

CATEGORY	EARNINGS	EMPLOYMENT
MANUFACTURING	\$2,831.32	134,763
WAREHOUSING AND DISTRIBUTION	\$344.50	16,292
TOTAL	\$3,175.82	151,055

Source: University of New Orleans

OVERALL ECONOMIC IMPACT

The overall economic impact of the ports on the Louisiana economy is the sum of the components identified in this report. Tables 9 and 10 present the estimates for the overall economic impact of the ports on the economy.

TABLE 9

THE PORTS OF LOUISIANA AND THE MARITIME INDUSTRY ECONOMIC IMPACT
(in millions of \$s)

CATEGORY	DIRECT IMPACT	SECONDARY IMPACT	TOTAL IMPACT
PORT INDUSTRY:			
PORTS OPERATIONS	\$56.84	\$104.95	\$161.79
PORT CONSTRUCTION	\$125.12	\$252.13	\$377.25
STEAMSHIP COMPANIES	\$327.12	\$604.07	\$931.18
VESSEL SERVICES	\$2,731.84	\$3,977.24	\$6,709.08
INLAND TRANSPORTATION	\$822.26	\$1,643.76	\$2,466.02
SUB-TOTAL	\$4,063.18	\$6,582.15	\$10,645.33
PORT USERS:			
MANUFACTURING	\$5,836.87	\$11,858.49	\$17,695.36
WAREHOUSING AND DISTRIBUTION	\$422.08	\$991.84	\$1,413.92
SUB-TOTAL	\$6,258.95	\$12,850.33	\$19,109.28
TOTAL IMPACT	\$10,322.13	\$19,432.48	\$29,754.61

Source: University of New Orleans

TABLE 10

THE PORTS AND THE MARITIME INDUSTRY -- EARNINGS AND EMPLOYMENT
(Earnings in millions of \$s)

CATEGORY	EARNINGS	EMPLOYMENT
PORT INDUSTRY:		
PORT OPERATIONS	\$26.34	1,330
PORT CONSTRUCTION	\$100.60	4,617
STEAMSHIP COMPANIES	\$251.89	7,655
VESSEL SERVICES	\$1,116.08	58,901
INLAND TRANSPORTATION	\$453.31	20,063
 SUB - TOTAL	 \$1,948.22	 92,566
PORT USERS:		
MANUFACTURING	\$2,831.32	134,763
WAREHOUSING AND DISTRIBUTION	\$344.50	16,292
 SUB - TOTAL	 \$3,175.82	 151,055
TOTAL IMPACT	\$5,124.04	243,621

Source: University of New Orleans

In 1999, the ports and the maritime industry generated total direct spending in the Louisiana economy of \$10,322.13 million, or **\$10.32 billion dollars**. That direct spending creates an additional \$19,432.48 million, or **\$19.43 billion**, of secondary spending in the Louisiana economy. Thus, the total economic impact of the ports of Louisiana and the maritime industry in 1999 was \$29,754.61 million, or over **\$29.75 billion**. The ports and maritime industry create total annual income in the state of \$5.12 billion. Finally, the industry supports the employment of 243,621 people in the state. Note that not all of the jobs are fully dependent on the maritime industry but do rely in whole or in part on the economic activity created by the industry.

TAX REVENUES

As the activities of the port generate income in the local area, the people who receive this income spend a part of it paying state and local taxes. At the state level, they pay state income taxes directly on the income received, and as they buy goods and services, they pay the taxes that apply to those purchases. The purchase of certain goods and services is taxable under the retail sales tax and under various other taxes -- such as the gasoline tax, the insurance premium tax, the soft drink tax, the beer tax and the like. The assumption for the estimation of all of these taxes is that the recipient of this income is an average Louisiana consumer; thus, the proportion of that income that is paid in these taxes is equal to the average for the state as a whole. The businesses that are located in the state because of the existence of the port also pay state business taxes; specifically corporate income taxes, corporate franchise taxes and sales taxes on business purchases. At the local level, local sales tax and the local property taxes paid by businesses are generated by the economic impact created by the port and the maritime industry.

State income taxes that are paid on the income generated can be estimated by determining the proportion of income that the average person in Louisiana pays in state income taxes. The average Louisiana resident paid 1.067 percent of his or her income in state income taxes. That proportion is applied to the total income created by port activities to estimate the total income tax revenues due to the ports and the maritime industry.

To estimate the amount of sales tax revenue attributable to the spending caused by the ports, it is necessary to estimate the proportion of income that is spent on taxable commodities in Louisiana. The United States Department of Labor conducts a massive survey of consumer spending upon which it bases the Consumer Price Index. This Consumer Expenditure Survey for 1991-92, recently released, reveals that consumers spent approximately 48.52 percent of their income on commodities that were taxable under the Louisiana retail sales tax. Applying this proportion to the total income generated and then applying the sales tax rate of 4 percent yields state tax revenue.

Many goods and services are taxable under special excise taxes, which should also be included in the estimates. The Louisiana taxes considered here are the motor fuel tax, the public utilities tax (here it is assumed that the tax is passed on to consumers), the tobacco tax, the insurance premium tax, the beer and alcoholic beverage tax, the pari-mutuel tax, the soft drink tax, the special fuels tax, and vehicle license fees. Dividing total state tax revenue from these sources by the total personal income in the state in that year yields the excise tax proportion used to estimate excise tax revenues. Multiplying this rate times the income generated produces the total excise tax revenue.

Finally, the firms that are located in the area and in the state because of the ports pay various forms of business taxes to the state. Foremost among those are sales taxes on business purchases, corporate income taxes and corporate franchise taxes. The methodology employed to estimate these taxes involves several steps. First, total sales for an average firm must be related to the purchases made by those firms on taxable items, the total corporate franchise tax base of the firm (the corporate franchise tax base is equal to the value of the firm's capital stock plus long-term debt), and total earnings subject to tax. These data were obtained from several sources: The 1998 Census of

Manufacturing, Louisiana; the Internal Revenue Service, Statistics of Income, Corporate Income Tax Returns; and unpublished data from the Louisiana Department of Revenue and Taxation.

The methodology to estimate local sales tax revenue is very similar to that used to estimate state sales tax revenue. The only difference is that the average local sales tax rate in Louisiana is 4 percent. The methodology to estimate the sales and property taxes paid by the port-related business is similar to the methodology used to estimate the state business tax revenue.

TABLE 11

STATE TAX REVENUES DUE TO THE ECONOMIC ACTIVITIES OF THE PORTS
(in millions)

TAX SOURCE	TAX REVENUES
STATE TAXES:	
STATE INCOME TAX	\$54.83
STATE SALES TAX	\$99.45
STATE EXCISE TAXES	\$86.44
STATE BUSINESS TAXES	\$44.34
SUBTOTAL - STATE TAX REVENUES	\$285.06
LOCAL TAXES:	
LOCAL SALES TAX	\$99.45
LOCAL BUSINESS TAXES	\$38.47
SUBTOTAL - LOCAL TAX REVENUES	\$137.92
TOTAL TAX REVENUES	\$422.98

Source: University of New Orleans

In 1999, the ports of Louisiana and their related economic activities in the state alone generated a total of \$285.06 million in tax revenues for the state of Louisiana (see Table 10). In 1999, the ports and the firms located in the state because of the ports generated a total of \$137.92 million for hard-pressed local governments in the state (see Table 10). In total, the economic activities of the ports and the maritime industry created a total of \$422.98 million in state and local tax revenue in 1999. That is revenue that will recur every year and will increase as the activities of the maritime industry increase.

CONCLUSION

The Louisiana ports and the maritime industry are indeed a valuable part of the state's economies. Not only do the ports and the maritime industry provide a significant current economic impact to the local and state economies, as has been documented in this report, but they also provide one of the most likely targets for the future development of the economy of Louisiana. With the passage of NAFTA and the new GATT agreement, international trade will flourish in the United States. The strategic location of Louisiana and the ports and maritime infrastructure that we have developed in the state should provide us with a competitive advantage over other areas as this part of the economy develops over time.

In 1999, the ports and the maritime industry produced \$10.32 billion of primary spending and \$19.43 billion of secondary spending for a total of \$29.75 billion of total spending in the state. This constitutes 22.5% percent of total Louisiana gross state product, which is the total dollar value of the state's goods and services. The ports and related activities produced \$5.12 billion of income for Louisiana residents. This constitutes 5.1% percent of the entire personal income in the state.

The economic activities of port-related firms support 243,621 permanent jobs for the people of the state. This constitutes approximately one out of every 8 jobs in the state. In addition, the economic activities of those port-related firms created \$285.06 million in state tax revenue and \$137.92 million in local tax revenue for a total of \$422.97 million in revenue for the state and local governments.

In 1997, the last time this study was done, the ports and port industry had a significant impact on the Louisiana economy. Since then, the ports' economic impact has grown considerably. Table 12 presents the comparison data for 1997 and 1999 and the relevant growth rates.

TABLE 12

ECONOMIC IMPACT, 1997 And 1999

CATEGORY	1997	1999	PERCENT CHANGE
CONTAINER CARGO (In tons)	3,603,131	3,368,607	-6.5%
BREAK BULK CARGO (In tons)	27,455,519	40,453,398	47.3%
BULK (In tons)	384,062,556	337,396,690	-12.2%
TOTAL CARGO (In tons)	415,121,206	381,396,690	-8.1%
DIRECT IMPACT (In millions)	\$9,698.40	\$10,322.13	6.4%
SECONDARY IMPACT (In millions)	\$18,381.60	\$19,432.48	5.7%
TOTAL IMPACT (In millions)	\$28,080.00	\$29,754.61	6.0%
EARNINGS (In millions)	\$4,785.10	\$4,813.52	5.9%
EMPLOYMENT	229,869	243,621	6.0%
STATE TAX REVENUE (In millions)	\$266.20	\$285.06	7.1%
LOCAL TAX REVENUE (In millions)	\$128.80	\$137.92	7.1%
TOTAL TAX REVENUE (In millions)	\$395.00	\$422.98	7.1%

Not only are the ports and the maritime industry an important part of the Louisiana economy but they are also a growing part of our economy. Cargo growth from 1997 to 1999 was down but the composition of the cargo had shifted in favor of greater break-bulk cargo. Since break-bulk cargo requires additional handling, the impact has actually increased while the cargo volume has decreased. When that growth is added to the investment and growth in spending at the ports themselves, the total impact of the industry has increased by 6.0%. By any measure this indicates a growing industry that has great potential.