

**Joint Legislative Committee on Performance
Evaluation and Expenditure Review (PEER)**

Report to
the Mississippi Legislature



The Impact of Hurricane Katrina on Mississippi's Commercial Public Ports and Opportunities for Expansion of the Ports

Mississippi has fifteen commercial public ports—three on the Gulf Coast, six on the Mississippi River or its tributaries, and six on the Tennessee-Tombigbee Waterway. Prior to Hurricane Katrina, Mississippi's proportion of total U. S. waterborne tonnage was approximately 2%. At the state level, these commercial public ports had a significant impact on the Mississippi's economy.

When Hurricane Katrina made landfall on August 29, 2005, as could be expected, its primary impact was on the state's Gulf ports. Damage at the Gulf port included warehouses, berths, docks, offices, access roads, and rail lines. The Gulf ports also lost equipment and, in some cases, business records. The estimated loss of assessed value at these three ports totals approximately \$99.9 million. Based on the responses of port directors surveyed, the impact of the hurricane on the state's inland ports was negligible. Most of the inland ports reported receiving no damage; three reported minor damage.

Rebuilding and revitalizing the ports and shipping industry in Mississippi will be a challenge facing the state in upcoming years. Whatever actions are taken to expand Mississippi's commercial public ports must be subject to the framework provided by applicable federal trade agreements and laws and state laws and regulations.

In addition to the losses from Hurricane Katrina, factors limiting the expansion of Mississippi's commercial public ports that must be addressed in the future include major competition from ports in surrounding states, a comparatively poor funding base, and problems with railways and other intermodal connectors. Opportunities for growth of the ports should result from projected growth in domestic and international waterborne tonnage, particularly Latin American trade opportunities; undeveloped land area and facilities available for development; and opportunities with non-cargo markets, such as gaming and cruise lines. Several of the individual ports have developed their own expansion plans to increase business and serve existing customers more effectively.

June 20, 2006

PEER: The Mississippi Legislature's Oversight Agency

The Mississippi Legislature created the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER Committee) by statute in 1973. A joint committee, the PEER Committee is composed of seven members of the House of Representatives appointed by the Speaker and seven members of the Senate appointed by the Lieutenant Governor. Appointments are made for four-year terms with one Senator and one Representative appointed from each of the U. S. Congressional Districts. Committee officers are elected by the membership with officers alternating annually between the two houses. All Committee actions by statute require a majority vote of four Representatives and four Senators voting in the affirmative.

Mississippi's constitution gives the Legislature broad power to conduct examinations and investigations. PEER is authorized by law to review any public entity, including contractors supported in whole or in part by public funds, and to address any issues that may require legislative action. PEER has statutory access to all state and local records and has subpoena power to compel testimony or the production of documents.

PEER provides a variety of services to the Legislature, including program evaluations, economy and efficiency reviews, financial audits, limited scope evaluations, fiscal notes, special investigations, briefings to individual legislators, testimony, and other governmental research and assistance. The Committee identifies inefficiency or ineffectiveness or a failure to accomplish legislative objectives, and makes recommendations for redefinition, redirection, redistribution and/or restructuring of Mississippi government. As directed by and subject to the prior approval of the PEER Committee, the Committee's professional staff executes audit and evaluation projects obtaining information and developing options for consideration by the Committee. The PEER Committee releases reports to the Legislature, Governor, Lieutenant Governor, and the agency examined.

The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.

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June 20, 2006

Honorable Haley Barbour, Governor
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Members of the Mississippi State Legislature

On June 20, 2006, the PEER Committee authorized release of the report entitled **The Impact of Hurricane Katrina on Mississippi's Commercial Public Ports and Opportunities for Expansion of the Ports.**

A handwritten signature in cursive script, reading "Harvey Moss", written over a horizontal line.

Representative Harvey Moss, Vice Chair

This report does not recommend increased funding or additional staff.

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The Impact of Hurricane Katrina on Mississippi's Commercial Public Ports and Opportunities for Expansion of the Ports

Executive Summary

Introduction

In response to a legislative request, the PEER Committee reviewed the impact of Hurricane Katrina on Mississippi's commercial public ports and attempted to identify the strategy the state should take in rebuilding the ports and directing future efforts for their possible expansion.

Background

Mississippi has fifteen commercial public ports. The ports of Gulfport and Yellow Creek are state ports, while the remaining thirteen commercial public ports are local ports.* Three of Mississippi's commercial public ports operate along the Gulf Coast, six operate on the Mississippi River or its tributaries, and six operate on the Tennessee-Tombigbee Waterway.

Exhibit A, page viii, gives physical and operational characteristics of Mississippi's commercial public ports.

Mississippi's Commercial Public Ports Before and After Hurricane Katrina

On August 29, 2005, Hurricane Katrina made landfall, bringing unprecedented destruction to the U. S. Gulf Coast region. Widely acknowledged as the single most expensive natural disaster in the nation's history, with over \$34 billion in initial damage estimates to all economic sectors, the storm brought with it tremendous challenges that will affect economic recovery, rebuilding, and mitigation efforts for years to come. Not the least of these challenges will be the rebuilding and revitalization of the ports and shipping industry in Mississippi.

* This review does not include Mississippi's three public ports that are primarily recreational--i.e., the ports of Biloxi, Long Beach, and Iberville.

Exhibit A: Physical and Operational Characteristics of Mississippi's Commercial Public Ports

Port	Date Placed Under Current Governance	Category of Governance	Acreage of Public Port*	Channel Depth	Square Footage of Warehouse and Dock
<i>Gulf Coast</i>					
Port of Pascagoula	1956	Local	214	42 feet 38 feet+	1,996,643
Port of Gulfport	1960	State	184	32-36 feet	8,015,040
Port Bienville	1972	Local	25	12 feet	610,780
<i>Mississippi River</i>					
Port of Natchez	1954	Local	11	22 feet	111,000
Port of Claiborne County	1991	Local	410	14 feet	66,859
Port of Vicksburg	1960s	Local	3	12 feet	129,000
Yazoo County Port	1964	Local	15	9 feet	9,800
Port of Greenville	1930s	Local	10	9 feet	450,000
Port of Rosedale	1977	Local	75	9 feet	67,000
<i>Tennessee-Tombigbee</i>					
Yellow Creek Port	1972	State	8	9 feet	100,000
Port Itawamba	1975	Local	3	10.5 feet	145,680
Port of Amory	1985	Local	24	9 feet	532,720
Port of Aberdeen	1986	Local	80	9 feet	160,000
Port of Clay County	1984	Local	20	9-12 feet	14,600
Lowndes County Port	1975	Local	19	9 feet	400,000

SOURCE: PEER survey of Mississippi's commercial public ports and analysis of state laws establishing the ports and Mississippi Department of Transportation records.

* Some ports are part of large industrial complexes. This measurement represents only the area occupied by the public port. +The Port of Pascagoula has two channels.

The Ports' Commercial Activity Before Hurricane Katrina

Prior to Hurricane Katrina, Mississippi's proportion of total U. S. waterborne tonnage was approximately 2%. At the state level, Mississippi's commercial public ports had a significant impact on the state's economy prior to Hurricane Katrina.

According to the American Association of Port Authorities, approximately 6% of total goods transported by the U. S. freight transportation system in calendar year 2002 came through commercial ports in the United States. These goods were carried only on domestic waterways.

At the state level, Mississippi's commercial public ports had a significant impact on the state's economy prior to Hurricane Katrina. Many of Mississippi's key industry sectors can attribute their economic viability in part to port services.

By 2003 tonnage, the majority of the state's waterborne tonnage was handled by the Gulf ports (76%), followed by the Mississippi River ports (19%), with the Tennessee-Tombigbee Waterway ports handling 5% of the total. The Gulf ports handled 54% of the state's domestic waterborne cargo tonnage and 100% of the state's international waterborne cargo tonnage that was directly shipped to or received at Mississippi ports.

Status of the Ports After Hurricane Katrina

Hurricane Katrina's primary impact was on the state's Gulf ports. The estimated loss of assessed value at these three ports totals approximately \$99.9 million.

As could be expected, the hurricane's primary impact was on the Gulf ports. Hurricane Katrina heavily damaged Mississippi's commercial public ports of Bienville, Gulfport, and moderately damaged the Port of Pascagoula. Exhibit B, page x, shows a summary of the financial effects of Hurricane Katrina on the individual Gulf ports.

Damage to infrastructure (e.g., berths, docks, storage areas) and superstructure (e.g., cranes, terminals, office buildings) of the Gulf ports included warehouses, berths, docks, offices, access roads, and rail lines. The ports also lost equipment and, in the case of the Port Bienville, all business records, including those stored on computers. As of May 2006, the ports of Gulfport and Bienville were still operating their business offices out of new locations because their previous business offices were destroyed. The Port of Pascagoula moved back into its repaired office space in April 2006.

Customers lost cargo stored at the ports. Also, the hurricane dumped debris and sand into the ports' shipping channels, which had to be cleared by dredging.

The estimated loss of assessed value at the three ports totals approximately \$99.9 million. The ports plan to restore damaged infrastructure through insurance proceeds, Federal Emergency Management Agency assistance, and bank loans.

The heavy damage to the ports is reflected in a decline in their commercial activity in the months following the hurricane. At the end of 2005, the ports were handling only approximately 31% of their pre-Katrina levels of tonnage.

Exhibit B: Summary of the Financial Effects of Hurricane Katrina on Mississippi's Gulf Ports

	Pascagoula	Gulfport	Bienville
Asset Value Prior to Hurricane	\$65,000,000	\$127,573,778	\$39,357,106
Decline in Tonnage Post-Katrina as Compared to Tonnage for September-December 2004	69%	69%	Information not available because all of the port's records were destroyed by Hurricane Katrina.
Effect on Staffing	Retained 90% of staff	Retained 100% of staff	Retained 100% of staff
Effect on Revenues	Undetermined	Decreased by 70%	Decreased by 68%
Types of Damage	Damaged drainage, sewer and water supply systems; damaged port buildings, land, and marine structures.	Damaged or destroyed port buildings and warehouses; damaged land and infrastructure improvements.	Heavy siltation of the channel; debris from warehouses and their contents; loading and unloading equipment destroyed; rail lines damaged.
Damage Assessment	\$15,729,000	\$50,556,175	\$33,623,607
Anticipated Source of Funding for Repairs	Insurance and FEMA	Port funds, FEMA, and insurance	FEMA , bank loans, and insurance

NOTE: This table reflects a damage assessment as of January 31, 2006.

SOURCE: Information reported by individual port directors.

Possible Expansion of Mississippi's Commercial Public Ports: The Roles of Government and the Individual Ports, Impediments, and Opportunities

In analyzing the issue of expansion of Mississippi's commercial public ports, the PEER Committee considered the following:

- the roles of the federal and state government in promoting trade at the ports;
- the efforts of the individual ports in promoting trade;
- the factors limiting expansion of the ports; and,
- the opportunities available for growth of the ports.

The federal government promotes trade through trade agreements with foreign countries, through laws such as those authorizing the creation of foreign trade zones, and through trade assistance to individual states. These have an impact on how and with what countries the ports may do business. At the state level, Mississippi law has assigned primary responsibility for developing the commercial public ports to the Mississippi Development Authority and the Department of Transportation. Also, the Legislature has enacted several programs designed to promote the development of the ports. Whatever actions are taken to expand Mississippi's commercial public ports must be subject to the framework provided by the applicable federal trade agreements and laws and state laws and regulations. Also, several of the individual ports have developed their own expansion plans to increase business and serve existing customers more effectively.

In addition to the impact of Hurricane Katrina, factors limiting the expansion of Mississippi's commercial public ports include major competition from ports in surrounding states, a comparatively poor funding base, and problems with railways and other intermodal connectors. Opportunities for growth of the ports should result from projected growth in domestic and international waterborne tonnage, particularly Latin American trade opportunities; undeveloped land area and facilities available for development; and opportunities with non-cargo markets, such as gaming and cruise lines.

Strategy for the Future

PEER recommends that the Legislature create a Mississippi Commission on Public Ports within the Mississippi Development Authority to provide ongoing policy direction and oversight to a statewide port development program. The purpose of the commission would be to monitor the needs of the ports of the state and to devise a coordinated strategy for their commercial expansion.

PEER recommends that the Mississippi Commission on Public Ports be comprised of the following seven members: a public port director from each of the state's three major waterways (the Gulf of Mexico, the Mississippi River and its tributaries, and the Tennessee-Tombigbee Waterway) appointed by the Governor; a state port director appointed by the Governor; a business person appointed from the state at large by the Governor; and the executive directors

of the Mississippi Department of Transportation and the Mississippi Development Authority, or their designees.

By December 31 of the year of its creation, the commission should recommend to the Legislature a set of future duties and responsibilities for the commission for the purpose of supporting the strategic development of the state's public ports. These duties should include the provision of active marketing assistance to the state's public ports, the creation of a strategic plan for commercial expansion of the ports as a statewide system, and a capital improvement program supported through state bonding authority. Also, the commission should identify sources of federal or other funding for its ongoing operation.

Further, the Legislature should amend MISS. CODE ANN. Section 65-1-705 (1972) to provide that the Mississippi Commission on Public Ports perform the functions of the Port Multi-Modal Fund Committee.

Recommendation

The Legislature should consider creating a Mississippi Commission on Public Ports within the Mississippi Development Authority which shall consist of the following seven members: a local public port director from each of the state's three major waterways (i.e., the Gulf of Mexico, the Mississippi River and its tributaries, and the Tennessee-Tombigbee Waterway) appointed by the Governor; a state port director appointed by the Governor; a business person with import/export experience appointed from the state at large by the Governor; and the executive directors of the Mississippi Development Authority and the Mississippi Department of Transportation, or their designees.

By December 31 of the year of its creation, the commission shall recommend to the Legislature a set of future duties and responsibilities for the commission for the purpose of supporting the strategic development of the state's public ports. These duties should include the creation of a strategic plan for commercial expansion of the ports as a statewide system, the provision of active marketing assistance to the state's public ports, and a capital improvement program supported through state bonding authority. Also, the commission should identify sources of federal or other funding for its ongoing operation.

Further, the Legislature should consider amending MISS. CODE ANN. §65-1-705 (1972) to provide that the Mississippi Commission on Public Ports shall perform the functions of the Port Multi-Modal Fund Committee.

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The Impact of Hurricane Katrina on Mississippi's Commercial Public Ports and Opportunities for Expansion of the Ports

Introduction

Authority

In response to a legislative request, the PEER Committee reviewed the impact of Hurricane Katrina on Mississippi's commercial public *ports* and attempted to identify the strategy the state should take in rebuilding the ports and directing future efforts for their possible expansion. PEER conducted the review pursuant to the authority granted by MISS. CODE ANN. §5-3-57 et seq. (1972).

Purpose and Scope

PEER had the following purposes in conducting the review:

- provide an overview of Mississippi's commercial public ports;¹
- describe the ports' commercial activity and status before and after Hurricane Katrina, including a description of the damage from the hurricane and estimated costs;
- determine impediments to and opportunities for commercial expansion of the ports;
- determine the roles of the federal and state governments and the efforts of individual ports in promoting growth of the ports; and,
- identify a strategy for expanding commercial activity at Mississippi's public ports.

The report also includes the following:

- a general description of commercial public ports and their operation, including the terminology used in the

¹ This review does not include Mississippi's three public ports that are primarily recreational--i.e., the ports of Biloxi, Long Beach, and Iberville.

port and *maritime* industry² (see Appendices A and B on pages 59 and 74);

- information on the role of waterborne transportation in the national *freight* transportation system and the role of Mississippi's commercial public ports within that system; and,
- profiles of each individual commercial public port, including descriptions of its *cargo* and customers, port characteristics, governance and mission, services, capital improvement plans, and long-term development goals (see Appendices C and D, pages 88 and 125).

Method

In conducting this study, PEER:

- consulted with staff and analyzed data provided by the Waterborne Commerce Statistics Center of the U. S. Army Corps of Engineers;
- surveyed Mississippi's commercial public port directors regarding port operations and development goals;
- reviewed financial data and master plans (where available) from Mississippi's public ports;
- conducted inspections of two Mississippi commercial public ports on two of the major waterways;
- reviewed port and waterborne commerce studies, including the *Comprehensive Assessment of the Ports of Mississippi* (referred to as *Comprehensive Assessment*) released in January 2000 by Parsons Brinckerhoff Quade & Douglas, Inc., under contract to the Mississippi Department of Transportation, and the *Latin America Trade and Transportation Study* (referred to as LATTTS I) released in March 2001 by Wilbur Smith Associates;
- reviewed relevant state and federal laws; and,
- analyzed data from the Bureau of Transportation Statistics, the U. S. Census Foreign Trade Division database, the Bureau of Economic Analysis, the U. S. Department of Commerce, and the U. S. Maritime Administration.

² Appendix B, page 74, is a glossary of port-related terms. Terms within the report that are defined in the glossary are italicized upon their initial appearance in the report text.

Background

Mississippi's Commercial Public Ports and Their Legal Authority

Mississippi has fifteen commercial public ports, including two state ports (at Gulfport and Yellow Creek) and thirteen local ports.

The U. S. Maritime Administration defines a port as “a harbor area in which are located marine *terminal facilities* for transferring cargo between ships and land transportation.” Cargo may also be transferred from *ships* to other types of waterborne transportation such as *barges*.

Ports range in complexity from simple one-*terminal* facilities to complex operations with multiple channels, wharves, terminals, *warehouses*, adjacent industrial parks, and supporting intermodal infrastructure such as railyards. Cargo that is transported through ports ranges in origin from surrounding counties (domestic cargo) to distant countries (international cargo). Appendix A, page 59, includes a general description of ports and how they operate.

A *public* port is one owned by a governmental entity such as a country, state, county, or city. However, as discussed in Appendix A, most public ports involve private sector firms in their operation. For example, many public ports hire private firms to manage public terminals and many public ports include terminals owned and operated by private industries.

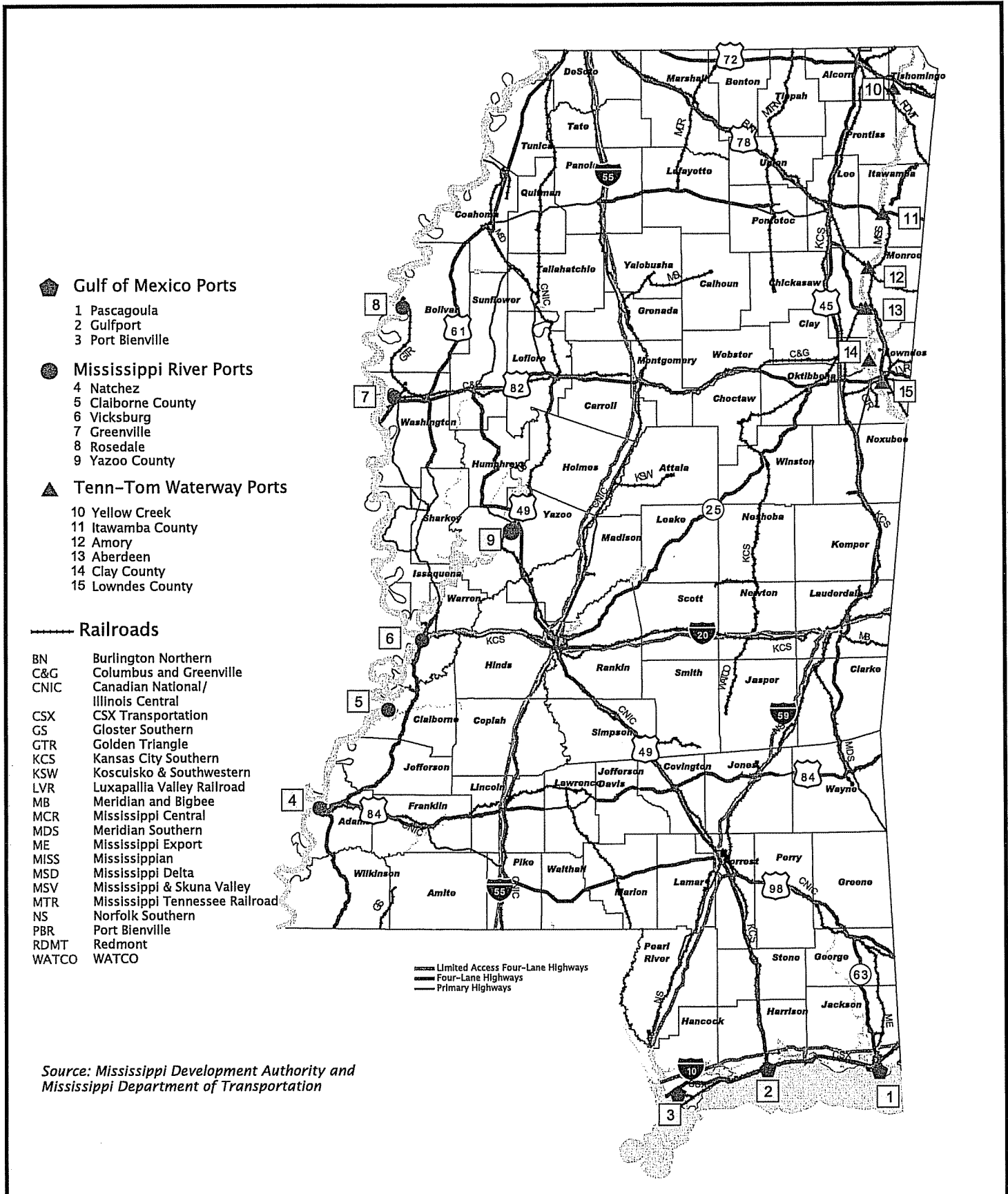
Mississippi has fifteen commercial public ports. In Mississippi, commercial public ports include both state ports and local ports. The ports of Gulfport and Yellow Creek are state ports, while the remaining thirteen commercial public ports in Mississippi are local ports. (See Exhibit 1, page 4, for a map showing the locations of the fifteen ports.)

State Ports

Mississippi law establishes two state ports: the Port Authority at Gulfport and the Yellow Creek Port on the Tennessee-Tombigbee Waterway.

MISS. CODE ANN. Section 59-5-1 et seq. (1972) establishes the Mississippi State Port Authority. At present, only one port, the State Port at Gulfport on the Gulf of Mexico, operates under authority of these sections. This port is governed jointly by the Mississippi Development Authority and a five-member authority made up of local and gubernatorial appointees.

Exhibit 1: Mississippi's Commercial Public Ports, Railroads, and Major Highways



MISS. CODE ANN. Section 59-17-1 et seq. (1972) authorizes the creation of state inland ports. At present, the Yellow Creek Port on the Tennessee-Tombigbee Waterway is the only state inland port operating under authority of these sections. Such ports may be established when a local governing authority that has the authority to operate a port seeks the creation of a state port and the Mississippi Development Authority studies the application and determines it to be in the public's best interest.

Yellow Creek has a management arrangement similar to that between the Port Authority at Gulfport and the Mississippi Development Authority. Specifically, MISS. CODE ANN. Section 59-17-23 (1972) states: "Any port or harbor, or any part thereof, and all facilities, structures, lands or other improvements, leased by, acquired by or conveyed to the state shall be operated by the board acting through a state inland *port authority* for such port or harbor, except as may be otherwise provided in this chapter." (The "board" in this case refers to the Mississippi Development Authority, the successor to the Mississippi Agricultural and Industrial Board.)

Local Ports

Local ports may be established in Mississippi either by general law or in local and private legislation. Several chapters in Title 59 of the MISSISSIPPI CODE authorize local governments to establish and operate port commissions. For example, Chapters 7, 9, and 11 of the MISSISSIPPI CODE authorize certain counties to establish port commissions. An example of a port established under the authority of local and private legislation is the Lowndes County Port (at Columbus) that was established by a local and private bill, H. B. 1376, *Laws of 1975*.

MISS. CODE ANN. Section 59-3-1 (1972) confers additional powers to local port commissions that are designated ports of entry (i.e., ports where cargo is unloaded and enters a country). These additional powers include authority to make certain facility improvements and to issue bonds and levy millage necessary to support infrastructure improvements. (See page 68 of Appendix A.)

Overview of Mississippi's Commercial Public Ports

Three of Mississippi's commercial public ports operate along the Gulf Coast, six operate on the Mississippi River or its tributaries, and six operate on the Tennessee-Tombigbee Waterway.

Exhibit 2, page 7, gives physical and operational characteristics of Mississippi's commercial public ports. The exhibit lists each of the fifteen ports and gives information reported by each port's management, such as

the year each was placed under its current governance and the category of governance (i.e., state or local), acreage of public port, channel depth, and square footage of warehouse and *dock* facilities. (Appendix C, page 88, includes more detailed profiles of each of the ports.) As noted in the exhibit, three of the ports operate along the Gulf Coast, six operate on the Mississippi River or its tributaries, and six operate on the Tennessee-Tombigbee Waterway.

Channel depths of the ports range from eight feet at the Port of Greenville to forty-two feet at the Port of Pascagoula. While the Port of Claiborne County has the most acreage (410 acres) for its public port, the Port of Gulfport has the most square footage of warehouse and dock space (8,015,040 square feet).

As shown in Exhibit 3 on page 8, FY 2005 revenues of Mississippi's ports ranged from \$16,495 reported by the Port of Clay County to \$21,787,645 reported by the Port of Gulfport. The primary sources of revenues for port operations are license and use fees, charges for the lease and rental of port land and equipment, and city and county taxes. (Page 68 of Appendix A, lists typical port fees and charges).

According to staff of Mississippi's public ports, the majority of the ports' non-operating expenditures are for capital facility construction, maintenance of specialized cargo handling facilities and equipment (e.g., for *containerized* and *roll-on roll-off cargo*), and dredging operations. While the U. S. Army Corps of Engineers provides equipment, technical assistance, and partial funding for Congressionally approved channel dredging projects at public ports, the ports receive no federal assistance for dredging their dock and mooring areas. Ports generally contract with private companies to perform this service.

Mississippi's public ports generally have outstanding debt in the form of bonds and loans. At the end of 2004, Mississippi's three commercial public ports on the Gulf Coast had a total of approximately \$57.6 million in outstanding debt, as follows:

- State Port Authority at Gulfport: \$31,850,000 in general obligation bond balances;
- Jackson County Port Authority (Port of Pascagoula): \$17,502,672 in general obligation bond balances, notes payable, and other liabilities; and,
- Port Bienville: \$8,229,635 in outstanding bonds and loans.

Pages 10 through 21 of this report discuss Mississippi commercial public ports' role in trade and the economy.

Exhibit 2: Physical and Operational Characteristics of Mississippi's Commercial Public Ports

Port	Date Placed Under Current Governance	Category of Governance	Acreage of Public Port*	Channel Depth	Square Footage of Warehouse and Dock
<i>Gulf Coast</i>					
Port of Pascagoula	1956	Local	214	42 feet 38 feet+	1,996,643
Port of Gulfport	1960	State	184	32-36 feet	8,015,040
Port Bienville	1972	Local	25	12 feet	610,780
<i>Mississippi River</i>					
Port of Natchez	1954	Local	11	22 feet	111,000
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Port of Vicksburg	1960s	Local	3	12 feet	129,000
Yazoo County Port	1964	Local	15	9 feet	9,800
Port of Greenville	1930s	Local	10	9 feet	450,000
Port of Rosedale	1977	Local	75	9 feet	67,000
<i>Tennessee-Tombigbee</i>					
Yellow Creek Port	1972	State	8	9 feet	100,000
Port Itawamba	1975	Local	3	10.5 feet	145,680
Port of Amory	1985	Local	24	9 feet	532,720
Port of Aberdeen	1986	Local	80	9 feet	160,000
Port of Clay County	1984	Local	20	9-12 feet	14,600
Lowndes County Port	1975	Local	19	9 feet	400,000

SOURCE: PEER survey of Mississippi's commercial public ports and analysis of state laws establishing the ports and Mississippi Department of Transportation records.

* Some ports are part of large industrial complexes. This measurement represents only the area occupied by the public port. +The Port of Pascagoula has two channels.

Exhibit 3: Annual Revenues of Mississippi's Commercial Public Ports for Fiscal Years 2003 through 2005*

Gulf Coast Ports		FY 2003	FY 2004	FY 2005
	Port of Pascagoula	\$16,056,320	\$9,134,485	Records destroyed by hurricane
	Port of Gulfport	\$22,143,599	\$21,969,188	\$22,903,914
	Port Bienville	\$6,283,720	\$6,107,427	Audit has not been started
Mississippi River Ports				
	Port of Natchez	\$599,375	\$651,615	\$702,775
	Port of Claiborne County	Non-operational	Non-operational	Non-operational
	Port of Vicksburg **	\$257,124	\$257,124	\$257,124
	Yazoo County Port	\$240,431	\$569,586	\$116,185
	Port of Greenville	\$595,988	\$574,480	\$603,500
	Port of Rosedale	\$467,145	\$741,116	Audit has not been completed
Tennessee-Tombigbee Waterway Ports				
	Yellow Creek Port	\$2,284,705	\$1,744,132	\$1,920,491
	Port Itawamba	\$390,163	\$166,831	\$280,266
	Port of Amory	Non-operational	Non-operational	\$84,000

	Port of Aberdeen	\$50,991	\$ 53,336	\$37,223
	Port of Clay County	\$17,302	\$18,922	\$16,495
	Lowndes County Port	\$854,106	\$608,480	\$542,419

SOURCE: Annual financial audits, budget requests, and PEER's survey of public ports.

* The two state ports—Gulfport and Yellow Creek—operate on the state fiscal year (July 1-June 30). The other ports operate on the federal fiscal year (October 1-September 30).

** Revenue sources for the Port of Vicksburg are from leases and rentals, which did not change from FY 2003 to FY 2005.

Mississippi's Commercial Public Ports Before and After Hurricane Katrina

On August 29, 2005, Hurricane Katrina made landfall, bringing unprecedented destruction to the U. S. Gulf Coast region. Widely acknowledged as the single most expensive natural disaster in the nation's history, with over \$34 billion in initial damage estimates to all economic sectors, the storm brought with it tremendous challenges that will affect economic recovery, rebuilding, and mitigation efforts for years to come. Not the least of these challenges will be the rebuilding and revitalization of the ports and shipping industry.

This chapter presents a snapshot of the ports' commercial activity prior to the hurricane, then an assessment of the impact of this disaster on Mississippi's ports, based on information reported by the ports' directors. The final chapters of the report contain discussions of factors that must be considered in the recovery and rebuilding of Mississippi's ports.

The Ports' Commercial Activity Before Hurricane Katrina

Prior to Hurricane Katrina, Mississippi's proportion of total U. S. waterborne tonnage was approximately 2%. At the state level, Mississippi's commercial public ports had a significant impact on the state's economy prior to Hurricane Katrina.

According to Bureau of Transportation Statistics, approximately 6% of total goods transported by the U. S. freight transportation system in calendar year 2002 came through commercial ports in the United States. These goods were carried only on domestic waterways.

At the state level, Mississippi's commercial public ports had a significant impact on the state's economy prior to Hurricane Katrina. Many of Mississippi's key industry sectors can attribute their economic viability in part to port services.

The Role of Waterborne Transportation in the National Freight Transportation System

In calendar year 2002, the U. S. freight transportation system (including all modes of transportation--trucking, railroad, waterborne, oil and gas pipelines, air, multi-modal, and parcel and express *shipments*) transported 19 billion tons of goods with a total value of approximately \$13 trillion. According to the American Association of

Ninety percent of international cargo transported to and from the United States is moved by water.

Port Authorities, approximately 360 commercial ports in the United States move more than 2.3 billions tons of cargo annually, including pipelines. In terms of *tonnage*, this represents approximately 12% of total goods transported by the U. S. freight transportation system in calendar year 2002.

In terms of international waterborne trade, the United States ranks first in the world in tonnage, *importing* and *exporting* approximately 1.2 billion tons of goods each year. Ninety percent of international cargo transported to and from the United States is moved by water. *Shippers* generally use lower cost rail and water transportation for heavy cargo of lower value, while air transportation is used for high value cargo of comparatively low weight and volume. According to the U. S. Army Corps of Engineers, cargo transported by water moves at an average transportation savings of \$10.67 per ton over the cost of shipping by alternative modes.

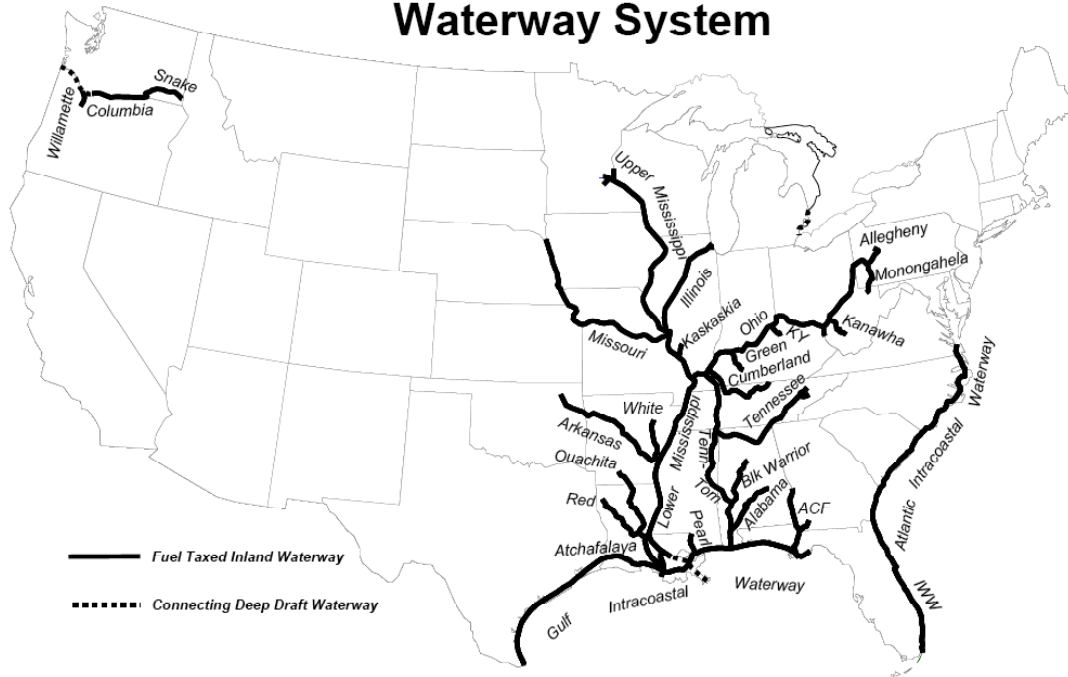
In terms of total tonnage, top U. S. *commodities* carried by water in rank order from highest to lowest are: petroleum and petroleum products, crude materials (such as gravel and lumber), coal, food and farm products, chemicals, and primary manufactured goods such as paper, metal, and wood products. For domestic waterborne tonnage, the highest tonnage cargo is petroleum and petroleum products, followed by coal. For international waterborne tonnage, the highest tonnage cargo is petroleum and petroleum products, followed by food and farm products. (See Appendix G, page 140, for waterborne imports and exports by tonnage and value.)

Mississippi's commercial public ports operate along the Fuel-Taxed Inland and Intercoastal Waterway System maintained by the United States Army Corps of Engineers.

As shown in Exhibit 4 on page 12, Mississippi's commercial public ports operate along the Fuel-Taxed Inland and Intercoastal Waterway System maintained by the United States Army Corps of Engineers. This 11,000-mile-long system directly serves thirty-eight states and moves about 630 million tons of domestic and international cargo (approximately 27% of total U.S. waterborne tonnage) valued at over \$73 billion annually. The system is funded by a fuel tax paid by commercial waterway operators who use the system. The tax funds half the cost of new construction and major rehabilitation of the inland waterways infrastructure. The Tennessee-Tombigbee Waterway portion of the system flows through Mississippi and Alabama and links the Tennessee and Tombigbee rivers to Mobile Bay. The Mississippi River portion of the system flows from Minnesota to Louisiana. The Gulf Intracoastal Waterway portion of the system flows from Florida to Texas.

Exhibit 4: The Fuel-Taxed Inland and Intracoastal Waterway System in the United States

The Fuel-Taxed Inland and Intracoastal Waterway System



SOURCE: United States Army Corps of Engineers.

Role of Mississippi's Public Ports in National Waterborne Commerce

In calendar year 2003, 47.5 million tons of cargo flowed through Mississippi's public ports.

In calendar years 1999 through 2003, Mississippi's proportion of total U. S. waterborne tonnage was relatively stable at approximately 2%. In calendar year 2003, the most recent year that tonnage data was available for all of Mississippi's commercial public ports, 47.5 million tons of cargo flowed through Mississippi's public ports. Of the state's 2003 waterborne tonnage, 54% was international in origin or destination and 46% was domestic.

In calendar year 2003, in terms of tonnage, Mississippi ranked twentieth among the forty states that handle waterborne commerce. Exhibit 5, page 13, lists these twenty states, their total state waterborne tonnage in 2003, and their percentage of total U. S. waterborne tonnage. As shown in the exhibit, Texas and Louisiana

rank the highest, with each state handling 20% of total U. S. waterborne tonnage.

Exhibit 5: Total State Waterborne Tonnage (in thousands of *short tons*) and Percent of Total U. S. Waterborne Tonnage Handled by the Twenty States with the Most Waterborne Tonnage in 2003

State	Total State Waterborne Tonnage	% of Total U. S. Waterborne Tonnage
Texas	473,941	20%
Louisiana	469,461	20%
California	193,378	8%
Florida	131,570	5%
Ohio	113,743	5%
Illinois	113,314	5%
New Jersey	111,661	5%
Washington	106,489	4%
Pennsylvania	104,404	4%
New York	99,406	4%
Kentucky	99,332	4%
West Virginia	73,326	3%
Alabama	72,650	3%
Indiana	68,059	3%
Michigan	66,387	3%
Alaska	65,353	3%
Virginia	50,033	2%
Minnesota	47,687	2%
Maryland	47,533	2%
Mississippi	47,446	2%

SOURCE: Waterborne Commerce Statistics Center.

Impact of Mississippi’s Commercial Public Ports on the State’s Economy

In calendar year 1999, Mississippi’s ports generated 3% of the gross state product (\$1.4 billion), \$38 million in state payroll taxes, and \$21 million in state sales taxes.

In addition to contributing to Mississippi’s role in national waterborne commerce, according to the study *Comprehensive Assessment of the Ports of Mississippi*, Mississippi’s commercial public ports have had a significant impact on the state’s economy. According to that report, in calendar year 1999, Mississippi’s ports generated 3% of the gross state product (\$1.4 billion), \$38 million in state payroll taxes, and \$21 million in state sales taxes. In that same year, Mississippi’s commercial public ports and their supporting marine service facilities directly employed 2,585 people, resulting in the indirect

employment of an additional 4,207 persons in freight transport services, trucking, warehousing and distribution and 26,877 in port user industries. These jobs had a total payroll of \$765 million.

The Ports' Commercial Activity, by Waterway Category

For purposes of discussion in the remainder of this report, PEER will refer to Mississippi's commercial public ports by the following categories, based on the waterways on which they are located:

- Gulf ports: Port of Pascagoula, Port of Gulfport, Port Bienville
- Mississippi River ports: Port of Natchez, Port of Claiborne County, Port of Vicksburg, Yazoo County Port, Port of Greenville, Port of Rosedale
- Tennessee-Tombigbee Waterway ports: Yellow Creek Port, Port of Amory, Port of Aberdeen, Port Itawamba, Port of Clay County, Lowndes County Port

The majority of the state's waterborne tonnage is handled by the Gulf ports (76%), followed by the Mississippi River ports (19%), with the Tennessee-Tombigbee Waterway ports handling 5% of the total. According to 2003 Corps of Engineers data, the Gulf ports handle 54% of the state's domestic waterborne cargo tonnage and 100% of the state's international waterborne cargo tonnage that is directly shipped to or received at Mississippi ports.

The majority of the state's waterborne tonnage is handled by the Gulf ports (76%).

The following sections provide information on the ports' commercial activity, by category, for calendar year 2003, the most recent year for which tonnage data was available for all of Mississippi's commercial public ports.

Commercial Activity at the Gulf Ports

As shown in Exhibit 2 on page 7, the channel depths of Mississippi's three commercial Gulf ports range from twelve feet at Port Bienville to forty-two feet at Port of Pascagoula. Because of its channel depth, the Port of Pascagoula can accommodate up to 71% of the world's seagoing ships and 99.95% of its barges. Port Bienville can only serve barges, but can accommodate 94% of the world's barges.

In 2003, cargo tonnage ranged from 472,000 tons at Port Bienville to 31.3 million tons at the Port of Pascagoula.

In calendar year 2003, the state's three Gulf ports handled 34 million tons of cargo, representing 3% of total Gulf waterborne traffic.

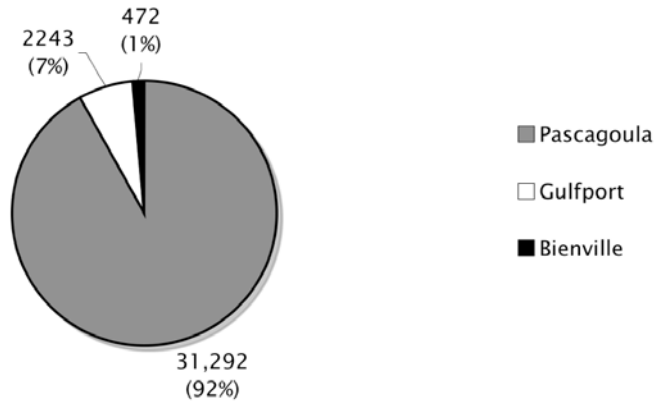
According to the study *Comprehensive Assessment of the Ports of Mississippi*, Mississippi's Gulf ports have had a small but unique port market compared to the Gulf ports of other states, specializing in "niche markets" such as bananas.

Exhibit 6 on page 16 shows the distribution of tonnage among the three Gulf ports in 2003. Cargo tonnage ranged from 472,000 tons at Port Bienville to 31.3 million tons at the Port of Pascagoula (of which about 600,000 tons were handled at the public terminal). In terms of nationwide rank in tonnage, in calendar year 2003, the Port of Pascagoula ranked 22nd nationally and the Port of Gulfport ranked 110th out of the top 150 tonnage ports.

Exhibit 7 on page 16 shows the Gulf ports' top commodities in 2003, by tonnage. Approximately eighty percent of the tonnage was petroleum and petroleum-related products, handled primarily by the Port of Pascagoula. In terms of value of export cargo, the Port of Gulfport had the largest share of Mississippi's Gulf ports. The transport of apparel and fabrics contributed to Port of Gulfport's higher valuation. From August 2004 to August 2005, the Port of Gulfport ranked in the top ten among thirty-four inland and coastal ports of the Gulf Coast states in terms of export cargo dollar value. Also, in calendar year 2003, the Port of Gulfport ranked third (behind the ports of New Orleans and Houston; see discussion on page 44) among ports along the Gulf Coast for *containerized cargo* tonnage and eighteenth nationally out of the top thirty *container* ports. In the same year, Port Bienville ranked thirtieth of the top thirty ports nationally for containerized cargo tonnage.

Approximately eighty percent of the Gulf ports' 2003 tonnage consisted of petroleum and petroleum-related products.

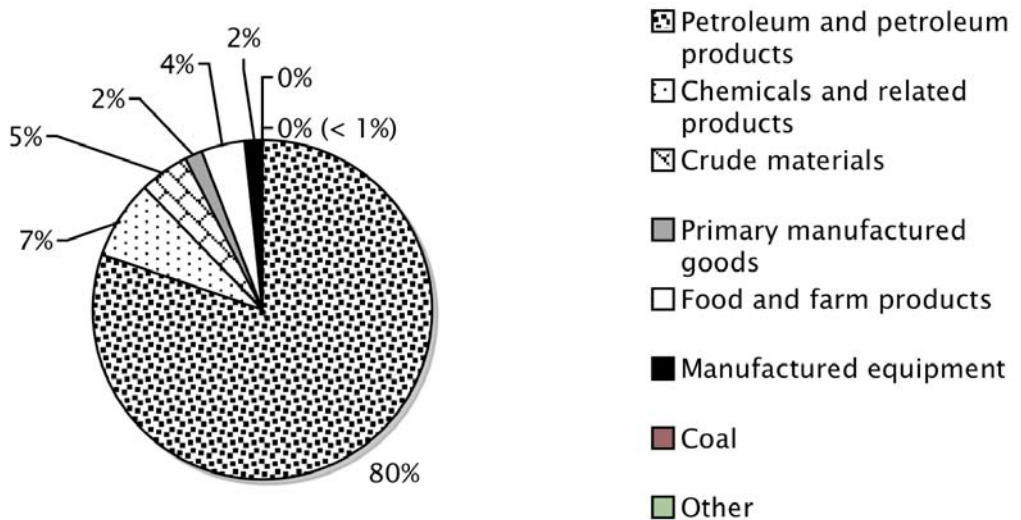
Exhibit 6: Gulf Ports' Share of Total Mississippi Gulf Coast Waterborne Tonnage in Calendar Year 2003 (in thousands of short tons)



Total 2003 Waterborne Commerce Tonnage: 34,007

SOURCE: 2003 Data of the Waterborne Commerce Statistics Center.

Exhibit 7: Gulf Ports' Total Waterborne Tonnage for Calendar Year 2003, by Principal Commodity Group



Total 2003 Waterborne Commerce Tonnage: 34,007

SOURCE: 2003 Data of the Waterborne Commerce Statistics Center.

In 2003, 81% of Mississippi's international waterborne cargo was imported while 19% was exported.

In 2003, 81% of the state's international waterborne cargo was imported while 19% was exported. As shown in Appendix F, page 139, the top waterborne import was crude petroleum and the top export was classified as petroleum products.

Appendix G, page 140, shows the most current import and export data by country. The top imports by tonnage or value were oil and apparel. Top exports by tonnage were oil and paper products, whereas top exports by value were vehicles and paint.

Exhibit 8, page 18, shows the value and tonnage of Mississippi's exports through the Gulf ports to CAFTA partners, from 2003 through 2005. Appendix H, page 146, shows that in 2005, of the Central American Free Trade Agreement (CAFTA) partners, Mississippi's highest value of exports was to Honduras and its highest tonnage was to Guatemala. Also, in 2005 the lowest value of exports was to the Dominican Republic and the lowest tonnage was to Nicaragua. Waterborne exports from Mississippi ports rose and fell with the CAFTA nations from 2003 to 2005, a situation that might improve with free trade (refer to discussion on page 28).

Commercial Activity at the Mississippi River Ports

As shown in Exhibit 2 on page 7, channel depths of the state's commercial public ports along the Mississippi River range from Port of Greenville's depth of eight feet to the Port of Natchez's natural depth³ of twenty-two feet. Because of shallower channel depths north of Natchez, barges are the primary type of *vessel* used to transport cargo on the Mississippi River. Because of its channel depth, the Port of Natchez can accommodate 3% of the world's seagoing ships and 99.5% of barges. The Port of Greenville can only accommodate 11% of the world's barges.

Among the ports along the Mississippi River, the Port of Vicksburg had the highest tonnage in 2003--3.6 million tons (43% of total).

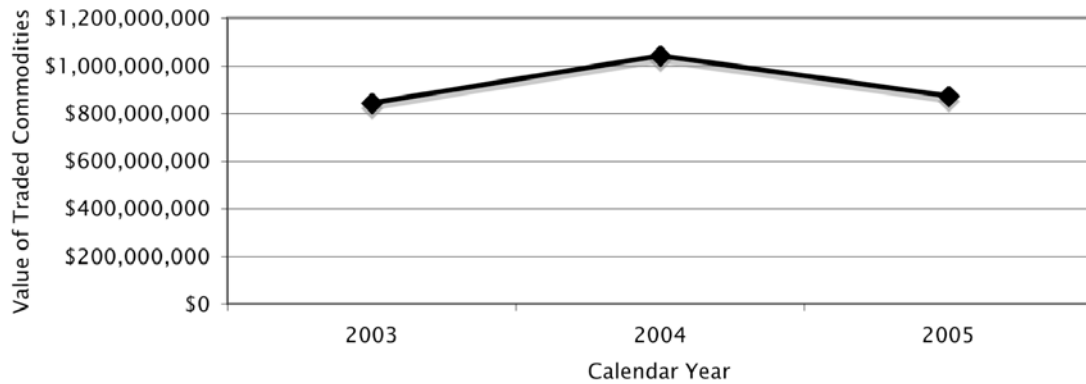
Exhibit 9 on page 20, shows that in calendar year 2003, the ports along the Mississippi River shipped a total of approximately 8 million tons, representing 2% of the total tonnage shipped on the entire Mississippi River. Among the ports along the Mississippi River, the Port of Vicksburg had the highest tonnage--3.6 million tons (43% of total), followed by the Port of Greenville with 3.2 million tons. In terms of national rank in tonnage, in calendar year 2003,

³ The natural depth of a port is its depth without dredging. Ports such as Natchez that have naturally deep harbors have a strong competitive advantage over ports that must be *dredged* to maintain their depth because of the significant and ongoing costs of dredging operations. Ports with no dredging costs can charge lower fees to their customers than ports with high dredging costs.

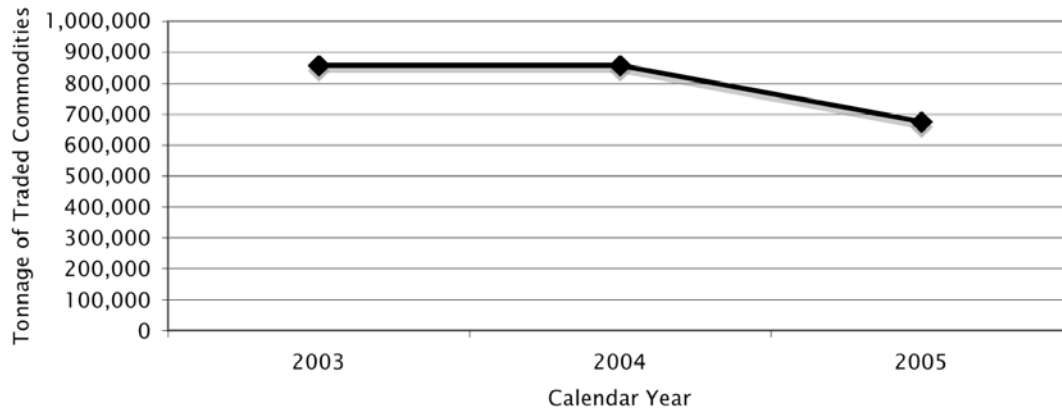
of the top 150 tonnage ports, the Port of Vicksburg ranked 90th nationally and the Port of Greenville ranked 95th.

Exhibit 8: Value and Tonnage of Exports from Mississippi with CAFTA Trade Partners

Value of Exports from Mississippi to CAFTA Partners



Tonnage of Exports from Mississippi with CAFTA Partners



SOURCE: U.S. Department of Commerce, Office of Trade and Industry Information

Mississippi's CAFTA Partners: Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua

Like the Gulf ports, the majority of Mississippi River ports' 2003 tonnage consisted of petroleum and petroleum-related products.

While two of the six Mississippi River ports—the Port of Vicksburg and the Port of Greenville—have “*port of entry*” designation, none of their CY 2003 tonnage was classified as international. Cargo coming into these ports primarily originated from New Orleans, Illinois, and Kentucky. According to Mississippi public port directors, international cargo coming into their ports has customarily first gone through *customs* at other major Gulf ports, such as New Orleans and Mobile; therefore the cargo was classified as domestic when it was moved from New Orleans to the Mississippi River ports. The Mississippi River ports report that their cargo from foreign countries has generally originated from Brazil, Japan, Russia, Korea, and the Netherlands.

As shown in Exhibit 10 on page 20, like that of Mississippi's Gulf ports, the majority of Mississippi River ports' tonnage has consisted of petroleum and petroleum-related products. Other high-tonnage commodities moved through these ports have included soybeans, limestone, and nitrogenous fertilizer. These commodities were moved on barges in *bulk* and *breakbulk* form.

Commercial Activity at the Tennessee-Tombigbee Waterway Ports

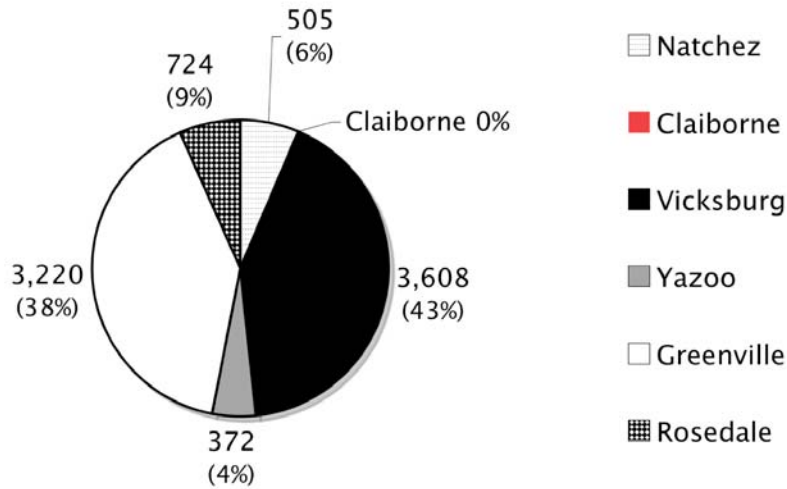
As shown in Exhibit 2 on page 7, channel depths of Mississippi's commercial public ports located along the Tennessee-Tombigbee Waterway ranged from nine feet at the Yellow Creek Port, Port of Amory, Port of Clay County, and Lowndes County Port to ten feet at the Port of Aberdeen. Tennessee-Tombigbee ports can accommodate from 75% to 84% of the world's barges, but cannot accommodate ships.

In calendar year 2003, Mississippi's commercial public ports along the Tennessee-Tombigbee Waterway handled 2.1 million tons, representing 34% of total tonnage on the waterway, which flows through the two states of Mississippi and Alabama.

In 2003, the highest tonnage commodity shipped through Mississippi's Tennessee-Tombigbee ports was crude material (e.g., forest products and gravel).

As shown in Exhibit 11 on page 21, in calendar year 2003 the Yellow Creek Port accounted for the largest percentage of Mississippi's port tonnage on the Tennessee-Tombigbee Waterway, followed by the Port of Aberdeen. Exhibit 12 on page 21, shows that in calendar year 2003, the highest tonnage commodity shipped through these ports was crude materials such as forest products and gravel, followed by chemicals such as fertilizer, then primary manufactured goods such as iron and steel products.

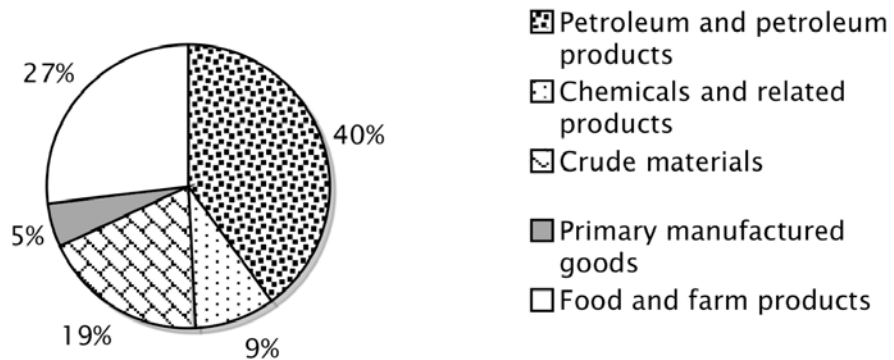
Exhibit 9: Mississippi River Ports' Share of Total Mississippi River Waterborne Tonnage in Calendar Year 2003 (in thousands of short tons)



Total 2003 Waterborne Commerce Tonnage: 8,429

SOURCE: 2003 Data of the Waterborne Commerce Statistics Center.

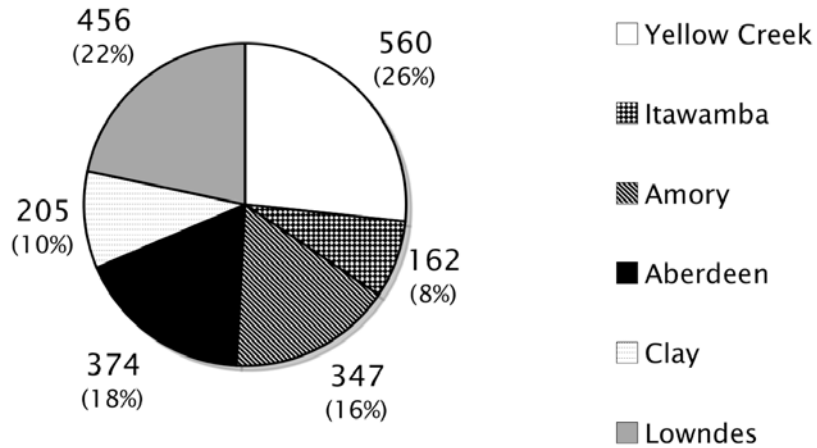
Exhibit 10: Mississippi River Ports' Total Waterborne Tonnage for Calendar Year 2003, by Principal Commodity Group



Total 2003 Waterborne Commerce Tonnage: 8,429

SOURCE: 2003 Data of the Waterborne Commerce Statistics Center.

Exhibit 11: Mississippi's Tennessee-Tombigbee Waterway Ports' Share of Total Tonnage on the Waterway (in thousands of short tons)

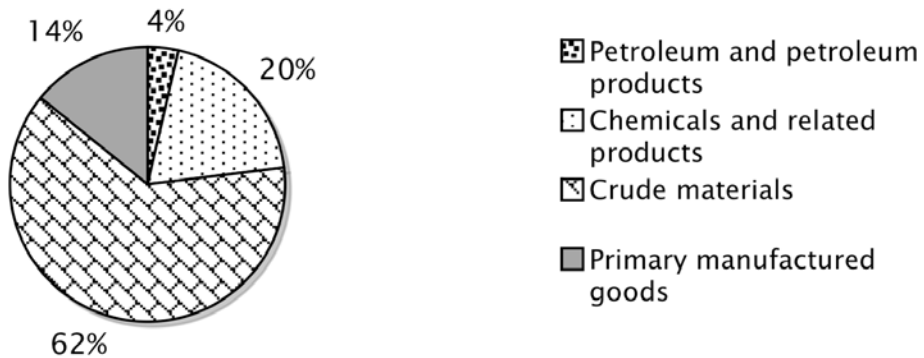


Total 2003 Waterborne Commerce Tonnage: 2,104

SOURCE: 2003 Data of the Waterborne Commerce Statistics Center.

Exhibit 12: Mississippi's Tennessee-Tombigbee Waterway Ports' Total Waterborne Tonnage for Calendar Year 2003, by Principal Commodity Group

Total 2003 Waterborne Commerce Tonnage: 2,104



SOURCE: 2003 Data of the Waterborne Commerce Statistics Center.

Status of the Ports After Hurricane Katrina

Hurricane Katrina's primary impact was on the state's Gulf ports. The estimated loss of assessed value at these three ports totals approximately \$99.9 million.

Subsequent to Hurricane Katrina, PEER surveyed directors of Mississippi's commercial public ports regarding the damage each port sustained. The following sections summarize the reports of the port directors regarding hurricane damage, its financial effects, and status of any expansion projects that were in progress at the time of the storm.

As could be expected, the hurricane's primary impact was on the Gulf ports. The following subsection contains a discussion of the overall effect of the hurricane on the Gulf ports, then relates effects and damages at each of the individual Gulf ports. The chapter concludes with a discussion of the impact on Mississippi River and Tennessee-Tombigbee Waterway ports.

Impact of Hurricane Katrina on the State's Gulf Ports

Overall Effect of Hurricane Katrina on Gulf Coast Ports

Hurricane Katrina heavily damaged Mississippi's commercial public ports of Bienville and Gulfport and moderately damaged the Port of Pascagoula.

Hurricane Katrina heavily damaged Mississippi's commercial public ports of Bienville and Gulfport and moderately damaged the Port of Pascagoula. Exhibit 13, page 23, shows a summary of the financial effects of Hurricane Katrina on the individual Gulf ports. Damage to infrastructure (e.g., *berths*, docks, storage areas) and superstructure (e.g., cranes, terminals, office buildings) of the Gulf ports included warehouses, berths, docks, offices, access roads, and rail lines. The ports also lost equipment and, in the case of Port Bienville, all business records, including those stored on computers. As of May 2006, the ports of Gulfport and Bienville were still operating their business offices out of new locations because their previous business offices were heavily damaged or destroyed. The Port of Pascagoula moved back into its repaired office space in April 2006. Customers lost cargo stored at the ports. Also, the hurricane dumped debris and sand into the ports' shipping channels, which had to be cleared by dredging.

At the end of 2005, the ports were handling only approximately 31% of their pre-Katrina levels of tonnage.

The estimated loss of assessed value at the three ports totals approximately \$99.9 million. Exhibit 13, page 23, shows a summary of the financial effects of Hurricane Katrina on the individual Gulf ports. The ports plan to restore damaged infrastructure through insurance

proceeds, Federal Emergency Management Agency assistance, and bank loans.

The heavy damage to the ports is reflected in a decline in their commercial activity in the months following the

Exhibit 13: Summary of the Financial Effects of Hurricane Katrina on Mississippi's Gulf Ports

	Pascagoula	Gulfport	Bienville
Asset Value Prior to Hurricane	\$65,000,000	\$127,573,778	\$39,357,106
Decline in Tonnage Post-Katrina as Compared to Tonnage for September-December 2004	69%	69%	Information not available because all of the port's records were destroyed by Hurricane Katrina.
Effect on Staffing	Retained 90% of staff	Retained 100% of staff	Retained 100% of staff
Effect on Revenues	Undetermined	Decreased by 70%	Decreased by 68%
Types of Damage	Damaged drainage, sewer and water supply systems; damaged port buildings, land, and marine structures.	Damaged or destroyed port buildings and warehouses; damaged land and infrastructure improvements.	Heavy siltation of the channel; debris from warehouses and their contents; loading and unloading equipment destroyed; rail lines damaged.
Damage Assessment	\$15,729,000	\$50,556,175	\$33,623,607
Anticipated Source of Funding for Repairs	Insurance and FEMA	Port funds, FEMA, and insurance	FEMA , bank loans, and insurance

NOTE: This table reflects a damage assessment as of January 31, 2006.

SOURCE: Information reported by individual port directors.

hurricane. At the end of 2005, the ports were handling only approximately 31% of their pre-Katrina levels of tonnage. The following report section gives examples of the change in the number of vessel calls at individual Gulf ports since the hurricane.

Effect of Hurricane Katrina on Individual Gulf Ports

Port of Pascagoula

Hurricane Katrina moderately damaged the Port of Pascagoula. Port officials are in the process of determining mitigation plans to protect assets in the event of future disasters.

As noted in Exhibit 13, damages to the port are estimated at approximately \$15,729,000, and include damages to the port's electrical equipment, water system, sewer system, the Bayou Casotte facility, chiller equipment, industrial water plant, administration building and its contents, communications and security systems, equipment, and vehicles.

Neither of the two major expansion projects at the Port of Pascagoula received any damage from the hurricane.

Two major expansion projects were in place at the Port of Pascagoula before Hurricane Katrina: a liquefied natural gas terminal and expansion of the Pascagoula River Harbor South Terminal. Neither of these projects received any damage from the hurricane.

In contrast to its prior pattern of commercial activity before the hurricane (see page 16), the Port of Pascagoula received only two vessel calls in September 2005 and seven in December 2005.

Port of Gulfport

Only a few structures at the Port of Gulfport were left structurally sound and can be repaired.

The Port of Gulfport received heavy damage to port infrastructure and operations on its east and west terminals. Only a few structures were left structurally sound and can be repaired. As noted in Exhibit 13, damages are estimated to be approximately \$50,556,175, detailed as follows:

- structural damage to the pile support system with a heavy debris field that included containers, railcars, lumber bundles, and steel sheeting from warehouses, resulting in unusable berths until debris was removed;
- top side structural damage as well as foundation failure for several buildings resulting in demolition or structural repairs;
- the Dole, Chiquita, Crowley, and State Port Authority maintenance, operations and administrative offices were completely destroyed;
- the DuPont ore handling facility was heavily damaged, with the compressor, electrical and control buildings completely destroyed;
- rail tracks were completely unusable and require removal, re-ballasting, and alignment;
- conveyors and support structures were heavily damaged;
- compressor, electrical and control buildings were completely destroyed;
- the *gantry crane* was damaged, but may be salvaged;

- Berths 1 and 2 and dockside *wharf* systems were destroyed or compromised; and,
- dry sheds, chiller, and freezer sheds are unusable and will be demolished.

In CY 2004, the Port of Gulfport averaged twenty-nine vessel calls per month. In September of 2005, the first month following the landfall of Hurricane Katrina, the port only received one vessel call and received seventeen vessel calls in December 2005. In CY 2006, the Port of Gulfport has been averaging twenty-three vessel calls per month, still below its CY 2004 average.

In terms of tonnage, CY 2004 tonnage at the Port of Gulfport averaged 204,000 tons per month. In September 2005, the month immediately following the hurricane, the port only handled 8,541 tons and handled 98,007 tons in December 2005.

Port Bienville

Port Bienville had difficulty documenting the hurricane's impact on its commercial activity because of the total loss of its business records.

Port Bienville had difficulty documenting the hurricane's impact on its commercial activity because of the total loss of its business records. FEMA and county personnel are preparing a mitigation plan and a long-term recovery plan, which will include Port Bienville's plans for protecting its assets in the future.

Port Bienville's channel received about 84,000 cubic yards of silt that obstructed the navigability of the waterway. Other damage amounted to at least \$33,623,607. (See Exhibit 13, page 23.) Hurricane Katrina damaged the wharf and *fender* system and warehouses, as well as privately owned loading and unloading equipment, and flooded office space, undermined rail lines, and placed boats on rail tracks. Also, as a result of the hurricane, Port Bienville lost its major South American *carrier*, Linea Peninsular, to Panama City, Florida.

Prior to Hurricane Katrina, the port had several expansion projects underway. These have all now resumed. These projects include expansion of the railway, culvert improvements, widening of the port entrance and turning lane to the shipping terminal, and overlay of the main road.

Impact of Hurricane Katrina on Mississippi's Inland Ports

Most of Mississippi's inland ports reported receiving no damage from Hurricane Katrina; three reported minor damage.

Based on the responses of the port directors surveyed by PEER, the impact of Hurricane Katrina on the state's inland ports was negligible. As described below, most of the inland ports reported receiving no damage; three reported minor damage. Two ports reported that the hurricane caused shipping delays and one reported direct expense from additional dredging that resulted from the storm.

Despite the setback in commercial activity in the month immediately following Hurricane Katrina, total tonnage for the state's inland public ports was 20% higher in calendar year 2005 than in calendar year 2004.

Impact on Mississippi River Ports

The Port of Natchez, Port of Claiborne County, Port of Vicksburg, Yazoo County Port, and Port of Rosedale reported receiving no damage from Hurricane Katrina. The Port of Greenville also reported receiving no damage, but did report having had delays in obtaining empty barges for shipments.

Impact on Tennessee-Tombigbee Waterway Ports

Yellow Creek Port, Port Itawamba, Port of Clay County, and Lowndes County Port reported receiving no damage from Hurricane Katrina.

The Port of Amory reported that Hurricane Katrina did only minor damage to the port, and had no effect on any port expansion plans, operating *capacity*, staffing level, revenue, or asset value. However, Kinder Morgan did experience a three-day delay receiving loaded barges through the Port of Mobile because of the storm, but were able to get back on schedule.

The Port of Aberdeen reported that it was not severely affected by Hurricane Katrina. However, it did receive high water, which created siltation in the port. The port has not yet had the necessary dredging that resulted from the siltation, and the dredging is expected to cost almost \$100,000. The hurricane also resulted in extremely expensive barge fees for shipping freight and delays in accessing barges.

Possible Expansion of Mississippi's Commercial Public Ports: The Roles of Government and the Individual Ports, Impediments, and Opportunities

In analyzing the issue of expansion of Mississippi's commercial public ports, the PEER Committee considered the following:

- the roles of the federal and state government in promoting trade at the ports;
- the efforts of the individual ports in promoting trade;
- the factors limiting expansion of the ports; and,
- the opportunities available for growth of the ports.

The federal government promotes trade through trade agreements with foreign countries and through laws such as those authorizing the creation of *foreign trade zones*. These have an impact on how and with what countries the ports may do business. At the state level, Mississippi law has assigned primary responsibility for developing the commercial public ports to the Mississippi Development Authority and the Department of Transportation. Also, the Legislature has enacted several programs designed to promote the development of the ports. Whatever actions are taken to expand Mississippi's commercial public ports must be subject to the framework provided by the applicable federal trade agreements and laws and state laws and regulations. Also, several of the individual ports have developed their own expansion plans to increase business and serve existing customers more effectively.

In addition to the impact of Hurricane Katrina (see pages 22 through 26), factors limiting the expansion of Mississippi's commercial public ports include major competition from ports in surrounding states, a comparatively poor funding base, and problems with railways and other intermodal connectors. Opportunities for growth of the ports should result from projected growth in domestic and international waterborne tonnage, particularly Latin American trade opportunities; undeveloped land area and facilities available for development; and opportunities with non-cargo markets, such as gaming and cruise lines, at the Port of Gulfport.

Role of the Federal Government in Promoting Trade at the Ports

The federal government seeks to promote trade at commercial public ports through trade agreements such as NAFTA and CAFTA and foreign trade zones and trade assistance offices in various states.

The federal government promotes trade through trade agreements with foreign countries and trade assistance to individual states. The following sections contain brief discussions of the federal trade agreements and foreign trade zones that affect Mississippi's port trade.

Trade Agreements

Over the past century, a long series of continuously evolving international negotiations has led to numerous agreements to reduce barriers to trade such as *duties* (taxes) on imported goods and quotas (limits on the amount of a product that can be imported during a given period). Supporters of freer trade (i.e., trade liberalization) argue that such allows individuals to buy from a worldwide market and increases production efficiency (and presumably lowers the cost of goods to the consumer) by allowing countries to specialize in the production of goods in which they have a comparative advantage.

Examples of global trade agreements are the General Agreement on Tariffs and Trade and the World Trade Organization. Examples of regional trade agreements are the Latin America Free Trade Agreement, the Andean Pact, the North American Free Trade Agreement (NAFTA), and the Central American Free Trade Agreement (CAFTA).

By reducing trade barriers, these agreements directly impact trade volume. Because of their importance to Mississippi's port trade, the following sections include brief discussions of the regional trade agreements of NAFTA and CAFTA.

North American Free Trade Agreement (NAFTA)

NAFTA was established in 1994 with the member countries of Canada, Mexico, and the U. S. NAFTA is in the process of eliminating almost all *tariffs* and trade barriers on North American industrial and agriculture products traded between member nations. According to President Clinton at the 1994 Summit of the Americas, "...the passage of NAFTA has given a new impetus to the interest of Latin countries in working towards a hemispheric free trade zone."

Central American Free Trade Agreement (CAFTA)

In 2004, the Dominican Republic and five Central American countries--Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua--signed a U. S.-Central American Free Trade Agreement. In 2005, the United States Congress passed, and the President signed, the trade agreement into law. The new agreement was titled the Dominican Republic-Central America-United States Free Trade Agreement and is referred to as either the DR-CAFTA or the CAFTA-DR.

Once all countries ratify the agreement, the act will establish free trade between these countries through the reduction and elimination of barriers to trade in goods and services and to investment. As of April 30, 2006, El Salvador, Honduras, and Nicaragua were the only CAFTA countries that qualified for duty-free trade with the United States. Certain laws and regulations of the other three countries would have to change for entry into the agreement.

Foreign Trade Zones

A 1934 Act of Congress (19 U.S.C. 81a-81u) provided for the establishment, operation, and maintenance of trade zones in ports of entry of the United States, to expedite and encourage foreign commerce.

The U.S. Department of Commerce website defines a foreign trade zone as follows:

A foreign-trade zone is a designated site licensed by the Foreign-Trade Zones (FTZ) Board [located within the Import Administration of the U.S. Department of Commerce] at which special customs procedures may be used. These procedures allow domestic activity involving foreign items to take place prior to formal customs entry. Duty-free treatment is accorded items that are re-exported and duty payment is deferred on items sold in the U.S. market, thus offsetting customs advantages available to overseas producers who compete with producers located in the United States. Subzones are special-purpose zones, usually at manufacturing plants. A site which has been granted zone status may not be used for zone activity until the site has been separately approved for FTZ activation by local U.S. Customs and Border Protection (CBP) officials, and the zone activity remains under the supervision of CBP. FTZ sites and facilities remain within

the jurisdiction of local, state or federal governments or agencies. [emphasis added]

Zone sites must be within or adjacent to a U. S. Customs and Border Protection (CBP) port of entry; however, the adjacency requirement can be satisfied if the zone or subzone site is within ninety minutes' driving time from the outer limits of a CBP port of entry.

According to the Import Administration of the U.S. Department of Commerce, foreign trade zones provide the following public benefits:

- help facilitate and expedite international trade;
- provide special customs procedures as a public service to help firms conduct international trade related operations in competition with foreign plants;
- encourage and facilitate exports;
- help attract offshore activity and encourage retention of domestic activity;
- assist state/local economic development efforts; and,
- help create employment opportunities.

As of April 2006, Mississippi had three foreign trade zones, two of are located in areas with ports.

As of April 2006, Mississippi had the following three foreign trade zones and subzones (i.e., private plant sites authorized by the Foreign Trade Zones Board and sponsored by a grantee). Although the zones also have general-purpose users, the following lists only special-purpose users.

- FTZ No. 92: Mississippi Coast Foreign-Trade Zone, Inc. (Jackson, Harrison, and Hancock counties)
 - 92A V. T. Halter Marine
 - 92B Northrop Grumman Ship Systems
 - 92C Northrop Grumman
 - 92D Chevron Products
- FTZ No. 158: Vicksburg/Jackson Foreign-Trade Zone, Inc. (Central and Northeast Mississippi counties)
 - 158A Cortelco USA
 - 158B Peavey Electronics
 - 158C Alliant Aerospace
 - 158D Nissan North America
 - 158E Ergon Refining, Inc.

- FTZ No. 262: Kenco (DeSoto County)

Foreign trade zones 92 and 158 generated more than \$5 billion in zone-related activity. The ports handle many products generated by these zones.

Department of Commerce Foreign Trade Assistance Offices

The federal government assists with trade development of individual states through the U. S. Department of Commerce. Mississippi's office assists existing clients with exports and develops new clients and opportunities for Mississippi exports. The office emphasizes job growth associated with development of an export market.

Role of State Government in Promoting Trade at the Ports

State government's mechanisms for promoting port trade include assistance from two state agencies, loans and grants to governing authorities of commercial public ports, and corporate income tax credits.

In Fiscal Year 2005, Mississippi obligated more than \$7,325,000 on state programs to promote trade at the ports.

As noted previously, the Mississippi Development Authority (MDA) and the Mississippi Department of Transportation (MDOT) have primary responsibility at the state level for developing Mississippi's commercial public ports. This section begins with a discussion of their respective roles.

Also, as is discussed in the remainder of the chapter, the Legislature has enacted several programs designed to promote the development of the state's public ports. These programs fall into the following major categories:

- loans and grants to public port governing authorities for the development of public port infrastructure and intermodal connections;
- income tax credits to corporations utilizing the state's public ports to import and export cargo; and,
- other programs and laws to assist Mississippi companies engaged in foreign trade.

In Fiscal Year 2005, the state obligated more than \$7,325,000 on these programs. See Exhibit 14, page 36.

Role of the Mississippi Development Authority in Developing the Ports

MDA provides financial, technical, and marketing assistance in support of the state's port industry.

In addition to the role that MDA plays in overseeing operations at the state ports of Gulfport and Yellow Creek (see page 3), MDA provides financial, technical, and marketing assistance in support of the state's port industry. MDA provides technical assistance to international businesses to schedule and coordinate transportation and distribution services to ensure efficient product movement to major markets. MDA has one staff person assigned as the MDA designee for state ports.

MDA states that it includes all transportation modes (water, air, rail, highway) in its marketing strategies. One MDA marketing publication notes that the state offers the following incentives that are crucial to international trade:

- competitive service and operating costs;
- easy access to state and national transportation networks;
- located directly on the Gulf of Mexico;
- full-service ports with refrigerated or controlled temperature warehouses;
- efficient customs services;
- mild climate allowing year-round operation; and,
- dedicated, experienced and productive workforce.

The publication notes that waterway shipping costs from Mississippi offer an affordable alternative to other ports along the Gulf of Mexico and southeastern seaboard.

MDA has a Mississippi trade office in Santiago, Chile. The contractor for this office represents Mississippi in all of South America. MDA also has a contractor in Shanghai, China, who covers all of China for Mississippi. Finally, MDA has a contractor in Torino, Italy, who represents Mississippi throughout all of Europe.

The report subsection "Loans and Grants for the Development of Public Port Infrastructure and Intermodal Connections," page 34, discusses state financial assistance programs that MDA administers.

Role of the Department of Transportation in Developing the Ports

In 1994, when the Highway Department became the Department of Transportation, the Legislature created the Office of Intermodal Planning (see MISS. CODE ANN. § 65-

1-20 [1972]). The office has two staff assigned to ports, as well as a ports committee.

The office funds some infrastructure improvements to airports, waterway ports, and rail and bus terminals—particularly accessibility to these modes. Another purpose of this office is to promote the development and growth of the state’s water transportation industry, including its navigable waters and port facilities, both river and deep-sea. Subsection (g) specifically directs the office to:

Compile and provide, where necessary, the capabilities of the Mississippi ports and harbor facilities with respect to equipment, systems or types of products handled, economic benefits, job creation, capital investments, and other pertinent data, including studies and planning for the expansion to further the development of the facilities and the water transportation industry in general.

The Office of Intermodal Planning funds some port infrastructure improvements and promotes the development of the state’s water transportation industry.

In December 1998, MDOT contracted with the consulting firm of Parsons, Brinckerhoff, Quade and Douglas to research the capabilities of Mississippi’s public ports and develop a strategy for their expansion and development, as mandated by Section 65-1-20. The firm released its final report, entitled *Comprehensive Assessment of the Ports of Mississippi*, in January 2000.

As stated in the preface to the executive summary of the report:

The sixteen Mississippi Ports present an enormous economic opportunity for the State of Mississippi. The Port system already has a huge effect on the economy of the state and will continue to do so if properly supported and optimized. The Comprehensive Assessment of the Ports of Mississippi presents a strategy for the State of Mississippi to meet the infra-structure and capital needs of its port industry through the year 2025.

Conclusions and recommendations contained in the assessment are discussed throughout this report.

MDOT administers the state’s multi-modal grant funds and intermodal connector funds, as discussed in the following subsection.

Loans and Grants for the Development of Public Port Infrastructure and Intermodal Connections

Port Revitalization Revolving Loan Fund

MISS. CODE ANN. Section 57-61-41 (1972) authorizes MDA to provide, through the Port Revitalization Revolving Loan Fund, low-interest loans to state, county, or municipal port and airport authorities “for the improvement of port and airport facilities to promote commerce and economic growth.” According to MDA staff, these loans have a simple 3% interest rate spread across ten-year annual principal payments. The *Comprehensive Assessment* reported that between 1995 and 2000, MDA distributed \$3,385,000 in loans through this fund to public ports for improvements (e.g., warehousing, temperature-controlled facilities, and cargo-moving equipment).

Multi-Modal Grant Funds and Intermodal Connector Funds

Intermodal improvements allow ports to increase productive throughput of cargo. In Mississippi, funds available to finance intermodal improvements include state multi-modal grant funds and federal intermodal connector funds. The Mississippi Department of Transportation administers both of these funds.

MISS. CODE ANN. Section 65-1-703 (1972) authorizes the establishment of a special fund in the State Treasury known as the Multi-Modal Transportation Improvement Fund for the purpose of making improvements to Mississippi’s publicly owned airports, public ports, publicly-owned short line railroads, and public transit systems. The Legislature is authorized to designate state funds for deposit into the Multi-Modal Transportation Improvement Fund.

MISS. CODE ANN. Section 65-1-707 (1972) requires that during each state fiscal year, MDOT distribute 38% of the money in the Multi-Modal Transportation Improvement Fund to public ports. It should be noted that there has been no dedicated general fund appropriation to the fund since its inception. MISS. CODE ANN. Sections 65-1-705 and 65-1-707 (1972) establish the Port Multi-Modal Fund Committee to review and approve applications for the funds, which may only be used for expenditures:

- *directly related to dredging, capital improvements or the rebuilding or rehabilitation of basic infrastructure and not for routine maintenance, administrative or operational expenses;*
- *for a project or use directly related to the operation of the port in its modal role; and*

- *for a purpose outside the normal operating budget of the port.*

Port Multi-Modal Fund

The Port Multi-Modal Fund Committee is comprised of the following members: the executive directors of MDOT, MDA, and the Mississippi Water Resources Association⁴ and seven port directors (the three directors of the coastal ports and four directors of the inland ports), appointed by the President of the Mississippi Water Resources Association. MISS. CODE ANN. Section 65-1-707 (1972) states that as a condition of receiving the funds, the public port shall be required to fund from public or private sources not more than 10% of the total cost of the project or purpose for which the funds are to be spent.

MISS. CODE ANN. Section 65-1-709 (1972) establishes a legislative committee to oversee the administration of the Multi-Modal Transportation Improvement Fund, comprised of the following members: the Chairmen of the Senate and House Transportation Committees, the Chairman of the Senate Ports and Marine Resources Committee and the Chairman of the House Ports, Harbors and Airports Committee, or their designees. State law requires MDOT to provide the committee with an annual report on administration of the fund, including a description of all applications for funding, criteria used to evaluate the applications, and an analysis of the return and benefits from each funded project.

Intermodal Connector Improvement Program Fund

Federal Highway Administration funds that MDOT administers are for improving accessibility to the national highway system roadways. A committee composed of directors of FHWA-approved intermodal facility connectors determines the distribution of the funds. Federal intermodal funds require matching funds from the intermodal facilities.

Recent Use of Loans and Grants for Development of the Ports

As the above-noted fund sources have become available for port improvements, the ports have increasingly benefited from them. For example, in FY 2000, only \$2.1 million was approved for ports from these funds.

⁴ According to its website, the Mississippi Water Resources Association is a coalition of public and private corporations that oversees the management and development of Mississippi's water resources, including its ports, harbors, river systems and flood control, waterways and water supply. All of the state's public ports belong to the association. According to the association's Executive Director, the association partners with the ports in their economic development, including providing assistance with the recruitment of industry to the ports.

In FY 2005, more than \$7 million in loans and grants was approved for various port-related projects.

However, in FY 2005, more than \$7 million was approved for various projects. Exhibit 14, page 36, shows totals of loan and grant amounts awarded from FY 2000 through FY 2006, as funds became increasingly available for port improvements.

Most notable is how the city of Amory used the funds to make its port, which had been dormant for twenty years, operational. Other uses of the funds have included berth expansions, dredging, road access and paving, and warehouse improvements.

Exhibit 14: Loan and Grant Amounts Awarded to Mississippi's Commercial Public Ports from 2000 through 2006, by Waterway Category

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Total
Gulf Coast	\$698,040	\$873,018	\$615,000	\$130,678	\$460,833	\$2,653,933	\$1,952,602	\$7,384,104
MS River	\$777,931	\$1,750,000	\$2,215,449	\$145,574	\$612,305	\$3,040,067	\$751,763	\$9,293,089
Tenn-Tom	\$655,484	\$851,982	\$1,875,620	\$2,253,671	\$301,070	\$1,631,000	\$1,849,100	\$9,417,927
TOTAL	\$2,131,455	\$3,475,000	\$4,706,069	\$2,529,923	\$1,374,208	\$7,325,000	\$4,553,465	\$26,095,120

All funds *approved* in the four primary funds: Intermodal Connector Funds, Multi-Modal Funds, MDA Grant and MDA Loan

SOURCE: PEER analysis of funding data from MDOT and MDA.

Corporate Income Tax Credit Programs

Income Tax Credit for Exports through Mississippi Ports

To promote increased use of Mississippi's ports, state law provides for an income tax credit for exporting cargo through a state public port.

In 1994, the Mississippi Legislature passed MISS. CODE ANN. §27-7-22.7 (1972) to provide an income tax credit to any income taxpayer exporting cargo through a public port facility located in the state. The purpose of the credit was to promote increased use of ports in this state, particularly by those that would not otherwise use such ports without the benefit of a tax credit, and to increase the number of port-related jobs and other associated economic benefits.

Subsection (3) established the amount of the tax credit equal to the total of the following charges on export cargo paid by the corporation:

- receiving into the port;
- handling to a vessel; and,
- *wharfage*.

The credit is subject to the limitations established in Subsection (4), which provides that the credit cannot exceed 50% of the amount of tax imposed on the taxpayer for the taxable year reduced by the sum of all other credits allowable to the taxpayer under this chapter. Unused

PEER computed total tax credits awarded for exporting cargo through public ports in Mississippi in calendar year 2004 to be \$365,285.

portions of the credit can be carried forward for five years; however, the total amount of credit that a taxpayer could claim for the period beginning January 1, 1994, and ending December 31, 2005, was limited to \$1.2 million.

The most recent Mississippi Port Income Tax Credit Act Report, for calendar year 2004, noted that the Port of Amory, Port of Claiborne County, and Port of Clay County reported no export activity for the period of January 1, 2000, through December 31, 2004. Of the twelve ports reporting export tonnage in the report, four (Port of Greenville, Port of Natchez, Port of Rosedale, and Yazoo County Port) reported income tax credits associated with this tonnage for 2004, and three indicated that they would provide the credit information at a later date. PEER computed total tax credits awarded for exporting cargo through public ports in Mississippi in calendar year 2004 to be \$365,286. According to staff of the Port of Gulfport, in order to obtain the tax credit, the exporting company must file paperwork with the port, which could explain why the remaining five ports reporting export tonnage reported no income tax credits.

According to self-reported data from the ports, 110 new jobs were created at the ports in calendar year 2004 and exports increased by 4% from calendar year 2003 to calendar year 2004.

MISS. CODE ANN. §27-7-22.7 (1972) states that the Legislature will determine whether the tax credit will be continued, based on whether the credits are achieving their stated purposes according to the information contained in the annual reports. The Legislature has extended the repeal date of the law three times since its original enactment. The law is currently set to repeal on December 31, 2009.

Income Tax Credit for Imports through Mississippi Ports

State law provides for an income tax credit for utilizing a Mississippi public port facility to import cargo.

In 2004, the Legislature passed MISS. CODE ANN. §27-7-22.23 (1972) to provide an income tax credit to any income taxpayer utilizing a public port facility located in Mississippi to import cargo unloaded from a carrier at said port. To qualify for the credit, the taxpayer must locate its U. S. headquarters in Mississippi on or after July 1, 2004, employ at least five permanent full-time employees (i.e., working at least thirty-five hours per week) who actually work at such headquarters, and have a minimum capital investment of \$5 million in Mississippi.

Subsection (3)(a) sets the amount of the credit allowed equal to the total of the following charges on import of cargo paid by the corporation:

- receiving into the port;

- handling from a vessel; and,
- wharfage.

The credit is subject to the limitations of Subsection (4), which provides that the credit cannot exceed 50% of the amount of tax imposed on the taxpayer for the taxable year reduced by the sum of all other credits allowable to such taxpayer under this chapter. Unused portions of the credit can be carried forward for the succeeding five years; however, the total amount of credit that a taxpayer can claim under the section is limited to amounts varying from \$1 million to \$4 million, based on the number of permanent full-time employees at its headquarters in Mississippi.

The most recent *Annual Tax Expenditure Report* prepared by the Center for Policy Research and Planning of the Mississippi Institutions of Higher Learning had no estimate of the amount of income tax credit for imports taken by Mississippi corporations because “the information is not available.”

Other Programs and Laws to Assist Mississippi Companies Engaged in Foreign Trade

Additional programs or laws to assist Mississippi companies in developing trade through the ports include the following:

- *The Freeport Warehouse Program*—This program cuts business costs by allowing full exemption of all property taxes on finished goods for up to ten years.
- *Loan Guarantees*—MISS. CODE ANN. Section 57-57-1 et seq. (1972) provides for loan guarantees for small and medium-sized businesses to protect against losses associated with foreign trade. The Small Business Administration provides these loans.
- *Export Trade Companies*—MISS. CODE ANN. Section 57-57-3 (1972) has a provision to establish an export trade company for financial assistance and tax incentives for Mississippi businesses engaging in export sales.
- *Joint Ventures to Attract Private Capital*—MISS. CODE ANN. Section 59-9-15 (1972) allows county port commissions and county development commissions to enter into joint ventures or community alliances with private entities or other county port commissions or county development commissions to construct and operate facilities. This could give ports additional flexibility in attracting private capital.

Role of the Individual Ports in Promoting Commercial Growth

Several of the individual commercial public ports have expansion plans underway to increase commercial growth.

Several Mississippi ports have developed their own expansion plans in anticipation of increased port business and in order to improve operations for current customers. These expansion plans often involve land acquisitions or development of any land they currently own, sometimes away from the port.

In general, Mississippi ports are expanding and improving to provide warehouse or industrial development, primarily through land acquisitions. Some ports, including all three Gulf ports, are reconfiguring their ports for additional ship or barge berth space and some have completed or are in the process of deepening their channels to accommodate higher tonnage ships. The Port of Pascagoula can now accommodate nearly 100% of the world fleet. The Port of Gulfport has also deepened its channel with the assistance of the U. S. Army Corps of Engineers. Several ports are in the planning stages for intermodal connectors.

The Gulf ports show evidence of developing new opportunities through equipment and investments. The inland ports are relatively stable in commodities they transport due to the fact that they serve particular industries. However, the inland ports are seeking new opportunities.

Gulf Ports' Expansion Plans

All of the ports along the Gulf Coast had achieved several of their long-term development goals before Hurricane Katrina hit (see Appendix C, page 88). These goals included new water, sewer, and lighting systems; dredging projects to deepen and widen the channels; and additional warehouse space. These ports also each maintain a master development plan with development goals designed to guide the ports into the future.

Port of Pascagoula Expansion Plans

The Port of Pascagoula plans to develop two new terminals and an industrial park.

According to an update of the strategic plan, the port authority is widening its focus to include not just industries that rely on water transportation, but all private industry in Jackson County. Because of anticipated global market expansion, the port authority plans to develop a new terminal on the west bank of the Pascagoula River to handle break-bulk, *neo-bulk*, and short-sea container cargo.

Expansion plans also include a liquefied natural gas terminal. For the east bank of the Pascagoula River, the port authority plans to develop a “world-class” industrial park for its customers that would include a full-service hotel, upscale restaurants, banquet and meeting facilities, ground transportation services, business processing centers, and international banking. The port authority anticipates a partnership with the private sector, thereby improving Port of Pascagoula’s waterfront for tourism and recreation.

According to the strategic plan, the Port of Pascagoula’s ship and cargo related fees (e.g., *pilotage*, wharfage, cargo handling) are lower than the fees charged by the neighboring port of Mobile. For three hypothetical ships and cargos calling at the ports of Mobile and Pascagoula, in FY 2001 the savings ranged from \$7,652 for the smallest vessel to \$18,523 for the largest. This port plans to continue to maintain a competitive pricing strategy.

Port of Gulfport Expansion Plans

The Port of Gulfport is working with MDOT regarding access for both recreational and cargo handling purposes and has design plans for a cruise market.

The Port of Gulfport last had an update to its master plan in 2003. One of the main issues the port has faced is the balance between the shipping process and the recreational activities on leased port property. The port is working with the Department of Transportation regarding access for both recreational and cargo handling purposes. The port authority also has design plans for a cruise market whereby the port would receive per passenger wharfage of \$2.50 to \$4.75, plus charges for parking and miscellaneous items. The port authority also plans to continue expansion into the forest products arena, with importation of Brazilian lumber and exportation of paper and pulp products. The port has attracted some of Louisiana’s cargo through the Crowley *liner* service, and may obtain some of New Orleans’s lumber, frozen goods, and other cargo.

Port Bienville’s Expansion Plans

Port Bienville plans to enhance highway access to I-10 and construct a new rail bridge.

Port Bienville, a shallow *draft* port, has facilities that include an industrial park and the Port Bienville Railroad. According to the port’s master plan, the port and industrial park contain over five miles of barge canal waterfront access and over 800 acres of developable land. Port Bienville handles both break-bulk and container cargo. The port plans to increase its intermodal capacity by enhancing highway access to Interstate 10 and constructing a new rail bridge over the Pearl River with a new connection to the Norfolk Southern Railroad. The

port has several goals, including developing marketing strategies to expand Latin American trade, developing strategies for timber harvesting, and examining berthing needs for future tenants.

Mississippi River Ports' Expansion Plans

As noted previously, Mississippi River ports were not physically impacted by Hurricane Katrina and are on track with their development goals. Although none of the ports have a master development plan, many port directors indicated that the best use of the ports would be to facilitate industrial development in the geographic areas in which the ports exist.

Port of Natchez Expansion Plans

The Port of Natchez is the state's only natural inland deepwater port and plans to capitalize on this by increasing its tonnage and client base.

The Port of Natchez is part of an industrial park and has eight tenants. The port has the advantage of being the only natural inland deepwater port in Mississippi, with a depth of twenty-two feet. The port authority anticipates capitalizing on this feature by increasing its tonnage and client base, particularly by attracting *containerships* to the port. Because container cargo requires a steady load of cargo, port personnel plan to attract more industry to the area through marketing strategies, including use of the worldwide web. The port also plans to address infrastructure needs through major road improvements and by providing a rail extension and overpass at the junction of the rail and road entrance.

Port of Claiborne County Expansion Plans

Presently inactive, the Port of Claiborne County notes a need for major financial support in order to revitalize.

The Port of Claiborne County is presently inactive. The port commission noted a need for major financial support in order to revitalize the port. The port commission expects an additional electric power station to be built near the port, which should benefit port revitalization.

Port of Vicksburg Expansion Plans

The Port of Vicksburg plans to promote its market potential through its unique attributes, such as having the only rail crossing over the Mississippi River between Memphis and Baton Rouge.

The Port of Vicksburg includes an industrial park with thirty-five on-site tenants. The port authority plans to promote its market potential through unique attributes, such as having the only rail crossing over the Mississippi River between Memphis and Baton Rouge; being the largest river port city in the state; and being part of a foreign trade zone and a U. S. Customs port of entry.

Yazoo County Port Expansion Plans

The Yazoo County Port has no plans to expand its physical facility.

The Yazoo County Port is not part of an industrial park and only has one tenant. The tenant leases the port from the county and controls operations at the port. The port will continue to ship fertilizer that arrives at the port. The port has no plans to expand the physical facility.

Port of Greenville Expansion Plans

The Port of Greenville plans to expand into the containerized barge business.

The Port of Greenville is part of an industrial park with twenty-nine on-site tenants and plans to develop 220 acres off-site for industrial use. The port commission plans to add more acreage contiguous to the port and to expand into the containerized barge business.

Port of Rosedale Expansion Plans

The Port of Rosedale anticipates moving additional tonnage as a result of NAFTA.

The Port of Rosedale is part of an industrial park with five on-site tenants and two off-site. The port commission has optioned a thirty-eight acre site to a firm to build a facility costing in excess of \$100,000,000 that would create increased tonnage as well as provide technical jobs for the area. The port director noted that Interstate 69, known as the "NAFTA Highway," will pass within fifteen miles of the port. The port anticipates additional tonnage for the port to handle.

Tennessee-Tombigbee Waterway Ports' Expansion Plans

Yellow Creek Port Expansion Plans

The Yellow Creek Port is making improvements to the port's ten-mile rail spur.

The Yellow Creek Port is part of an industrial park with five tenants. The Yellow Creek State Inland Port Authority is making improvements to the port's ten-mile rail spur. The port authority is in ongoing discussions with two prospects that may make large investments and create over one hundred jobs.

Port Itawamba Expansion Plans

The Port Itawamba port director did not provide PEER with expansion plans for that port.

Port of Amory Expansion Plans

The Port of Amory expects construction of a biorefining and alternative energy complex at the port.

The Port of Amory has experienced major capital improvements after being dormant for twenty years. The mayor and port officials expect construction of a biorefining and alternative energy complex at the port. The port officials plan to further develop available port acreage.

Port of Aberdeen Expansion Plans

The Port of Aberdeen plans installation of rail from the mainline to the port terminal.

The Port of Aberdeen is part of an industrial park with five tenants. The mayor and port officials have planned major projects, including the installation of rail from the mainline to the port terminal, and they are targeting cargo that could be containerized for shipping.

Port of Clay County Expansion Plans

The Port of Clay County plans to continue soliciting users and shippers.

The Port of Clay County is part of a small industrial park with two tenants. Due to low user interest, port personnel have not developed a master site development plan. However, port personnel plan to continue soliciting users and shippers in efforts to bring the port to its fullest potential.

Lowndes County Port Expansion Plans

The Lowndes County Port plans to purchase additional land for port expansion and to upgrade the port's existing infrastructure and equipment.

The Lowndes County Port is part of an industrial park with six tenants. The port commission plans to purchase additional land for port expansion and to upgrade the port's existing infrastructure and equipment to meet the needs of its industrial base for economical transportation. Other expansion plans include a rail spur to the port and the upgrade of two cranes.

Factors Limiting the Expansion of the Ports

Competition from surrounding states' ports and problems with intermodal transportation connectors are two of the major problems impeding Mississippi's commercial expansion of the ports.

As noted previously, in addition to the impact of Hurricane Katrina (discussed on pages 22 through 26), factors limiting expansion at Mississippi's commercial public ports include:

- major competition from ports in surrounding states;
- a comparatively poor funding base;
- problems with railways and other intermodal connectors; and,
- other factors such as a low level of local support.

The following sections contain discussions of these factors.

Major Competition from Ports in Surrounding States

Mississippi's coastal ports are near other states' Gulf ports of Houston, New Orleans, Mobile, and several Florida ports. New Orleans and Memphis also flank Mississippi's river ports.

- *Texas* has twelve deep-draft ports along 423 miles of the Gulf Intra-Coastal Waterway and sixteen shallow-draft inland ports. The Port of Houston ranks second busiest among all U. S. ports, handling 4,857 vessel calls per year and more than 212 million tons of dry and liquid bulk cargo, containerized cargo, and *general cargo*. Petroleum and petrochemicals are the major commodities Texas ports handle.
- *Louisiana* has six deep draft ports that all compete with Mississippi's ports. (In addition to the deep draft ports, Louisiana has twenty-one inland and shallow-water river ports.) The Port of South Louisiana, which is located where the Mississippi River flows into the Gulf of Mexico, handles more than 239 million tons of

cargo annually. The Port of South Louisiana has a channel depth of forty-five feet, allowing access to more vessels than Mississippi's coastal ports. Major import commodities for the Port of South Louisiana include crude oil, chemicals (including fertilizers), steel products, and petrochemicals. Exports from the Port of South Louisiana include maize, soybeans, wheat, and animal feed.

The Port of New Orleans is located on the Mississippi River approximately 100 miles from the Gulf. Prior to Hurricane Katrina, it handled about forty-two million tons of cargo annually, including some tonnage that moved on to Mississippi ports on the Mississippi River. The port has a channel depth of forty-five feet and an array of intermodal connectors. Major imports include petroleum products, iron, steel, metal ores, non-metallic minerals, coffee, inorganic chemicals, forest products, vegetable fats and oils, natural rubber, fertilizers, and organic chemicals. Exports for the Port of New Orleans include cereal grains, soybeans, petroleum, animal feeds, organic chemicals, paper and liner board, vegetable fats and oils, iron, steel, metal ores and scraps, and inorganic chemicals. The Port of New Orleans was damaged by Hurricane Katrina and lost some business to other coastal ports.

- In *Alabama*, the State Port Authority maintains ten inland waterway ports and a deepwater port at Mobile. Local governments and private interests maintain seven other ports in Alabama. In 2004, the facilities of the Alabama Port Authority handled over twenty-five million tons of cargo. The Port of Mobile has a channel depth of forty-five feet, which accommodates 85% of the world's vessels and 100% of container ships. The Alabama Port Authority currently has a \$300 million expansion project underway at the Port of Mobile known as the *Mobile Container Terminal*. This facility will have an annual capacity of 800,000 *TEU* when completed in 2007. This project will significantly compete with Mississippi ports expansion plans for container cargo. Mobile's new container terminal will probably negatively impact the Port of Gulfport and Port of Pascagoula's plans to expand in the container cargo business, unless unique factors can attract shippers to Mississippi's Gulf ports.
- *Florida* has fourteen *seaports*, seven of which are in the Gulf Coast. Florida's gulf coast seaports are competitors with Mississippi's gulf ports. Cargo vessels, as well as passenger vessels, call at Florida's Gulf ports. Currently, 80% of U. S. cruises depart from Florida's seaports.

Mississippi's inland ports compete with inland ports of Louisiana, Tennessee, Alabama, and Arkansas.

- *Louisiana* has thirteen inland ports, four of which border the Mississippi River. These ports support local industry, but could compete for Mississippi cargo, particularly the port near Tallulah and Lake Providence.
- *Tennessee* has four major ports, at Memphis, Nashville, Chattanooga, and Knoxville. Only one of these ports, the Port of Memphis, is on the Mississippi River.
- *Alabama* has seventeen inland ports that serve local industries. Some of these ports are on the Tennessee-Tombigbee Waterway and the Black Warrior-Tombigbee Waterway.
- *Arkansas* has nine public ports, four of which are on the west bank of the Mississippi River. Southeast Arkansas ports will have easy access to the I-69 NAFTA Highway.

Comparatively Poor Funding Base

While, as noted previously, the state of Mississippi has invested more than \$26 million in the ports since 2000 through its grant and loan programs (see page 34), this amount falls short of the \$65 million recommended for critically and immediately needed infrastructure improvements through calendar year 2005 in the *Comprehensive Assessment*.

That consulting firm noted that Louisiana invests \$24.5 million per year in its ports from a Transportation Trust Fund that is funded through motor vehicle, aviation, and marine fuel taxes. Louisiana requires a 10% match from the ports on projects funded with trust fund monies. As of January 2000, the program had provided \$186 million for port improvements.

The consulting form also noted that Florida achieved \$458 million in improvements at its fourteen ports within a four-year period by:

- selling a \$220 million state bond issue (the indebtedness is serviced by state appropriations of approximately \$35 million per year); and,
- requiring each port to invest its own monies into the port improvement projects funded with state bond proceeds, at a match rate of 25% to 50%.

Problems with Railways and Other Intermodal Connectors

Limited Rail Service and Lack of Dockside Rail Competition for Gulf Ports

As previously noted, Mississippi is surrounded by major ports (e.g., New Orleans, Mobile, Houston) with direct access to Class I rail carriers. The ability to offer shippers competitive rail access at dockside gives a port a significant competitive advantage. Not only does it assure the shipper direct rail access to the entire country, but it reduces rail shipping costs by reducing the number of switching fees (i.e., the fee charged each time a shipper changes rail lines) that the shipper must pay and lowering freight charges because of the competition.

Whereas multiple Class I rails serve the major ports of surrounding states, Mississippi's coastal ports have direct access to at most two rail lines.

Mississippi's three Gulf ports cited limited rail service as a constraint to their commercial expansion. Whereas multiple Class I rails serve the major ports of surrounding states, Mississippi's coastal ports have direct access to at most two rail lines. The CSX Transportation line serves all of Mississippi's coastal ports. The Port of New Orleans is served by six Class I rail lines and the Port of Mobile is served by four Class I rail lines.

Inadequate Access to Interstate Highways and Relatively High Cost of Motor Carrier Services

Another essential intermodal connection at ports is access to truck transportation and adequate highway connections to move the cargo quickly to its final destination.

Even prior to Hurricane Katrina, some of Mississippi's Gulf Coast ports had no easy truck access to the interstate highway system.

Even prior to Hurricane Katrina, the Port of Gulfport was experiencing significant problems with traffic congestion in the area surrounding the port. The congestion was preventing trucks from quickly accessing the interstate and moving their cargo. Port Bienville had the same problem of having no easy truck access to I-10.

Also, with respect to the cost of motor carrier service, the Port of Mobile has a competitive edge over Mississippi's ports. While both states have a gross vehicle weight restriction of 80,000 pounds, Alabama allows a 10% overage for in-state shipments, which makes motor carrier services more economical through the Port of Mobile.

Other Factors that Could Impede Development of Mississippi's Commercial Public Ports

- *Low Level of Local Support*--The local economy is a very important factor for ports. When local economies cannot contribute to the maintenance, expertise and marketability of a port, it is vulnerable to decline or control by entities with those resources. One of

Mississippi's commercial public ports is inactive (Port of Claiborne County) and two are partially used (Yazoo County Port and Port of Amory). Of these two, private companies lease both for export only.

- *Height of the Mississippi River Bridge*--The Port of Natchez is prevented from taking full advantage of its natural depth because the low height (112 feet) of the Mississippi River Bridge at Baton Rouge prevents oceangoing ships from traveling to Natchez.

Without Further Development, Mississippi's Gulf Ports' Current Infrastructure Might be Unable to Handle Projected Increases in Latin American Trade through 2020

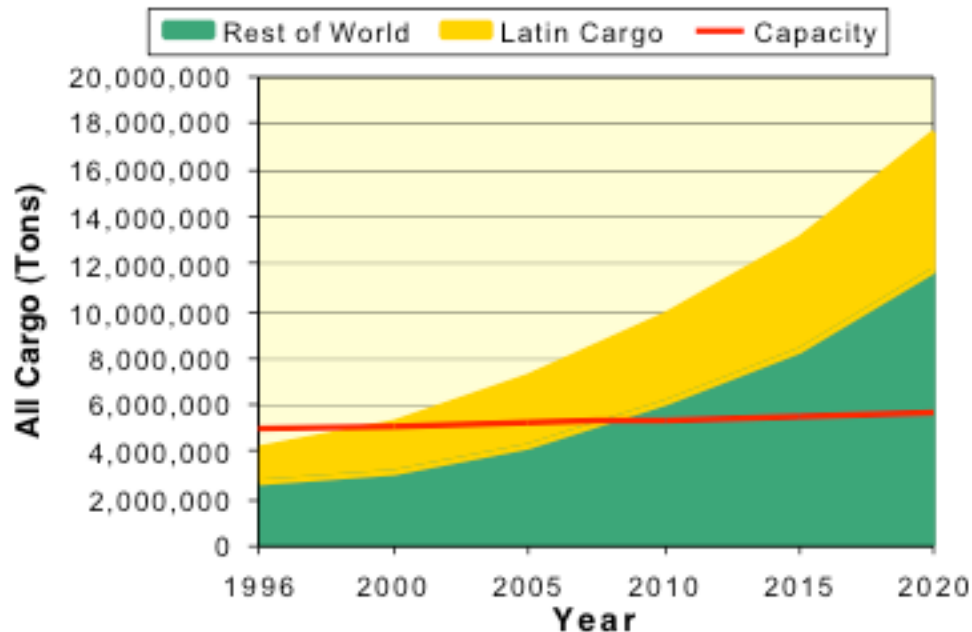
Exhibit 15 on page 49 shows the LATTTS I projected increases in international tonnage (for Latin America and the rest of the world) through the ports of Gulfport and Pascagoula through 2020 in comparison to their current capacity. This projection excludes liquid bulk and neo-bulk cargo.

According to LATTTS projections, by 2020 the ports at Gulfport and Pascagoula could expect 18 million tons of international cargo annually, but if no changes in infrastructure or improvements in throughput were made, they would only be able to handle 5 million tons.

As the exhibit shows, at the time of the LATTTS I study (1996), the ports had excess capacity to handle international tonnage. Specifically, in 1996 the two ports had a combined capacity to handle approximately five million tons of international cargo with only four million tons of international cargo coming through the ports during that year. As shown in the exhibit, if the LATTTS projections for increased international tonnage materialize, the two ports begin to exceed their combined capacity of five million tons of international cargo per year in 2000. According to the LATTTS projections, by 2020 the ports could expect eighteen million tons of international cargo annually, but if no changes in infrastructure or improvements in throughput were made they would only be able to handle five million tons.

Exhibit 15: Mississippi Ports' Infrastructure Capacity

MISSISSIPPI - THROUGHPUT vs. CAPACITY (ALL CARGO)



SOURCE: LATTIS I Section B: Mississippi Marine Terminals.

Opportunities Available for Growth of the Ports

The *Comprehensive Assessment of the Ports of Mississippi* projected that Mississippi's domestic waterborne cargo tonnage will increase by almost 48% between 1996 and 2025. Another primary opportunity for commercial growth of Mississippi's public ports is the projected significant increase in international trade, particularly with Latin America.

As noted previously, opportunities for growth of the ports should result from:

- projected growth in domestic and international waterborne tonnage, particularly Latin American trade opportunities;
- undeveloped land area and facilities; and,
- opportunities with non-cargo markets, such as gaming and cruise lines, at the Port of Gulfport.

The following sections contain discussions of these opportunities.

Projected Growth in Domestic Cargo

Some transportation consultants predict that as the nation's highways become more congested and fuel prices rise, domestic shippers will increasingly turn to waterborne transportation to transport their cargo.

The Federal Highway Administration forecasts that U. S. freight volumes are expected to increase greatly by the year 2020, greatly straining highway system capacity, reliability and productivity. Between 1980 and 2002, truck travel grew by more than 90%, while lane-miles of public roads increased by only 5% . Some transportation consultants predict that as the nation's highways become more congested and fuel prices rise, domestic shippers will increasingly turn to waterborne transportation to transport their cargo. The *Comprehensive Assessment* (refer to page 33) forecasted that Mississippi domestic waterborne cargo tonnage will increase by almost 48% from 1996 to 2025, from 3 million to 4.5 million tons per year.

Containerized freight is ideally suited for the waterborne transportation of domestic cargo. Container barges are used to transport cargo on inland waterways and small vessels on fixed schedules can move intermodal containers or trailers from one domestic port to another using a process referred to as short-sea shipping. The shipping of cargo in containers is popular because of its efficiency in throughput—i.e., containerized cargo can be lifted by overhead gantry crane from the waterborne vessel and placed directly on a truck or rail chassis to reach its final land destination. While there are costs associated with the specialized cranes and warehouse and wharfage space sometimes needed to store containerized cargo temporarily, these expenses can be recouped in port revenues from increased commercial traffic.

Three Mississippi Gulf Coast ports and one inland port are currently equipped to accept containerized cargo.

Mississippi commercial public ports currently equipped to accept containers include the three Gulf Coast ports of Pascagoula, Gulfport, and Port Bienville and the Lowndes County Port on the Tennessee-Tombigbee Waterway. Also, the Yellow Creek Port on the Tennessee-Tombigbee Waterway has expressed an interest in targeting the containerized cargo market, as have the Mississippi River ports at Natchez, Greenville, and Rosedale.

Projected Growth in International Cargo

The primary opportunity for commercial growth of Mississippi's public ports is the projected significant increase in international trade, particularly with Latin America, and to a lesser extent, Europe and Asia. Also, the executive director of the Port of Gulfport noted that west coastal African nations are a potential market for existing commodities such as garments, furniture, and crude petroleum.

PEER found forecasts of an upcoming increase in international cargo trade for Mississippi's commercial public ports in the two consultants' studies *Comprehensive Assessment of the Ports of Mississippi* and the *Latin American Trade and Transportation Study*. Also, trade conditions brought about by the Central American Free Trade Agreement will almost assuredly increase trade between Mississippi and those countries.

Forecast by Parsons Brinckerhoff

In the *Comprehensive Assessment of the Ports of Mississippi*, the consultants forecast an increase in the total international cargo handled by Mississippi's ports by approximately 4.9% annually by 2010. This increase is expected to result from growth in the economies of Mississippi's major trade partners in Latin America and Asia and an increase in the international trade share of the Mississippi economy.

The consultants projected the strongest source of cargo growth for Mississippi ports to be exports of forestry, paper, and poultry products to Europe and Latin America. Based on the projected increase in commercial activity at the state's public ports, the consultants forecast an approximately 142% increase in both port-related jobs and state tax revenues.

Forecast by the Latin American Trade and Transportation Study (LATTS)

The Latin American Trade and Transportation Study is a major, ongoing study of how the Gulf/Southeast region of the United States can capture a significant share of the projected growth in trade with Latin America. The purpose of the study, referred to as LATTS, was to forecast growth in U. S. trade with Latin America through 2020 and develop strategies to guide investment in the intermodal transportation infrastructure of the Alliance Region (which includes Mississippi) to attract and handle the forecasted growth in trade. The study was financed through the Federal Highway Administration Pool Fund and managed by the Mississippi Department of Transportation.

LATTS projected that trade between Latin America and the Alliance Region (which includes Mississippi) will triple by 2020.

While the LATTS projections in Latin American trade growth apply to the entire Alliance Region, in making their infrastructure needs projections, the authors presumed that the states and ports included in the study would retain the relative shares of trade with Latin America that existed in 1996 (the last year of actual data available at the time of the study). Therefore, the growth percentages projected for the entire region could be applied to Mississippi's Gulf ports that traded with Latin America at the time of the LATTS review.

LATTS I concluded that Latin America is poised for large growth in its international trade due to:

- continued economic restructuring with increasing privatization of industry and the resulting need for high-tech equipment and services; and,
- trade liberalization, including multi-lateral trade agreements and declining import duties, which could result in hemisphere-wide free trade.

The LATTS I (first phase) study concluded the following regarding Latin American trade with the Alliance Region:

- In 1996, 86% of U.S. imports from Latin America and 71% of U.S. exports to Latin America entered or exited through the Alliance Region.
- Trade between Latin America and the Alliance Region is projected to triple by 2020.
- LATTS I projects average annual growth of 5.3% in U. S. exports to Latin America and 3.8% in imports from Latin America to the United States, with the greatest growth in the trade of manufactured goods.

Additional information on the LATTS studies may be found in Appendix E, page 132.

Impact of the Central American Free Trade Agreement (CAFTA)

CAFTA nations are of particular trade interest to Mississippi because of their proximity and the fact that some of Mississippi's Gulf ports have already developed an active trade with Central American countries.

Although the Central American Free Trade Agreement was signed in August 2005, but as of July 2006, only four countries--El Salvador, Honduras, Nicaragua, and Guatemala--were in full compliance with the terms of the agreement and therefore entitled to duty-free trade with the United States. While the CAFTA nations⁵ are included in the LATTS studies, these nations are of particular trade interest to Mississippi because of their proximity and the fact that some of Mississippi's Gulf ports have already developed an active trade with Central American countries.

As of 2004 (the most recent year of data for comparison), Mississippi ranked 14th among the fifty states in the value of cargo exported to CAFTA nations. The top Mississippi exports to CAFTA nations in calendar year 2004 were fabric mill products, computer and electronic products, and petroleum, chemical, and coal products.

⁵ CAFTA nations include Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua.

Undeveloped Land Area and Facilities at the Ports Could Provide Potential for Growth

According to the *Comprehensive Assessment*, in 1998, Mississippi's public ports had a nominal (potential) throughput capacity of 15.2 million tons per year, but were only handling 7 million tons of cargo (46% of combined capacity.) The consultants observed that in 1999, twelve of the state's public ports had the basic waterfront infrastructure to handle forecast cargo demand through year 2025 and two of the remaining ports had adequate infrastructure through 2021.

In particular, at the time of its strategic plan (2004), the Port of Pascagoula had the following unused property on the West Harbor:

- fifty-five acres of prime waterfront property for new development, including more than 2,000 linear feet of wharf along the Pascagoula River, together with rail marshalling capabilities; and,
- several unoccupied buildings and facilities along the East Bank of the Pascagoula River, including an inactive part of the operations of Northrop Grumman Ship Systems Ingalls and the former Heinz Pet Food Plant with 195,000 square feet of covered storage and alongside docking facilities.

Subsequent to the release of the port's 2004 strategic plan, the U. S. Department of Defense recommended closure of the Pascagoula Naval Station located on Singing River Island in the Port's West Harbor as part of its Base Realignment and Closure plan. The 109th Congress introduced H.R. 3886 in September 2005 directing the U. S. Navy to convey any improvements that it had made on the property at no cost to the "reversionary" party, the State of Mississippi. MISS. CODE ANN. Section 59-9-21 (4) (1972) would allow the Jackson County Port Authority to lease the land from the state and sub-lease it with approval of the Secretary of State to an interested party. The port authority and the state would then share the rental proceeds.

Also, Port Bienville has over 800 acres of developable land at the port and 1,048 acres available for development if the industrial park is included.

Opportunity to Develop Gaming and Cruise Ship Markets at Port of Gulfport

Prior to Hurricane Katrina, the Port of Gulfport was landlord to two commercial gaming operations that generated \$211 million in gaming and hotel revenues and attracted 4.7 million visitors in 2001. Out of the nearly \$20 million in port revenue, the Port of Gulfport earned about

50% from the gaming sector and 50% from the maritime sector. In 2003, the casinos were expanding their operations and the port's twenty-year plan envisioned four gaming facilities on port property, including hotels, parking and other support facilities.

Plans to facilitate gaming and cruise ship market development at the Port of Gulfport include deepening and widening the channel, initial cost of which is expected to be \$100 million.

Prior to Hurricane Katrina, the Port of Gulfport was also considering getting into the cruise market, which would generate per passenger wharfage fees plus charges for parking and other miscellaneous items. A total of two berths at one terminal were listed in the port's twenty-year plan.

According to the director of the Port of Gulfport, these plans are still in place despite the impact of Hurricane Katrina. Plans to facilitate these opportunities include deepening and widening the channel. Initial cost for the channel expansion is expected to be \$100 million.

Strategy for the Future

PEER recommends that the Legislature create a Mississippi Commission on Public Ports within the Mississippi Development Authority to provide ongoing policy direction and oversight to a statewide port development program. The purpose of the commission would be to monitor the needs of the ports of the state and to devise a coordinated strategy for their commercial expansion.

The primary factors that influence the commercial attractiveness of a port are its proximity to deep waters, the depth of its channel(s), the condition and sufficiency of its infrastructure and superstructure, the availability of a full range of port services at competitive prices, the efficiency of its operations as evidenced by its ability to provide rapid throughput of cargo, the availability and condition of supporting intermodal transportation at competitive prices, and its willingness and ability to accommodate the specialized needs of shippers.

As discussed in Appendix E on page 132, the two major studies of Mississippi's ports contain strategies for their development that primarily focus on infrastructure improvement and development. While both studies recommend significant investment in the infrastructure of the ports as well as in supporting intermodal transportation connections, the *Comprehensive Assessment* also recommended the legislative creation of a Mississippi Ports Council to provide policy, direction, and oversight to a statewide port development program. PEER concurs with the concept of this recommendation, suggesting the creation of a Mississippi Commission on Public Ports within the Mississippi Development Authority.

While public and private entities currently exist in Mississippi with statewide port representation, these entities have limited roles with respect to the development of a statewide public port system. For example, as discussed on page 35, the Port Multi-Modal Fund Committee is comprised of the following ten members: the executive directors of MDOT, MDA, and the Mississippi Water Resources Association and seven port directors (the three directors of the coastal ports and four directors of the inland ports), appointed by the President of the Mississippi Water Resources Association. The sole responsibility of this committee is to distribute limited funding (\$1.9 million in each of fiscal years 2005 and 2006; \$3.8 million in FY 2007) to the state's ports for purposes specified in MISS. CODE ANN. Section 65-1-707 (1972). Private associations have formed to promote the development of specific waterways (e.g., the Tennessee-Tombigbee Waterway Authority), as well as to promote the development and management of all of the state's water

resources, including its ports (the Mississippi Water Resources Association). These associations lack the ability to launch major port development initiatives such as the creation of a capital improvement bond program.

Creation of a Mississippi Commission on Public Ports within the Mississippi Development Authority would provide the expertise and authority necessary to implement a major port development program. PEER recommends that the commission be comprised of the following seven members: a local public port director from each of the state's three major waterways (i.e., Gulf of Mexico, Mississippi River and its tributaries, and Tennessee-Tombigbee Waterway) appointed by the Governor; a state port director appointed by the Governor; a business person with import/export experience appointed from the state at large by the Governor; and the executive directors of the Mississippi Development Authority and the Mississippi Department of Transportation, or their designees.

By December 31 of the year of its creation, the commission should recommend to the Legislature a set of future duties and responsibilities for the commission for the purpose of supporting the strategic development of the state's public ports. These duties should include the creation of a strategic plan for commercial expansion of the ports as a statewide system, the provision of active marketing assistance to the state's public ports, and a capital improvement program supported through state bonding authority. Also, the commission should identify sources of federal or other funding for its ongoing operation.

Further, the Legislature should amend MISS. CODE ANN. §65-1-705 (1972) to provide that the Mississippi Commission on Public Ports perform the functions of the Port Multi-Modal Fund Committee.

Recommendation

The Legislature should consider creating a Mississippi Commission on Public Ports within the Mississippi Development Authority which shall consist of the following seven members: a local public port director from each of the state's three major waterways (i.e., Gulf of Mexico, Mississippi River and its tributaries, and Tennessee-Tombigbee Waterway) appointed by the Governor; a state port director appointed by the Governor; a business person with import/export experience appointed from the state at large by the Governor; and the executive directors of the Mississippi Development Authority and the Mississippi Department of Transportation, or their designees.

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Further, the Legislature should consider amending MISS. CODE ANN. §65-1-705 (1972) to provide that the Mississippi Commission on Public Ports shall perform the functions of the Port Multi-Modal Fund Committee.

Appendix A: General Description of Ports and Their Operation

Definition and Purpose

According to the U. S. Department of Transportation Maritime Administration's *Glossary of Shipping Terms*, a port is "a harbor with piers or docks." Ports that handle oceangoing vessels are called *seaports*, while ports that handle river traffic (primarily barges) are referred to as river ports. The term *inland port* generally refers to a port on a lake or river that also has access to an ocean.

The complexity of a commercial port's operations is not captured in the Maritime Administration's definition of a port. A better description of that complexity is found in the United Nations Conference on Trade and Development's definition of a seaport:

Seaports are interfaces between several modes of transport, and thus they are centers for combined transport. Furthermore, they are multi-functional markets and industrial areas where goods are not only in transit, but they are also sorted, manufactured and distributed. As a matter of fact, seaports are multi-dimensional systems, which must be integrated within logistic chains to fulfill properly their functions. An efficient seaport requires, besides infrastructure, superstructure and equipment, adequate connections to other transport modes, a motivated management, and sufficiently qualified employees.

The primary purpose of commercial ports is to transfer cargo between water-based modes of transportation (e.g., ships to barges) or between water-based transportation modes and land-based modes (e.g., trucks, trains, pipelines). Ports seek to achieve this transfer in as safe, secure, and efficient manner as possible.

Types of Cargo Handled by Ports

Ports handle three major types of cargo:

- *Bulk*: loose cargo (dry or liquid) that is loaded in volume directly into the vessel's hold (e.g., grain, soybean, peanuts, potash, gasoline, chemicals);

- *Breakbulk*: non-containerized general cargo stored in boxes, bales, pallets, or other units to be loaded onto or discharged from ships or other forms of transportation (e.g., iron, steel, machinery); and,
- *Containerized*: cargo stored in standard-size boxes made of aluminum, steel, or fiberglass. Common dimensions are 20' x 8' x 8' (called a TEU or twenty-foot equivalent unit) or 40' x 8' x 8' (called an FEU or forty-foot equivalent unit). A standard 40' container holds approximately 55 cubic meters. Examples of cargo shipped in containers are apparel, toys, and computer equipment. Also, poultry, vegetables, fruits, and seafood are examples of commodities shipped in refrigerated containers.

The term general cargo refers to containerized and breakbulk goods, in contrast to bulk cargo. A fourth type of cargo, neo-bulk cargo, refers to uniformly packaged goods, such as wood pulp bales, which stow as solidly as bulk, but are handled as general cargoes. Other types of cargo handled by ports include automobiles and dimensional/project cargo, which is cargo with special handling needs, such as live circus animals. Cargo that is transported on waterways ranges in origin from surrounding counties to distant countries.

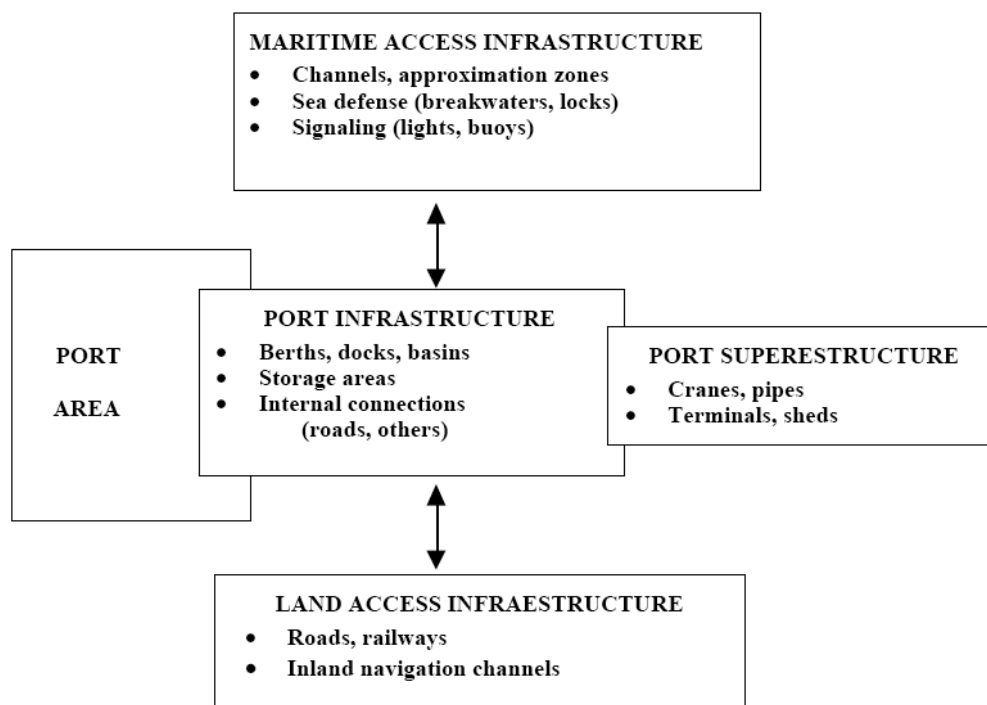
Types of Vessels Calling on Ports

The primary types of vessels that call at ports are: barges, *tankers*, *bulk carriers*, containerships, breakbulk vessels, and roll-on roll-off (RO/RO) vessels.

Physical Characteristics of Ports

As shown in Figure 1 in this appendix, Trujillo and Nombela describe a port's physical characteristics in terms of its maritime access infrastructure (e.g., channels, breakwaters), port infrastructure (e.g., berths, docks, storage areas), port superstructure (e.g., cranes, terminals, office buildings), and land access infrastructure (e.g., roads, railways). They define the "port area" as "a complex of berths, docks, and adjacent land where ships and cargo are served."

Figure 1. Scheme of seaports' structure



SOURCE: *Privatization and Regulation of the Seaport Industry* by L. Trujillo and G. Nombela

To maintain the maritime access infrastructure, most ports require continuous dredging of the shipping channels in order to remove the natural accumulation of silt and sand deposits. The U. S. Army Corps of Engineers maintains a dredging schedule for ports.

Ports have to have reliable docks that can anchor vessels and uphold the impact of cargo loading and unloading. Ports range in complexity from simple one-*terminal* facilities to complex operations with multiple public and private terminals and industrial parks.

The type of materials-handling equipment used by ports varies by type of cargo. For examples, according to LATTIS I:

...bulk commodities such as farm products and coal require different materials handling equipment (silos, conveyors, ship loaders, etc.) than containerized commodities (gantry cranes, stackers, carriers, etc.) or liquid bulk commodities (storage tanks, pipelines, etc.). Moreover, ports tend to specialize in specific materials handling equipment and capacities, and

hence attract specific commodity mixes consistent with their materials handling.

In their study entitled *Privatization and Regulation of the Seaport Industry*, Lourdes Trujillo and Gustavo Nombela of the Applied Economic Analysis Department of Spain's Universidad de Las Palmas de Gran Canaria describe the increasingly capital intensive nature of seaports:

In the last decades, we have witnessed profound changes in maritime transport, which have modified the balance between capital and labor at seaports. Ports are now increasingly becoming capital-intensive industries, while in the past they used to be labor-intensive. . . .The development of containerized transport is another factor that has significantly modified ports' operations. Containers have allowed large cost reductions in cargo handling, but they have also imposed new needs on ports in terms of equipment (gantry cranes, specialized terminals, improved pavements, etc). On the other hand, economies of scale obtained by the transport of large quantities of containers and bulk cargoes have led to the building of increasingly larger specialized ships that require substantial port investments in new infrastructures and equipment.

Port Ownership

Ownership of a port can be public, private, or mixed (public and private). According to Trujillo and Nombela, in most countries public institutions have traditionally owned and managed ports.

One argument for using public funds to build and improve port facilities is that ports are expected to yield significant public benefits in terms of economic development. Another justification for public ownership of ports is to avoid the risk of private firms monopolizing and thereby limiting usage of port facilities. However, Trujillo and Nombela argue that tighter public budgets and increasing fiscal needs have led many countries to seek private participation in seaports, including private sector construction of increasingly expensive port infrastructure. Governments are encouraging private sector port development through the use of concession contracts that allow the private firm to operate the port for long periods in order to recover their investment costs, but retain public ownership of the port in order to ensure that society does not lose ownership of essential assets.

Port Management

Although most ports have historically been owned by public entities, the private sector has long been involved in the provision of services at a port, including management at some ports.

The port authority is responsible for managing and coordinating the activities taking place at a port. While port authorities are generally public institutions, as noted in the previous section, they can be purely private. According to Trujillo and Nombela, ports generally follow one of three organizational models, based on the role assumed by the port authority:

- *Landlord port*: port infrastructure is owned by the port authority, which also manages the port. Port services are provided by private firms that own the superstructure assets and all equipment required for service provision. In general, this is the most common form of organization for large ports.
- *Tool port* (also referred to as a manager port): The port authority owns the infrastructure, superstructure, and equipment. Private firms provide services by renting port assets.
- *Operator port* (also referred to as a services port): The port authority owns all of the assets and provides all of the services. According to Trujillo and Nombela, services ports are more likely to be privately owned.

Not all ports conform completely to one of these models and other variations of public versus private ownership and management do exist.

Port Operations

Services Provided by Ports

As shown in Box 2 in this appendix, Trujillo and Nombela describe port services in terms of the following categories: infrastructure provision, berthing (e.g., pilotage, tying), cargo handling (e.g., *stevedoring*, storage), consignees (i.e., specialized agents hired by shipping companies to arrange in advance the paperwork and all matters related to the use of port facilities by a ship), and ancillary services (e.g., repairs, maintenance, provision of water and electricity, services of a *chandler*).

Box 2. Port services	
<p>1. Infrastructure provision</p> <p>2. Berthing services:</p> <ul style="list-style-type: none"> • Pilotage • Towing•Tying <p>3. Cargo handling:</p> <ul style="list-style-type: none"> • Stevedoring • Terminals • Storage • Freezing (fish, others) 	<p>4. Consignees:</p> <ul style="list-style-type: none"> • Administrative paperwork for ships and cargo • Permits (sanitary, customs, etc) • Service hiring <p>5. Ancillary services:</p> <ul style="list-style-type: none"> • Supplies • Repairs • Cleaning, refuse collection • Safety

SOURCE: L. Trujillo and G. Nombela, *Privatization and Regulation of the Seaport Industry*

As discussed in the previous section, these services can be performed entirely by a public entity (i.e., by employees of the port authority) or contracted to the private sector. Most public ports have some private sector involvement in the provision of these services. For example, the physical handling of the cargo at a port is the responsibility of the *terminal operator* that is usually a private stevedoring company that contracts with the port authority to carry out the following cargo-related responsibilities at one or more of the port's terminals through monetary compensation of shippers and carriers:

- oversight of the unloading of cargo from ship to dock;
- matching of the unloaded cargo to the ship's *manifest* (list of goods);
- transferring of the cargo into the shed;
- checking documents authorizing a trucker to pick up cargo;
- oversight of the loading/unloading of railroad cars, etc.

Stevedores and terminal operators are responsible for removing, storing, and stacking all cargo handling equipment, or other materials left on piers, wharves, docks, *aprons*, warehouses, open areas, or other space alongside vessels to designated areas promptly upon the completion of each loading or unloading of vessels.

Types of Workers Employed at the Ports

The operation of a port involves numerous categories of workers, as described below.

- The *shipper* or *consignor* is the person or company who is usually the supplier or owner of the commodities being shipped.
- The *consignee* is the buyer of the shipment.
- *Brokers* arrange for transportation of cargo for a percentage of the revenue.
- *Customs brokers* prepare the needed documents for importing goods.
- The *freight forwarder* prepares the needed documents for export.
- The *consolidator* is the person or firm that combines cargo from a number of shippers into a container that will deliver the goods to several buyers.
- The *carrier* is the individual, partnership, or corporation engaged in the business of transporting goods or passengers.
- The *steamship agent* is the local representative who acts as a liaison among ship owners, local port authorities, terminals, and supply/service companies. The agent can arrange for pilots, tug services, stevedores, inspections, etc. as well as seeing that the ship is supplied with food, water, mail, medical services, etc.
- A *pilot*, who is a licensed navigational guide, helps to guide ships into and out of the harbor.
- The *harbor master* is an officer who attends to the berthing of a ship in the harbor.
- *Terminal managers, stevedores, and longshoremen* (also called *longshore laborers*) are responsible for handling the cargo at a port. While the term *stevedore* may refer to the company that hires the cargo handlers, the terms *stevedore* and *longshoreman* are interchangeable. A longshoreman may or may not be a member of a labor union.
- *Checkers* are clerks who match the actual count of unloaded cargo (i.e., number of boxes, drums, bundles, pipes) against the amount listed on the ship's manifest.
- *Chandlers* supply ships at berth with needed provisions.

- *Recoopers* repair torn packaging for shipment.
- *U. S. Customs officials* ensure that proper duties are collected on imported cargo and U. S. Coast Guard and U. S. Customs and Border Protection personnel address port security concerns (see the following discussion of security at ports).

Large ports typically employ staff in operations, administration, communications, and marketing. In addition to the usual administrative staff, such ports may employ a port engineer, director of security, director of marketing, and director of trade development.

Port Security

According to the U. S. Customs and Border Protection of the Department of Homeland Security's official website, U. S. ports are secured by the following entities in the following ways:

- U. S. Customs and Border Protection (CPB): *"CBP uses intelligence and a risk-based strategy to screen information on 100 percent of cargo before it is loaded onto vessels destined for the United States. All cargo that is identified as high risk is inspected, either at the foreign port or upon arrival into the U.S."*

Through its container security initiative, CPB works with host government customs services to examine U. S.-bound high-risk maritime containerized cargo at foreign seaports. By the end of 2006, CPB plans to include 82% of U. S.-bound transpacific maritime containerized cargo in its container security initiative program.

- U. S. Coast Guard: *"The Coast Guard routinely inspects and assesses the security of U.S. ports in accordance with the Maritime Transportation and Security Act and the Ports and Waterways Security Act. Every regulated U.S. port facility is required to establish and implement a comprehensive security plan that outlines procedures for controlling access to the facility, verifying credentials of port workers, inspecting cargo for tampering, designating security responsibilities, training, and reporting of all breaches of security or suspicious activity, among other security measures. Working closely with local port authorities and law enforcement agencies, the Coast Guard regularly reviews, approves, assesses and inspects these plans and facilities to ensure compliance."*
- *Terminal operator: "The terminal operator is responsible for the area within the port that serves as a loading, unloading, or transfer point for the cargo. This includes storage and repair facilities and management offices."*

- *Port Authority:* The port authority often provides additional security for its facilities. The port also manages marine navigation and safety issues within its boundaries.

The most intensive government security is provided at U. S. ports of entry. As of March 2006, the United States had 317 official ports of entry in the United States, four of which are located in Mississippi--i.e., the ports of Gulfport, Pascagoula, Vicksburg, and Greenville. At these ports of entry, U. S. Customs and Border Protection of the U. S. Department of Homeland Security is responsible for enforcing federal import and export laws contained in 19 CFR 101.1. CBP uses large-scale X-ray and gamma ray machines and radiation detection devices to screen cargo. Ports of entry are also responsible for performing agriculture inspections to protect the United States from potential carriers of animal and plant pests or diseases that could cause serious damage to America's crops, livestock, pets, and the environment.

Also, the U. S. Coast Guard imposes operating rules for handling dangerous and hazardous cargo.

U. S. Customs Personnel at Mississippi Ports

U. S. Customs and Border Protection generally has a presence at Mississippi's four water ports of entry. Customs personnel carry out a variety of functions. For example, officers are uniformed, badged, and armed personnel who board ships to conduct inspections and to enforce customs and immigration laws. Agriculture officers are uniformed and badged, but not armed. They specialize in food diseases and the disposal of garbage. Administrative personnel collect paperwork.

Port of Gulfport

Currently, Customs and Border Protection (CBP) staff work in the Gulfport region to cover the area from Port Bienville to Pascagoula. The staff includes one port director, three supervisory CBP Officers, seventeen CBP Officers, eight Agriculture Specialists, and three Administrative/Technical staff.

Port of Vicksburg

Customs personnel for Vicksburg encompass four counties--Hinds, Rankin, Madison, and Warren--as well as Madison Parish in Louisiana and an unstaffed Customs port in Greenville. CBP staff includes one port director position and three CBP Officers.

Port of Pascagoula

Customs personnel for the Port of Pascagoula cover all of Jackson County. The CBP staff includes a Port Director, a CBP Officer, and a Technician.

Port of Greenville

Customs personnel for Greenville operate from the Vicksburg office. Therefore, Greenville is an unstaffed Customs port.

Taxes, Fees, and Penalties Collected by the Port Authority

Taxes

The only tax revenues received by public ports are ad valorem taxes allocated to the port by the local governing authority.

Fees

Some ports participate in a conference that sets the uniform port *terminal charges*, rules, and regulations of its members. For example, the Port of Gulfport and the Port of Pascagoula are among the twenty members of the Gulf Seaports Marine Terminal Conference. Other members of the conference include the ports of New Orleans, Houston, and Tampa.

License Fees

In order to conduct business at a port, stevedores and terminal operators must obtain a license from the port authority. These licenses must be renewed annually. Port authorities also require each of the following businesses to obtain a license in order to operate at the port:

- port bulk facilities;
- port ship yards, dry-docks and commercial vessel repair;
- port harbor *tugboat* and towing companies;
- port barge bunkering and *lighterage* services;
- port commercial waterfront facilities;
- *steamship agents*;
- bus, limousine and taxicab companies serving cruise ship passenger terminals;
- ship chandlers;

- mobile food, merchandise and/or service vendors;
- *common carriers* by water of passengers within the port district; and,
- oil waste removal and/or sanitary removal companies.

Fees Related to Use of Port Facilities

Stevedore Use Fee

Stevedores licensed to utilize the facilities of a port are assessed a stevedore use fee on all cargo handled or conveyed over public berths on which wharfage charges are assessed. The charge is based on the type of cargo-- e.g.:

- breakbulk or container cargo, per net ton;
- lumber and logs, per MBF (gross measurement);
- bulk cargo, per net ton; or,
- vehicle, rolling stock or similar, each.

Facilities Use Charge

A per-ton charge is assessed on a party to which the port authority has issued a permit for the temporary use of designated facilities for the loading and unloading of general cargo between an inland carrier and a vessel or barge or between a vessel and barge.

Fees Applicable to Vessels

Harbor Master Fee

The port authority charges all vessels engaged in commerce a *harbor master* fee, the proceeds of which are used for general harbor improvements, including maintenance dredging, non-federal sponsor obligations, fire protection equipment and associated maintenance, and vessel traffic management systems. The fee is charged per foot *LOA* of the vessel.

Dockage

Dockage is the charge assessed against a vessel for berthing at a wharf, pier, *bulkhead* structure, or bank, or for mooring to a vessel so berthed. Dockage charges begin when the first line of the docking vessel has been made fast to a wharf or is occupying the berth immediately alongside and continues until the last line has been released and the vessel is completely clear of the wharf.

Vessels are assessed at a daily (per twenty-four-hour period) rate per foot LOA (based on a table where the rate per foot increases as the vessel length category increases) plus any berth length required in excess of reasonable length to safely moor the vessel. A port authority may charge an additional fee for dockage called a capstan fee for use of capstans at a berth.

Anchorage and Fleeting

Port authorities charge a fee to a ship that anchors in its waters and to barges that secure to a mother vessel for transloading (referred to as fleeting).

Line Handling

A per service fee is charged for line handling for mooring, unmooring, and shifting commercial vessels.

Fees Applicable to Cargo

According to Trujillo and Nombela, cargo handling charges represent between 70% and 90% of the total cost involved in moving goods through a seaport.

Equipment Rental

Port authorities charge hourly rates for use of equipment such as *container gantry cranes* and P&H 300 ton truck cranes.

Charge for Handling of Cargo

Cargo handling fees are charged per ton of 2,000 pounds. The rates vary by type of cargo.

Wharfage

Wharfage is assessed on cargo when it is placed in *transit sheds*, storage areas, shipside, or on the apron. Wharfage rates, which are charged per ton of 2,000 pounds, vary by type of cargo. For example, the rate for frozen meat and poultry is different from the rate for fruit and vegetables and there is a separate table of rates for the various types of bulk cargo. Wharfage is charged on passenger traffic at a per passenger rate for embarking, disembarking and in transit. Wharfage is the liability of the owner of the cargo.

Wharf Demurrage

When cargo remains at a port longer than the free time allowance (usually thirty days), a daily fee is charged per ton of cargo.

Storage Charges

Shippers can pay a daily fee to store cargo at a port, provided that storage space is available. There are separate rates for inside storage versus open storage, and the charges are assessed per ton or forty cubic feet, whichever produces the greater revenue.

Charges for Various Support Services

Port authorities charge a variety of fees for support services. For example, ports charge fees for:

- weighing vehicles (e.g., trucks, trailers) on port authority scales;
- providing electrical service to refrigerated containers or trailers (this fee is charged per twenty-four-hour period and is based on the length of the container); and,
- providing fresh water (fee is charged per net ton of water).

Penalties

Port authorities charge penalties for violation of certain rules and regulations. Examples of violations resulting in penalties include the following:

- loading, unloading, handling, and/or storage of cargo without prior assignment by the port authority of the space being used;
- unnecessary delay in movement of a vessel (fine assessed per hour of delay); and,
- violation of any of the provisions of the tariff (fine assessed per violation).

Other Sources of Port Revenues

The other primary sources of public port revenues are income from the lease and rental of port property and equipment; income from the sale of port property; and interest earnings on investments. Ports with gaming leases, such as the Port of Gulfport, earn a percentage of gaming (5%) and non-gaming (3%) sales.

Expenditures

Ports have constant expenditures related to maintenance, dredging, and personnel. Equipment for handling cargo also requires routine maintenance and assurance of safety and reliability. The ports contribute to the cost of dredging, although the federal government also assumes some of the cost.

Indicators of Port Performance

To assist in evaluating the outcomes of a port, Trujillo and Nombela have divided performance indicators into the following three categories: physical, factor productivity, and economic and financial. A brief discussion of suggested performance indicators, by category, follows.

Physical Indicators

These indicators focus on how much cargo is moved by a port and how quickly:

- *Ship turnaround time*: total time that a vessel spends in port, from when it enters until when it exits.
- *Waiting rate*: The time in the port, but outside berth, divided by the time at berth.
- *Berth occupancy rate*: percentage of total available time that berths are in use by ships. This indicator must be considered, along with the turnaround time, because a port could have a high berth occupancy rate because it is not servicing ships on a timely basis.
- *Working time over time at berth*: A value close to one indicates that during most of the time that a vessel spends at berth, it is being serviced.
- *Cargo dwell-time*: The time elapsed between cargo having been unloaded from a ship until it exits the port, or the reverse operation.

Other possible physical indicators noted by Trujillo and Nombela are related to safety concerns, such as the number of accidents or incidents suffered by ships at a port, preferably expressed in relative terms such as in relation to the number of ship movements to and from the port.

Factor Productivity Indicators

These are indicators that reflect on the productivity of labor and capital:

- *Tons per worker-hour or per gang-hour*: In comparing this indicator between ports, it is important to note variations in the size of a gang, the type of cargo being moved, and the type of equipment available for loading and unloading the cargo.
- *Tons per crane-hour*: This indicator evaluates the productivity of one of the main elements of equipment used for cargo loading/unloading.
- *Tons per berthing location or per linear meter*: This indicator measures the efficiency of a port in the use of its basic infrastructure in providing services to ships.
- *Tons per ship-day*: This indicator gives an idea of the total productivity of a port in cargo handling.

Economic and Financial Indicators

The objective of these indicators is to reflect port finances and the level of charges to users:

- operating surplus over gross (or net) registered tons; or operating surplus over handled ton;
- total income (expenditure) over gross (or net) registered tons or ton; and,
- charge per handled TEU (twenty-foot equivalent unit).

SOURCES: Bureau of Transportation Statistics Center; American Association of Port Authorities' *Glossary of Maritime Terms*; U. S. Maritime Administration; U. S. Customs and Border Protection Trade Security Procedures; *Privatization and Regulation of the Seaport Industry* (by L. Trujillo and G. Nombela); rates and schedules (tariffs) of terminal operations; "Securing U. S. Ports" (U. S. Customs and Border Protection); U. S. Public Port Development Expenditure Report; *Latin America Trade and Transportation Study I*; Rail Freight Roundtable; interviews with U. S. Customs staff and port directors; and, PEER survey of Mississippi port directors.

Appendix B: Glossary of Port-Related Terms

Anchorage - Port charge relating to a vessel moored at approved anchorage site in a harbor.

Anti-dumping duty - A tariff imposed to discourage sale of foreign goods, subsidized to sell at low prices detrimental to local manufacturers.

Appraisalment - Determination of the dutiable value of imported merchandise by a Customs official who follows procedures outlined in their country's tariff, such as the U. S. Tariff Act of 1930.

Apron - The area immediately in front of or behind a wharf shed on which cargo is lifted. On the "front apron," cargo is unloaded from or loaded onto a ship. Behind the shed, cargo moves over the "rear apron" into and out of railroad cars.

Backhaul - To haul a shipment back over part of a route it has traveled.

Balloon freight - light, bulky articles

Barge - A large, flat-bottomed boat used to carry cargo from a port to shallow-draft waterways. Barges have no locomotion and are pushed by towboats. A single, standard barge can hold 1,500 tons of cargo or as much as either fifteen railroad cars or sixty trucks can carry. A barge is 200 feet long, thirty-five feet wide and has a draft of nine feet. Barges carry dry bulk (grain, coal, lumber, gravel, etc.) and liquid bulk (petroleum, vegetable oils, molasses, etc.).

Barge carrier - Ships designed to carry barges; some are fitted to act as full containerships and can carry a varying number of barges and containers at the same time (see **LASH**).

Berth - (verb) To bring a ship to a berth. (noun) The wharf space at which a ship docks. A wharf may have two or three berths, depending on the length of incoming ships.

Bill of lading (B/L) - A document that establishes the terms of a contract between a shipper and a transportation company. It serves as a document of title, a contract of carriage, and a receipt for goods.

Board of Commissioners - The members of the governing board of a port authority are called commissioners. Members of a Board of Commissioners can be elected or appointed and usually serve for several years.

Bonded warehouse - A building designated by U. S. Customs authorities for storage of goods without payment of duties to Customs until goods are removed.

Breakbulk cargo - Non-containerized general cargo stored in boxes, bales, pallets or other units to be loaded onto or discharged from ships or other forms of transportation. (See also: **bulk cargo** and **container**.) Examples include iron, steel, machinery, linerboard, and woodpulp.

Broken stowage - The loss of space caused by irregularity in the shape of packages; any void or empty space in a vessel or container not occupied by cargo.

Broker - A person who arranges for transportation of loads for a percentage of the revenue from the load. Using U. S. Customs' "Automated Broker Interface" (ABI), brokers can file importers' entries electronically.

Bulk cargo - Loose cargo (dry or liquid) that is loaded (shoveled, scooped, forked, mechanically conveyed or pumped) in volume directly into a ship's hold--e.g., grain, coal, and oil.

Bulk carrier - All vessels designed to carry bulk cargo such as grain, fertilizers, ore, and oil.

Bulkhead - A structure used to protect against shifting cargo and/or to separate the load.

Cabotage - Shipment of cargo between a nation's ports is also called coastwise trade. The U. S. and some other countries require such trade to be carried on domestic ships only.

Capacity - The available space for, or ability to handle, freight.

Captive cargo port - When most of a port's inbound cargoes are being shipped short distances and most of its export products come from nearby areas, the port is called a captive cargo port. (Contrasts with a **transit port**.)

Cargo - The freight (goods, products) carried by a ship, barge, train, truck, or plane.

Carrier - An individual, partnership, or corporation engaged in the business of transporting goods or passengers

Cartage - Originally the process of transporting by cart. Today, the term is used for trucking or trucking fees.

Chandler - Like a hotel at sea, a ship needs many supplies to operate and serve its crew--groceries; paper products; engine parts; electronics; hardware; etc. A chandler sells these supplies to the ship's agent. Originally, chandlers (candle makers) provided illumination to ships. Over time they expanded the variety of products they could provide to ships.

Checking - The service of counting and checking cargo against appropriate documents for the account of the cargo or the vessel or other person requesting the same.

Clerks - When cargo is unloaded from a ship, a clerk checks the actual count of the goods (number of boxes, drums, bundles, pipes, etc.) versus the amount listed on the ship's manifest. He will note shortages, overages or damage. This is used to make claims if needed.

Commodity - Article shipped. For dangerous and hazardous cargo, the correct commodity identification is critical.

Common carrier - Trucking, railroad or barge lines that are licensed to transport goods or people nationwide are called common carriers.

Consignment - shipment of goods. The buyer of this shipment is called the consignee; the seller of the goods is called the consignor.

Consolidated Freight Station or Container Freight Station (CFS) - Location on terminal grounds where stuffing and stripping of containers is conducted.

Consolidator - The person or firm that consolidates (combines) cargo from a number of shippers into a container that will deliver the goods to several buyers.

Container - A box made of aluminum, steel, or fiberglass used to transport cargo by ship, rail, truck, or barge. Common dimensions are 20' x 8' x 8' (called a TEU or twenty-foot equivalent unit) or 40' x 8' x 8' (called an FEU). Variations are collapsible containers, tank containers (for liquids) and "rag tops" (open-topped containers covered by a tarpaulin for cargo that sticks above the top of a closed box). In the container industry, containers are usually simply called boxes.

Container cells - The construction system employed in container vessels; permits ship containers to be stowed in a vertical line with each container supporting the one above it.

Container chassis - A piece of equipment specifically designed for the movement of containers by highway to and from container terminals.

Container crane - Usually, a rail-mounted **gantry crane** located on a **wharf** for the purpose of loading and unloading containers on vessels.

Container on Flat Car (COFC) - A container placed directly on a railroad flatcar without chassis.

Container terminal - A specialized facility where ocean container vessels dock to discharge and load containers, equipped with cranes with a safe lifting capacity of 35-40 tons, with booms having an outreach of up to 120 feet in order to reach the outside cells of vessels. Most such cranes operate on rail tracks and have articulating rail trucks on each of their four legs, enabling them to traverse along the terminal and work various bays on the vessel and for more than one crane to work a single vessel simultaneously. Most terminals have direct rail access and container storage areas, and are served by highway carriers.

Container yard (CY) - A materials handling/storage facility used for completely unitized loads in containers and/or empty containers.

Containerization - The technique of using a container to store, protect and handle cargo while it is in transit. This shipping method has both greatly expedited the speed at which cargo is moved from origin to destination and lowered shipping costs.

Containerized cargo - Containerization is a system of intermodal cargo transport using standard ISO containers that can be loaded on container ships, railroad cars, and trucks.

Containership - A full containership is a ship equipped with permanent **container cells**, with little or no space for other types of cargo. A partial containership is a multipurpose containership where one or more but not all compartments are fitted with permanent container cells. Remaining compartments are used for other types of cargo.

Customs - A **duty** or tax on imported goods. These fees are a major bonus to the economy. In 1999, for example, the U. S. Customs Department collected over \$22 billion

in fees nationally, which went into the U.S. Treasury. The Customs Department also works to prevent the importation of illegal drugs and contraband.

Customs broker - This person prepares the needed documentation for importing goods (just as a freight forwarder does for exports). The broker is licensed by the Treasury Department to clear goods through U. S. Customs. Performs duties related to documentation, cargo clearance, coordination of inland and ocean transportation, dockside inspection of cargo, etc. (Also known as a customhouse broker.)

Customs entry - All countries require that the importer make a declaration on incoming foreign goods. The importer then normally pays a duty on the imported merchandise. The importer's statement is compared against the carrier's vessel manifest to ensure that all foreign goods are properly declared.

Deadweight - The number of tons of 2,240 pounds (i.e., **long tons**) that a vessel can transport of cargo, stores, and bunker fuel. It is the difference between the number of tons of water a vessel displaces "light" and the number of tons it displaces when submerged to the "load line."

Deck barge - Transports heavy or oversize cargoes mounted to its top deck instead of inside a hold. Machinery, appliances, project cargoes, and even recreational vehicles move on deck barges.

Demurrage - A penalty fee assessed when cargo is not moved off a wharf before the free time allowance ends.

Direct loading or discharge - The operation of transferring cargo by means of vessels, shore cranes, barge cranes, or other mechanical equipment in a direct movement between the vessel and railroad car, motor vehicle, barge, vessel or other conveyance situated directly alongside the loading or unloading vessel.

Dock - (verb) - To bring in a vessel to tie up at a wharf berth. (noun) - A dock is a structure built along, or at an angle from, a navigable waterway so that vessels may lie alongside to receive or discharge cargo. Sometimes, the whole wharf is informally called a dock.

Dock receipt - A form used to acknowledge receipt of cargo and often serves as basis for preparation of the **ocean bill of lading**.

Dockage - The charge assessed against a vessel for berthing at a wharf, pier, bulkhead structure, or bank, or for mooring to a vessel so berthed.

Draft - The depth of a loaded vessel in the water taken from the level of the waterline to the lowest point of the hull of the vessel; depth of water, or distance between the bottom of the ship and waterline.

Drayage - Transport by truck for short distances--e.g., from wharf to warehouse. Also, charge made for local hauling by dray or truck (same as **Cartage**).

Dredge - (noun) A waterborne machine that removes unwanted silt accumulations from the bottom of a waterway. (verb) The process of removing sediment from harbor or river bottoms for safety purposes and to allow for deeper vessels.

Dry bulk - Minerals or grains stored in loose piles moving without mark or count. Examples are potash, industrial sands, wheat, soybeans, and peanuts.

Dunnage - Wood or other material used in stowing ship cargo to prevent its movement.

Duty - A government tax on imported merchandise.

Export - Shipment of goods to a foreign country.

Export license - A government document that permits the “licensee” to engage in the export of designated goods to certain destinations.

Export rate - A rate published on traffic moving from an interior point to a port for transshipment to a foreign country.

Federal Maritime Commission (FMC) - The U. S. governmental regulatory body responsible for administering maritime affairs, including the tariff system, freight forwarder licensing, enforcing the conditions of the Shipping Act, and approving conference or other carrier agreements.

Feeder service - Ocean transport system involving use of centralized ports to assemble and disseminate cargo to and from ports within a geographic area. Commodities are transported between major ports, then transferred to feeder vessels for further transport to a number of additional ports.

Fender piles - The wooden or plastic pilings on the outer edge of the wharf function like the fenders on a car. They are there to absorb the shock of a ship as it docks at the wharf and to protect the structural pilings that actually support the wharf. Fender piles are also called sacrifice piles, since they are designed to be discarded after they are broken.

Finger pier - Same as a pier; i.e., a structure that juts out into a waterway from the shore for mooring vessels and cargo handling.

Fleeting - The area at which barges, towboats, and tugs are berthed until needed. The operation of building or dismantling barge tows.

Foreign Trade Zone (FTZ) - Known in some countries as a free zone, a foreign trade zone (FTZ) is a site within the USA (in or near a U. S. Customs port of entry) where foreign and domestic goods are held until they are ready to be released into international commerce. If the final product is imported into the U. S., duties and taxes are not due until the goods are released into the U. S. market. Merchandise may enter a FTZ without a formal Customs entry or the payment of Customs duties or government excise taxes. In the zone, goods may be: stored; tested; sampled; repackaged or relabeled; cleaned; combined with other products; repaired or assembled, etc.

Free on Board (FOB) – U. S. Domestic use: shipped under a rate that includes costs of delivery to and the loading onto a carrier at a specified point. The agreement between the seller and buyer specifies the point at which the cost of transporting the goods and the assumption of risk of damage to or loss of the goods transfers from the seller to the buyer. For example, the term FOB Vessel means that the seller is responsible for the goods and preparation of export documentation until the goods are actually placed aboard the vessel. International use: an international term of sale that means that the seller fulfills his obligation to deliver when the goods have passed over the ship’s rail at the named port of shipment (i.e., the buyer bears all costs and risks of loss or damage to the goods from that point).

Freight - Merchandise hauled by transportation lines.

Freight forwarder - An individual or company that prepares the documentation and coordinates the movement and storage of export cargoes. (See also **Customs broker**.)

Freighter - A category of ship including **Breakbulk** vessels (both refrigerated and unrefrigerated), **containerships**, partial containerships, **Roll-on/Roll-off** vessels, and **barge carriers**.

Gantry crane - Track-mounted, shoreside crane utilized in the loading and unloading of breakbulk cargo, containers, and heavy lift cargo.

General cargo - Consists of both containerized and breakbulk goods, in contrast to bulk cargo. (See: **breakbulk cargo**, **container**, **bulk cargo**, and **dry bulk**). General cargo operations produce more jobs than bulk handling.

General cargo carriers - A category of ship including breakbulk freighters, car carriers, cattle carriers, pallet carriers and timber carriers.

Grain elevator - Facility at which bulk grain is unloaded, weighed, cleaned, blended and exported.

Gross tonnage - The sum of container, breakbulk, and bulk tonnage.

Hague Rules, The - A multilateral maritime treaty adopted in 1921 (at The Hague, Netherlands). Standardizes liability of an international carrier under the **ocean bill of lading**. Establishes a legal "floor" for the **bill of lading**.

Harbor master - An officer who attends to the berthing, etc., of ships in a harbor.

Harmonized System of Codes (HS) - An international goods classification system for describing cargo in international trade under a single commodity-coding scheme. Developed under the auspices of the Customs Cooperations Council (CCC), an international Customs organization in Brussels, this code is a hierarchically structured product nomenclature containing approximately 5,000 headings and subheadings. It is organized into 99 chapters arranged in 22 sections. Sections encompass an industry (e.g., Section XI, Textiles and Textile Articles); chapters encompass the various materials and products of the industry (e.g., Chapter 50, Silk; Chapter 55, Manmade Staple Fibers; Chapter 57, Carpets). The basic code contains four-digit headings and six-digit subheadings. Many countries add digits for Customs tariff and statistical purposes. In the United States, duty rates will be the eight-digit level; statistical suffixes will be at the ten-digit level. The Harmonized System (HS) is the current U.S. tariff schedule (TSUSA) for imports and is the basis for the ten-digit Schedule B export code.

Heavy hauler - A truck equipped to transport unusually heavy cargoes (steel slabs, bulldozers, transformers, boats, heavy machinery, etc.)

Heavy lift - Very heavy cargoes that require specialized equipment to move the products to and from ship/truck/rail/barge and terminals. This "heavy lift" machinery may be installed aboard a ship designed just for such transport. Shore cranes, floating cranes and lift trucks may also adapted for such heavy lifts.

Hopper car - A freight car used for handling dry bulks, with an openable top and one or more openings on the bottom through which the cargo is dumped.

Hostler (or hustler) - A tractor, usually unlicensed, for moving containers within a yard. An employee who drives a tractor for the purpose of moving cargo within a container yard.

I.L.A. - International Longshoremen's Association, which operates on the East and Gulf Coasts. The International Longshore and Warehouse Union (I.L.W.U.) operates on the West Coast.

Import - To receive goods from a foreign country.

Import license - A document required and issued by some national governments authorizing the importation of goods.

I.M.X. - This is transportation shorthand for intermodal exchange. In an IMX yard, containers can be lifted from truck chassis to rail intermodal cars or vice versa.

In Bond (cargo) - Cargo moving under the control of U. S. Customs where duty has not yet been paid.

Incentive rate - A lower-than-usual tariff rate assessed because a shipper offers a greater volume than specified in the tariff. The incentive rate is assessed for that portion exceeding the normal volume.

Interchange - Point of entry/exit for trucks delivering and picking up containerized cargo. Point where pickups and deposits of containers in storage area or yard are assigned.

Intermodal shipment - When more than one mode of transportation is used to ship cargo from origin to destination, it is called intermodal transportation. For example, boxes of hot sauce from Louisiana are stuffed into metal boxes called containers at the factory. That container is put onto a truck chassis (or a railroad flat car) and moved to a port. There the container is lifted off the vehicle and lifted onto a ship. At the receiving port, the process is reversed. Intermodal transportation uses few laborers and speeds up the delivery time.

I.S.O. - International Standards Organization. Worldwide organization formed to promote development of standards to facilitate the international carriage and exchange of goods and services. Governs construction specifications for ISO containers.

J.I.T. - The abbreviation for "just in time," which is a way to minimize warehousing costs by having cargo shipped to arrive just in time for its use. This inventory control method depends on extremely reliable transportation.

Lading - Refers to the freight shipped; the contents of a shipment.

Landlord port - At a landlord port, the port authority builds the wharves, which it then rents or leases to a terminal operator (usually a stevedoring company). The operator invests in cargo-handling equipment (forklifts, cranes, etc), hires longshore laborers to operate such lift machinery and negotiates contracts with ocean carriers (steamship services) to handle the unloading and loading of ship cargoes. (See also: **operating port**.)

LASH - A specially constructed 900-foot-long vessel equipped with an overhead crane for lifting specially designed barges and stowing them into cellular slots in an athwartship position. LASH stands for Lighter Aboard Ship. Just as cargo is transported by barge from the shallower parts of the Mississippi River to the Port of New Orleans for

export aboard ocean-going ships, LASH barges are lifted into these unusual ships. Overseas, the ship can discharge clusters of barges in the open waters. Then several towboats assemble the barges into tows bound for various ports and inland waterways, without the ship having to spend time traveling to each port.

Launch service - Companies that offer “water-taxi” service to ships at anchor.

LCL - The acronym for “less than container load.” It refers to a partial container load that is usually consolidated with other goods to fill a container.

Length overall (LOA) - Linear measurement of a vessel from bow to stern.

Lift-on/Lift-off (LO/LO) - Cargo handling technique involving transfer of commodities to and from the ship using shoreside cranes or ship’s gear.

Lighterage - The loading or unloading of a ship by means of a lighter (barge), especially when shallow waters prevent an ocean going vessel from approaching a berth, or if berths are unavailable.

Liner - A vessel sailing between specified ports on a regular basis.

Local cargo - Cargo delivered to/from the carrier where origin/destination of the cargo is in the local area.

Longshore laborers (longshoremen) - Dock workers who load and unload ships or perform administrative tasks associated with the loading or unloading of cargo. They may or may not be members of labor unions. Longshore gangs are hired by stevedoring firms to work the ships. Longshoremen are also called stevedores.

Long ton - A long ton equals 2,240 pounds.

LTL - Means a shipment that is “less than truckload.” Cargoes from different sources are usually consolidated to save costs.

Malpractice - A carrier giving a customer illegal preference to attract cargo. This can take the form of a money refund (rebate); using lower figures than actual for the assessment of freight charges (undercubing); misdeclaration of the commodity shipped to allow the assessment of a lower tariff rate; waiving published tariff charges for demurrage, CFS handling or equalization; providing specialized equipment to a shipper to the detriment of other shippers, etc.

Manifest - Document that lists in detail all the bills of lading issued by a carrier or its agent or master for a specific voyage. A detailed summary of the total cargo of a vessel. Used principally for Customs purposes.

Marine surveyor - Person who inspects a ship hull or its cargo for damage or quality.

Marine terminal operator - Any person, firm, corporation, or other business entity engaged in carrying out the business of furnishing wharfage, dock, warehouse, or other port terminal facilities and services such as handling, loading and unloading, and warehouse checking, in connection with a common carrier by water in the foreign commerce or in the interstate commerce on the high seas or in the Great Lakes.

Maritime - (adjective) Located on or near the sea. Commerce or navigation by sea. The maritime industry includes people working for transportation (ship, rail, truck and

towboat/barge) companies, freight forwarders and customs brokers; stevedoring companies; labor unions; chandlers; warehouses; ship building and repair firms; importers/exporters; pilot associations, etc.

Marshaling yard - This is a container parking lot or any open area where containers are stored in a precise order according to the ship loading plan. Container terminals may use a grounded or wheeled layout. If the cargo box is placed directly on the ground, it is called a grounded operation. If the box is on a chassis/trailer, it is a wheeled operation.

Master - The officer in charge of the ship. "Captain" is a courtesy title often given to a master.

Master inbound - U. S. Customs' automated program that allows for electronic reporting of inbound (foreign) cargoes in the U. S.

Mooring dolphin - A cluster of pilings to which a boat or barge ties up.

Neo-bulk cargo - Uniformly packaged goods, such as wood pulp bales, which stow as solidly as bulk, but are handled as general cargoes.

NVOCC - A non-vessel-owning common carrier that buys space aboard a ship to get a lower volume rate. An NVOCC then sells that space to various small shippers, consolidates their freight, issues bills of lading, and books space aboard a ship.

Ocean Bill of Lading (Ocean B/L) A contract for transportation between a shipper and a carrier. It also evidences receipt of the cargo by the carrier. A bill of lading shows ownership of the cargo and, if made negotiable, can be bought, sold or traded while the goods are in transit.

Ocean carrier - Diesel-fueled vessels have replaced the old steamships of the past, although many people still refer to modern diesel ships as steamships. Likewise, the person who represents the ship in port is still often called a steamship agent. (See: steamship agent)

On-dock rail - Direct shipside rail service. Includes the ability to load and unload containers/breakbulk directly from rail car to vessel.

On-terminal rail - Rail service and trackage provided by a railroad within a designated terminal area.

Operating port - At an operational port like Charleston, South Carolina, the port authority builds the wharves, owns the cranes and cargo-handling equipment, and hires the labor to move cargo in the sheds and yards. A stevedore hires longshore labor to lift cargo between the ship and the dock, where the port's laborers pick it up and bring it to the storage site. (See **landlord port**.)

Overheight cargo - Cargo more than eight feet high that thus cannot fit into a standard container.

Overland Common Point (OCP) - A term stated on the bills of lading offering lower shipping rates to importers east of the Rockies, provided merchandise from the Far East comes in through the West Coast ports. OCP rates were established by U. S. West Coast steamship companies in conjunction with western railroads so that cargo originating or destined for the American Midwest and East would be competitive with all-water rates via the U.S. Atlantic and Gulf ports. Applies to eastern Canada.

Piggyback - A rail transport mode where a loaded truck trailer is shipped on a rail flatcar.

Pilot - A licensed navigational guide with thorough knowledge of a particular section of a waterway whose occupation is to steer ships along a coast or into and out of a harbor. Local pilots board the ship to advise the captain and navigator of local navigation conditions (difficult currents, hidden wrecks, etc.).

Point of origin - The place at which a shipment is received by a carrier from the shipper.

POL - port of loading

Pomerene Act (U.S. Federal Bill of Lading Act of 1916) - U.S. federal law enacting conditions by which a **bill of lading** may be issued. Penalties for issuing a bill of lading containing false data include monetary fines and/or imprisonment.

Port - This term is used both for the harbor area where ships are docked and for the agency (port authority) that administers use of public wharves and port properties.

Port authority - the entity with the responsibility for coordinating all of the activities at a port. Traditionally, the functions of a port authority include: provision of infrastructure for maritime access and within the port area, strategic port planning, promotion and marketing, regulation and control of port safety, environmental protection, and management of port assets, both infrastructure and superstructure.

Port of call - Port where a ship discharges or receives traffic.

Port of entry - Port where cargo is unloaded and enters a country.

Quay - A structure attached to land to which a vessel is moored.

Railhead - End of the railroad line or point in the area of operations at which cargo is loaded and unloaded.

Red label - A label required on shipments of flammable articles.

Reefer - A container with refrigeration for transporting frozen foods (meat, ice cream, fruit, etc.)

Roll-on roll-off (ro/ro) - A ro/ro ship is designed with ramps that can be lowered to the dock so cars, buses, trucks or other vehicles can drive into the belly of the ship, rather than be lifted aboard by a crane. A ro/ro ship, like a container ship, has a quick turnaround time of about twelve hours.

Rubber-tired gantry (RTG) - Traveling crane used for the movement and positioning of containers in a container field. RTGs may also be used for loading and unloading containers from rail cars.

Schedule B - The Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

Seaport - Seaports are interfaces between several modes of transport and thus they are centers for combined transport. Furthermore, they are multi-functional markets and industrial areas where goods are not only in transit, but they are also sorted,

manufactured, and distributed. As a matter of fact, seaports are multi-dimensional systems, which must be integrated within logistic chains to fulfill properly their functions. An efficient seaport requires, besides infrastructure, superstructure and equipment, adequate connections to other transport modes, a motivated management, and sufficiently qualified employees.

Service Contract - As provided in the Shipping Act of 1984, a contract between a shipper (or a shippers association) and an ocean common carrier (or conference) in which the shipper makes a commitment to provide a certain minimum quantity of cargo or freight revenue over a fixed period and the ocean common carrier or conference commits to a certain rate or rate schedule as well as a defined service level (such as assured space, transit time, port rotation, or similar service features). The contract may also specify provisions in the event of nonperformance on the part of either party.

Sheddage - Regardless of the length of stay, a vessel is charged a one-time fee for use of shed space and/or marginal (waterside) rail track space. The charge is based on the length of a vessel.

Ship - According to the Maritime Glossary of Shipping Terms, the major classifications of ships are as follows: **bulk carriers**, combination passenger and cargo ships (ships with a capacity for 13 or more passengers), **freighters**, **barge carriers**, **general cargo carriers**, full and partial **containerships**, **roll-on/roll-off** vessels, and **tankers**.

Shipment - The tender of one lot of cargo at one time from one shipper to one consignee on one bill of lading.

Shipper - The person or company who is usually the supplier or owner of commodities shipped. Also called Consignor.

Shippers Association - A non-profit entity that represents the interests of a number of shippers. The main focus of shippers associations is to pool the cargo volumes of members to leverage the most favorable service contract rate levels.

Shipper's Export Declaration (SED) - A Bureau of the Census International Trade Administration form used for compiling U. S. exports. It is completed by a shipper and shows the value, weight, destination, etc., of export shipments as well as Schedule B commodity code.

Shipping Act of 1916 - The act of the U. S. Congress (1916) that created the U. S. Shipping Board to develop water transportation, operate the merchant ships owned by the government, and regulate the water carriers engaged in commerce under the flag of the United States. As of June 18, 1984, applies only to domestic offshore ocean transport.

Shipping Act of 1984 - Effective June 18, 1984, describes the law covering water transportation in the U.S. foreign trade.

Shipping Act of 1998 - Amends the Shipping Act of 1984 to provide for confidential service contracts and other items.

Short ton - A short ton equals 2,000 pounds. Lifting capacity and cargo measurements are designated in short tons.

Slip - A vessel's berth between two piers.

Spreader - a device for lifting containers by their corner posts. The spreader bar on a container crane is telescopic to allow lifting containers of various lengths.

Steamship - Today, ships that transport cargo overseas are powered by diesel fuel instead of steam. Many people still use the term “steamship,” but the more modern term for the service is “**ocean carrier**” and for the ship itself, “motor vessel.”

Steamship agent - The local representative who acts as a liaison among ship owners, local port authorities, terminals and supply/service companies. An agent handles all details for getting the ship into port; having it unloaded and loaded, inspected, and out to sea quickly. An agent arranges for pilots; tug services; stevedores; inspections, etc., as well as seeing that a ship is supplied with food, water, mail, medical services, etc. A steamship agency does not own the ship.

Steamship company - A business that owns ships that operate in international trade.

Steamship conference - A group of vessel operators joined together for the purpose of establishing freight rates.

Steamship line - A steamship (ocean carrier) service running on a particular international route. Examples: NSCSA (National Shipping Company of Saudi Arabia), American President Lines (APL), Maersk Sealand, Evergreen, etc.

Stevedores - Labor management companies that provide equipment and hire workers to transfer cargo between ships and docks. Stevedore companies may also serve as terminal operators. The laborers hired by the stevedoring firms are called stevedores or longshoremen.

Straddle carrier - Container terminal equipment that is motorized and runs on rubber tires. It can straddle a single row of containers and is primarily used to move containers around the terminal, but also to transport containers to and from the **transtainer** and load/unload containers from truck chassis.

Stripping - The process of removing cargo from a container.

Stuffing - The process of packing a container with loose cargo prior to inland or ocean shipment.

Sufferance wharf - A wharf licensed and attended by Customs authorities.

Tank barges - Used for transporting bulk liquids, such as petroleum, chemicals, molasses, vegetable oils and liquefied gases.

Tanker - A ship fitted with tanks to carry liquid cargo such as crude petroleum and petroleum products; chemicals, liquefied gasses (LNG and LPG), wine, molasses, and similar products.

Tariff - Schedule, system of duties imposed by a government on the import/export of goods; also, the charges, rates and rules of a transportation company as listed in published industry tables.

Terminal - specialized berths where all operations are mainly concentrated on a given type of cargo.

Terminal charge - A charge made for a service performed in a carrier’s terminal area.

Terminal facilities - One or more structures comprising a terminal unit at which any licensee performs services, including, but not limited to wharves, warehouses, covered and/or open storage space, cold storage plants, grain elevators, and receiving stations, used for the transmission, care and convenience of cargo and/or passengers in the interchange of same between land and water carriers, or between two water carriers.

Terminal operator - The company that operates cargo handling activities on a wharf. A terminal operator oversees unloading cargo from ship to dock, checking the quantity of cargoes versus the ship's manifest (list of goods), transferring of the cargo into the shed, checking documents authorizing a trucker to pick up cargo, overseeing the loading/unloading of railroad cars, etc.

Throughput charge - The charge for moving a container through a container yard off or onto a ship.

Tonnage - Most ocean freight is billed on the basis of weight or measurement tons (W/M). Weight tons can be expressed in **short tons** of 2,000 pounds, **long tons** of 2,240 pounds or metric tons of 1,000 kilos (2,204.62 pounds). Measurement tons are usually expressed as cargo measurement of 40 cubic feet (1.12 meters) or cubic meters (35.3 cubic feet.)

Toplift - A piece of equipment similar to a forklift that lifts from above rather than below. Used to handle containers in the storage yard to and from storage stacks, trucks and railcars.

Towage - The charge made for towing a vessel.

Towboat - A snub-nosed boat with push knees used for pushing barges. A small towboat (called a push boat) may push one or two barges around the harbor. A large towboat that is used to push from 5 to 40 barges in a tow is called a line boat. From the Port of New Orleans, line boats deliver cargo to Mid-America via the 14,500-mile waterway system flowing through the Crescent City. (See also **tug boat**.)

Trailer On Flat Car (TOFC) A container placed on a chassis that is in turn placed on a railroad car.

Tramp - A ship operating with no fixed route or published schedule.

Transit port - When the majority of cargoes moving through a port are not coming from or destined for the local market, the port is called a transit (or through) port.

Transit shed - The shed on a wharf is designed to protect cargoes from weather damage and is used only for short-term storage. Warehouses operated by private firms house goods for longer periods.

Transshipment - The unloading of cargo at a port or point where it is then reloaded, sometimes into another mode of transportation, for transfer to a final destination.

Transtainer - A type of crane used in the handling of containers that is motorized, mounted on rubber tires, and can straddle at least four railway tracks, some up to six, with a lifting capacity of 35 tons for loading and unloading containers to and from railway cars.

Tugboat - Strong v-hull shaped boat used for maneuvering ships into and out of port and to carry supplies. A ship is too powerful to pull up to the wharf on its own. It cuts power and lets the tug nudge it in. Generally barges are pushed by **towboats**, not tugs.

Turnaround - In water transportation, the time it takes between the arrival of a vessel and its departure.

Twenty foot Equivalent Unit (TEU) - A unit of measurement equal to the space occupied by a standard twenty foot container. Used in stating the capacity of container vessel or storage area. One 40 ft. container is equal to two TEUs.

Vessel - A ship or large boat.

Vessel operator - A firm that charters vessels for its service requirements, which are handled by their own offices or appointed agents at ports of call. Vessel operators also handle the operation of vessels on behalf of owners.

Warehouse - A place in which goods or merchandise is stored.

Waybill (WB) - A document prepared by a transportation line at the point of a shipment; shows the point of the origin, destination, route, consignor, consignee, description of shipment and amount charged for the transportation service. It is forwarded with the shipment or sent by mail to the agent at the transfer point or waybill destination. Unlike a bill of lading, a waybill is not a document of title.

Wharf - The place at which ships tie up to unload and load cargo. The wharf typically has front and rear loading docks (aprons), a transit shed, open (unshedded) storage areas, truck bays, and rail tracks. (see **Terminal**)

Wharfage fee - A charge assessed by a pier or wharf owner for handling incoming or outgoing cargo.

Appendix C: Profiles of Mississippi's Commercial Public Ports

This appendix contains profiles of each of Mississippi's commercial public ports, in the following order:

Gulf Coast ports

- Port of Pascagoula;
- Port of Gulfport; and,
- Port Bienville.

Mississippi River ports

- Port of Natchez;
- Port of Claiborne County;
- Port of Vicksburg;
- Yazoo County Port;
- Port of Greenville; and,
- Port of Rosedale.

Tennessee-Tombigbee Waterway ports

- Yellow Creek Port;
- Port Itawamba;
- Port of Amory;
- Port of Aberdeen;
- Port of Clay County; and,
- Lowndes County Port.

These profiles include information on the port's cargo and customers, characteristics, governance and mission, services, capital improvement plans, and long-term development goals. Regarding capital improvement plans and long-term development goals, when the information was available, PEER noted the status of the plans or goals.

Pages 22 through 26 of the report detail the damage that each port director reported from Hurricane Katrina.

SOURCE: PEER survey of Mississippi port directors.

Port of Pascagoula

The Port of Pascagoula is a deepwater port on the Mississippi Gulf Coast with two harbors, the Pascagoula River Harbor and the Bayou Casotte Harbor. The port's two harbors are a combination of public and private terminals moving more than thirty-four million tons of cargo through the channel annually. The Port of Pascagoula receives slightly more cargo than it ships, with 66% of its trade being to and from foreign destinations. It is continuously ranked in the top twenty-five tonnage handlers among all ports in the United States.

Port Cargo and Customers

Cargo for the Port of Pascagoula originates from markets that include Indonesia, Finland, and various ports in South America. Import cargo includes chemicals, forest products, bulk grains, rubber, phosphate rock, and crude oil. Exports from the port include forest/paper products, frozen poultry and meats, steel, machinery, vehicles, fertilizer, and petroleum products. As part of its strategic mission, the port authority is targeting all types of cargo.

The Jackson County Port Authority owns and maintains a public terminal. In addition, there are federally owned facilities within the port that the U. S. Navy and the U. S. Coast Guard operate. Facilities within port boundaries support shipbuilding and offshore construction and operations, a refinery, chemical terminals, commercial fishing and recreational activities. The Port of Pascagoula has the following private tenants: Gulf Coast Cold Storage, Inc.; CSA; First Chemical; Coastal Cargo; and Signal International, L.L.C.

Port Characteristics

The Port of Pascagoula is a U. S. Customs port of entry, which allows for international importing and exporting. The public port covers 214 acres. The port serves most of Mississippi with industrial and agricultural products. The Port of Pascagoula has channel depths of 38 feet and 42 feet and a barge berth with a draft of 15 feet. Nearly 100% of barges can access the Port of Pascagoula. The port can accommodate 57% of tanker vessels, 69% of bulk vessels, and 91% of container vessels can access the port. The Port of Pascagoula has 1,996,643 square feet of warehouse and dock space.

Governance and Mission

Jackson County has owned the Port of Pascagoula since 1956. A port director is responsible for daily operations at the port with oversight from a nine-member Jackson County Port Authority *board of commissioners*, five of whom the Jackson County Board of Supervisors appoints and four of whom the Governor appoints. The mission of the Jackson County Port Authority is to acquire, develop, and manage assets as necessary to build a world-class, multi-use industrial port and to encourage and support industrial and private investment in Jackson County.

Port Services

Services at the Port of Pascagoula include stevedore services, mooring assistance, fuel, chandler, cargo handling equipment, *drayage*, towing, repairs, fresh water at berth, pilots, divers, and customs brokers, marine tank and vessel cleaners, and warehousing. Transportation of cargo from the port includes rail and major highway access.

The Jackson County Port Authority licenses stevedoring companies that hire their own labor. The stevedoring companies work directly for the shippers. However, the port authority also maintains a relationship with all customers, both shippers and carriers. These companies are Coastal Cargo, CSA, and Tri-State Maritime. Once stevedores receive cargo from inland and *ocean carriers*, they tally, inspect, and distribute the cargo to ocean carriers and inland conveyances. The stevedores also provide storage, recouping, grading, and sampling of cargo as required.

Capital Improvement Plans

In January 2000, the Port of Pascagoula identified \$10,049,000 in needs, including:

- Rehabilitate 200,000 square feet of deteriorated concrete dock both inside and outside buildings E and F (\$3,000,000);
- Replace 2,400 feet of timber pile and wale fender system for E and F, G and H (\$800,000); **Completed**
- Repair or replace roofing on Buildings B-1, G and H (\$650,000); **Completed**
- Rehabilitate 200,000 square feet of deteriorated concrete dock both inside and outside Buildings G and H (\$3,000,000); **In Progress**
- Replace deteriorated 550 feet of fender system at “B” berth at west river (\$250,000); **Completed**

- Upgrade and replace lighting in 80,000 square foot west river building A-1 (\$30,000); **Project cancelled due to changes in plans for the warehouse.**
- Rebuild 5,000-feet of railroad track at Bayou Casotte (\$700,000); **Completed**
- Refurbish Bayou Casotte sewer and water system from Highway 611 to buildings G and H, and buildings E and F (\$182,000); **Completed**
- Replace tie and ballast for 1,800 feet of rail on West River (\$70,000);
- Upgrade existing sprinkler system for Building A-1 (\$28,000); **Project cancelled due to change in plans for warehouse.**
- Upgrade existing sprinkler system for Buildings B-1 and B-2 (\$50,000); **Complete**
- Pave six acres of West Harbor *reefer* truck parking areas inside and outside of gate (\$400,000); **Complete**
- Correct settled areas and provide stone base for use as product storage (\$90,000);
- Purchase a new switcher locomotive for the West River facility to replace aged one (\$125,000); **Complete**
- Replace 1,800 square foot west bank office/shop (\$106,000); **Project cancelled**
- Upgrade existing Bayou Casotte sprinkler system for Buildings G & H and Buildings E & F (\$50,000); **Complete**
- Update and add lighting to Building G and H due to elimination of skylights (\$35,000); **Complete**
- Remove 300 feet of existing deteriorated barge dock (\$90,000);
- Paint interior overhead of Buildings G and H, and paint underside of corrugated roof for preservation (\$393,000). **Roof Replaced.**

In addition to the capital improvements listed above, the port authority has demolished an abandoned *grain elevator* and the site was cleared for development. The property, which is now the Pascagoula River Harbor South Terminal, provides 60 acres, 3,000 feet of berthing space, 38 feet of water and holding for 600 rail cars. The port has completed a dredging project that provides 42 feet of water depth with the ability to pass two vessels in the channel. A connection between the port's access roadways and MS 611 to I-10, and north via MS 63, would relieve some of the congestion created by the shipyard and port traffic during busy times.

Long-Term Development Goals

The Jackson County Port Authority completed a 2004 Strategic Plan Review that resulted in long-term development goals. Specific goals are to:

- Provide a world-class multi-use industrial port through a combination of public and private investment;
- Develop the West Bank of the Pascagoula River to its best and highest value use;
- Develop the East Bank of the Pascagoula River to its best and highest value use;
- Promote and develop Bayou Casotte as waterfront industrial property for the benefit of the state, county, and port;
- Improve rail service with multiple carrier access to port- and county-owned waterfront and industrial locations;
- Exploit the Foreign Trade Zone to the advantage of the port, county, state, and industrial/commercial users;
- Identify, purchase and/or lease property in the county that has the potential for industrial/commercial or public use development in conjunction with the Jackson County Economic Development Foundation and county supervisors;
- Identify, design, build, and manage infrastructure, industrial parks and industrial service facilities in order to facilitate industrial development and county growth, either unilaterally or in conjunction with the Jackson County Economic Development Foundation and the county supervisors;
- Organize staff and create administrative policies and procedures that continue to enable the Jackson County Port authority to work in harmony with the Jackson County Economic Development Foundation, the county supervisors, and the state, and to effectively and efficiently manage the county's industrial and waterfront assets and programs.

Port of Gulfport

The Port of Gulfport is the only state-owned port on the Gulf of Mexico. The port is not a top tonnage handling port. However, it is in the top thirty U. S. ports that handle containerized cargo. It is also one of the top three Gulf ports handling containerized cargo. The port ships and receives about the same amount of cargo, with 97% of the cargo coming from and going to foreign destinations. The Port of Gulfport has niche markets, primarily consisting of tropical fruits and forest products.

Port Cargo and Customers

The Port of Gulfport handled 2.2 million tons of cargo in 2003. The port serves all regions of Mississippi and portions of neighboring states with tropical fruits, minerals, and agricultural products. The Port of Gulfport has two marine terminals, East and West. East Terminal has three berths dedicated primarily to bulk and breakbulk operations. East Terminal customers include Dole Fresh Fruit, Gearbulk, Newman Lumber, and other Central and South American forest product suppliers. West Terminal has seven berths that primarily handle containerized cargo. Major carriers calling at the West Terminal include Chiquita, P&O Corporation, and Crowley Liner Services. The following cargo is limited or discouraged from entering the port: explosives, gases, flammable liquids, oxidizing substances, organic peroxides, toxic and infectious substances, corrosives and miscellaneous dangerous substances and articles, garbage, and coal.

Cargo that entered the Port of Gulfport in 2003 originated at twenty-four ports. Ports of origin are as follows: Port of Mobile (Alabama), Port Manatee, Port of Tampa (Florida), Port Fourchon, Port of New Orleans (Louisiana), Port of Galveston (Texas), Castilla Port, Cortes Port (Honduras), Port of Turbo, Santa Marta (Colombia), St. Thomas (Guatemala), Bolivar Port (Ecuador), Bunbury Port, Campana Port (Argentina), San Marta (Venezuela), Barrios Port, Port of Paranaqua (Brazil), Altamira (Mexico), Rotterdam, Copenhagen Port (Denmark), Rostock (Germany), Mersin (Turkey), Kaliningrad (Russia), and Gibraltar (United Kingdom).

Port Characteristics

The Port of Gulfport is a U. S. Customs port of entry, which allows for international importing and exporting. The public port covers 184 acres. Channel depth for the Port of Gulfport ranges from 32 feet to 36 feet. Nearly 100% of the world's barges can access the Port of Gulfport. However, only 46% of tanker vessels, 47% of bulk vessels, and 60% of container vessels can access the Port of Gulfport. The port has 8,015,040 square feet of warehouse and dock space.

Governance and Mission

The State of Mississippi received ownership of the Port of Gulfport from the City of Gulfport in 1960. The chief executive officer, along with a five-member state port authority board of commissioners, is responsible for the daily operations of the port. MISS. CODE ANN. § 59-5-11 (1972) authorizes the Mississippi Development Authority to oversee operations of the Port of Gulfport through the State Port Authority at Gulfport. The Mississippi Development Authority is responsible for approval of major contractual relationships the board of commissioners considers. The port's mission is to be a profitable, self-sufficient port providing world-class maritime terminal services to present and future customers and to facilitate the economic growth of Mississippi through the promotion of international trade and creation of employment. As part of its mission, port directors are targeting containerized and breakbulk cargo.

Port Services

The Port of Gulfport has stevedore services, mooring assistance, pilots, divers, fresh water at berths, customs brokers, fuel, mooring assistance, chandler, drayage, and cargo handling equipment, and warehousing. The port has two stevedore companies, P & O Ports and Stevedore Services of America, that are able to handle all types of cargo, including *heavy lifts*, containers, bulk, general cargo, and USDA products. The stevedoring companies also provide *stripping* and *stuffing* services to customers who use the Port of Gulfport. Transportation of cargo from the port includes rail and major highway access. The port's governing authority and customers rely on stevedoring companies for the handling of cargo at the Port of Gulfport.

Capital Improvement Plans

In January 2000, the Port of Gulfport had identified \$40,300,000 in needs, which included the following:

- Build a new 75,000-80,000-square-foot warehouse for the East Terminal (\$4,000,000);
- Pave thirty acres of the West Terminal, including lighting and drainage (\$4,000,000);
- Demolish and replace existing 1,200 foot berths 1 and 2 due to deterioration and rebuild to current terminal standards (\$16,000,000);
- Repair West Terminal cofferdam (1,600 feet) and new bulkhead (\$12,000,000);
- Upgrade gantry crane #2 (\$1,400,000);
- Make West Terminal power system improvements, including a new MSPA electrical power station, underground mainline, and distribution system (\$1,400,000); and,
- Make 5,900 feet of timber pile and wale fender system maintenance for all the berthing facilities (\$1,500,000).

Long-Term Development Goals

Prior to Hurricane Katrina, the Port of Gulfport was undertaking a \$114-million, five-year construction plan from 2000 to 2005. Between 2000 and 2010, Port of Gulfport expected projects to total \$200 million. Major development goals included:

- Connect with high-speed north/south rail, create a bypass for road traffic, and own and possibly operate a short line railroad.
- Complete a major dredging project, develop a new container storage area, make operational a new berth and crane, and construct a new warehouse.

Port Bienville is a shallow draft port in the southwest corner of Hancock County, near the intersection of the Mississippi Gulf Coast and the Pearl River. The port is part of an industrial park. It handles more inbound cargo than outbound and 53% of the cargo originates from or goes to foreign destinations.

Port Cargo and Customers

Port Bienville serves Harrison and Hancock counties with agricultural, chemical, and mineral products. Current primary users of port facilities are chemical plants, steel fabrication companies, and bulk materials handlers. Prior to Hurricane Katrina, the port handled approximately 550,000 tons of cargo annually. Cargo for the port originates in Progresso, Mexico; Baton Rouge, Louisiana; Kentucky, and Virginia. The port authority discourages garbage and waste cargo. As part of its strategic mission, the port is targeting container and barge cargo.

Port Bienville has sixteen tenants. Water access tenants include G.E. Plastics, Manufab, Professional Construction Services, SSA Gulf, Gulf Coast Fabrication, and Wellman of Mississippi. Other tenants are A & R Distribution, Blue Flash Express, Calgon Carbon Corporation, Eaglebrook, Global Sourcing and Design, Gulf Concrete, Hancock Industries, MS Polymer Technologies, Polychemie, and South Coast Electric Systems.

Port Characteristics

The public port covers twenty-five acres and is located within the Port Bienville Industrial Park. Due to the controlling depth of twelve feet dictated by the Intracoastal Waterway, the port primarily accommodates barge traffic. It can also accommodate shallow draft ships. There is a ninety-foot horizontal restriction to the port due to the Rigolets Bridge that provides access to the port with no vertical restrictions. The port has 610,780 square feet of warehouse and dock space.

Governance and Mission

Hancock County constructed Port Bienville in 1972. The port's executive director is responsible for daily operations at the port, with oversight from the seven-member Hancock County Port and Harbor Commission. The mission of the Port and Harbor Commission is to enhance the economic well-being and quality of life of the citizens

of Hancock County by promoting, developing, constructing, maintaining and operating harbors, seaports, and industrial parks and by developing environmentally responsible commercial, industrial, and manufacturing enterprises for the encouragement of employment within the boundaries of Hancock County.

Port Services

Major services at Port Bienville include stevedoring, drayage, pilots, customs services, and dock space for short-term lease. SSA Gulf provides stevedore services. This is primarily a bulk unloading activity with trucks provided under the stevedore contract. Stevedore services are arranged directly between port users and their customers. Transportation of cargo from the port includes rail and major highway access.

Capital Improvement Plans

In January 2000, Port Bienville identified \$600,000 in needs. They were:

- Repair existing 450-foot long steel sheet pile bulkhead loosing fill from behind (\$50,000); **completed**
- Rebuild existing 400-foot bulkhead (\$250,000); **completed**
- Provide dredging to existing 6,700-foot ship channel for access of ship traffic to port (\$150,000 per year); **completed**, and,
- Repair/replace 150 feet of collapsed timber bulkhead at Area 5A (\$150,000) **completed**.

Long-Term Development Goals

The port plans to develop additional berthing and storage facilities, potential dredging, and new internal rail connections. Specifically, the port plans to construct a north/south rail link to the Norfolk Southern Railroad; to construct a new access road from old Highway 90 to new Highway 90; dredge and improve Berth 3 to accommodate additional loading and unloading activities; and construct 4,000 linear feet of improved bulkhead.

The Port of Natchez serves surrounding Mississippi counties and Louisiana parishes with agricultural, chemical, and forestry products. The port has handled up to one million tons annually, but currently handles 150,000 tons of cargo. The Port of Natchez receives more cargo than it ships. Although the port has shipped internationally, it does not directly ship to or receive cargo from foreign destinations.

Port Cargo and Customers

The port handles a variety of products, including chemicals, aluminum ore, cement, and various food and farm products. No class of cargo is discouraged or limited. Tenants at the port include Bad Boy Enterprises, Bastek, Blackdog Manufacturing, Buzzi Unicem, Dynasteel Corporation, Provision, Tessengerlo Davison Chemicals, and the U. S. Coast Guard. As part of its strategic plan, the port is targeting bulk and breakbulk cargo.

Port Characteristics

The public port covers eleven acres. With a natural deepwater channel depth of twenty-two feet, nearly 100% of barges can access the port. The port can accommodate 14% of container vessels, but tanker or bulk vessels cannot access the port. The port has two barge berths. The port has 111,000 square feet of warehouse and dock space.

Governance and Mission

Adams County has owned the Port of Natchez since 1954. A port director is in charge of daily operations, with oversight from the five-member Port of Natchez Commission. The mission of the port commission is to increase its client base and tonnage. Since 2003, the port has experienced a steady increase in both.

Port Services

Services at the Port of Natchez include stevedoring, mooring assistance, cargo handling equipment, drayage, towing, repairs, and fresh water at berth. The port has rail access and major highway access within three miles.

Port employees provide stevedore services at the port. Employees temporarily place, store, and reload cargo that arrives by barge, truck, or rail, then employees load the

cargo onto its required mode of transportation equipment for shipment to its final destination. Cargo customers pay a fee for stevedore services.

Capital Improvement Plans

In January 2000, Port of Natchez identified \$860,000 in needs. They were:

- Repair and improve liquid loading dock (\$750,000); and,
- Purchase a trackmobile to support current and future rail operations (\$110,000).

Current needs that the port has identified include:

- Repair and improve liquid loading terminal (\$750,000);
- Repair and improve the port's south general cargo dock (\$296,700);
- Rehabilitate two existing cranes (\$155,000); and,
- Purchase a mobile conveyor system (\$70,000).

Long-Term Development Goals

The Port of Natchez plans to increase its capacity to handle an increase in cargo, including the completion of the bulk cargo handling dock (which includes paving the road access), extending the rail, and completing the covered conveyor system. The longer-range plans include deeper channel depths to handle oceangoing barges and smaller vessels, a rail extension and maintenance program on the terminal, creation of an overpass at the juncture of the rail and road entrance, rebuilding a bridge along the major access, and major road improvements along the truck route access.

Port of Claiborne County

The Port of Claiborne County is presently inactive and was last active in 2001. It is located eight miles west of Port Gibson, off U. S. Highway 61.

Port Cargo and Customers

The port does not currently handle cargo and it does not have customers. However, it has served surrounding Mississippi counties with pulpwood.

Port Characteristics

The Port of Claiborne County is a slack water port with the public port covering 410 acres. The port has a channel depth of fourteen feet. The Port of Claiborne County has 66,859 square feet of warehouse and dock space.

Governance

Claiborne County has owned the Port of Claiborne County since 1991. An executive director maintained the port daily with oversight from a ten-member Claiborne County Port Commission.

Port Services

Services at the Port of Claiborne County included stevedoring, mooring assistance, drayage, and fresh water at berth.

Capital Improvement Plans

In January 2000, the Port of Claiborne County identified \$330,000 in needs. They are:

- Pave existing two-lane entrance road to port that is one mile long (\$300,000); and,
- Recoat the existing structure of pier and dolphins due to normal coating deterioration (\$30,000).

Current improvement needs are estimated at more than \$1 million and include:

- Provide adequate electrical power to the port;
- Construct needed warehouse space;
- Improve the port's access road (Grand Gulf Port Connector Road); and,

- Purchase and install a crane to load and unload *cargo* from *barges*.

Long-Term Development Goals

The Port Commission is marketing and preparing the port for a potential second nuclear reactor at the Grand Gulf Nuclear Station.

Port of Vicksburg

The Port of Vicksburg is located on a tributary near the intersection of the Mississippi and Yazoo rivers. The port has an industrial park with major commercial customers and tenants. It is located at U. S. Highway 61, twelve miles north of Interstate 20. The majority of cargo handled at the port is inbound, with no direct shipments to or receipt of cargo from foreign ports.

Port Cargo and Customers

The Port of Vicksburg handled 3.6 million tons of cargo in 2003. The port serves surrounding Mississippi counties and a Louisiana parish with industrial and agricultural products. The port is a U. S. Customs port of entry that is suitable for imports and exports. The Port of Vicksburg receives more than twice the amount of cargo than it ships out. Commodities include petroleum, chemicals, crude materials such as wood, limestone, and gravel, and manufactured goods such as lime, concrete, and aluminum. The port limits or discourages explosives as cargo.

All tenants of the port are private except a city-owned water treatment plant. Port tenants are Anderson-Tully, Beavers Diesel, Big River Shipbuilders, Bunge North America, Capella Engineered Wood, Citgo Petroleum, Conagra International Fertilizer, DTE Petcoke, Efabco Building, Ergon Refining, Excide Building, Falco Lime, Graham Packaging, Harbor Warehousing, Hillcity Oil Company, Holcim Cement, Kinder Morgan Bulk Terminals, Magnolia Marine Transport Company, Neill Gas, Pennzoil-Quaker State, Polyvulc USA, Smith Towing, Specialty Process Fabricator, U. S. Coast Guard, U. S. Corps of Engineers, Vicksburg Water Treatment Plant, Vicksmetal/Armco Associates, and Waring Oil Company.

Port Characteristics

The public port covers three acres and has two barge berths, both with a draft of twelve feet. With barge drafts of twelve feet, 94% of the world's barges can access the Port of Vicksburg. However, no vessels can access the port. The port has 129,000 square feet of warehouse and dock space.

Governance and Mission

Warren County has owned the Port of Vicksburg since the 1960s. A contract terminal manager takes care of daily

port operations with oversight from a five-member port commission. The mission of the port is to enhance, facilitate, develop, and create jobs in Warren County and to provide economical transportation.

Port Services

Services at the port include stevedoring, fuel and chandler, cargo handling equipment, drayage, towing, repairs, fresh water at berth, pilots, customs broker, and divers. Kinder Morgan Terminals provides stevedore services for the port under a lease agreement with the Port Commission. Kinder Morgan also maintains relationships with customers of the public terminal. The stevedore supplies a full line of terminal services, including unloading/reloading to and from barges, trucks, or rail. The company provides inside and outside storage for general cargo and some *dry bulk* cargo. The Port of Vicksburg has rail access and major highway access four miles away.

Capital Improvement Plans

In January 2006, the Port of Vicksburg identified \$3,900,000 in needs. They are:

- Replace the existing 400-foot long, two-lane bridge access to the port with a modern four-lane bridge (\$2,000,000).
- Upgrade and rehabilitate the bridge crane infrastructure and replace the fifteen-ton crane (\$1,400,000).
- Upgrade and rehabilitate the T-Dock facility (\$500,000).

Long-Term Development Goals

The Port of Vicksburg has a capital budget of over \$1 million that includes repairing and upgrading over 900 feet of existing rail track. Improvements to an existing bridge crane, purchase of a new forty-ton crane, installation of a truck and rail scale, increased capacity of the rail spur by 1,000 feet, rehabilitation of certain port facilities, dredging of the cut in the Mississippi River, and increasing the depth of the channel to twelve feet. For the future, improvements are planned for roadways and creating a truck bypass to alleviate congestion through the city.

The master plan for the Port of Vicksburg is to develop an aggressive marketing plan and secure additional land for industrial development. The vision for the port includes

pursuing the possibility of relocating some industries that do not depend on water location for their business to expand to other areas within Warren County and Vicksburg. As part of its strategic mission, the Port Commission is pursuing the rebirth of paper shipments, primarily domestic, and new steel customers. In addition, the commission is investigating dry bulk agricultural products.

Yazoo County Port

The Yazoo County Port is a shallow draft port that is located on the Yazoo River, a branch of the Mississippi River. In 2003, the port handled 372,000 tons of cargo, 95% of which was shipped from the port or was outbound. As of June 2005, 100% of the cargo handled at the port was outbound.

Port Cargo and Customers

Currently, everything shipped from the port is produced in Yazoo County. The only commodity shipped from the port is nitrogenous fertilizer, which the port's only tenant and lessor manufactures. There is no incoming cargo. Commodities that have shipped from the port in the past include fertilizers, corn, soybeans, and sorghum grains. As part of its strategic mission, the port would ship soybeans from the port if the need arises. The port does not have a policy that discourages or limits any cargo at the port.

Port Characteristics

The public port covers fifteen acres and has a channel depth of nine feet. The port can accommodate 75% of barges and no ships. The port has 9,800 square feet of warehouse and dock space.

Governance and Mission

Yazoo County has owned the Yazoo County Port since 1964. A port director and the Terra Chemical Corporation tend to the daily operations of the port with oversight from a five-member port commission. The county currently leases the port to Terra Chemical to operate as a public port. The port's mission is simply to ship all fertilizer that arrives at the port.

Port Services

Services at the Yazoo County Port include stevedoring, mooring assistance, cargo handling equipment, drayage, and fresh water at berth. Employees of Terra Chemical handle the services at the port. Once fertilizer arrives at the port by truck, Terra Chemical employees empty it into a *hopper* and deliver it to a barge. The port has direct rail access and major highway access a half-mile away from the port.

Capital Improvement Plans

In January 2000, the Yazoo County Port identified \$25,000 in needs, which was to rehabilitate existing 5,000 square foot warehouse.

Long-Term Development Goals

The Yazoo County Port has no long-term development goals. Since all land is developed and the port has no other customers, there are no plans to expand.

The Port of Greenville is an upper Mississippi River port within Mississippi. It is considered one of the top twenty inland ports and serves as a U. S. Customs port of entry. In 2003, the port handled 3.2 million tons of cargo, of which 57% was inbound and none was foreign trade.

Port Cargo and Customers

Cargo includes petroleum products such as gasoline and fuel oil, chemicals such as fertilizers, crude materials such as limestone and gravel, and food and farm products such as soybeans, rice, and corn.

The majority of cargo unloaded at the public terminal is domestic in origin. Several of the loads come from Alton and Chester, Illinois, and Owensboro, Kentucky. In 2005, there were five barges of coil rod shipped from Brazil and five barges of coal from Kentucky. The public terminal currently has no class of cargo on an embargo list.

The Port of Greenville has twenty-nine public and private tenants. Public tenants include Greenville Boat Ramp, Greenville Port Terminal North, City Waterfront, Mississippi Levee Board, U. S. Coast Guard, and Greenville Port Terminal. Private tenants include Warren Petroleum, Bunge Corporation, U. S. Gypsum, Greenville Gravel Company, Nichols Propeller, Lighthouse Point Casino, Greenville Yacht Club, Jubilee Casino, Itapco, Transmontaigne Terminaling, Superior Boat Works, Paducah Rigging, Con Agra, Farmer's Grain, Great Dane/Pines Trailer, Mississippi Marine, APAC Asphalt, Terral River Services, Scott Petroleum, Morris Recycling, Producer's Rice, Gerald Andrus Steam Generating Plant, and Wepfer Marine.

Port Characteristics

The public port covers ten acres and is a shallow draft river port with a channel depth of nine feet. No ship vessel would be able to access the port. The port has 450,000 square feet of warehouse and dock space.

Governance and Mission

Washington County has owned the Port of Greenville since the 1930s. A port director runs the daily operations of the port, with oversight from a five-member commission.

The mission of the Greenville Port Commission is to serve the public and private sectors of the region by providing

responsible, efficient, economical, safe, and timely transload and storage of cargo to and from truck, rail, and barge. The port also is involved with the private sector in developing, stabilizing, and growing all aspects of commerce that are water-related through its contacts with local, state, and federal delegations.

Port Services

Port services include stevedoring, mooring assistance, cargo handling equipment, drayage, and towing. The Port of Greenville has direct rail access and major highway access is three miles away from the port.

Port employees provide stevedore services for the port. When a barge enters the terminal for unloading, it is placed under the covered bridge crane where there are four all-weather berths. The tops, if any, are removed and the cargo is loaded to either a truck or train, if it is immediately outbound, or transported to the warehouse if it is to be stored. Barges that arrive to be loaded are either placed under the bridge crane or at the open berth where the cargo is loaded either by dumping it down a chute, transferred via conveyor, or loaded with slings by the overhead crane, depending on the nature of the cargo. Outbound scrap metal is dumped down a chute, bulk grain products are conveyed, and bagged cargo is placed with overhead cranes.

Capital Improvement Plans

In January 2000, the Port of Greenville identified \$1,550,000 in needs. They are:

- Repair/replace one mile of main concrete access road to port. Pave 1,000 feet of shoulders for more efficient use (\$1,500,000).
- Repair 500 square yards of ten-inch-thick wharf dock surface that has settled (\$50,000).

Long-Term Development Goals

The Greenville Port Commission envisions developing for inbound and outbound containerized cargo a 220-acre site on Lake Ferguson that the Port Commission administers for the Mississippi Levee Board and the addition of more acreage contiguous to the present terminal. In addition to containerized cargo, the port commission is targeting grain products and their by-products, project cargo, and lumber products as part of its strategic cargo.

The Port of Greenville has constructed a new barge facility, which includes four new covered barge berths, a new sixty-

ton overhead gantry crane, and truck and rail access directly under the crane. The port also intends to continue annual maintenance on facilities, connector roads and its six miles of rail. Included in future planning is an increase in rail holding capability from twenty-two cars to over forty-five cars.

The Port of Rosedale is the northernmost Mississippi port on the Mississippi River. The port serves surrounding counties with agricultural and steel products. In 2003, the port handled 526,000 tons of cargo, with nearly half being inbound and none being foreign trade.

Port Cargo and Customers

The Port of Rosedale receives and ships an equal proportion of domestic cargo. Commodities include fertilizers, waterway improvement materials, iron and steel bars, and a small amount of food products. Cargo arrives to the Port of Rosedale from the Port of New Orleans. Cargo is not limited or discouraged, rather each is judged individually.

The port has a number of private tenants on and off the channel. On-channel tenants include Jantran, Helena Chemical, Sanders, Inc., and Cives Steel. The public terminal is also on the channel. Off-channel tenants include APAC and Jesco Resources.

Port Characteristics

The public port covers seventy-five acres and has 67,000 square feet of warehouse and dock space.

Governance and Mission

The City of Rosedale and Bolivar County have owned the Port of Rosedale since 1977. A port director takes care of daily operations, with oversight from a seven-member port commission. The mission for the port is to locate additional industries using the inland river system and to increase cargo tonnages for the public terminal. Furthermore, the mission is to provide jobs and create additional taxes.

Port Services

Services at the Port of Rosedale include stevedoring, mooring assistance, cargo handling equipment, drayage, towing, repairs, and fresh water at berth. The port has direct rail access, and a major highway is twenty miles away. Rail is currently embargoed for use due to cost. Port employees provide stevedoring services for inbound barge shipments of steel, aggregates, soybean meal, pellets, and other dry-bulk materials. Port employees also

provide stevedoring services for outbound cargo, including cottonseed, cottonseed hulls, rice, soybeans, and other general cargo that might be requested. No liquid handling facilities are available at the public terminal.

Capital Improvement Plans

In January 2000, the Port of Rosedale identified \$2,235,000 in needs. They are:

- Resurface and widen one mile of existing access road (\$500,000).
- Refurbish twenty-two miles of existing railroad tracks, replacing ties and reballast as required (\$1,500,000).
- Purchase a new 8,000-pound capacity forklift (\$35,000).
- Repair and resurface pile coating at main dock (\$200,000).

Long-Term Development Goals

The Port of Rosedale has identified two major landside access projects. They are applying for funds under the federally funded, state-controlled Intermodal Connector Improvement Program to rehabilitate an access road that will link their port and their new industrial park. This project will be accomplished in sections to reduce the overall cost and is estimated at \$250,000. Recently, the Port of Rosedale embargoed movement over its thirty-mile short line railroad due to the condition of the crossties, ballast, and rail. Over twenty-two miles are seventy-pound rail, which is too light for the type of cargo being handled.

The port commission has optioned a thirty-eight-acre hydraulic-fill site with a seven-acre berm to a firm to build a facility costing in excess of \$100,000,000. This opportunity would create a major tonnage increase as well as provide high-paying technical jobs. The port commission is attempting to locate a steel use that would allow the public terminal to increase its steel handling tonnage. This became part of the port's strategic mission due to a plant closure.

Yellow Creek Port

Yellow Creek Port is the only state-owned inland port. The port is the northernmost Mississippi port located on the Tennessee-Tombigbee Waterway.

Port Cargo and Customers

Yellow Creek Port primarily handles steel for customers in surrounding Mississippi counties, Tennessee, and Alabama. The port has served as a southeastern United States regional distribution center for “I-beams” used in mobile homes and steel rods. Currently, port cargo includes steel coils for about eighty customers and large fabricated steel components for three large steel fabricators. Cargo enters the port from various locations, including other states. Port authorities discourage or limit scrap and hazardous material, and fertilizers. Private tenants at the port facility include FerrouSouth, Skyline, PSP/Montech, Ergon, Dynasteel, and Rollform Group.

Port Characteristics

The public port covers eight acres. Yellow Creek Port has a channel depth of nine feet and can accommodate 75% of the world’s barges, but cannot accommodate vessels. There is direct rail access at the port and major highway access within fifteen miles. The port has large capacity cranes and forklifts. The port has 100,000 square feet of warehouse and dock space.

Governance and Mission

The State of Mississippi has owned the Yellow Creek Port since 1972. An executive director tends to the daily operations of the port, with oversight by the State Inland Port Authority. The port authority’s mission is to provide economical and competitive services.

Port Services

Services at the Yellow Creek Port include stevedoring, mooring assistance, cargo handling equipment, repairs, fresh water at berth, pilots, and divers. Port employees provide all stevedore services.

Capital Improvement Plans

In 2006, Yellow Creek Port identified approximately \$6 million in needs. Plans include:

- Site work for Rollform Group, a new tenant.
- A three-mile rail spur in the industrial park for a bio-fuel tenant.
- Expansion projects, including an additional building and an overhead crane.
- Additional infrastructure improvements.

Long-Term Development Goals

Activities are ongoing under port-supported investment. The port committed over \$2.6 million in the construction of a new barge facility in the Northeast Mississippi Waterway Industrial Park. This investment includes a barge berth, rail, roads and infrastructure, a new crane and development of up to 220 acres. Yellow Creek Port is improving the ten-mile rail spur leading to the port, as well as conducting internal facility maintenance on roadways and rails. The port is currently targeting steel and container cargo.

Port Cargo and Customers

Port Itawamba serves surrounding Mississippi and Alabama counties with steel coils, scrap copper, potash, long logs, wood bark, wood chips, and crushed rock.

Port Characteristics

The public port covers three acres and has a channel depth of 10.5 feet. It can accommodate 75% of the world's barges, but cannot accommodate vessels. There is direct rail and major highway access at the port. The port has 145,680 square feet of warehouse and dock space.

Governance

Itawamba County has owned Port Itawamba since 1975. A port director is in charge of the port's daily operations, with oversight from a five-member county port commission.

Port Services

Services at Port Itawamba include cargo handling equipment, drayage, fresh water at berth, and divers.

Capital Improvement Plans

In 2000, Port Itawamba identified \$1,015,000 in needs. Plans are to:

- Replace a leased crane with a new 150-ton crawler gantry crane in order to support current operations at the bulk unloading berth (\$700,000).
- Obtain a barge jockey electric winch powered system for moving barges within the berth (\$50,000).
- Add new loading equipment for aggregate, including hopper and a 200-foot by 100-foot pad (\$120,000).
- Upgrade an existing thirty-six-inch conveyor system to a ninety-foot-long one (\$45,000).
- Repair or replace the existing breasting dolphin to support existing loading operations (\$100,000).

Long-Term Development Goals

Development goals call for a combination of rail access improvements, a new covered barge terminal complete with increased berth in capability, a new sixty-ton overhead bridge crane, and both truck and rail access directly to the barge area. The port estimates improvements will cost approximately \$3 million, with \$2 million committed by the port and over \$1 million from grants (total cost \$3,200,000).

The Port of Amory serves Monroe County with raw materials and wood milling. The city's public port was inactive for twenty years, from 1985 to July 2005. Presently two industries operate at the port, Weyerhaeuser and Kinder Morgan. Weyerhaeuser owns the land on which it operates and has a dock that adjoins the city's dock on the south side. Weyerhaeuser has been operating at the port since 1985, producing wood chips and mulch from trees. Kinder Morgan began operations in July 2005 unloading bulk ores from barges, storing, mixing, and transporting this ore to Tronox in Hamilton.

Port Cargo and Customers

Since July 2005, the Port of Amory has handled inbound and outbound cargo. The Port of Amory restricts all hazardous materials and all cargo that the Department of Homeland Security restricts. The port is targeting new materials that include containers, ore, petcoke, steel, fertilizer, rock, garments, energy, and forestry and agricultural products.

Port Characteristics

The Port of Amory is located on the Tombigbee River on Mississippi's upper portion of the Tennessee-Tombigbee Waterway. The public port covers twenty-four acres of space. The Port of Amory has a channel depth of nine feet and can accommodate 75% of the world's barges. The port cannot accommodate vessels. The Port of Amory has rail access and major highway access within a half mile. The port has 532,720 square feet of warehouse and dock space.

Governance and Mission

The city of Amory has owned the Port of Amory since the Tennessee-Tombigbee Waterway was completed in 1985. The mayor of Amory serves as the port director and has delegated facilitating port operations to the city planner. The city plans to expand the present services at the port by increasing the amount of bulk ore handled at the port and by handling new types of materials for present and new customers.

Port Services

Services at the Port of Amory include cargo handling equipment, drayage, and fresh water at berth. The Kinder Morgan Company provides stevedore services at the port. The twenty-four acres of public port that the City of Amory owns is leased to Kinder Morgan for a ten-year period.

Kinder Morgan's stevedore services include unloading barges or containers from the water by using a large excavator or thirty-ton overhead crane. The stevedore can also unload cargo from rail or from trucks. Presently, bulk ore is unloaded from barges, stored in domes, mixed using a conveyor, and loaded into rail cars or trucks, then transported by rail or trucks to Tronox in Hamilton. The stevedore also provides fleeting service for barges using a tugboat that Kinder Morgan owns.

Through its lease from the city, Kinder Morgan has exclusive use of the twenty-four acres of land containing the crane and dock wall and non-exclusive use of the rail spur and access roads. Cargo customers must do business directly with Kinder Morgan for stevedore services.

Capital Improvement Plans

In 2005, the City of Amory completed improvements to Waterway Drive, which connects the port with highways 6 and 278 at a cost of \$1.4 million. The same year, the city completed rehabilitation of the Port of Amory, which had been inactive for twenty years. Rehabilitation included work on the dock, wall, crane, rail spur, access road, and channel (dredging). The City of Amory is in the process of adding side parking lanes on Waterway Drive on the south side of the Weyerhaeuser facility. Bidding should begin for the construction of these lanes within the next three months, with an estimated cost of \$220,000. Within the next two years, the access road entering the port from Waterway Drive on the north side of Kinder Morgan will need improving, at an estimated cost of more than \$500,000.

Long-Term Development Goals

In 2005, the City of Amory sold 152 acres of land to Southern Ethanol Co., LLC for construction of a biorefining and alternative energy complex with an estimated capital cost of over \$100 million. The acreage is located on the south end of the port's industrial park next to Highway 278. An announcement of plans for the start of construction is expected in 2006.

The city owns twenty-eight acres of undeveloped land on the north side of Kinder Morgan with access to the

waterway, highway, and rail spur. The city anticipates leasing this land to an industrial prospect during 2006.

Additionally, the city owns a thirty-acre tract of land between Weyerhaeuser and Southern Ethanol that is undeveloped and approximately fifty acres of land across Waterway Drive from the waterway that is undeveloped. These additional tracts of land should become more marketable with the recent construction of the Kinder Morgan facility and the anticipated construction of the ethanol plant. Utilization of these tracts of land is expected within the next five years.

City personnel have developed the following land development goals:

- 2006 - lease the twenty-eight-acre tract north of the dock to a new or present industry.
- 2006-2007 - start construction by Southern Ethanol on its 152-acre site.
- 2007-2009 - lease thirty-acre tract owned by the city to a new or present industry.
- 2008-2011 - lease fifty-acre tract across Waterway Drive to a new or present industry.

Port of Aberdeen

The Port of Aberdeen is on the Tennessee-Tombigbee Waterway. The port handles only domestic cargo and no foreign cargo. Inbound vessels comprise 82% of the port's traffic, with very little traffic going from the port.

Port Customers

The Port of Aberdeen serves surrounding Mississippi and Alabama counties by handling chemicals, fuel, oil, logs, bentonite clay, and fertilizer. The ports of origin for fertilizer and gasoline are New Orleans and Mobile, respectively. Port authorities do not discourage or limit any cargo. Port tenants include Mico, Pearson Technologies, Tom Soya Grain, Jackson Wood Fiber, and Texaco.

Port Characteristics

The public port covers eighty acres and has a channel depth of nine feet, accommodating 84% of the world's barges. The port has 160,000 square feet of warehouse and dock space.

Governance and Mission

The city of Aberdeen has owned the Port of Aberdeen since 1986. The mayor of Aberdeen serves as the port director. The board of aldermen provides oversight for the port. The mission for the Port of Aberdeen is to develop the potential for numerous businesses to locate on the available land near the port through the ability for barges to load and unload their cargo at port.

Port Services

Services at the Port of Aberdeen include stevedoring, mooring assistance, cargo handling equipment, drayage, and towing. The Tom Soya Grain Company provides stevedore services. These services include complete logistics from cargo origin to destination. The stevedore works directly with cargo and governing port authorities.

Capital Improvement Plans

In 2000, the Port of Aberdeen identified \$2,760,000 in needs. Plans were to:

- Replace existing mooring/breasting dolphins and repair five other dolphins (\$170,000). **Completed**
- Dredge the *slip* area (\$90,000).
- Extend rail spur two miles (\$1,500,000).
- Provide an additional 1,200-foot slip, with two dolphins and a forty-five-foot-diameter loading cell (\$1,000,000).

Long-Term Development Goals

The Port of Aberdeen has planned two major projects, including the installation of rail from the mainline to the terminal. Without rail, the Port of Aberdeen has not been able to compete for projects and recently lost a project to Port Itawamba due to the lack of direct rail service.

The port authorities plan to increase the inbound and outbound tonnage, and to locate additional business on or near the port in order to make it a vital port on the waterway. The authorities further plan to target nonperishable cargo that can be containerized or that can be loaded on barges. Also, the plan is to be able to ship items for manufacturers such as furniture, ethanol, and cotton.

Port of Clay County

The Port of Clay County serves surrounding counties with soybeans, corn, and rock salt. The port handles 165,000 tons of cargo annually.

Port Cargo and Customers

The Port of Clay County has the distinction of handling corrosives, which accelerates the wear on equipment. The port also has a roll-on, roll-off concrete dock currently being used by local industry. The port of origin for cargo entering the Port of Clay County is New Iberia, Louisiana. The Port of Clay County does not discourage or limit cargo, but considers all cargo. The port currently has two private tenants: B and W of West Point and the Tom Soya Grain Company.

Port Characteristics

The public port has twenty acres and a channel depth of nine to twelve feet. The port can accommodate 75% of the world's barges, but cannot accommodate vessels. The port has 14,600 square feet of warehouse and dock space.

Governance and Mission

Clay County has owned the port since 1984. The Tom Soya Company operates the port and leases the port from Clay County. The port's mission is to provide stevedoring and logistic services for any interested barge shipper.

Port Services

Services at the Port of Clay County include stevedoring, mooring assistance, fuel, cargo handling equipment, drayage, towing, repairs, and fresh water at berth. The Tom Soya Grain Company provides stevedoring services, which include logistics from origin to destination--that is, loading at origin, barge transportation to port, offloading, and scheduling trucks out of port. The stevedore, Tom Soya Grain Company, acting as port manager, maintains business relationships with shippers at origin and cargo customers at final destination.

Capital Improvement Plans

In 2000, the Port of Clay County identified \$1,250,000 in needs. They were:

- Dredge existing berth (\$100,000); Existing berth was dredged in 2004-2005 at a cost of \$82,000.
- Obtain a 120-ton crawler crane (\$700,000); Purchased a used 100-ton crawler crane at a cost of \$325,000.
- Replace a 190-ton capacity hopper (\$55,000).
- Replace the existing 300-foot conveyor (\$120,000).
- Replace the existing deteriorated compact front-end loader (\$30,000); replaced three times since 2000 at a cost of \$93,000.
- Replace the existing equipment with two cubic yard front-end loader (\$125,000).
- Obtain two new *mooring dolphins* at bridge unloading facility (\$120,000).

Long-Term Development Goals

Port managers identified the following improvement needs:

- Replace two 190-ton hoppers (\$120,000);
- Replace a 300-foot belt conveyor (\$135,000);
- Install two new mooring dolphins at bridge unloading facility (\$140,000); and
- Grub and re-berm existing dredge disposal site (\$42,000).

The Port of Clay County has no master site development plan due to low user interest levels over the past twenty years. However, port managers state that they continue to solicit users and shippers in efforts to bring the port to its fullest potential. As part of its mission, the port is currently targeting bulk, liquid, and heavy roll-on, roll-off equipment.

Lowndes County Port

The Lowndes County Port, located in Columbus, is at the mid-point of the Tennessee-Tombigbee Waterway and is the southernmost Mississippi port on the waterway. The port offers intermodal capability, with accessible highway and rail connections, stevedoring services, warehousing, and paved truck parking.

Port Cargo and Customers

The Lowndes County Port serves surrounding Mississippi and Alabama counties with numerous industrial products such as chemicals, steel, and forest products. In 2003, cargo to the port originated in McIntosh, Alabama; Taft, Louisiana; Covington, Louisiana; and Sunshine, Louisiana. The port does not allow cargo such as garbage or cargo that is toxic or highly flammable. The port is strategically targeting steel raw materials and finished products.

The Lowndes County Port has five tenants that include Baldor Electric Motors, Georgia Pacific, Southern Ionics, Southern Wood Fiber, and Stevedoring Services of America/Logistic Services. In addition to waterborne outbound cargo of wood chips and inbound chemicals, wood pulp and fiber comes and goes by truck, but is not transported on water.

Port Characteristics

The public port covers nineteen acres and can accommodate 75% of the world's barges. The port cannot accommodate vessels. The port has 400,000 square feet of warehouse and dock space.

Governance and Mission

Lowndes County has owned the Lowndes County Port since 1975. A port director is responsible for daily operations at the port. A five-member port authority provides oversight for the port. The port authority's mission is to be able to offer business and industry a competitive, efficient means of moving their cargo.

Port Services

Services at the Lowndes County Port include stevedoring, mooring assistance, fuel, cargo handling equipment, drayage, repairs, fresh water at berth, divers, and a railcar mover. Stevedoring Services of America is the stevedore

for the Lowndes County Port. Stevedore services include intermodal cargo transfer, weighing, storage and container preparation. The stevedore service leases the facility from the port authority and performs services for cargo customers.

Capital Improvement Plans

Current plans are to upgrade both the forty-ton bridge crane and the 100-ton tracked crane.

Long-Term Development Goals

All of the port's roadways have been resurfaced within the last four years and a 250-truck marshalling area has been constructed.

The port is in the process of purchasing an additional fifty acres with waterfront access for port expansion and is planning an additional 1,200-foot section of rail spur. The port is also upgrading its existing infrastructure and equipment to meet the needs of its industrial base for economical transportation.

SOURCES: American Association of Port Authorities *Glossary of Maritime Terms*; U. S. Maritime Administration *Glossary of Shipping Terms*; and PEER survey of Mississippi's port directors.

**Appendix D: 2003 Tonnage and Cargo by Port
(thousands short tons)**

Gulf Coast [34,007]

	Domestic		Foreign	
	Inbound	Outbound	Inbound	Outbound
Port of Pascagoula (Total 31,292)	1,131	9,377	17,514	3,270
<i>Petroleum and petroleum products</i>	475	8,096	16,201	2,496
Crude petroleum	48	55	16,103	0
Gasoline	58	4,677	5	51
Kerosene	0	90	36	0
Distillate fuel oil	252	959	57	87
Residual fuel oil	74	1,550	0	500
Naphtha and solvents	26	68	0	0
Lube oil and greases	0	0	0	12
Petroleum coke	0	227	0	1,846
Liquid natural gas	0	419	0	0
Petroleum products nec.	17	51	0	0
<i>Chemicals and related products</i>	545	1,237	155	326
Nitrogenous fertilizer	9	2	0	0
Potassic fertilizer	0	2	0	0
Fertilizer and mixes nec.	0	265	0	249
Acyclic hydrocarbons	1	0	0	0
Benzene	185	412	0	0
Other hydrocarbons	244	132	0	77
Nitrogen func. Comp.	0	87	0	0
Sulphur (liquid)	0	263	0	0
Sulphuric acid	86	68	9	3
Ammonia	12	0	155	0
Sodium hydroxide	8	0	0	0
Metallic salts	0	7	0	0
<i>Crude materials</i>	90	17	1,120	17
Rubber and gums	0	0	15	0
Lumber	0	0	13	17
Limestone	19	0	0	0
Sand and gravel	59	0	0	0
Clay and refractory materials	11	15	0	0
Non-metallic mineral nec.	2	2	0	0
Phosphate rock	0	0	1,091	0
<i>Primary manufactured goods</i>	3	1	1	101
Paper and paperboard	0	0	0	78
Miscellaneous mineral products	2	0	0	0
Iron and steel primary forms	0	0	0	16
Iron and steel pipe and tube	1	1	0	0
Fabricated metal products	0	0	1	3
Primary wood products	0	0	0	3
<i>Food and farm products</i>	12	13	0	313
Oats	5	0	0	0
Meat, fresh, frozen	0	0	0	312
Animal feed, prep.	3	7	0	0
Water and ice	4	6	0	0
<i>Manufactured equipment, machinery</i>	5	14	13	6
Machinery (not electric)	5	12	0	6

**Appendix D: 2003 Tonnage and Cargo by Port
(thousands short tons)**

Vehicles and parts	0	0	0	1
Ships and boats	0	0	13	0
Manufactured products nec.	0	1	0	0
Unknown or unclassified	0	0	13	8
Unknown or unclassified	0	0	13	8

	Domestic		Foreign	
	Inbound	Outbound	Inbound	Outbound
Port of Gulfport (Total 2,243)	38	33	1,228	942
Coal	0	0	0	1
Coal coke	0	0	0	1
Petroleum and Petroleum Products	5	0	0	32
Distillate fuel oil	5	0	0	5
Lube oil and greases	0	0	0	20
Naphtha and solvents	0	0	0	7
Chemicals and Related Products	0	0	2	33
Carboxylic acids	0	0	0	1
Inorganic elements, oxides, halogen salts	0	0	0	1
Pigments and paints	0	0	0	1
Coloring materials nec.	0	0	0	1
Perfumes and cleansers	0	0	0	3
Plastics	0	0	1	19
Pesticides	0	0	1	3
Starches, gluten, glue	0	0	0	1
Chemical additives	0	0	0	1
Chemical product nec.	0	0	0	2
Crude Materials	34	16	260	34
Wood in the rough	0	0	0	2
Lumber	0	0	24	1
Pulp and waste paper	0	0	0	11
Sand and gravel	0	0	6	0
Non-ferrous ores	27	16	229	0
Sulphur (dry)	0	0	0	16
Non-metal minerals	7	0	21	4
Primary Manufactured Goods	0	17	102	330
Paper products	0	0	6	324
Lime, cement and glass	0	0	3	1
Iron and steel products	0	0	0	2
Non-ferrous metal products	0	17	46	2
Primary wood products	0	0	47	2
Food and Farm Products	0	0	678	364
Fish	0	0	1	2
Grain	0	0	0	4
Vegetable products	0	0	17	2
Processed grain and animal feed	0	0	0	13
Other agricultural products	0	0	640	343

**Appendix D: 2003 Tonnage and Cargo by Port
(thousands short tons)**

<i>Manufactured Equipment, Machinery and Products</i>	0	0	154	136
Machinery (not electric)	0	0	2	5
Electric machinery	0	0	2	2
Vehicles and parts	0	0	1	3
Manufactured wood products	0	0	7	0
Textile products	0	0	130	119
Rubber and plastic products	0	0	4	3
<i>Unknown or Unclassified</i>	0	0	12	7

	Domestic		Foreign	
	Inbound	Outbound	Inbound	Outbound
Port Bienville "East Pearl River, MS" (Total=472)	223	0	95	154
<i>Petroleum and Petroleum Products</i>	4	0	0	1
Petroleum Coke	4	0	0	4
<i>Chemicals and Related Products</i>	204	0	1	32
Other hydrocarbons	79	0	0	0
Alcohols	90	0	0	0
Nitrogen func. Comp.	0	0	1	0
Plastics	35	0	0	31
Chemical products	0	0	0	1
<i>Crude Materials</i>	13	0	3	7
Lumber	0	0	2	3
Sand and gravel	0	0	1	0
Iron ore	2	0	0	0
Non-ferrous ores	11	0	0	0
Non-metallic minerals	0	0	0	4
<i>Primary Manufactured Goods</i>	1	0	1	24
Newsprint	0	0	0	11
Paper and paperboard	0	0	0	7
Paper products	0	0	1	3
Fabricated metal products	1	0	0	1
Primary wood products	0	0	0	2
<i>Food and Farm Products</i>	0	0	1	3
Vegetables and produce	0	0	0	1
Animal feed	0	0	0	1
Food products	0	0	1	1
<i>Manufactured Equipment, Machinery and Products</i>	1	0	88	94
Machinery (not electric)	0	0	0	7
Electric machinery	0	0	0	2
Manufactured wood prod.	1	0	0	0
Textile products	0	0	83	77
Rubber and plastic products	0	0	2	2
Manufactured products	0	0	3	6
<i>Unknown or Unclassified</i>	0	0	1	3

**Appendix D: 2003 Tonnage and Cargo by Port
(thousands short tons)**

Mississippi River [8,429]	Domestic		Foreign	
	Inbound	Outbound	Inbound	Outbound
Port of Natchez (Total = 505)	295	210	0	0
Chemicals	37	0	0	0
Nitrogenous fertilizer	22	0	0	0
Sodium hydroxide	12	0	0	0
Inorganic elements, oxides, and halogen salts	3	0	0	0
Crude Materials	182	16	0	0
Aluminum ore	13	0	0	0
Clay and retractable material	0	16	0	0
Manufactured Goods	76	0	0	0
Cement and concrete	76	0	0	0
Food and Farm Products	0	194	0	0
Wheat	0	9	0	0
Corn	0	35	0	0
Rice	0	10	0	0
Sorghum grain	0	43	0	0
Soybeans	0	97	0	0
Port of Claiborne County				
	No Commerce Reported		No Commerce Reported	
Port of Vicksburg (Total = 3,608)	2,802	806	0	0
Petroleum	1,476	620	0	0
Crude petroleum	897	32	0	0
Gasoline	261	0	0	0
Distillate fuel oil	135	58	0	0
Residual fuel oil	10	45	0	0
Lube oil and greases	89	219	0	0
Naphtha and solvents	0	40	0	0
Asphalt, tar, and pitch	82	221	0	0
Petroleum coke	0	6	0	0
Chemicals	141	52	0	0
Nitrogenous fertilizer	65	49	0	0
Phosphalic fertilizer	3	3	0	0
Potassic fertilizer	25	0	0	0
Fertilizer and mixes	21	0	0	0
Sodium hydroxide	23	0	0	0
Metallic salt	4	0	0	0
Crude Materials	737	9	0	0
Wood in the rough	238	0	0	0
Limestone	219	0	0	0
Sand and gravel	249	0	0	0
Waterway improvement materials	28	0	0	0
Non-ferrous ores	0	7	0	0
Slag	2	0	0	0
Non-metallic minerals	2	2	0	0

**Appendix D: 2003 Tonnage and Cargo by Port
(thousands short tons)**

Manufactured Goods	280	33	0	0
Newsprint	0	17	0	0
Paper and paperboard	0	8	0	0
Lime	172	0	0	0
Cement and concrete	72	0	0	0
Iron and steel plates and sheets	16	0	0	0
Primary iron and steel	9	0	0	0
Aluminum	11	0	0	0
Fabricated metal products	0	3	0	0
Primary wood products	0	5	0	0
Food and Farm Products	168	92	0	0
Wheat	0	3	0	0
Corn	122	26	0	0
Sorghum grains	0	4	0	0
Soybeans	2	53	0	0
Oilseeds	0	4	0	0
Animal feed	44	2	0	0
<hr/>				
Yazoo County Port (Total = 372)	17	355	0	0
Chemicals	17	235	0	0
Nitrogenous fertilizer	17	232	0	0
Fertilizer and mixes	0	3	0	0
Food and Farm Products	0	120	0	0
Corn	0	53	0	0
Sorghum grains	0	1	0	0
Soybeans	0	66	0	0
<hr/>				
Port of Greenville (Total = 3,220)	1,849	1,371	0	0
Petroleum and Petroleum Products	1,260	11	0	0
Gasoline	466	4	0	0
Distillate fuel oil	340	7	0	0
Residual fuel oil	388	0	0	0
Naphtha and solvents	4	0	0	0
Liquid natural gas	63	0	0	0
Chemicals and Related Products	168	15	0	0
Nitrogenous fertilizer	118	15	0	0
Phosphatic fertilizer	6	0	0	0
Potassic fertilizer	33	0	0	0
Fertilizer and mixes	11	0	0	0
Crude Materials	368	129	0	0
Forest products	0	2	0	0
Limestone	299	0	0	0
Sand and gravel	30	18	0	0
Waterway improvement materials	13	0	0	0
Iron and steel scrap	0	109	0	0
Non-metal minerals	26	0	0	0
Manufactured Goods	0	2	0	0
Iron and steel plates and sheets	0	2	0	0
Food and Farm Products	53	1,214	0	0

**Appendix D: 2003 Tonnage and Cargo by Port
(thousands short tons)**

Wheat	0	40	0	0
Corn	4	226	0	0
Rice	0	276	0	0
Sorghum grains	0	65	0	0
Soybeans	0	568	0	0
Oilseeds	19	40	0	0
Animal feed, preparation	30	0	0	0
Port of Rosedale (Total = 724)	260	464	0	0
<i>Chemicals and Related Products</i>	109	11	0	0
Nitrogenous fertilizer	67	11	0	0
Phosphatic fertilizer	6	0	0	0
Potassic fertilizer	29	0	0	0
Fertilizer and mixes	8	0	0	0
<i>Crude Materials</i>	131	23	0	0
Wood in the rough	0	23	0	0
Waterway improvement materials	131	0	0	0
<i>Primary Manufactured Goods</i>	11	0	0	0
Iron and steel bars and shapes	10	0	0	0
Primary iron and steel	1	0	0	0
<i>Food and Farm Products</i>	9	430	0	0
Wheat	0	40	0	0
Corn	0	38	0	0
Rice	0	131	0	0
Sorghum grains	1	23	0	0
Soybeans	3	193	0	0
Oilseeds	5	0	0	0
Animal feed, preparation	0	5	0	0

**Appendix D: 2003 Tonnage and Cargo by Port
(thousands short tons)**

Tennessee-Tombigbee

(Mississippi ports only) [2,104]

	Domestic		Foreign	
	Inbound	Outbound	Inbound	Outbound
Yellow Creek Port (560)	175	385	0	0
Forest products				
Fertilizer				
Iron and steel products				
Port Itawamba (162)	14	148	0	0
Forest products				
Metal products				
Iron and steel products				
Port of Amory (347)	0	347	0	0
Forest products				
Port of Aberdeen (374)	305	69	0	0
Petroleum Products				
Soil				
Sand				
Rock				
Gravel				
Port of Clay County (205)	173	32	0	0
Forest products				
Soil				
Sand				
Rock				
Gravel				
Lowndes County Port (456)	106	350	0	0
Crude materials				
Chemicals				

SOURCE: U. S. Army Corps of Engineers, Waterborne Commerce Statistics Center; Tennessee-Tombigbee Waterway District.

Appendix E: Selected Strategies for Development of the State's Public Ports Identified in the *Comprehensive Assessment* and LATTS Studies

Purpose and Content of the Latin American Trade and Transportation Studies (LATTS I and II)¹

As noted by the former Executive Director of the Mississippi Department of Transportation, Dr. Robert L. Robinson:

It is the prediction of many that South and Central America are going to provide the next major economic expansion - similar to the Pacific Rim Nations. If we work together as a region, get ready and move appropriately, the Southeast is in the right place at the right time. If we are to get the maximum benefit from both South and Central America's economic expansion, we must be proactive and not after the fact reactive. (LATTS I and II)

The Southeastern Transportation Alliance² was formed in 1996 for the purpose of undertaking the Latin American Trade and Transportation Study. The purpose of the study, which is referred to as LATTS Phase I, or more simply LATTS I, was to forecast growth in U. S. trade with Latin America through 2020 and develop strategies to guide investment in the intermodal transportation infrastructure (port, airport, rail, and highway) of the Alliance Region, which includes Mississippi, necessary to attract and handle the forecasted growth in trade. The study was financed through the Federal Highway Administration Pool Fund and managed by the Mississippi Department of Transportation.

Following the March 2001 completion of LATTS I, the ongoing study of progress in achieving the objectives outlined in LATTS I, as well as continued identification of

¹ For purposes of LATTS I, Latin America was defined as all western hemisphere nations south of the United States: Argentina, Bahamas, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, French Guiana/Guyana/Suriname, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

² Members of the Alliance include the state transportation agencies in the states/commonwealth of: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Puerto Rico, Tennessee, Texas, Virginia, and West Virginia, in cooperation with the Federal Highway Administration of the United States Department of Transportation.

opportunities for and impediments to the continued expansion of the Alliance Region's trade with Latin America, was undertaken under the name of LATTs II. Throughout LATTs II, interim presentations and technical memoranda will be produced by Wilbur Smith Associates³, the lead LATTs consultant, and submitted to the alliance members for review. While the LATTs projections in Latin American trade growth apply to the entire Alliance Region, in making their infrastructure needs projections, the authors presumed that the states and ports included in the study would retain the relative shares of trade with Latin America that existed in 1996 (the last year of actual data available at the time of the study). Therefore, the growth percentages projected for the entire region can be applied to Mississippi's Gulf ports that traded with Latin America at the time of the LATTs review.

Projected Growth in Trade with Latin America

In 1996, 86% of U. S. imports from Latin America and 71% of U. S. exports to Latin America entered or exited through the Alliance Region.

LATTs I observed that trade between Latin America and the United States tends to gateway (i.e., enter or leave the United States) in the Alliance Region. Based on the 1996 actual trade data used in LATTs I, 86% of imports from Latin America to the United States entered through the Alliance Region, while 71% of U. S. exports to Latin America departed through the region. 80% of the tonnage associated with this trade was transported by water.

In 1996, the top seven Latin American countries or groups of countries importing from and exporting to the U. S. were Brazil, Colombia, Mexico, Venezuela, Jamaica and the Bahamas, other Caribbean islands, and other Central American countries.

Trade between Latin America and the Alliance Region is projected to triple by 2020.

LATTs I concluded that Latin America is poised for large growth in its international trade due to:

- continued economic restructuring with increasing privatization of industry and the resulting need for high tech equipment and services; and,
- trade liberalization, including multi-lateral trade agreements (refer to discussion on page 28) and

³ According to its website, <http://www.wilbursmith.com/>, Wilbur Smith Associates is a full-service infrastructure consulting firm with sixty-five offices worldwide that was established in 1952 to provide planning, engineering, design, financial, economics, and CEI services for infrastructure projects of all types—transportation, community development, water and sewer systems, and others.

declining import duties, which could result in hemisphere-wide free trade.

The LATTTS I “base case” trade forecasts (assuming a continuation of recent trade trends and conditions until 2020) project that total international trade in the Alliance Region is expected to double by 2020, with the Latin American component of this trade projected to triple in the same time frame. LATTTS I projects that this level of trade growth will result in an additional 1.39 million jobs in the Alliance Region by 2020.

If trade conditions improve during the forecast period (e.g., adoption of a Western Hemisphere Free Trade Agreement, higher economic growth trends for Latin America and/or the United States, changes in U. S. policies regarding Cuba), growth in Latin American trade for the Alliance Region could be 22% higher than the base case forecast, resulting in 1.35 million more jobs than in the base case forecast. Factors that would work against achieving the high case forecast include slower trade liberalization, weak growth in the Brazilian economy (with the largest economy in Latin America, Brazil’s economy impacts other countries in the region), and slower improvement of Latin America’s transportation infrastructure.

LATTTS I projects average annual growth of 5.3% in U. S. exports to Latin America and 3.8% in imports from Latin America to the United States, with the greatest growth in the trade of manufactured goods.

LATTTS I projects that for the period 1996-2020, the annual growth in exports from the Alliance Region to Latin America will average 5.3% and the annual growth in imports from Latin America to the U. S. will average 3.8%. LATTTS I also projects that Mexico’s importance as a trading partner with the U. S. will increase from 44% of Latin American trade in 1996 to 54% in 2020. LATTTS I projects that if the projected increased trade with Mexico materializes, land transportation will increase its share of total Latin American trade by 13%, while the waterborne share of this trade will fall.

By commodity group, LATTTS I projects manufactured goods (which have the highest value per ton and are the most easily transported in containers) to experience the fastest growth in both imports from and exports to Latin America. According to LATTTS I, between 1996 and 2020 the Alliance Region stands to improve its current trade position with Latin America considerably in the trade of manufactured and primary manufactured goods (e.g., chemicals) and primary commodities. Also, LATTTS I concludes that as per capita income rises in Latin American countries, there will be increasing demand for

high-value added food products, which is one of the Alliance Region's production strengths.

LATTS I lists the following Latin American countries with strong potential as U.S. export markets: Argentina, Chile, Mexico.

LATTS II predicts that the following cargoes will experience the greatest export growth to Latin American countries: nonmetallic minerals, waste and scrap, petroleum and coal products, transportation equipment, miscellaneous manufacturing, chemical, stone, clay, glass and concrete, electrical machinery, and food and kindred products. LATTS II predicts that the following Latin American cargoes have the greatest import growth potential: crude oil and natural gas, apparel, instruments, furniture and fixtures, printed matter, coal, lumber and wood, rubber and plastics, fabricated metal products, pulp and paper, and farm products.

A discussion of the LATTS I strategies for developing an Alliance Region Strategic Transportation System to capture growth in Latin American trade with the U. S. is found on page 136.

Public Port Development Strategies Identified in the *Comprehensive Assessment*

In order to enhance and expand the direct and indirect benefits gained by the state's economy from port activities, the *Comprehensive Assessment* included a proposed Port Development Program. The consultants suggested that initial funding for the program come from general fund appropriations, followed by consideration of a transportation trust fund for subsequent phases if an appropriate funding source can be identified.

The following program elements recommended by the consultants were taken from their study of port development programs in Florida and Louisiana:

- legislative creation of a Mississippi Ports Council that would provide policy, direction, and oversight to the Port Development Program (the study proposed that MDOT would provide technical, administrative, and clerical support to the council while MDA would provide technical marketing assistance);
- development and implementation of a marketing program targeted specifically for ports;
- development of a five-year Capital Improvement Program that meets the development needs of the port; and,
- funding of a recommended Capital Investment Program (see discussion below) through a grant program with a 10% match from the port receiving the

funds. The study recommended a grant cap of \$5 million per port per year.

Recommended Capital Investment Program

The Parsons Brinckerhoff Quade & Douglas, Inc., consultants concluded that in order for the state's public ports to continue their present level of operations and to compete for future business, the ports needed an estimated \$168.2 million in improvements over the twenty-five year time frame of the study. In order to optimize the ports' throughput capacity and efficiency, the consultants recommended improvements to infrastructure, equipment, warehousing, and intermodal access (estimated by MDOT at \$30 million), as well as the construction of new berths and acquisition of additional land.

Five million dollars would be invested in the state's ports in year 1, followed by \$20 million in year 2, \$22 million for each of years 2 and 3 and \$10 million per year through 2025. Also, the consultants determined that \$2 million was necessary to meet critical needs (i.e., infrastructure deficiencies with the highest potential to cause disruption of normal port operations or to present a clear safety hazard) and \$67 million to meet immediate needs (i.e., those deficiencies materially affecting a port's ability to serve current customers efficiently and safely). The remaining \$99 million would address those deficiencies in the ports' infrastructure that affect their ability to accommodate future growth and attract new customers.

Had the state followed the Parsons Brinckerhoff Quade & Douglas, Inc., recommendations beginning in FY 2000, it would have invested \$89 million in the state's public ports through FY 2006. As shown in Exhibit 14 on page 36, the state has provided \$25 million in loans and grants to the ports during this period.

Port Development Strategies Identified in LATTS

LATTS I concluded that the Alliance Region's ability to attract the jobs and investment dollars associated with the forecasted increase in trade with Latin America depends upon the region's competitiveness. With respect to waterborne transportation, the study identified fifty-two inland and coastal ports with the greatest potential to capitalize on the projected growth in trade.

While the study group selected Mississippi's three coastal public ports for inclusion in the system, it did not select any of the state's public ports on the Mississippi River or Tennessee-Tombigbee Waterway, because none of these

ports met the LATTTS I criteria⁴ for inclusion. It is also important to note that while the Port of Bienville was included in the LATTTS Strategic Port System “in recognition of its importance to the state,” it did not meet the study team’s criteria of being one of the most significant port facilities in the Alliance Region regarding trade with Latin America. As a result, the study did not include the Port of Bienville in its determination of infrastructure needs.

While LATTTS I included recommendations for capital investment in the state’s two ports included in the LATTTS Strategic Port System, it also included the following recommendations for maximizing the utilization of existing port infrastructure.

Utilize available computer-based cargo management systems to increase port efficiency

LATTTS I notes that one of the primary ways to utilize more fully the existing port infrastructure is to increase marine terminal efficiency (i.e., to increase cargo throughput) through full implementation of available information technology systems designed to track cargo such as Terminal Operating Systems (TOS), Intelligent Transportation Systems (ITS) and Automatic Equipment Identification (AEI). However, it should also be noted that implementation of state of the art computer systems entails a cost.

Increase port productivity and efficiency by taking a systemic approach to port agility

An agile port system is one of various multimodal/intermodal concepts explored in LATTTS I as capable of accommodating the Alliance Region’s need for increased throughput capability and flexibility. According to LATTTS I, a systemic approach to port agility involves connecting multiple conventional marine terminals to one or two Intermodal Interface Centers with truck and/or train freight corridors.

⁴ LATTTS I automatically included seaports and riverports in the Alliance Region in its Strategic Port System that met the following “major gateway port” criteria: designation as a National Highway System waterport, minimum channel depth of 35 feet, and handled 500,000 tons of waterborne Latin American cargo annually at the time of the study. LATTTS I considered other ports for inclusion in the system based on factors such as expectations that a port would meet the “major gateway port” criteria in the near future, making sure that every state in the Alliance Region had at least one port in the Strategic Port System, and including ports deemed to be of particular interest to each alliance member. (Alliance members were each entitled to designate up to five facilities in whatever combination of transportation modes as the alliance member felt best served their particular interests.)

Invest in port infrastructure

With respect to all terminals, both public and private, at the ports of Gulfport and Pascagoula, LATTs I identified \$742 million in infrastructure needs through 2020 in order to take full advantage of the projected increase in Latin American trade and trade with the rest of the world through these ports, under the base case scenario. As shown below, the infrastructure investment would expand the ports' capacities to handle container and breakbulk cargo by a total of 689 acres.

SUMMARY OF MISSISSIPPI INFRASTRUCTURE NEEDS

Cargo Type	Acres			Infrastructure Improvement Costs		
	Current	2020 Need	% Increase	Latin America	Rest of World	World
Container	60	346	477%	\$69,120,135	\$160,015,364	\$229,135,498
Break Bulk	94	343	264%	\$185,349,261	\$327,150,076	\$512,499,337
Neo Bulk	0	0	0%	\$0	\$0	\$0
Dry Bulk	9	18	105%	\$0	\$0	\$0
Liquid Bulk	0	0	0%	\$0	\$0	\$0
TOTAL				\$254,469,396	\$487,165,440	\$741,634,835

SOURCE: LATTs I: Mississippi Marine Terminals

Continue development of a seamless, cost-efficient intermodal transportation system in support of the state's ports

Another part of the LATTs I strategy for attracting new manufacturing and industries to support the projected growth in trade is to ensure development of a seamless, cost-efficient, intermodal transportation system in the region. According to the study, "most of the bottlenecks impeding the integrated, fast and competitive movement of goods occur at...the on-port/-off-port intermodal connections." To address these intermodal needs, LATTs I foresees partnerships developing between ports and other transportation industries such as rail, truck, and marine cargo carriers. LATTs I also foresees that agreements between ports will become more prevalent as regional systems are developed.

LATTs I recommends that the Canadian National & Kansas City Southern Industrial Rail Lines link their line extending from Gulfport with its line from Jackson.

SOURCE: *Comprehensive Assessment of the Ports of Mississippi*, January 2000, Parsons Brinckerhoff Quade & Douglas, Inc., under contract to the Mississippi Department of Transportation; *Latin America Trade and Transportation Study*, March 2001, Wilbur Smith Associates.

**Appendix F:
Top Ten Mississippi Imports by Weight**

Location	Commodity Group	Tons
Foreign	Crude Petroleum	16,103,142
	Sand, Gravel, Shells, Clay, Salt, and Slag	1,118,968
	Food and Food Products	679,927
	Manufactured Goods	261,828
	Non-Ferrous Ores and Scrap	229,275
	Chemicals, Excluding Fertilizers	168,173
	Petroleum Products	98,308
	Primary Non-Metal Products	56,586
	Lumber, Logs, Wood Chips, and Pulp	54,669
	Primary Metal Products	47,888
TOTAL		18,818,764

Top Ten Mississippi Exports by Weight

Location	Commodity Group	Tons
Foreign	Petroleum Products	2,528,442
	Food and Food Products	680,200
	Primary Non-Metal Products	431,141
	Chemical Fertilizers	249,826
	Manufactured Goods	248,622
	Chemicals, Excluding Fertilizers	149,238
	Lumber, Logs, Wood Chips, and Pulp	35,824
	Primary Metal Products	26,139
	Sand, Gravel, Shells, Clay, Salt, and Slag	23,953
	Coal, Lignite, and Coal Coke	1,278
TOTAL		4,374,663

SOURCE: 2003 Data of the Waterborne Commerce Statistics Center, Corps of Engineers

Appendix G: Mississippi Waterborne Export and Import Data for 2005

Top 50 Countries Receiving Mississippi <i>Waterborne Exports</i> in 2005*				
Rank	Short Tons by Country		U.S. Dollar Value by Country	
1	Mexico	807,817	Mexico	\$423,969,302
2	Spain	566,150	Honduras	\$393,489,487
3	France	289,883	Guatemala	\$213,787,319
4	Panama	257,424	El Salvador	\$170,986,505
5	Russia	235,964	Russia	\$163,296,150
6	Guatemala	219,794	Panama	\$68,625,497
7	Honduras	200,345	Chile	\$63,394,363
8	Chile	149,901	Cuba	\$50,522,858
9	Poland	119,301	Costa Rica	\$39,596,721
10	El Salvador	114,573	Ecuador	\$38,273,469
11	Bahamas	110,770	Nicaragua	\$27,910,235
12	Gibraltar	97,809	Dominican Repub	\$27,804,661
13	Ecuador	92,969	Bahamas	\$27,322,126
14	Canada	92,188	Spain	\$23,344,313
15	Netherlands Antilles	77,874	United Kingdom	\$21,233,089
16	Dominican Repub	67,826	Gibraltar	\$15,797,214
17	Japan	64,707	Italy	\$14,874,058
18	Brazil	64,510	Korea, S.	\$14,564,140
19	Cuba	57,837	Colombia	\$13,417,572
20	Costa Rica	55,809	Vatican City	\$13,156,896
21	Vatican City	40,781	Angola	\$12,655,505
22	Italy	40,497	Netherlands Antilles	\$11,917,909
23	United Kingdom	39,571	Georgia	\$11,172,879
24	Singapore	26,815	India	\$9,528,095
25	Angola	24,146	Singapore	\$7,561,470
26	Colombia	20,477	Belgium	\$6,548,849
27	Georgia	19,218	Turkey	\$5,227,768
28	Korea, S.	17,064	Lithuania	\$5,084,895
29	Nicaragua	16,451	Barbados	\$4,474,887
30	Belgium	15,421	Canada	\$4,280,126
31	Turkey	8,348	France	\$4,214,568
32	Barbados	6,426	Congo	\$3,418,767
33	Guadeloupe	6,383	Guadeloupe	\$3,305,532
34	Congo	6,135	Peru	\$3,002,656
35	Lithuania	5,869	Ukraine	\$2,698,471
36	Ukraine	4,488	Ghana	\$1,873,720
37	Ghana	3,721	Haiti	\$1,795,456
38	Haiti	2,557	Poland	\$1,761,722
39	Venezuela	2,420	Brazil	\$1,075,520
40	Gabon	1,589	Japan	\$971,190
41	Switzerland	1,143	Venezuela	\$906,732
42	Gambia	780	Gabon	\$765,414
43	Aruba	260	Switzerland	\$547,467
44	Belize	231	Gambia	\$394,076
45	India	208	Belize	\$143,933
46	Peru	134	Aruba	\$126,216
47	Philippines	111	Philippines	\$90,694
48	Senegal	65	Bolivia	\$54,931
49	Bolivia	33	Senegal	\$37,175
50	Jamaica	24	Australia	\$32,670

*Note: Based on cargo shipped from the ports of Gulfport and Pascaquola, which handle 99.5% of international cargo at Mississippi ports.

SOURCE: U. S. Bureau of the Census, Foreign Trade Division

**Top Five Commodities Exported by Vessel to Top Tonnage Countries
From Mississippi in 2005***

Mexico	
All Commodities	807,817
Mineral Fuel, Oil, Etc.	640,189
Organic Chemicals	49,758
Apparel Articles, Knit or Crochet	20,928
Paper and Paperboard Articles	18,756
Plastics and Plastic Articles	18,020
Spain	
All Commodities	566,150
Mineral Fuel, Oil, Etc.	547,576
Organic Chemicals	18,270
Paper and Paperboard Articles	153
Wood Pulp	65
Milling Products	44
France	
All Commodities	289,883
Mineral Fuel, Oil, Etc.	289,883
Panama	
All Commodities	257,424
Mineral Fuel, Oil, Etc.	238,666
Paper and Paperboard Articles	17,068
Wood and Articles of Wood	1,333
Iron or Steel Articles	187
Nuclear Reactors, Boilers	59
Russia	
All Commodities	235,964
Meat and Edible Meat Offal	235,948
Vehicles, Except Railway or Tramway	16
*Based on cargo shipped from the ports of Gulfport and Pascagoula, which handle 99.5% of international cargo at Mississippi ports.	
SOURCE: U. S. Bureau of the Census, Foreign Trade Division	

**Top Five Commodities of Countries with Highest Value of Exports from
Mississippi in 2005***

Mexico	
All Commodities	\$423,969,302
Apparel Articles, Knit or Crochet	\$98,828,578
Cotton, Yarn and Woven Fabric	\$50,089,775
Knitted or Crocheted Fabrics	\$48,724,670
Mineral Fuel, Oil, Etc.	\$37,745,564
Nuclear Reactors, Boilers, Machinery	\$31,672,746
Honduras	
All Commodities	\$393,489,487
Knitted or Crocheted Fabrics	\$79,714,867
Cotton, Yarn and Woven Fabric	76,282,060
Paper and Paperboard Articles	41,292,668
Apparel Articles, Knit or Crochet	35,446,808
Apparel Articles, Not Knit Etc.	33,824,557
Guatemala	
All Commodities	\$213,787,319
Paper and Paperboard Articles	\$59,235,220
Cotton, Yarn and Woven Fabric	\$57,810,949
Meat and Edible Meat Offal	\$30,438,462
Mineral Fuel, Oil, Etc.	\$10,457,680
Optic, Photo, Medic or Surgical Instruments	\$7,482,421
El Salvador	
All Commodities	\$170,986,505
Knitted or Crocheted Fabrics	\$82,340,369
Paper and Paperboard Articles	\$21,949,306
Apparel Articles, Knit or Crochet	\$16,258,154
Cotton, Yarn and Woven Fabric	\$16,054,345
Mineral Fuel, Oil, Etc.	\$13,339,020
Russia	
All Commodities	\$163,296,150
Meat and Edible Meat Offal	\$163,040,116
Vehicles, Except Railway or Tramway, and Parts	\$256,034
*Based on cargo shipped from the ports of Gulfport and Pascagoula, which handle 99.5% of international cargo at Mississippi ports.	
SOURCE: U. S. Bureau of the Census, Foreign Trade Division	

Top 50 Countries from Whom Mississippi Imported Waterborne Cargo in 2005*

Rank	Tons by Country		U.S. Dollar Value by Country	
	Country	Tons	Country	Value
1	Mexico	11,866,732	Mexico	\$3,447,279,909
2	Trinidad/Tobago	1,020,577	Honduras	\$659,697,319
3	Morocco	988,328	El Salvador	\$363,178,812
4	Nigeria	883,916	Trinidad/Tobago	\$362,910,160
5	Venezuela	679,229	Nigeria	\$305,730,718
6	Columbia	562,661	Colombia	\$243,599,249
7	Honduras	349,738	Venezuela	\$189,656,816
8	Guatemala	332,269	Guatemala	\$186,845,918
9	United Kingdom	298,257	United Kingdom	\$177,722,163
10	Belgium	241,713	Nicaragua	\$134,943,951
11	Kuwait	232,137	Belgium	\$57,231,579
12	Iraq	82,274	Argentina	\$49,867,224
13	Australia	77,764	Kuwait	\$47,113,900
14	Norway	69,322	Brazil	\$39,190,847
15	Ukraine	63,797	Morocco	\$28,042,990
16	El Salvador	57,745	Indonesia	\$24,724,406
17	Nicaragua	49,609	Lithuania	\$23,602,499
18	Chile	37,011	Spain	\$21,376,856
19	Argentina	36,787	Norway	\$21,065,325
20	Spain	36,322	Iraq	\$15,230,810
21	Brazil	34,927	Korea, S.	\$13,311,651
22	Lithuania	34,356	Ukraine	\$11,880,819
23	Indonesia	22,394	Costa Rica	\$10,845,843
24	Estonia	16,299	Australia	\$7,444,109
25	Costa Rica	14,685	Thailand	\$5,064,975
26	Latvia	12,003	Denmark	\$3,863,225
27	Russia	10,212	Malaysia	\$3,722,156
28	Japan	9,973	Sweden	\$2,646,293
29	Peru	5,019	Estonia	\$2,605,346
30	Thailand	4,675	Latvia	\$2,396,071
31	Malaysia	4,633	Bolivia	\$2,122,437
32	Ecuador	2,498	Peru	\$1,756,800
33	Bolivia	1,925	Russia	\$1,673,355
34	Vietnam	1,918	India	\$1,477,493
35	Sweden	1,575	Japan	\$1,041,661
36	India	1,158	Chile	\$693,323
37	Korea, S.	885	Ecuador	\$649,008
38	Denmark	692	Luxembourg	\$624,930
39	Netherlands	89	Netherlands	\$439,835
40	Pakistan	73	Germany	\$411,458
41	Uruguay	72	Pakistan	\$321,359
42	Panama	43	Belize	\$219,901
43	China	36	China	\$214,619
44	Germany	28	Italy	\$138,794
45	Belize	21	Panama	\$50,661
46	Italy	12	Canada	\$36,400
47	Luxembourg	4	Uruguay	\$26,527
48	Philippines	2	Montserrat	\$11,073
49	Montserrat	2	Austria	\$10,937
50	Canada	1	Taiwan	\$5,159

*Based on cargo of the ports of Pascagoula and Gulfport, which handle 99.5% of Mississippi's imports.

SOURCE: Bureau of the Census, Foreign Trade Division

**Tonnage of Top Five Commodities Imported by Vessel to Mississippi
From Top Tonnage Countries in 2005***

Mexico

All Commodities	11,866,731
Mineral Fuel, Oil, Etc.; Bitumen Substances; Mineral Wax	11,767,043
Apparel Articles and Accessories, Knit or Crochet	32,797
Apparel Articles and Accessories, Not Knit	21,885
Edible Vegetables and Certain Roots and Tubers	14,618
Wadding, Felt, Etc.; Yarn; Twine, Ropes, Etc.	11,060

Trinidad and Tobago

All Commodities	1,020,577
Mineral Fuel, Oil, Etc.; Bitumen Substances; Mineral Wax	969,565
Inorganic Chemicals; Precious and Rare Earth Metals and Radioactive Compounds	51,012

Morocco

All Commodities	988,328
Mineral Fuel, Oil, Etc.; Bitumen Substances; Mineral Wax	988,328

Nigeria

All Commodities	883,916
Mineral Fuel, Oil, Etc.; Bitumen Substances; Mineral Wax	883,916

Venezuela

All Commodities	679,229
Mineral Fuel, Oil, Etc.; Bitumen Substances; Mineral Wax	679,229

*Based on cargo of the ports of Pascagoula and Gulfport, which handle 99.5% of Mississippi's imports.

SOURCE: Bureau of the Census, Foreign Trade Division

**Value of Top Five Commodities Imported by Vessel to Mississippi
From Countries with Highest *Value* in 2005***

Mexico

All Commodities	\$3,447,279,909
Mineral Fuel, Oil, Etc.; Bitumin Substances; Mineral Wax	\$2,888,222,970
Apparel Articles and Accessories, Not Knit	\$237,824,202
Apparel Articles and Accessories, Knit or Crochet	\$234,959,513
Wadding, Felt, Etc.; Yarn; Twine, Ropes, Etc.	\$26,232,971
Wood and Articles of Wood; Wood Charcoal	\$7,042,249

Honduras

All Commodities	\$659,691,019
Apparel Articles and Accessories Knit or Crochet	\$400,714,781
Apparel Articles and Accessories, Not Knit	\$151,205,357
Edible Fruit and Nuts; Citrus Fruit or Melon Peel	\$58,714,748
Electric Machinery, Etc.; Sound Equipment; TV Equipment; Parts	\$11,230,932
Coffee, Tea, Mate, and Spices	\$10,992,728

El Slavador

All Commodities	\$363,178,812
Apparel Articles and Accessories Knit or Crochet	\$291,333,668
Apparel Articles and Accessories, Not Knit	\$63,909,826
Paper and Paperboard, and Articles (Including Paper Pulp Articles)	\$3,373,709
Special Classification Provisions	\$920,493
Coffee, Tea, Mate and Spices	\$633,594

Trinidad and Tobago

All Commodities	\$362,910,160
Mineral Fuel, Oil, Etc.; Bitumin Substances; Mineral Wax	\$351,804,094
Inorganic Chemicals; Precious and Rare Earth Metals and Radioactive Compounds	\$11,106,066

Nigeria

All Commodities	\$305,730,718
Mineral Fuel, Oil, Etc.; Bitumin Substances; Mineral Wax	\$305,730,718

*Based on cargo of the Ports of Pascagoula and Gulfport, which handle 99.5% of Mississippi's imports.

SOURCE: Bureau of the Census, Foreign Trade Division

Appendix H: Value of Exports from Mississippi with CAFTA Partners

(Vessel Trade Only in U. S. Dollars)

	2003	2004	2005
World Total	\$1,958,601,681	\$2,394,470,839	\$1,931,825,032
<i>CAFTA Partners*</i>			
Costa Rica	43,769,163	50,838,986	39,596,721
Dominican Republic	32,145,356	39,027,619	27,804,661
El Salvador	179,630,519	205,845,061	170,986,505
Guatemala	152,430,171	221,785,471	213,787,319
Honduras	411,574,023	474,622,174	393,489,487
Nicaragua	24,102,116	50,684,083	27,910,235
Sub-Total	\$843,651,348	\$1,042,803,394	\$873,574,928

Tonnage of Exports from Mississippi with CAFTA Partners

	2003	2004	2005
World Total	4,011,692	4,153,211	4,104,683
<i>CAFTA Partners*</i>			
Costa Rica	52,446	81,748	55,809
Dominican Republic	116,589	107,668	67,825
El Salvador	109,323	140,499	114,573
Guatemala	234,887	271,944	219,793
Honduras	332,093	236,769	200,345
Nicaragua	12,612	18,105	16,451
Sub-Total	857,950	856,734	674,796

*El Salvador, Honduras, Nicaragua, and Guatemala are the only countries that had fully enacted the free trade terms as of July 2006.

SOURCE: U. S. Bureau of the Census, Foreign Trade Division

Agency Responses



STATE OF MISSISSIPPI
HALEY BARBOUR, GOVERNOR
MISSISSIPPI DEVELOPMENT AUTHORITY
LELAND R. SPEED
EXECUTIVE DIRECTOR



June 19, 2006

Mr. Max Arinder
Director, PEER Committee
P.O. Box 1204
Jackson, MS 39215

Dear Max:

I concur with the recommendations contained in the draft submitted June 13, 2006.

Sincerely,

A handwritten signature in cursive script, appearing to read "Leland R. Speed".

Leland R. Speed
Executive Director

LRS/lb

Harry Lee James
Deputy Executive Director/
Chief Engineer

Brenda Znachko
Deputy Executive Director/
Administration



Ray Balentine
Director
Office of Intermodal Planning

Willie Huff
Director
Office of Enforcement

Larry L. "Butch" Brown
Executive Director

P. O. Box 1850 / Jackson, Mississippi 39215-1850 / Telephone (601) 359-7249 / FAX (601) 359-7110 / GoMDOT.com

June 14, 2006

Dr. Max K. Arinder, Ph.D., Director
PEER Committee
P. O. Box 1204
Jackson, MS 39215-1204



RE: PEER Report on Mississippi Public Ports

Dear Dr. Arinder:

Thank you for allowing MDOT the opportunity to review your report regarding the public ports of Mississippi. We feel that the report is very comprehensive and provides an overview of our public ports' current status, programs, needs, etc.

We, however, do not support the recommendation that the Legislature consider creating a Mississippi Commission on Public Ports within the Mississippi Development Authority, and amending MISS. CODE 65-1-705 (1972) to allow a new Mississippi Commission on Public Ports to perform the functions of the Port Multi-Modal Committee.

The Port Multi-Modal Fund Committee as established by MISS. CODE 65-1-705 has functioned well, with satisfactory results, and therefore does not need to be replaced. We do feel, however, that the Legislature needs to make available general fund monies to support the Multi-Modal Fund. To date, MDOT, through the approval of the Mississippi Transportation Commission, has provided \$20 Million in state funds in support of the Multi-Modal Program. The first two years were funded at \$5 Million per year. The MDOT FY 2007 budget increases that funding level to \$10 Million.

The issue of having a Commission on Public Ports was a recommendation of the "Comprehensive Assessment of the Ports of Mississippi", a study funded by MDOT and completed in 2000. As a direct result of that report's recommendations, and through the efforts of Intermodal Transportation officials around the State, the Ports Multi-Modal Committee was established by the Legislature in 2001. This Committee's membership is comprised of port directors representing the Gulf Coast ports, the Tenn-Tom Waterway ports, and the Mississippi River ports, along with representatives of the MDOT and MDA. This Committee has functioned for several years now in support of the strategic development of the state's public ports. It is our position that the intent of your recommendation is already being accomplished.



PEER Report on Mississippi Public Ports
June 14, 2006
Page 2

One other point to note is that the other modes, public railroads, public transit, and airports, have the same type committees as was established for the water ports. The creation of a Ports Commission would create an inconsistent structure in the way that Intermodal Transportation is handled in the State for the various non-highway transportation modes.

Thank you again for allowing us to review the report and provide comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry L. Brown". The signature is written in a cursive, flowing style.

Larry L. "Butch" Brown
Executive Director

LLB/jem

PEER Committee Staff

Max Arinder, Executive Director
James Barber, Deputy Director
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