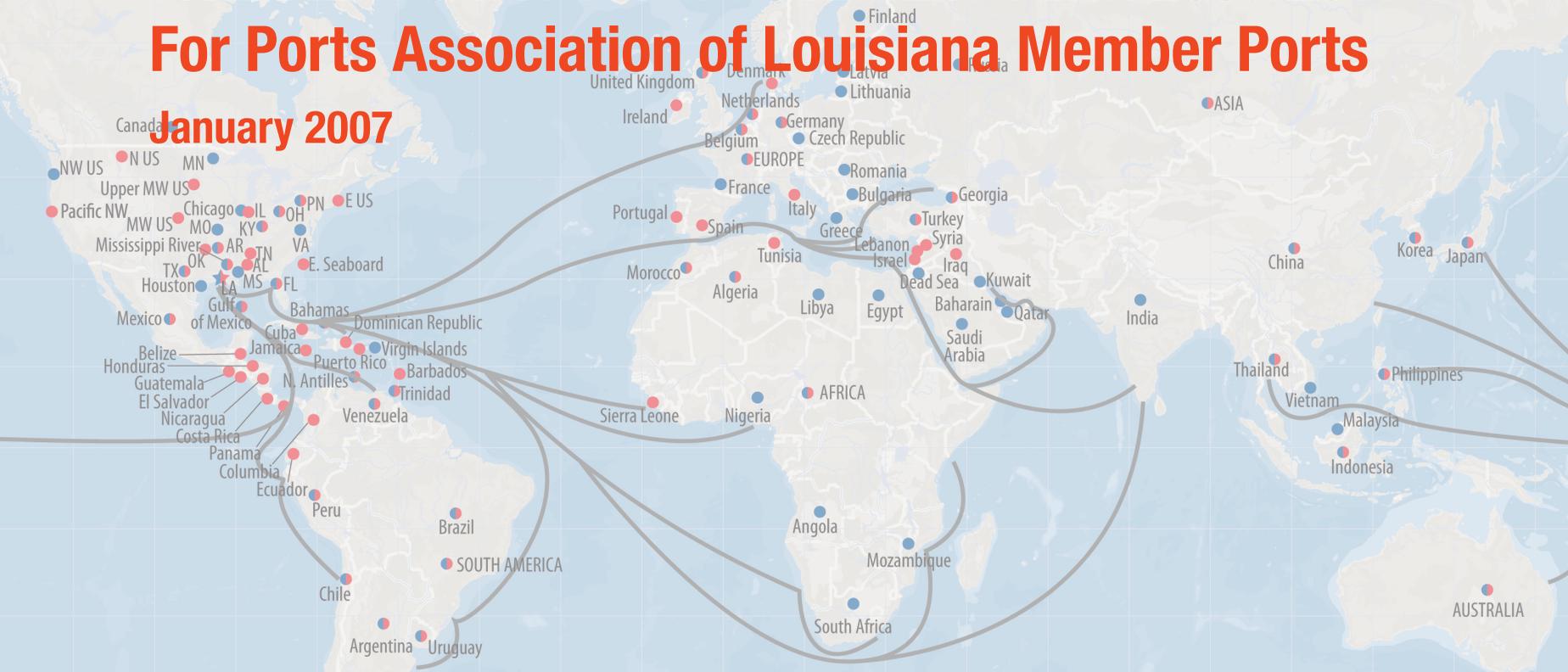


FIVE-YEAR CAPITAL IMPROVEMENT PLAN 2007-2011 For Ports Association of Louisiana Member Ports

January 2007

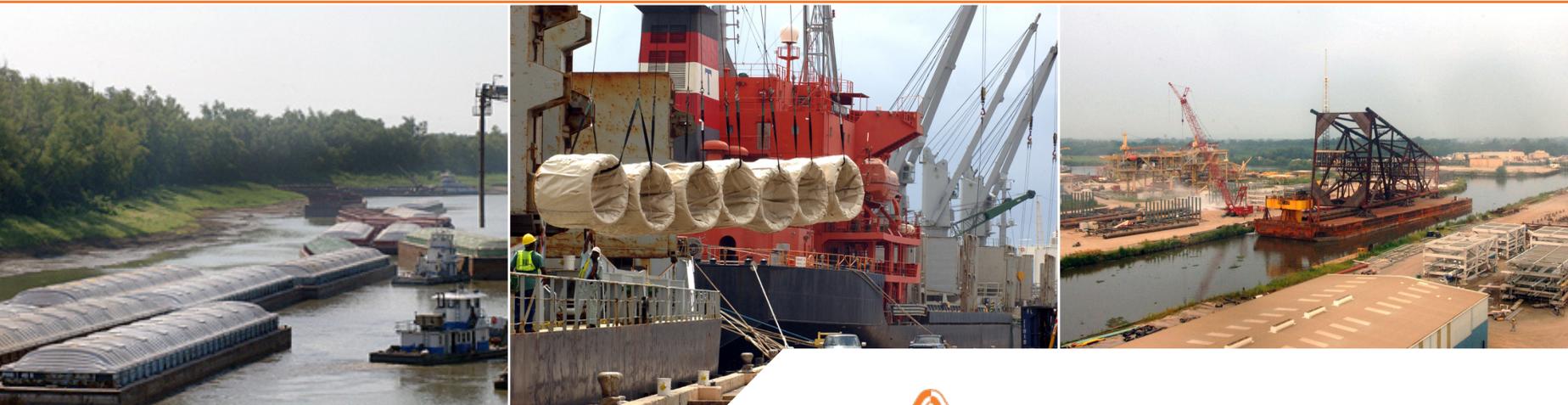


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In cooperation with PAL member ports





Association of Louisiana

In cooperation with PAL member ports

FIVE-YEAR CAPITAL IMPROVEMENT PLAN 2007-2011

Prepared for

**The Ports Association of Louisiana
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January 2007

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Appendix

PAL Member Port Directory

Preface

The Ports Association of Louisiana (PAL) contracted with The Shaw Group to collect data and to develop a five-year capital improvement plan (CIP) inclusive of projects documented by each of PAL's member ports. PAL represents 31 of the state's ports. The planning team contacted management personnel at each of the member ports in an effort to obtain data relative to the respective facilities, much of that data is presented in this report.

In addition, the planning team met monthly with PAL's executive committee throughout the duration of the CIP development process to review and discuss proposed methods and procedures to accomplish the tasks at hand. These methods and procedures are also incorporated herein.

To determine projects qualified for inclusion in the five-year CIP, a decision making process was created. It incorporated various thresholds to be met by eligible projects. The process was prepared for and approved by the PAL executive committee. With the exception of two unique projects, the projects identified in this CIP followed the referenced qualifications criteria.

For purposes of this assignment, the capital improvement program excludes those projects directly related to federal funding resulting from reconstruction of damages caused by the hurricanes of 2005, Katrina and Rita.

Data collected for each port is summarized and presented in this report. Detailed data collected for each port was provided to the PAL executive committee for its internal use as a project deliverable.

Executive Summary

Following the direction and scope prepared by the Ports Association of Louisiana (PAL), the intent of this report was to prepare a thorough and comprehensive five-year capital improvement plan (CIP) for the 31 PAL member ports. To collect the necessary data for the CIP, ports were visited and information relative to each port was provided by port management personnel. This study presents legitimate and realistic capital improvement needs for the period 2007 to 2011.

The five-year plan was proposed to provide each PAL member port with the opportunity to consider, within a compressed time frame, economic, environmental, engineering, and cost aspects of projects specific to the individual ports. In addition, the plan is intended to identify and summarize the following:

- The economic impact of the Louisiana ports on the state's economy
- The domestic and international marketplace of PAL member ports
- A five-year Capital Improvement Plan for Louisiana ports as a whole
- An evaluation of historical funding sources for Louisiana ports and ports in neighboring Gulf of Mexico states

Several port-related studies were abstracted and summarized to identify the significant impact of the state's port industry on the state and national economies. The economic data indicates that Louisiana has consistently ranked in the top two states nationally relative to tonnage of waterborne imports and exports. While the larger deep-draft ports and some shallow draft ports focus on cargo transfer, many of the state's shallow draft ports serve in the national interest as industrial sites for water-related industries and for the servicing of the offshore oil and gas industry in the Gulf of Mexico. Economic data also indicate that Louisiana ports and the maritime industry, while significant at the national level, are a key component to driving the local and state economies by supporting the employment of approximately 269,000 workers in Louisiana alone.

Additionally, the marketplace in which the PAL member ports operate is global. Louisiana ports handle thousands of commodities inbound from 76 domestic and international origins and outbound to 81 regional and international destinations. These origins and destinations are represented by eight continents or regions including Africa, Asia, Australia, the Caribbean, Europe, the Middle East, North America, and South America.

Relative to port-specific projects, those listed in the CIP include only improvements rated as having the highest probability of potential development during the planning period. The probability function was based on a rating system implemented and used to evaluate each project

on its own merit. To be considered in this CIP, a project was required to have completed economic and environmental feasibility reviews, preliminary engineering evaluations, and a preliminary cost estimate based on the engineering evaluation. Likewise, projects were not included if funding was in place with no costs projected beyond 2006 as these projects were considered essentially complete.

As a result of this approach, a comprehensive and well-substantiated list of capital improvement projects was created for PAL member ports within the 2007-2011 planning period. The resulting CIP includes a total of 104 individual projects with a total estimated cost of approximately \$820 million (\$849 million including projects-in-motion). Each project was categorized as (a) having new economic development potential or (b) as being developed to retain the state's existing investment, i.e., revenue maintenance. Two-thirds of the proposed projects are associated with generating new economic development and the remaining one-third are related to revenue maintenance.

From the perspective of funding, findings suggest that historical and present means and allocation of funding will not be adequate to capitalize the projects identified. Louisiana Ports obtain greater than 89% of their funding for capital improvement projects from four sources: port generated revenue (38.8%), port bonds (20.4%), the Port Construction and Development Priority Program (PCDPP) (21.0%), and capital outlay (8.9%). These and other less significant sources combined have provided an annual average of approximately \$91 million in funding for projects at PAL member ports during the period 2001 through 2005.

The results of the CIP indicate that approximately \$164 million of non-private investment funding will be needed annually during the period 2007 through 2011 to fund approximately \$820 million worth of port-related construction projects. Additional funding at the local, state, and federal levels will be necessary to eliminate the \$73 million annual deficit and support sustainable growth in the state's maritime sector including the projects identified.

Nearly 50 ports in the states of Texas, Mississippi, Alabama, and Florida compete with Louisiana for the movement of cargo. Ports in neighboring states face similar challenges to those in Louisiana—the need for the expansion and rehabilitation of infrastructure and equipment with limited funding availability. Each of these states and their ports are unique and employ various means of creating needed funding. A few examples include the following:

- Texas—The use of ad valorem or property taxes to facilitate the issuance of \$431 million in general obligation bonds during the period 1994 to 2004

- Mississippi—Execution of an agreement with casino operations on port property that generates \$12 million annually in port revenue
- Alabama—Voter approval of a \$100 million amendment to the state’s constitution to support a \$300 million port revitalization program and a five percent corporate income tax credit to stimulate private investment
- Florida—The creation of a commission to provide a cost-effective means of financing various capital projects for Florida's ports by issuing bonds and transferring the proceeds to the individual ports (approximately \$375 million in revenue bonds have been issued since 1996 as a result of this commission)

Conclusions suggest that encouraging ports to consider the overall feasibility of a project, including economic, environmental, and engineering variables leads to a dependable, justifiable, and credible approach to financing capital improvement projects. Findings support the continuation of the PCDPP as it provides the market assessment, environmental criteria, engineering evaluation, and economic feasibility needed to justify state funding. However, at current funding limits, ports are often forced to piecemeal projects, and many projects intended to enhance Louisiana’s economic well-being and competitiveness with other Gulf Coast states will be left unfunded. In all likelihood, unless an expanded dependable source of state funding for port improvements is developed, more projects will require funding by way of less objective and more political means thereby likely causing the delay of more solidly based projects and a decline in the quality and competitiveness of the state’s port industry.

Finally, as noted in Chapter 6.0 Conclusions, a statewide, port-based strategic plan is needed if Louisiana is to regain its historical position as a leader in the Gulf Coast, national, and international marketplace and in the maritime industry at-large. A summary listing of the conclusions derived in the process of preparing this report is provided below.

- Louisiana's ports are vital to the respective local economies, to the state's economy, and to the economic well-being of the nation.
- Louisiana ports transfer commodities to and from local markets, regional markets, national markets, and the worldwide marketplace in a consistent and reliable manner.
- Following standards relative to the port industry, engineering principles, and construction industry standards, only qualified port projects are included in the PAL five-year capital improvement plan.

- Of the proposed capital projects, two-thirds are new revenue based (expanding economic development) and one-third are dedicated to revenue retention (sustaining the existing system).
- For the 2007 to 2011 planning period, PAL member ports have justified and anticipate 104 capital improvement projects valued at \$849 million (which includes projects in motion).
- Based upon historical indicators, the allocation of state and federal funds required to sustain and expand the state's maritime industry is both uncertain and inadequate. If the state is to maximize the benefit of current cargo trends and recent discoveries in the Gulf of Mexico, a stable, dependable, and adequate source of additional infrastructure capital will be required.
- An understanding of how neighboring Gulf of Mexico states manage port development and financial constraints provide ideas for future funding opportunities that may be utilized by Louisiana and its ports.
- PAL's continued involvement with and participation in the Port Construction and Development Priority Program by way of project evaluation and increased funding is vital to the future success of the state's maritime industry—deep-draft and shallow-draft; inland and coastal; cargo and oil and gas related.
- Port planning based upon standard transportation planning principles and a consensus-based approach is necessary to maintain long-term strategic development goals.
- Because long-term, stable and dependable funding is generally considered both a state and local responsibility in Louisiana, local port jurisdictions should develop plans that are well-coordinated with local, regional, and state interests in mind.
- PAL's approach to unifying the state's port interests will enhance Louisiana's competitiveness along the Gulf Coast and within the international marketplace. However, this goal can be accomplished only with cooperation and coordination in the preparation statewide port-based strategic plan.

1.0 Introduction, Approach, and Methodology

1.1 Introduction

The purpose of this report was to prepare a thorough and comprehensive five-year capital improvement plan (CIP) for ports of the Ports Association of Louisiana (PAL). A graphic representation of the state noting port locations is included as Exhibit 1. The following list identifies the 31 PAL member ports within the state.

<u>Legislated Name</u>	<u>Common Name</u>
Abbeville Harbor & Terminal District	Port of Vermilion
Alexandria Regional Port Authority	Port of Alexandria
Avoyelles Parish Port Commission	Avoyelles Parish Port
Caddo-Bossier Port Commission	Port of Shreveport-Bossier
Columbia Port Commission	Port of Columbia
Grand Isle Port Commission	Grand Isle Port
Greater Baton Rouge Port Commission	Port of Greater Baton Rouge
Greater Krotz Springs Port Commission	Port of Krotz Springs
Greater Lafourche Port Commission	Port Fourchon
Greater Ouachita Port Commission	Greater Ouachita Port
Jefferson Parish Economic Development & Port District	JEDCO
Lake Charles Harbor & Terminal District	Port of Lake Charles
Lake Providence Port Commission	Port of Lake Providence
Mermentau River Harbor & Terminal District	Port of Mermentau
Millennium Port Authority	Millennium Port Authority
Morgan City Port Harbor & Terminal District	Port of Morgan City
Natchitoches Parish Port Commission	Natchitoches Parish Port
Plaquemines Port, Harbor & Terminal District	Plaquemines Port
Pointe Coupee Parish Port	Port of Pointe Coupee
Port of Iberia District	Port of Iberia
Board of Commissioners of the Port of New Orleans	Port of New Orleans
Port of South Louisiana	Port of South Louisiana
Red River Parish Port Commission	Red River Parish Port
St. Bernard Port, Harbor & Terminal District	Port of St. Bernard
South Tangipahoa Parish Port Commission	Port Manchac
Terrebonne Port Commission	Port of Terrebonne
Vidalia Port Commission	Port of Vidalia
West Calcasieu Port,	West Calcasieu Port
West Cameron Port Commission	West Cameron Port
West Feliciana Parish Port Commission	Port of West Feliciana
West St. Mary Parish Port Harbor & Terminal District	Port of West St. Mary

A PAL member port directory is included as an Appendix. The directory includes the address, telephone number, and key contact information for each PAL member port.

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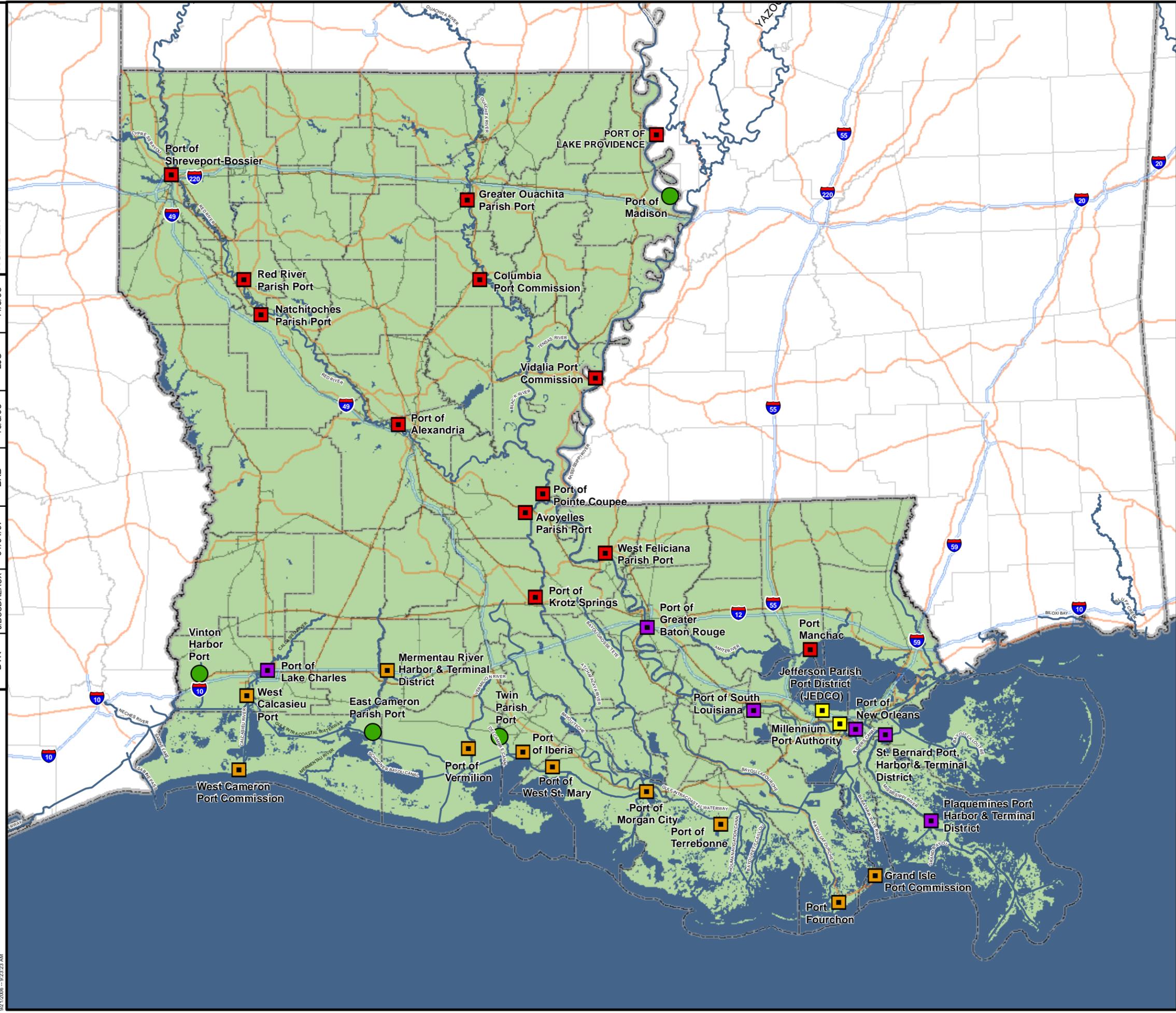
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1 inch equals 30 miles

Legend

PAL Member Ports

- Inland
- Coastal
- Deep Draft
- Affiliates

Other Ports

- Non-PAL

- Navigable Waterways
- Railroads
- Interstate
- Highway



**EXHIBIT 1
PORTS OF LOUISIANA**

FIVE-YEAR CAPITAL IMPROVEMENT PLAN
2007 - 2011

In addition to specific port related data, a broadly-based economic analysis of the state's port system was addressed. This overview identified and consolidated the following information:

- The economic impact and importance of Louisiana ports relative to local, state, and national parameters
- The domestic and international marketplace in which the PAL member ports operate
- Five-year capital improvement plans of each PAL member port
- An evaluation of historical funding sources for Louisiana ports and ports in neighboring Gulf of Mexico States

To collect the necessary data, representatives of the consulting team visited each port and obtained data provided by port personnel. The result is a legitimate and well-substantiated PAL five-year CIP for the period 2007 to 2011.

The CIP and funding needs of those ports which are not current PAL members are not included in this study. While no significant projects are currently anticipated at these facilities, these ports have historically applied for state and federal funding assistance and are likely to do so in the future.

1.2 Site Visits

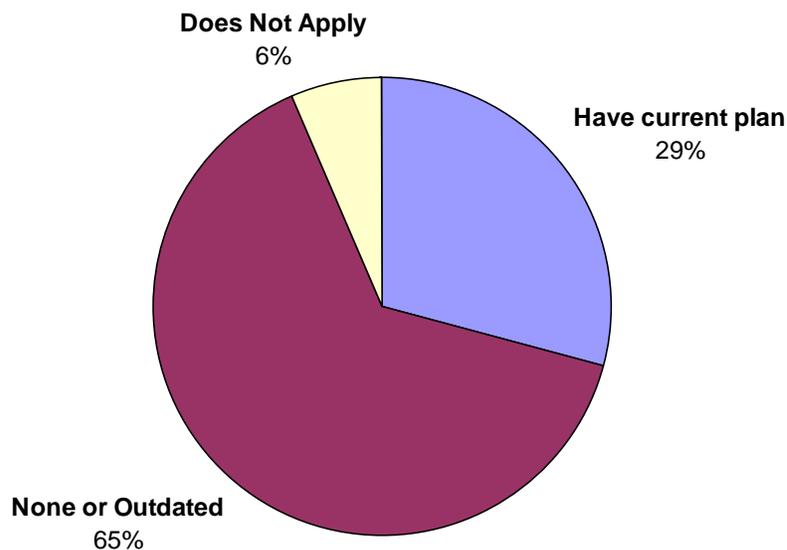
During May and June 2006, PAL member ports were visited to (a) inventory each site, (b) visit port staff, (c) become familiar with the port facilities, and (d) collect relevant data supporting the CIP. When possible, the port director or his designee was interviewed. Interviews included discussions regarding current port operations, current master plans, and proposed five-year CIP projects. In isolated cases where site visits could not be made, interviews were conducted by telephone.

1.3 Review of Web Sites, Master Plans, and Port Profiles

In addition to site visits, other sources of information were utilized when available. These sources include websites, port master plans, and PAL supplied port profiles. Of the PAL member ports, 20 ports maintain a website. The websites vary in content, but all generally provide basic information regarding the port location, contact information, tenants, and facilities.

During the site visits, the availability of current master plans specific to each facility was discussed. Nearly two-thirds of the ports (20 of 31) either have no master plan or have a plan that is outdated and in need of updating. Two port affiliations (JEDCO and Millennium) are not ports *per se*, and master plans are not pertinent at this time. Only nine ports presented a current master plan for use in preparing their respective five-year CIPs. The existence of port specific master plans is presented graphically in Exhibit 2 below.

Exhibit 2
Availability of Port Master Plans
PAL Member Ports



Initially, PAL provided port profiles for a majority of the ports. The profiles varied in length and detail. They included information such as location, organizational structure, number of port employees, revenue, tonnage, cargo activity, main channel depth, and a brief description of facilities. Because various data presented in the profiles were outdated, the profiles were updated as needed and provided to PAL.

2.0 *Economic Impact of Louisiana Ports*

For purposes of this report, several port related studies, were abstracted and summarized to note the broadly based impact of the state's port industry on national, regional, and local economies. Also noted in this section and in later sections is the impact of the ports as related to international cargo movements.

Ports play a significant role in the overall economy of the state, the country, and the world. They allow for an efficient means of transporting commodities and equipment wherever navigable waterways exist—between cities, between states, and between countries. Equally as important, they provide jobs, personal income, and tax revenue.

A 2002 presentation titled *Delivering the Goods: Ports in the South* provided by Sujit M. CanagaRetna to the Council of State Governments Southern Legislative Conference in Atlanta, Georgia, provided several pertinent facts regarding the contribution of ports to the nation's economy. The following examples are noteworthy. Data is presented on an annual basis.

- U. S. ports handle approximately two billion tons of cargo.
- U. S. ports contribute approximately \$700 billion to the gross domestic product.
- U. S. ports support nearly 13 million jobs.
- U. S. ports provide nearly \$500 billion in personal income.
- U. S. ports generate approximately \$200 billion in tax revenue.

Louisiana's ports are a significant contributor to these statistics. In fact, Louisiana has consistently ranked as one of the top two states nationally with regard to tonnage of domestic and foreign waterborne cargo. According to the USACE Waterborne Commerce Statistics Center, five of the top thirteen tonnage based ports in the United States during 2004 were located in Louisiana. The ports, their ranking, and total tonnage in 2004 are as follows:

Exhibit 3: USACE Tonnage Rankings (2004)

Louisiana Port	2004 Ranking	Tonnage
Port of South Louisiana	1 st	224,187,322
Port of New Orleans	7 th	78,085,209
The Port of Greater Baton Rouge	10 th	57,082,823
Port of Lake Charles	12 th	54,768,322
Plaquemines Port Harbor & Terminal District	13 th	54,404,720

The 2004 flow of cargo to and from these five ports totals approximately 469 million tons or 18% of the total U. S. tonnage, all of which is attributed to deep draft port jurisdictions. However, for purposes of this report and in accordance with PAL's internal port classifications, the majority of the ports in the state are shallow-draft inland ports or shallow-draft coastal ports. These two classes serve as industrial sites for water-related industries, for servicing the offshore oil and gas industry in the Gulf of Mexico, and cargo transfer.

The following excerpt from the *Louisiana Statewide Transportation Plan* prepared by Wilbur Smith Associates in 2003 provides a strong indication of the importance of these ports to the nation.

Louisiana is the nation's second largest producer of natural gas and third largest producer of crude oil among the 50 states. In terms of offshore oil and gas production, the Gulf of Mexico accounts for more than 90 percent of the US production. Three major public ports, Port Fourchon, Iberia and Morgan City and a large number of private terminals operate as supply bases to this fast growing offshore oil and gas industry in the state.

Dr. Timothy P. Ryan of the University of New Orleans prepared a report titled *The Economic Impacts of the Ports of Louisiana and the Maritime Industry* dated February 2001. In that report, Dr. Ryan concluded that not only are the ports and the maritime industry a key component of the Louisiana economy, but they also represent a growing industry that expanded at a rate of 6% between the period 1997 and 1999. The report focused on four key areas of economic impact relative to the ports of Louisiana and the maritime industry: cargo tonnage, economic impact (spending), earnings/employment, and tax revenue. Data related to these areas

was updated by Dr. Ryan in a report titled *Louisiana Ports Gas Tax Impact* dated August 2002. A summary of updated supporting data is provided in Exhibit 4 below.

Exhibit 4: Dr. Ryan's Summary of Key Economic Data (2002)

Category	2002 Data	Percent of Total
Direct Impact/Spending	\$11,390,000,000	35%
Secondary Impact/Spending	<u>\$21,530,000,000</u>	<u>65%</u>
Total Impact/Spending	\$32,920,000,000	100%
Earnings (Ports)	\$5,660,000,000	N/A
Employment (Ports)	269,259	N/A
State Tax Revenue	\$314,750,000	67%
Local Tax Revenue	<u>\$152,290,000</u>	<u>33%</u>
Total Tax Revenue	\$467,040,000	100%

In Dr. Ryan's 2001 study of port related economic impact to the state, findings note that (1) the economic impact of the ports constitutes 22.5% of the total dollar value of the state's goods and services (gross state product), (2) the ports produce approximately 5% of the entire personal income in the state, and (3) the economic activities created by the ports result in approximately one out of every eight jobs in the state.

While Louisiana ports as a whole generate a significant impact on the state and U. S. economies, the impact of individual ports on their local respective economies is often dramatic. For example, a 1999 report titled *The Economic Impact of the Port of Lake Charles* by Dr. Douglas W. McNiel and Dr. Daryl V. Burckel of McNeese State University indicates that many of the largest and highest paying employers in Lake Charles would not have located in the region were it not for the marine support services provided by the Lake Charles Harbor and Terminal District along and/or near the Calcasieu Ship Channel. Examples identified in the report include the following:

- Refineries receive up to 95% of their feedstock (crude oil) via port complexes.
- Chemical manufacturers rely on waterborne commerce to receive virtually 100% of their raw materials.
- Rice mills ship as much as 80% of their products through the Port of Lake Charles alone.

Another report, *The Economic Impact of the Port of New Orleans* prepared by Martin Associates in August of 2005, highlights the economic importance of the Port of New Orleans on

the local and regional economy. The text provides facts such as those listed below regarding the Port of New Orleans.

- Port business activity created \$8.5 billion of personal wage and salary income in the state of Louisiana.
- The maritime cargo and vessel activity at the Port of New Orleans generated \$17.8 billion of total economic activity in Louisiana.
- The federal government received \$1.4 billion in federal income tax revenue as the result of port activity.

In summary, the economic data summarized heretofore substantiates the importance of Louisiana ports with respect to the economy of the state and the country. The activity related to waterborne commerce within the state is attributed to its proximity to the Gulf of Mexico, the Mississippi River, and large expanse of inland waterways. In accordance with data from Dr. Ryan's 2001 report, approximately 50% of the nation's foreign trade by weight is handled through the Gulf of Mexico.

Because Louisiana is geographically located along the center of the Gulf Coast, its ports are ideally positioned to handle local, regional, and international cargo. Present circumstances indicate that strategic planning for the capture of additional international cargo continues to be important to the state, its ports, and its waterway system. Therefore, careful and timely strategic planning and budgeting are imperative if long-term, feasible sustainability is to be enhanced.

3.0 *Domestic and International Marketplace*

Information provided by PAL member ports indicates that collectively they handle thousands of commodities that can be segregated into approximately 60 inbound and 50 outbound cargo types. According to the *Louisiana Statewide Transportation Plan* prepared by Wilbur Smith Associates in 2003, predominate inbound and outbound domestic commodities are farm products and petroleum products, respectively, based on tonnage and value in 2001. That plan projects the overall domestic tonnage to increase by 44% between 2000 and 2030. The statewide plan also identifies mineral fuel, oil, etc.; bituminous substances; and mineral wax as the top imports through Louisiana ports with respect to tonnage and value in 2001. Cereals were identified as the top export during the same year. The plan projects a significant increase in imports of 195% and exports of 129% during the period 2000 to 2030.

Cargo packaging type and/or business activity at Louisiana ports includes project cargo, specialized cargo, containerized cargo, bulk cargo, and break bulk cargo from domestic as well as international origins and destinations. According to data provided by the ports for this study, domestic inbound cargo is received from 19 regional distribution points while outbound sources track 20 U. S. destinations. From an international perspective, imports are received from no less than 57 individual countries or territories, and exports are delivered to approximately 61 destinations.

The cargo origins and destinations represent eight continents or regions including Africa, Asia, Australia, the Caribbean, Europe, the Middle East, North America, and South America. As provided by each port, a graphical representation of the marketplace in which the PAL member ports operate is presented in Exhibit 5 on the following page. A detailed summary of the cargo activity information is provided in Exhibits 6 and 7 on pages 3-3 thru 3-9. The tables include business activity by port including inbound and outbound cargo as well as origin and destinations. PAL member ports not included in the tables either do not currently have cargo activity (emerging or developing ports) or were identified as landlord ports with no current record of cargo activity.



LEGEND:

- Inbound Cargo Activity
- Outbound Cargo Activity
- Locations with both Inbound & Outbound Cargo Activity
- Shipping Routes



NOT TO SCALE



EXHIBIT 5
THE DOMESTIC AND INTERNATIONAL
MARKETPLACE OF PAL MEMBER PORTS
 FIVE-YEAR CAPITAL IMPROVEMENT PLAN
 2007 - 2011

Exhibit 6: Summary of INBOUND Activity (Page 1 of 3)

Port Name	Business Activity	Inbound Cargo Activity	
		Cargo Summary	Origin
Alexandria, Port of	Specialized Cargo, Bulk, Break Bulk, Project Cargo	Fertilizer	Romania, Libya, Russia, Kuwait, Qatar, Bahrain, Bulgaria, Saudi Arabia, Egypt, Malaysia, Canada
		Military cargo	Kentucky
		Aggregates	Missouri, Kentucky, Arkansas
		Citric Acid	China
		Equipment	Florida
Baton Rouge, Port of Greater	Containers, Bulk, Break Bulk	Petroleum	Central & S. America
		Molasses	South America, Australia, Mexico
		Rail	Czech Republic
		Pipe	S. America
		Steel products	S. America
		Chemicals	Europe & S. America
		Building and construction materials	Europe
		Cement	Asia & South America
Fourchon, Port	Specialized Cargo, Oil & Gas	Equipment, supplies, personnel and services that have been used off shore and are returned to shore for proper maintenance, disposal, etc.	South Louisiana, Gulf of Mexico, LOOP International
Iberia, Port of	Specialized Cargo, Oil & Gas	Steel	Domestic & international
		Pipe	Domestic & international
		Shell/limestone/barite	Domestic & international
		Oil & gas equipment	Domestic
Krotz Springs, Port of	Bulk	Aggregate	Missouri, Arkansas
		Grain	Local & regional
		Crude oil	West Texas
Lake Charles, Port of	Bulk, Break Bulk, Containers	Forest products	South America, Europe
		Barite	China
		Rutile	Australia, South Africa
		Aluminum	South America
		Limestone	Mexico
		Petroleum	Africa, Venezuela, Mexico
		Chemicals	Domestic & international
Liquefied natural gas	Algeria, West Africa		

Exhibit 6: Summary of INBOUND Activity (Page 2 of 3)

Port Name	Business Activity	Inbound Cargo Activity	
		Cargo Summary	Origin
Lake Providence, Port of	Bulk, Break Bulk	Aggregates	Missouri
		Coal	E. Kentucky, Bastrop
		Dry & liquid fertilizer	Local & regional
		Forest products	Mississippi River
		Lime	Caribbean, local & regional
		Tire chips	Houston, local & regional
Manchac, Port	Bulk, Break Bulk	Specialty woods (northern hardwoods)	Northwest U. S. & Canada
		Steel	Chicago
		Decorative rock	New Mexico, Georgia
		Pipe	Pennsylvania
		Construction materials	Ohio & Minnesota (Roofing shingles)
Mermentau, Port of	Bulk	Aggregates	Kentucky, Mexico
		Fertilizer	Kuwait, Texas, Port Allen (LA), north LA
		Rough rice	Texas, Mississippi, Arkansas
		Rice Hull Compost	Forest Hill (LA), Texas, Florida, Pennsylvania
Morgan City, Port of	Bulk, Oil & Gas	Steel, project cargo, offshore equipment, stone aggregate, drilling supplies	Mexico & Gulf Coast States
Natchitoches Parish Port	Bulk, Break Bulk	Aggregate	Arkansas, Kentucky, Missouri
		Forest products	Louisiana, Texas, Canada
New Orleans, Port of	Containers, Specialized Cargo, Break Bulk	Various containerized cargo, steel, rubber, plywood, coffee, metals, project cargo	Top 10 - Brazil, Indonesia, Netherlands, Turkey, Russia, Venezuela, Japan, China, Germany, India
Ouachita Port, Greater	Containers	Furniture	China
		Baby supplies	Indonesia
Plaquemines Port	Bulk	Coke, carbon black feed stock, IC 4, nickel, cobalt, petroleum products, phosphate, sulphur	N/A
Pointe Coupee, Port of	Bulk	Aggregate, lime	Missouri
		Liquid & dry fertilizer	South Louisiana (New Orleans)
Red River Parish Port	Bulk	Aggregate	Arkansas, Kentucky, Missouri
		Agricultural lime	Missouri
Shreveport-Bossier, Port of	Bulk, Break Bulk, Project Cargo	Aggregate	Kentucky
		Liquid petrochemicals	Houston- Gulf Coast
		Coal	Kentucky

Exhibit 6: Summary of INBOUND Activity (Page 3 of 3)

Port Name	Business Activity	Inbound Cargo Activity	
		Cargo Summary	Origin
Shreveport-Bossier, Port of (cont'd)		Fertilizer	Russia, Dead Sea, Bulgaria, Lithuania Canada, Virginia
		Steel	Thailand, Chicago
South Louisiana, Port of	Containers, Bulk, Break Bulk, Project Cargo	Chemicals/fertilizers	Venezuela, Trinidad, Russia, Chile, Romania, Germany, Lithuania, Bahrain, Morocco, Latvia
		Crude oil	Venezuela, Mexico, United Kingdom, Angola, N. Antilles, Algeria, Nigeria, Kuwait, Saudi Arabia, Germany, Virgin Islands, Georgia, Vietnam
		Petrochemicals	Venezuela, Trinidad, United Kingdom, N. Antilles, Algeria, Nigeria, Sweden, Virgin Islands, Bahamas
		Steel products	Venezuela, China, Trinidad, Russia, S. Africa, Egypt, Germany, Argentina, Mozambique, Belgium, France, Korea
		Concrete/Stone Products	China, Mexico, Thailand, Peru, S. Africa, Egypt, Greece, Turkey
		Ores/Phosphate Rock	China, Chile, Finland
		Wood/wood chips	China, Uruguay
		Coal/lignite/coke	Romania, Argentina
		Edible oils	Argentina
		Other	China, Brazil
St. Bernard, Port of	Bulk, Break Bulk, Project Cargo	Steel Products	China, Korea, India, South Africa, Venezuela, Russia, Brazil, Australia, Taiwan, Mexico, Trinidad
		Project/specialized cargo	Germany, Japan, Brazil, France & Italy
		Lumber/plywood	China, Malaysia, Indonesia, Brazil
		Aluminum Products	South Africa, Black Sea
		Ferro alloys	South Africa
		Fertilizers (potash)	Russia
		Limenite sand	Australia
		Coke	China, South America, Kuwait
		Fluorspar, Bauxite, Zinc Concentrates	South America
Limestone	Central America		
Vermilion, Port of	Specialized Cargo, Project Cargo	Oilfield deck, jacket and piping	South Louisiana, Gulf of Mexico
		Offshore living quarters	South Louisiana, Gulf of Mexico
		USCG approved modules	South Louisiana, Gulf of Mexico
		Salvage & refurbishment of offshore decks & jackets	South Louisiana, Gulf of Mexico

Exhibit 7: Summary of OUTBOUND Cargo Activity (Page 1 of 4)

Port Name	Business Activity	Outbound Cargo Activity	
		Cargo Summary	Destination
Alexandria, Port of	Specialized Cargo	Military cargo	Kentucky
Baton Rouge, Port of Greater	Containers, Bulk, Break Bulk, Project Cargo	Grain	Europe & Asia
		Molasses	Europe & Caribbean
		Chemicals	Europe & Asia
		Liquid bulk chemicals	Europe & Asia
		Petroleum coke	Domestic Product
		Petroleum products	Europe & Asia
		Pipe	South America
		Sugar	Domestic Product
		Containerized cargo	Europe & S. America
Columbia, Port of	Bulk	Grain by truck	local to poultry industry
		Cottonseed by rail	Midwest U.S.
Fourchon, Port	Specialized Cargo	All equipment, supplies, personnel and services for the offshore oil and gas business. Includes drilling fluids, fluid, water, pipe, equipment, personnel, and services.	South LA, Gulf of Mexico
Iberia, Port of	Specialized Cargo	Agriculture	Domestic
		Pipe	Gulf of Mexico
		Fabrication/modules	Gulf of Mexico, international
		Oil & gas equipment	Gulf of Mexico, international
Krotz Springs, Port of	Bulk	Refined petroleum products	Midwest U.S.
		Grain	Mississippi River then shipped overseas
Lake Charles, Port of	Containers, Bulk, Break Bulk	Petrochemical	Israel, Europe, Mexico, Africa, Brazil, Japan
		Rice, bagged goods, bulk grains	Africa, Central America, Iraq, West Indies
		Vegetable oil	Africa, Central America, West Indies
Lake Providence, Port of	Bulk	Cottonseed	local & regional, Midwest & Pacific NW
		Grain	local & regional, gulf
Manchac, Port	Bulk, Break Bulk	Plywood	Eastern U.S. (Hunt Plywood)
		Liquid bulk (vegetable oils)	Mexico

Exhibit 7: Summary of OUTBOUND Cargo Activity (Page 2 of 4)

Port Name	Business Activity	Outbound Cargo Activity	
		Cargo Summary	Destination
Mermentau, Port of	Bulk	Rough rice	Texas, Mexico, South America
		Clean rice	Caribbean, Mexico, South America
		Soybeans	Destrehan, Louisiana
Morgan City, Port of	Project Cargo, Bulk	Heavy Lift Project Cargo, General Cargo, Rice, Molasses, and Salt	Caribbean, Mexico, Louisiana
Natchitoches Parish Port	Bulk , Break Bulk	Forest products, asphalt	Louisiana
New Orleans, Port of	Containers, Break Bulk	Various containerized cargo, forest products, steel, chemicals, poultry, and other foodstuff	Top 10 Belgium, United Kingdom, Brazil, Netherlands, Uruguay, Argentina, Turkey, Russia, Guatemala, Honduras
Ouachita Port, Greater	Containers	Paper	Japan, UK, Spain, Australia, Germany
		Cotton	China
Plaquemines Port	Bulk	Coal, corn, soybean, fertilizer	N/A
Pointe Coupee, Port of	Bulk	Cottonseed	Northern U. S. (various states)
		Grain	Terral fleet empty barges which are then loaded by Bungee at Bungee dock.
		Dry fertilizer	North Louisiana
Red River Parish Port	Bulk	Fly ash	Puerto Rico
Shreveport-Bossier, Port of	Bulk, Project Cargo	Over dimensional vessels	Middle East, Africa
		Project cargo	Eastern Seaboard

Exhibit 7: Summary of OUTBOUND Cargo Activity (Page 3 of 4)

Port Name	Business Activity	Outbound Cargo Activity	
		Cargo Summary	Destination
South Louisiana, Port of	Bulk, Break Bulk, Containers	Animal feed	Morocco, Egypt, Colombia, Netherlands, Portugal, Spain, United Kingdom, Ireland, Israel, Turkey, Venezuela, Germany, Tunisia, Azores
		Coal/lignite/coke	Morocco, Portugal, Spain, United Kingdom, Mozambique, South Africa
		Maize	Morocco, Japan, China, Mexico, Colombia, Netherlands, Portugal, Dominican Republic, Jamaica, Spain, United Kingdom, Guatemala, El Salvador, Syria, Costa Rica, Ireland, Israel, Cuba, Algeria, Turkey, Ecuador, Honduras, Russia, Panama, Korea, Puerto Rico, Trinidad, Tunisia, Peru, Barbados, Lebanon, Leeward Windward Islands
		Milo	Morocco, Japan, Mexico
		Petrochemicals	Morocco, Mexico, Netherlands, Jamaica, N. Antilles, Chile, Italy, Bahamas
		Rice	Morocco, Mexico, Dominican Republic, Jamaica, United Kingdom, Guatemala, El Salvador, Honduras, Panama, Puerto Rico, Nicaragua, Barbados
		Soybean	Morocco, Japan, China, Egypt, Mexico, Colombia, Netherlands, Portugal, Dominican Republic, Indonesia, United Kingdom, Guatemala, El Salvador, Syria, Costa Rica, Ireland, Israel, Turkey, Venezuela, Honduras, Russia, Panama, Thailand, Belgium, Korea, Puerto Rico, Trinidad, Denmark, Nicaragua, Tunisia, Barbados, Philippines, Belize

Exhibit 7: Summary of OUTBOUND Cargo Activity (Page 4 of 4)

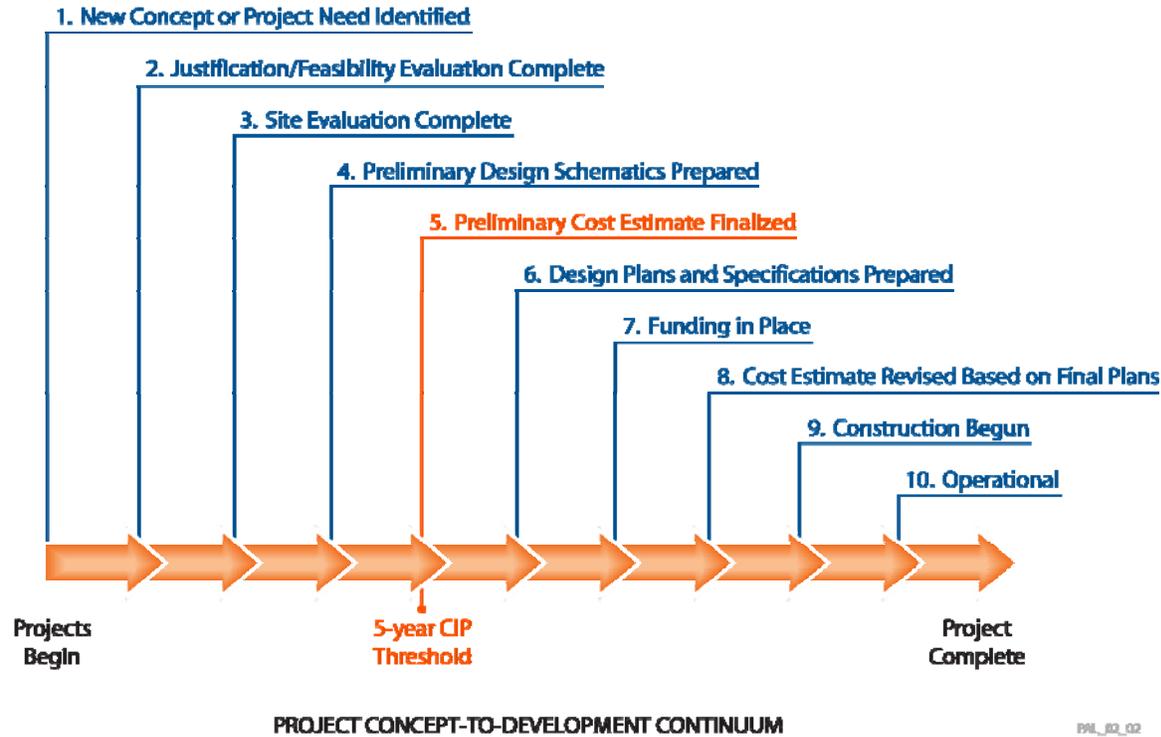
Port Name	Business Activity	Outbound Cargo Activity	
		Cargo Summary	Destination
South Louisiana, Port of (Cont'd)	Bulk, Break Bulk, Containers	Wheat	Morocco, Egypt, Mexico, Colombia, Dominican Republic, Jamaica, Spain, Guatemala, El Salvador, Costa Rica, Cuba, Venezuela, Ecuador, Panama, Puerto Rico, Trinidad, Nicaragua, Leeward Windward Islands, Barbados, Nigeria, Brazil, Sierra Leone, Belize
		Chemicals/fertilizers	Japan,
		Edible oils	Guatemala
		Crude oil	Chile
St. Bernard, Port of	Bulk Break Bulk	Ferro alloys	Pennsylvania, Alabama, Illinois
		Fertilizers (potash)	Florida, Georgia, Upper Mid West
		Zinc concentrates	Tennessee
		Limenite sand	Tennessee, Illinois
		Coke	Louisiana, Oklahoma, Texas
		Fluorspar	Illinois
		Bauxite	Louisiana, Arkansas
St. Mary, Port of West	Specialized Cargo	Oil & gas related	Gulf of Mexico, international
Terrebonne, Port of	Specialized Cargo	Fabrication, diving, oil field related activities	South Louisiana, Gulf of Mexico
Vermilion, Port of	Specialized Cargo	Oilfield deck, jacket and piping,	South Louisiana, Gulf of Mexico
		Offshore living quarters	South Louisiana, Gulf of Mexico
		USCG approved modules	South Louisiana, Gulf of Mexico
		Salvage & refurbishment of offshore decks & jackets	South Louisiana, Gulf of Mexico

4.0 Capital Improvement Plans

4.1 Potential Capital Improvement Projects

At the conclusion of the site visits and an initial round of data collection, a list of “potential” five-year capital improvement projects was identified and compiled by the staff of each port. This initial list was refined with the use of a project rating system. This approach and methodology was implemented so that each project could be rated according to a logical “concept-to-development” industry standard. The sequence below was developed for that use.

Exhibit 8



In accordance with the above continuum, port staffs were asked to justify and assign a current rating to each project that was initially identified. The rating was intended to provide an indication of the current status of each project and to incorporate validity, justification, and credibility to each project where warranted.

4.2 *Listing of Projects and Procedural Methodology in Project Evaluation*

Port management personnel provided data relative to projects deemed active from 2005 to 2011. Data from 2005 was eliminated and only projects and costs for the period 2006 to 2011 were considered. The initial assessment of the comprehensive list identified four primary types of projects. These types are described below.

- 1) *Projects-in-Motion* represents portions of projects with funding in place (Level 7 as listed above) and projected costs that will carry over into the 2007 to 2011 time frame. These projects are described as “in-motion” because each will be initiated in 2006. A total of eight projects at five different ports fit this classification. Those projects total approximately \$56 million in costs with \$29 million to be incurred in 2006 and \$27 million to be incurred during the 2007-2011 period. As such, the 2006 costs are identified in this plan as “projects-in-motion” and are presented separately from the costs representing a future funding need during the five-year 2007 through 2011 planning period.
- 2) *New Concepts or Ideas* represents projects that are included in future plans of the respective port, but the project has not progressed in the rating system past the pre-design stage (Level 4). The PAL executive board agreed that these projects would likely not have a high probability of occurring within the next five years. New concepts or ideas would generally score in the range of 1 to 4 within the noted rating system.
- 3) *Highly Probable Projects* represents projects that are assigned a minimum level of 5 within the rating system. Generally, these projects have received a significant degree of planning and investment to date thereby tending to indicate a high probability of development in the five-year time frame.
- 4) *Essentially Complete Projects* represents those that are under construction or nearly operational (Level 9 or 10), and no costs are anticipated beyond 2006. These projects are considered essentially complete and do not represent a future funding need.

Once a maximum rating was assigned to each project by the respective port representatives, projects were systematically reduced in number, and a final list of projects determined to be highly probable of occurring between 2006 and 2011 was established. The PAL board determined that a proper threshold for consideration in the final plan was a project rated at Level 5 or greater. Therefore, new concepts or ideas without supporting verification were not included in the CIP. Likewise, essentially complete projects were excluded. Essentially complete projects included 19 projects at seven ports with an estimated cost of approximately \$57 million. The initial net result of the project evaluation process was a list of capital improvement projects which included 104 projects with a total estimated cost of approximately \$1.2 billion within the five-year 2007-2011 planning period. However, several unique projects warranted further evaluation of this initial CIP projection.

4.3 Evaluation and Consideration of “Unique Projects”

In five separate instances, projects identified in the list of 104 are identified as unique, i. e., they are non-routine, one-of-a-kind projects. The combined total estimated cost of these five projects is \$679 million or approximately 57% of the total estimated costs of all projects identified in the PAL CIP. A brief description of each of the five projects and an explanation of their inclusion in the plan follows.

Port of New Orleans—France Road Terminal Relocation (approx. cost: \$110 million)

With local, state, and federal consensus, the decision has been made to no longer provide deep-water shipping access along the Mississippi River Gulf Outlet (MRGO) in St. Bernard and Orleans Parishes. Tenants located along the MRGO requiring deep-water access have requested relocation. According to New Orleans port personnel, relocation projects have a very high probability of occurring within the next five years although preliminary engineering plans have not been completed and funding sources have yet to be identified. Nonetheless, the project will be included in the PAL CIP. The project justification is described as “MRGO Related Relocations,” and the funding sources will be noted as one-third state, one-third federal, and one-third port generated.

Port of New Orleans—Jourdan Road Terminal Relocation (approx. cost: \$50 million)

The project description is similar to the France Road Terminal above.

Port of Iberia—Acadiana Gulf of Mexico Access Channel (approx. cost: \$158.9 million)

The project description includes proposed improvements along the Gulf Intracoastal Waterway from the Port of Iberia to the Gulf of Mexico by way of Freshwater Bayou. The project is considered unique in that it is, in relative terms, a very large project for a shallow draft port. Nonetheless, with federal authorization in the pending version of the Water Resources Development Act (WRDA), state and federal funding committed for the preliminary plans, and preliminary plans in progress, the project rates as having a high probability of occurring within the five-year planning period. It is included as a unique project because of the relative magnitude of the cost and the effect of that cost on the statewide capital improvement plan.

Plaquemines Parish Port—Seapoint Project (approx. cost: \$200 million)

This project is considered unique because approximately \$180 million or 90% of the total project costs are anticipated from private investors. Expectations are that the remaining 10% (\$20 million) will be provided by the State. The project will remain in the PAL CIP; however, the total estimated cost of the project will be represented only by the non-private investment funding need or \$20 million. Following an evaluation of this project, it was determined that private investment would not be considered in this plan to maintain

consistency. Each project that was expected to receive some amount of private investment was discounted by the amount of private investment anticipated.

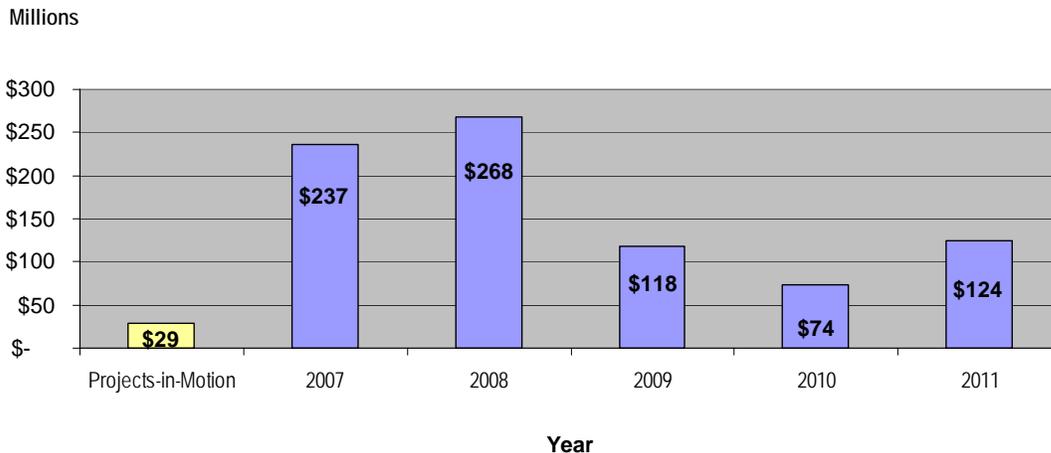
Port of Morgan City—Atchafalaya Dredging Project (approx. cost: \$160 million)

The total cost of this project is estimated to be \$300 million. Local port personnel indicated that the study to determine the economic feasibility of the project is nearing completion. Port staff also indicates that the project would begin within the next five years, and approximately \$160 million in costs would be incurred during that period. However, based on the execution of similar projects, this project is focused on a long-term horizon and will likely not be initiated during the five-year planning period. Specifically, the completion and favorable results of the economic feasibility and an environmental impact study as well as heavy dependence on authorization from Congress through WRDA plus later appropriations at the federal level are required. Therefore, this project will be included in the PAL CIP, but the total project cost during the planning period will be limited to \$25 million to address the completion of the study phase and to allow for the preliminary phases of project initiation within the five-year planning period.

4.4 PAL’s Five-Year Capital Improvement Plan

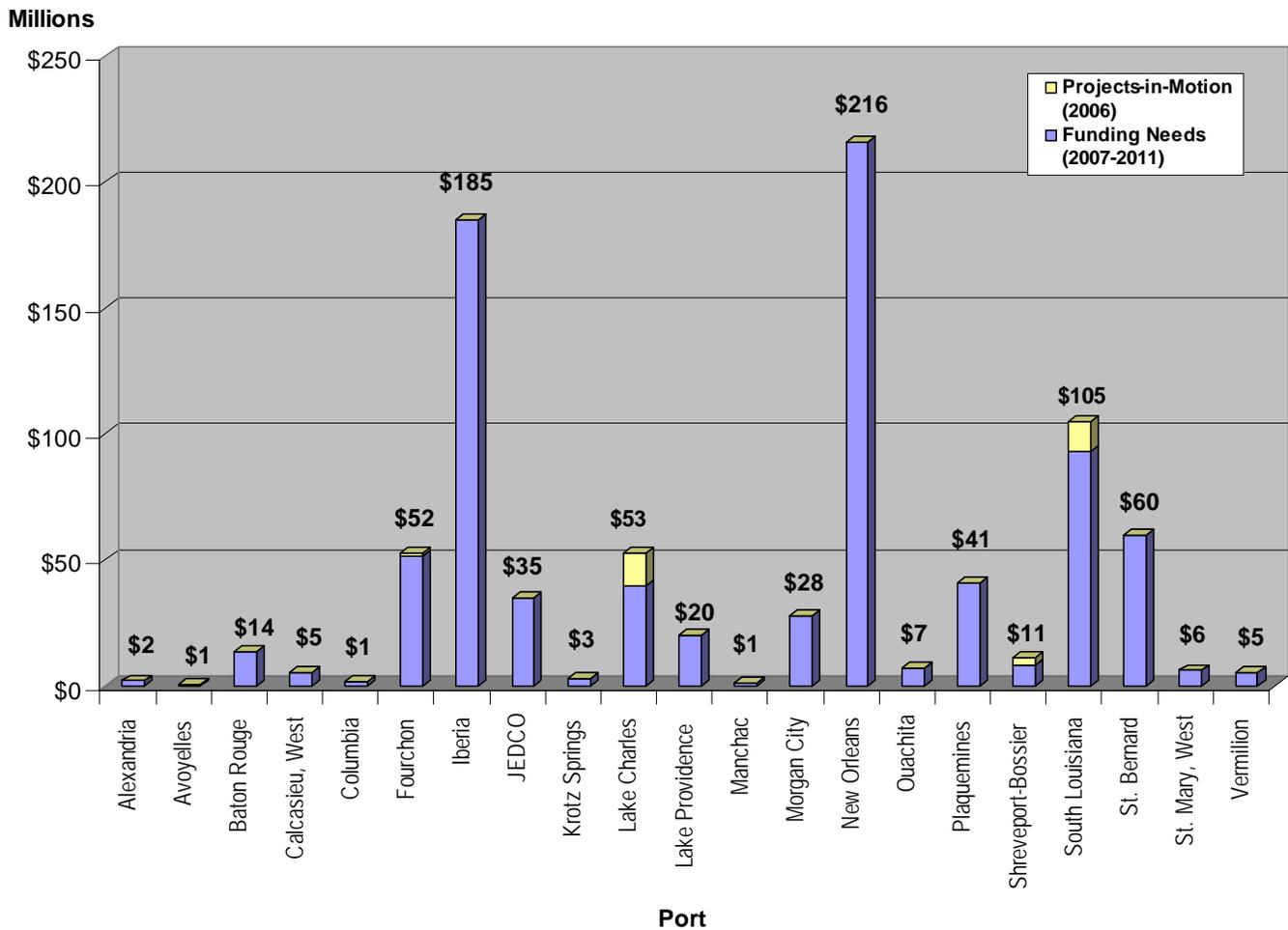
Following the complete evaluation of all projects, including the adjustment affected by the unique projects highlighted above, a final funding projection of projects included in the five-year CIP was prepared. The list includes 104 projects at 21 PAL member ports with a total estimated cost of \$849 million. The total estimated cost is represented by approximately \$29 million in costs for projects-in-motion during the five-year cycle and approximately \$820 million of future funding needs. The projected cost, i.e., funding needs, of PAL’s CIP are represented in Exhibit 9 by anticipated funding year.

**Exhibit 9
Project Cost of PAL CIP by Year
PAL Member Ports**



In a similar manner, information presented in Exhibit 10 provides an assessment of the financial needs of each port during the period 2006 through 2011 as identified in the PAL CIP. The chart includes both projects-in-motion (yellow) and future needs (blue).

Exhibit 10
Financial Needs Assessment by Port
PAL Member Ports
2006 through 2011



As indicated in Exhibit 10, the two ports with the largest funding needs in the near term are the Ports of New Orleans (approximately \$216 million) and Iberia (approximately \$185 million). In the case of New Orleans, the cost is attributed to the MRGO related relocations as previously described. Also as noted, the Port of Iberia is expected to receive congressional authorization of federal funding in FY 07 via WRDA for the dredging of the Acadiana to the Gulf Access Channel (AGMAC). The New Orleans projects and the AGMAC, because of their magnitude, skew the typical range of projects considered normal for state and local funding.

As an aside, it is considered significant to the future of individual ports and their respective jurisdictions as well as Louisiana's port system as a whole, that of the 104 projects justified and thereby included in PAL's CIP, 85 (or approximately 70%) were presented in port master plans while 36 (approximately 30%) were not. Only one-third of the ports have working master plans (current and practical for short-range planning), and more than two-thirds of the acceptable projects included in the PAL CIP are generated from that one-third of the ports. Therefore, addressing environmental, economic, political, and funding feasibility of port projects within a standard, objective planning approach is worthy of consideration by the ports of Louisiana.

A financial needs assessment created by the five-year CIP is provided in Exhibit 11 on page 4-7. Details of all projects included in the CIP were provided to PAL for its use in updating the CIP on an annual basis.

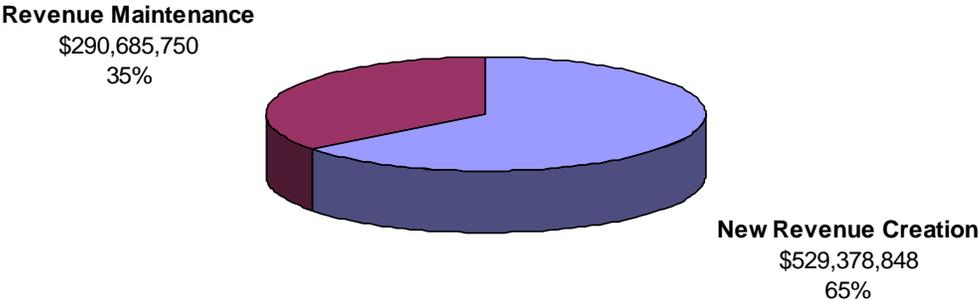
Exhibit 11
Financial Summary of Capital Improvement Plans
PAL Member Ports
2006 through 2011

Port Name	Project Costs						
	Projects-In-Motion (2006)	Total Cost Excluding Projects-In-Motion (2007 - 2011)	2007 Cost	2008 Cost	2009 Cost	2010 Cost	2011 Cost
Alexandria, Port of		\$1,875,000	\$175,000	\$900,000	\$800,000		
Avoyelles Parish Port		\$631,180	\$631,180				
Baton Rouge, Port of Greater	\$100,000	\$13,550,000	\$2,510,000	\$7,240,000	\$2,100,000	\$1,600,000	\$100,000
Calcasieu Port, West		\$5,000,000	\$2,500,000	\$2,500,000			
Cameron Port, West		\$0					
Columbia, Port of		\$1,447,500	\$1,447,500				
Feliciana, Port of West		\$0					
Fourchon, Port	\$1,000,000	\$51,500,000	\$16,000,000	\$13,500,000	\$11,000,000	\$11,000,000	
Grand Isle Port		\$0					
Iberia, Port of		\$184,910,200	\$25,355,000	\$53,718,200	\$42,417,000	\$22,053,000	\$41,367,000
JEDCO		\$35,025,000	\$2,025,000		\$3,500,000	\$3,500,000	\$26,000,000
Krotz Springs, Port of		\$2,700,000	\$200,000	\$2,500,000			
Lake Charles, Port of	\$12,800,000	\$39,750,000	\$27,475,000	\$7,775,000	\$3,250,000	\$1,250,000	
Lake Providence, Port of		\$19,750,000	\$9,125,000	\$10,625,000			
Manchac, Port		\$1,000,000	\$450,000	\$550,000			
Mermentau, Port of		\$0					
Millennium Port Authority		\$0					
Morgan City, Port of		\$27,600,000	\$1,300,000	\$1,300,000		\$10,000,000	\$15,000,000
Natchitoches Parish Port		\$0					
New Orleans, Port of		\$215,783,300	\$55,283,100	\$76,223,700	\$48,132,700	\$9,798,800	\$26,345,000
Ouachita Port, Greater		\$6,871,000	\$6,871,000				
Plaquemines Parish Port		\$40,833,333	\$22,500,000	\$18,333,333			
Pointe Coupee, Port of		\$0					
Red River Parish Port		\$0					
Shreveport-Bossier, Port of	\$3,030,000	\$7,907,000	\$5,907,000	\$2,000,000			
South Louisiana, Port of	\$12,299,399	\$92,781,085	\$49,540,242	\$42,240,843	\$500,000	\$500,000	
St. Bernard, Port of		\$59,750,000	\$6,200,000	\$22,250,000	\$5,100,000	\$12,200,000	\$14,000,000
St. Mary, Port of West		\$6,050,000		\$5,000,000	\$300,000	\$750,000	
Terrebonne, Port of		\$0					
Vermilion, Port of		\$5,350,000	\$1,230,000	\$880,000	\$1,180,000	\$880,000	\$1,180,000
Vidalia, Port of		\$0					
Totals	\$29,229,399	\$820,064,598	\$236,725,022	\$267,536,076	\$118,279,700	\$73,531,800	\$123,992,000

4.5 Analysis of PAL Member Port Capital Improvement Plans

Each project included in the PAL CIP during the period 2007 through 2011 (which excludes projects-in-motion) was placed into one of two categories: (1) “New Revenue Creation (Economic Development)” or (2) “Revenue Maintenance (Preservation of System).” By a near two-thirds majority (65%), most projects were identified as a function of New Revenue Creation. The distribution of project justifications with the respect to cost is presented graphically below in Exhibit 12.

**Exhibit 12
Project Justification by Project Type
PAL Member Ports
2007 through 2011**



These two general classifications were further segmented into 10 possible project types as listed below. These project types are intended to provide additional detail regarding the allocation of funding needs during the planning period.

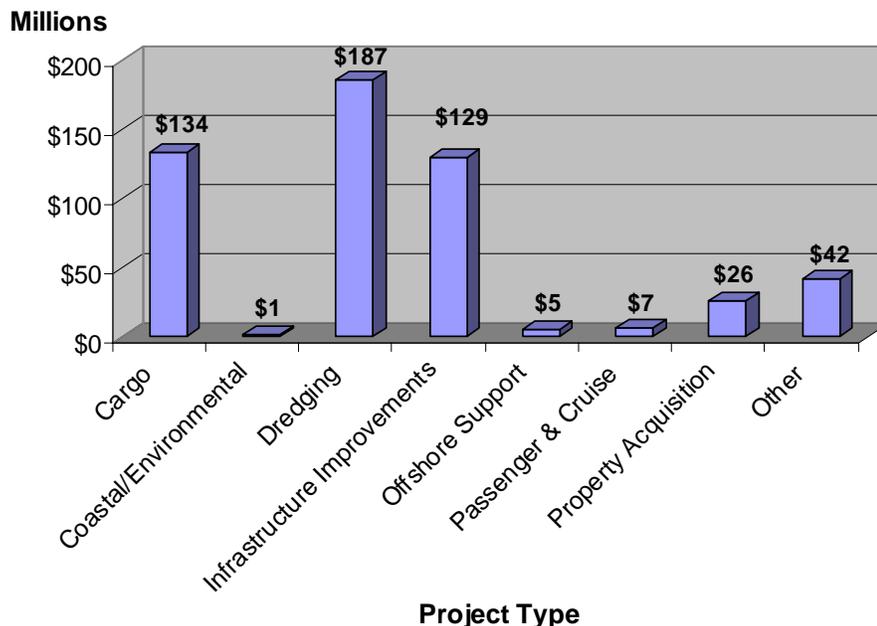
- | | |
|------------------------------|-----------------------|
| -Cargo | -Offshore Support |
| -Coastal/Environmental | -Passenger & Cruise |
| -Dredging | -Property Acquisition |
| -Infrastructure Improvements | -Security |
| -MRGO Related Re-locations | -Other |

Most of the project types are self-explanatory. However, the following types are defined below for clarification purposes:

- **Cargo**—The majority of the projects placed in this category are associated with facilities and equipment related to cargo handling and storage. Examples include dock construction/improvements, cranes, and warehouse construction.
- **Infrastructure Improvements**—These projects are related to expansion or improvement of each port’s infrastructure. Such as roadway improvements, rail spur construction, and installation of transit shed sprinkler systems.
- **Other**—This class includes projects that do not fit one of the other project types. Examples include purchase a harbor work boat, boat launch repairs, and completion of a master plan update.

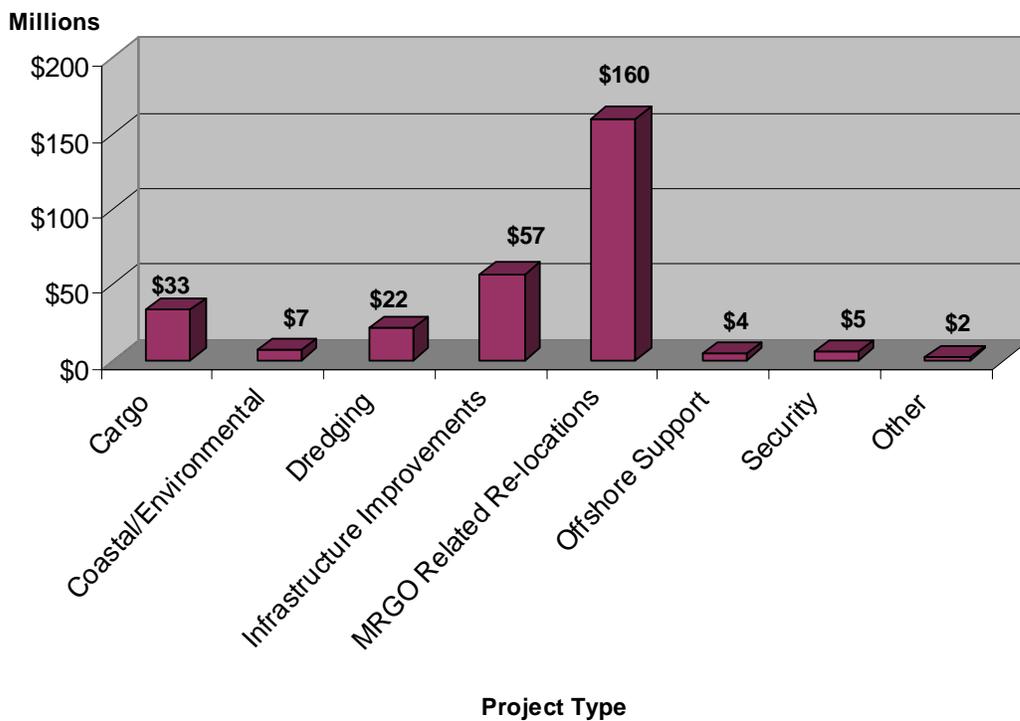
While eight of the ten project types were represented as New Revenue Creation, greater than 85% of the total projected costs for this project class was represented by three project types: cargo (\$134 million), dredging (\$187 million), and infrastructure improvements (\$129 million). Additional detail regarding the projected costs by project type for New Revenue Creation projects is presented below in Exhibit 13.

Exhibit 13
Projected Cost of New Revenue Creation/Economic
Development Projects by Project Type
PAL Member Ports
2007 through 2011



Eight of the ten project types were also represented by Revenue Maintenance/Preservation of System projects. Approximately 55% of the total projected costs for these projects were reflective of MRGO related relocations (\$160 million). Additional detail regarding the projected costs by project type for revenue maintenance/preservation of system projects is presented in Exhibit 14.

Exhibit 14
Projected Cost of Revenue Maintenance/Preservation
of System Projects by Project Type
PAL Member Ports
2007 through 2011



A financial needs assessment of the five-year CIP is provided in Exhibit 15 on the following page. The assessment details the estimated project costs according to project justification and relevant project types. Anticipated funding sources are summarized in Exhibit 16 and addressed further in Section 4.5.2.

Exhibit 15
Financial Needs Assessment According to Project Justification
PAL Member Ports
2006 through 2011

Project Justification	Project Costs			
	Projects-In-Motion (2006)		Projected Costs (2007 - 2011)	
New Revenue Creation	\$27,129,399	93%	\$529,378,848	65%
Cargo	\$11,800,000	43%	\$133,537,180	25%
Coastal/Environmental	\$0	0%	\$1,000,000	<1%
Dredging	\$0	0%	\$186,549,000	35%
Infrastructure Improvements	\$15,329,399	57%	\$129,436,835	24%
Offshore Support	\$0	0%	\$5,000,000	1%
Passenger & Cruise	\$0	0%	\$6,600,000	1%
Property Acquisition	\$0	0%	\$25,630,833	5%
Other	\$0	0%	\$41,625,000	8%
Revenue Maintenance	\$2,100,000	7%	\$290,685,750	35%
Cargo	\$0	0%	\$33,370,000	11%
Coastal/Environmental	\$1,000,000	48%	\$7,000,000	2%
Dredging	\$100,000	5%	\$21,537,500	7%
Infrastructure Improvements	\$1,000,000	48%	\$57,018,350	20%
MRGO Re-location	\$0	0%	\$160,000,000	55%
Offshore Support	\$0	0%	\$4,400,000	2%
Security	\$0	0%	\$5,309,900	2%
Other	\$0	0%	\$2,050,000	1%
Subtotals	\$29,229,399	100%	\$820,064,598	100%
Total Project Costs	\$849,293,998			

5.0 *Funding Evaluation*

5.1 *Traditional Funding Sources*

Traditional funding sources for port-related construction projects in Louisiana can be broadly categorized as state, federal, self-generated, and private investment. The total contribution from each of these broad categories is typically the sum of numerous specific funding sources. A break down of common funding sources by category includes the following:

State

- LDOTD Port Construction and Development Priority Program (PCDPP)
- Other Capital Outlay
- Louisiana Department of Economic Development

Federal

- EDA
- Homeland Security
- United States Army Corps of Engineers
- DOT Regional Transit Authority

Self-Generated

- Parish Funds
- Bonds
- Port Generated Revenue

Private Investment

- Non-public sources or the private sector

Historical data regarding the annual average contribution from each of these sources is limited. However, The *Louisiana Statewide Transportation Plan* prepared by Wilbur Smith Associates in 2003 provided the following summary of estimated investment needs and estimated amount of financial contribution from typical funding sources for port development (Exhibit 16 on the following page).

Exhibit 16
Estimated Investment Needs
Louisiana Statewide Transportation Plan

Source of Funds	Year 2002		Average 2003-2007	
	Amount	Percent	Amount	Percent
PCDPP	\$ 24,500,000	7%	\$ 37,300,000	8%
Capital Outlay Program	\$ 17,000,000	5%	\$ 17,000,000	4%
Self-Generated Funds	\$ 91,000,000	24%	\$ 109,000,000	24%
Subtotal	\$ 132,500,000	35%	\$ 163,300,000	36%
Private Investments	\$ 244,000,000	65%	\$ 292,500,000	64%
Total	\$ 376,500,000	100%	\$ 455,800,000	100%

Additional information relative to these sources is warranted. Examples include the following:

- Over the duration of the PCDPP, funding has not always been as consistent as it has in the recent past. It has been susceptible to annual budgetary fluctuations and legislative constraints.
- According to port personnel, the amount actually contributed by the Capital Outlay Program is considerably less than \$17 million annually as reported in the referenced transportation plan. A more accurate estimate of actual funds expended on specific projects was noted by port personnel to be closer to \$10 million.
- According to the referenced state transportation plan, the noted self-generated funds “have been obtained from a survey of actual expenditures by the State’s ports commissions.” No additional detail regarding the survey was provided in the transportation plan.
- The referenced transportation plan also states that it is “well established that the ratio between private investments by port users and port commissions is about 1.8; this yields about an expected \$244 million in private funds dedicated to port facilities and equipment.” For purposes of this report and as previously stated in Section 4.3, the estimated contribution of private investment was deducted from the estimated cost of each project identified in this CIP.

Because of the numerous possible sources of funding and the uncertainty regarding the significance of their actual amount of historical contribution, a financial analysis of historical contributions is warranted.

5.2 Historical Funding Sources

A financial analysis of historical funding contributions to capital improvement plans completed during the five-year period 2001 to 2005 was conducted. Each PAL member port identified projects completed during the period, the total cost of each project, and funding sources with associated amounts of contribution. Of the PAL member ports reporting, 18 reported projects completed during the period. The projects had a total cost of approximately \$455 million or an average of \$91 million annually. Numerous funding sources were identified, but four primary sources represented approximately 89% of the total funding. Findings of the historical analysis are provided in the following table. Major contributors are highlighted.

Exhibit 17
Historical Analysis of Port Construction Projects
PAL Member Ports ⁽¹⁾
2001 through 2005

Funding Source	Amount of Contribution	Annual Average	% of Total Funding
Port Generated Revenue	\$ 176,673,302	\$ 35,334,660	38.8%
PCDPP	\$ 95,587,624	\$ 19,117,525	21.0%
Port Bonds	\$ 92,765,317	\$ 18,553,063	20.4%
Capital Outlay	\$ 40,523,629	\$ 8,104,726	8.9%
Other ⁽²⁾	\$ 15,055,785	\$ 3,011,157	3.3%
EDA	\$ 7,909,339	\$ 1,581,868	1.7%
Homeland Security	\$ 6,847,197	\$ 1,369,439	1.5%
Fed FTA	\$ 6,176,116	\$ 1,235,223	1.4%
LED	\$ 4,574,978	\$ 914,996	1.0%
Private	\$ 4,465,929	\$ 893,186	1.0%
RRWC	\$ 4,466,467	\$ 893,293	1.0%
Totals	\$ 455,045,683	\$ 91,009,137	100%

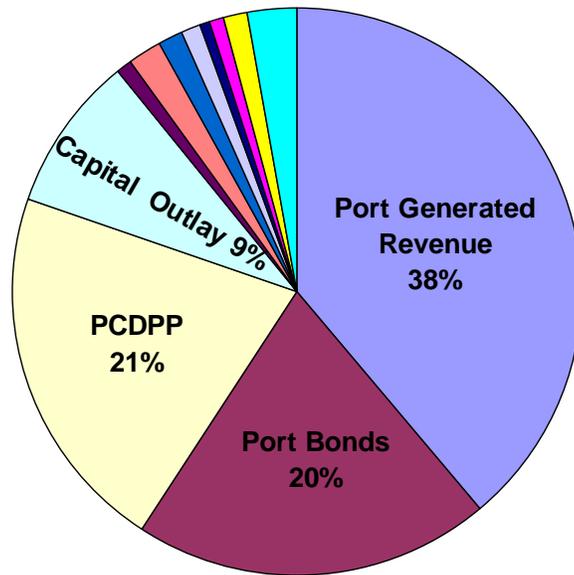
Notes:

(1) Ports that did not complete a project within the period 2001 through 2005 were omitted. Eighteen PAL member ports are represented in this table.

(2) Other funding sources that individually contributed less than one percent of the total were combined.

The significance of the percent of contribution from the four primary sources is clearly illustrated below in Exhibit 18.

Exhibit 18
Percent of Financial Contribution
2001 through 2005



As shown in the preceding Exhibits, port generated revenue has historically provided the largest contribution to port related capital improvement projects. During the financial data collection, each port was also asked to provide its total available cash from operations for each year during the period 2001 to 2005. Financial data provided by the ports in response to the request indicated the ports, as a whole, have approximately \$30 million in available cash annually to re-invest into their ports. This available cash supports the amount reported in Exhibit 17 for port generated revenue and demonstrates that ports are maximizing their capability to finance capital improvement needs. Furthermore, when port generated revenue, port bonds, and parish funds are combined, port authorities have provided approximately 60% of the total funding required for capital improvement needs with self-generated revenue.

The results of this CIP indicate that approximately \$164 million of non-private investment funding will be needed annually during the period 2007 through 2011 to fund approximately \$820 million of port-related construction projects. Based on the analysis of actual

historical funding sources, an annual average of approximately \$91 million can be expected at the current rates of contribution by the various sources. A comparison of the annual need (\$164 million) to the actual annual rates of contribution (\$91 million) equates to a funding deficit of \$73 million per year. This annual deficit must be eliminated if the projects identified in the CIP are to be developed.

5.3 *Funding Mechanisms in Neighboring Gulf of Mexico States*

Nearly 50 ports in the states of Texas, Mississippi, Alabama, and Florida compete with Louisiana for the movement of cargo. The locations of these ports are illustrated on Exhibit 19 on the next page.

Ports in neighboring states face similar challenges to those in Louisiana—the need for the expansion and rehabilitation of infrastructure and equipment with limited funding availability. An understanding of how these states manage financial constraints may provide ideas for future funding opportunities by Louisiana and its ports. The following represents an evaluation of funding mechanisms currently employed by neighboring Gulf of Mexico States.

Texas—The following excerpt was provided by the Texas Ports Association and provides a concise summary of Texas Ports:

Texas has more than 1,000 port facilities on 1,000 miles of channel maintained by the Corps of Engineers. In 2004 Texas ports handled 11,071 deep-sea vessel calls (18.5% of the national total). 473 million tons of cargo handled by Texas ports in 2003 accounted for nearly one million jobs for Texans and more than \$30 billion in economic impact. Texas ports handle cargo that ranges from passengers to crude oil, lumber and paper, steel, agricultural products, consumer goods, chemicals, containers, aggregate, automobiles, construction equipment and strategic military cargo. Texas ports are home to a vibrant commercial seafood business and serve the offshore drilling and recreational boating industries.

The Texas Transportation Institute completed a study in October 2005 titled *The Effect of the New Security Paradigm on Port Infrastructure Development and Finances*. The study focused on nine Texas ports that account for 88% of all international waterborne trade in Texas. While the focus of the report was the financial drain of recent port security requirements, it included a chapter focused on port finances that covered the ten-year period from 1994 to 2004. The study determined that nine ports acquired nearly \$1 billion in assets

pal_008_gulf_ports_jcb

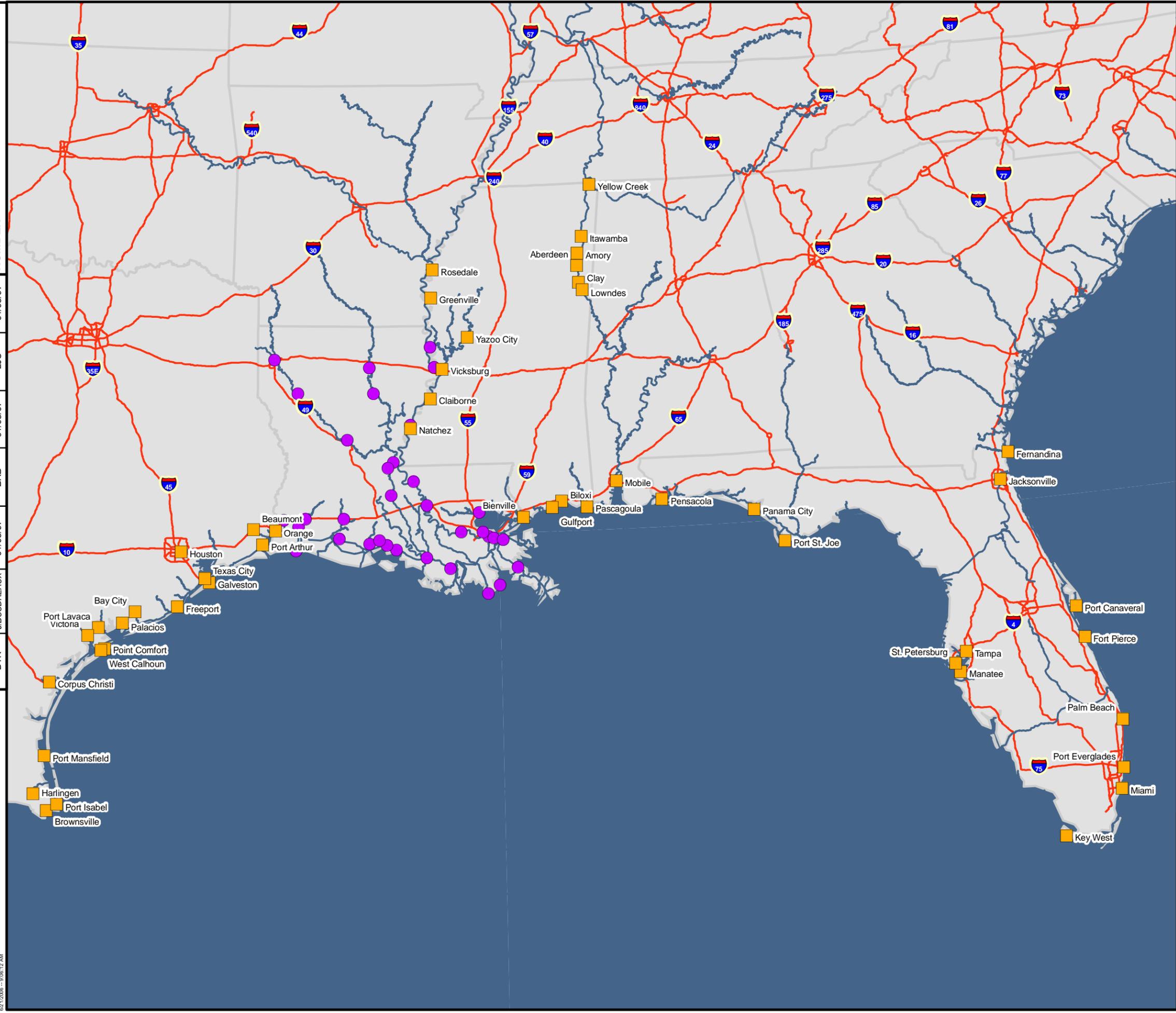
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APPROVED BY LJC 01/08/07

CHECKED BY BKB 01/08/07

DRAWN BY J.BOUDREAUX 01/08/07

OFFICE BTR



1:6,000,000
1 inch equals 95 miles

Legend

- Gulf Ports Outside LA
- Ports of Louisiana
- Interstate
- Navigable Waterways

REFERENCE: portsall.shp (USACE 1996)



Exhibit 19

PORTS OF THE GULF OF MEXICO

Five-Year Capital Improvement Plan
2007-2011

Map Document: G:\GIS Data\GIS Templates\SHAW_Template.mxd; Path: gis\port.mxd; Date: 02/20/06 10:06:12 AM

over the ten-year period. The following table was included in the study and provides a summary of funds utilized to acquire those assets.

Exhibit 20
Texas Ports Source of Funds Summary
1994 through 2004

Sources	Amount	% of Total
<i>Public Financing</i>		
General Obligation Bonds	\$ 431,375,920	44%
Grants--Non-Security	\$ 32,939,793	3%
Grants--Security	\$ 14,406,754	1%
Capital Contribution from Government	\$ 19,173,985	2%
<i>User Financing</i>		
Revenue Bonds	\$ 73,097,052	7%
Loans	\$ 43,008,051	4%
Reimbursements	\$ 17,536,834	2%
Other Contributions	\$ 3,721,344	0%
Cash & Miscellaneous	\$ 351,103,761	36%
Total	\$ 986,363,494	100%

The data provided in the table indicates that 87% of the funding utilized by the Texas ports in the ten-year period of study was provided by bonds and port generated revenue. The largest contributor was general obligation bonds at 44% of the total. These general obligation bonds are secured by ad valorem taxes which are a common means of funding for Texas ports. Eight of the nine ports reported tax revenue during the period that ranged from \$192,000 to \$28.8 million annually.

In summary, Texas ports receive very little state funding in the form of grants. The majority of their funding for capital improvement projects is generated by operating revenue and general obligation bonds. The large contribution from general obligation bonds is made possible by the ports ability to levy property taxes.

Information provided in this section was collected from two primary sources: The Texas Port Association website (www.texasports.org) and *The Effect of the New Security Paradigm on Port Infrastructure Development and Finances* by C.J. Kruse, D.H. Bierling (SWUTC. 167454. Southwest Region University Transportation Center, College Station, TX. October 2005).

Mississippi—Mississippi has 16 commercial public ports. The ports of Gulfport and Yellow Creek are state ports while the remaining 14 commercial public ports are local ports. Of Mississippi’s commercial public ports, 4 operate along the Gulf Coast, 6 on the Mississippi River or its tributaries, and 6 on the Tennessee-Tombigbee Waterway. Under law, oversight of the ports currently falls to the Mississippi Development Authority (MDA) and the Mississippi Department of Transportation (MDOT).

Mississippi ports utilize various sources of funding. The majority of the ports utilize self-generated funding in the form of operating revenues, loans, and bonds. In one case (Gulfport), non-traditional funding is provided by a casino operating on port property. A summary of typical port funding sources in the state of Mississippi follows:

- **Intermodal Connector Improvement Program**—This funding source is a grant program included in Mississippi’s Statewide Transportation Improvement Program (STIP). The STIP is updated by MDOT and submitted for approval to the Federal Highway Administration every four years. The STIP lists transportation projects in which federal dollars are to be spent, and it generally reflects MDOT’s six-year construction schedule. In terms of ports, the program is generally dedicated to roadways—access to intermodal facilities. Approximately \$14 million has been contributed to Mississippi port projects through this program since 1998.
- **Multi-modal Transportation Improvement Program**—This source is also a grant program administered by the MDOT for operators of federally funded transportation services. The MDOT selects projects for funding based on a competitive application process. The program awards approximately \$5 million annually, of which, Mississippi ports receive 58% or \$1.9 million annually for capital improvements.
- **Mississippi Port Revitalization Revolving Loan Program**—The program is a low interest loan program administered by the MDA and is designed for making loans to state, county, or municipal port authorities (local sponsors) for the improvement of port facilities to promote commerce and economic growth in the state. Funding for loans to local sponsors is derived from the issuance of state bonds or notes. The terms include a maximum loan amount of \$750,000 for any one project with an interest rate of 3% per annum over a maximum ten year period.
- **Self-Generated operating Revenue**—Mississippi ports rely heavily on self-generated operating revenue. Examples include handling fees for cargo and commodities, rent from leases of land and/or buildings, fees for logistical services, and the use of facilities (dockage and wharfage).
- **Revenue Bonds**—These bonds are commonly used to fund revenue producing projects. The debt is serviced by revenue created as a result of the project

- **Casino**—The Port of Gulfport reportedly receives \$12 million annually from the operation of a casino on its property.

Information provided in this section was collected from two primary sources: a report entitled *Comprehensive Assessment of the Ports of Mississippi* prepared by Parsons Brinckerhoff Quade & Douglas, Inc. (January 2000) and MDOT (telephone interview and website, www.gomdot.com).

Alabama—The Alabama State Port Authority (ASPA) operates deepwater port facilities in Mobile known as the Alabama State Docks in Mobile. The Authority directly employs greater than 500 workers, and its facilities handle more than 24 million tons of cargo each year. Alabama State Docks handle containers; general cargoes such as forest products, frozen meats, and metals; oversized and heavy lift cargoes; and bulk commodities such as coal and cement.

The ASPA is in the midst of a \$300 million port-wide revitalization program. The program was initiated in 2001 and is scheduled to be completed in 2007. The program includes a proposed \$250 million container/intermodal transportation and distribution center at Choctaw Point, a \$30 million expansion at the coal terminal, a \$9 million expansion at the Pier E general cargo terminal, and ongoing investments associated with security upgrades in conjunction with U. S. homeland security measures. The Choctaw Point Terminal, when fully constructed, will provide container capacity in excess of 600,000 TEUs with expansion capability.

According to a representative of ASPA, the authority is operated as a free enterprise and rarely receives state funding. The port's projects are primarily funded with operating income and the issuance of bonds. However, evidence of other funding sources was identified in relation to the previously described revitalization program. For example, phase I of the program was initiated in 2001 at total cost of \$45 million. Funding for this phase included the following sources:

- State funding (\$20 million)—This state contribution represents a portion of \$100 million authorized for port revitalization by voter approval of amendment one to the state's constitution in November 2000
- Port revenue bonds (\$15 million)
- Federal funds (\$5 million)
- ASPA cash reserves (\$4.9 million)

In addition to the state and self-generated funding, the State of Alabama has made an effort to stimulate private investment at its ports. During May 2001, the legislature passed a law

to encourage companies in Alabama and elsewhere to invest in the Port of Alabama. Senate Bill 393 provided a five percent corporate income tax credit to companies making capital improvements in the Alabama State Docks. Former Alabama Governor Don Siegelman said the following at a news conference when the law was passed:

Alabama is making a new commitment to our state port: for companies that invest in the Docks, we will invest in you. By investing in our state port, we are investing in new jobs and Alabama's future. The Port of Alabama will be a gateway to the world for Alabama, for the Southeast and for our nation.

Information provided in this section was collected from the Alabama State Port Authority website, www.asdd.com

Florida—Florida has 14 deepwater ports which are geographically split between the Gulf and Atlantic coasts. The Gulf ports are focused primarily on domestic trade while the Atlantic ports compete with ports along the Eastern Seaboard for international cargo and cruise ship passengers. Collectively, Florida ports facilitate greater than \$81 billion in international trade.

Florida's seaports are represented by a trade association, the Florida Ports Council (FPC). The FPC consists of the fourteen deep water port directors; the Executive Director of Florida's Office of Tourism, Trade, and Economic Development (OTTED); and the State Secretaries of Transportation and Community Affairs. The council is responsible for preparing an annual five-year Florida Seaport Mission Plan which defines the goals and objectives of the seaports.

According to the FPC, Florida ports utilize three primary means of funding as follows:

- **Florida Seaport Transportation and Economic Development Council (FSTED)**—The FPC established the state-funded FSTED program in 1990 which is managed by the FPC. The FPC meets semi-annually to review project applications submitted by each of the individual seaports. It also recommends which projects should be forwarded to the agencies for further review and funding. The list of FSTED recommended projects is reviewed by other state agencies to ensure that each project is consistent with state statutes and local master plans.

The FSTED Program has been amended from its original \$8 million to provide \$15 million annually in grants and a total of \$25 million annually to support bondable state revenues. State funding cannot exceed 50% of the total cost of a project. To be approved, a proposed project must be consistent with the seaport's comprehensive master plan and the local government's comprehensive plan, be of demonstrable economic benefit to the state, and be found consistent with the FDOT's adopted five-year work program. To be financed through bondable funding, candidate projects must also meet

statutory eligibility and consistency requirements. Waterside dredging related improvements require a 75/25 port/local government match. Landside access improvements (off-port) and on-port bonded projects require a minimum 50/50 contribution from recipient ports.

As a complement to the FSTED program, the Florida Ports Financing Commission (FPFC) was created in 1996 to offer efficiency in financing public works projects. The responsibility of the FPFC is to accept the list of projects approved by the FSTED and implement the bond funding program. The FPFC's purpose is to provide a cost-effective means of financing various capital projects for Florida ports by issuing bonds and transferring the proceeds to the individual ports. The FPFC has facilitated the issuance of approximately \$375 million in revenue bonds since 1996.

The loan agreements entered into by the ports provide that the ports must repay loans solely from funds received from the State Transportation Trust Fund (STTF). Twenty-five million dollars of the revenues received by state motor vehicle registration fees are deposited annually in the STTF for financing port projects. Payments under the loan agreements are made solely from money on deposit in the STTF.

According to seaport officials, the FSTED and the FPFC have been successful in speeding the completion of projects for the larger seaports and making possible the completion of projects for the smaller ports. To date, the FSTED has reportedly contributed \$1 billion in funds to Florida port projects.

- **FDOT Strategic Intermodal System (SIS)**—The FDOT SIS program was created in 2003 and is intended to target limited state funds toward a statewide network of high priority transportation facilities. Unlike FSTED, these funds are not solely dedicated to ports. The ports are competing with other modes of transportation within the state for these funds which are distributed by the FDOT. In November 2005, the FDOT released a list of projects proposed for matching grants using SIS growth management funds of the six-year period FY05/06-FY10/11. The list recommended approximately \$73 million in on-hub seaport projects. Hubs are defined in SIS as ports and terminals that move goods or people between Florida regions or between Florida and other markets in the United States and the rest of the world. While this is a relatively new source of funding for Florida ports, it is expected to become significant if maintained.
- **Self-generated operating revenue**—Florida ports utilize their revenue from operations to fund many port projects.

Other funding sources that are not as prevalent but are worthy of discussion include the following:

- **Metropolitan planning organization (MPO)**—According to state and federal laws, a long-range transportation plan must be developed by urban areas with greater than 50,000 people. The entity responsible for conducting the long-range planning process within each respective urban area is the MPO. Florida has 25 MPOs that are tasked with transportation planning and programming for the expenditure of state and federal transportation funds. The distribution of funding is largely dependent on the level of coordination between the local government and the port(s) in its respective area. The sources of funds distributed by the MPOs included local, state, and federal programs. Because the distribution of funds through the MPO is highly competitive, they are not always considered significant or dependable for the Florida ports.
- **Ad valorem taxes**—Few ports in Florida have the authority or exercise the authority to levy *ad valorem* taxes. One notable exception is the Port of Tampa which receives funds in excess of \$14 million annually from a Hillsborough County *ad valorem* tax.

Information provided in this section was collected from the following sources: the Florida Department of Transportation website, www.dot.state.fl.us/seaport/fsteddesc.htm; the Florida Ports Council website, www.flaports.org; *A Five-Year Plan to Achieve the Mission of Florida's Seaports* prepared by FSTED (February 2006); *An Analysis of the Funding Capacity of Florida's Seaports to Meet their Five-Year Capital Plans (FY 06/07 through FY 10/11)*, prepared by First Southwest Company (November 30, 2005); and, Phone interviews with various personnel representing FSTED, The Port of Pensacola, and The Port of Palm Beach.

6.0 Conclusions

The result of this study is a credible and well-substantiated five-year CIP for the 2007 to 2011 planning period for PAL affiliated ports. The evaluation process included assessing each Louisiana port and its respective proposed projects for the five-year planning period (2007-2011) with a consistent set of criteria. The evaluation criteria consisted of a set of process-related and sequence-based steps considered standard to ports as well as to the design and construction industries at large. As a result, a list of carefully considered projects needed to maintain and grow the state's public sector port industry was identified. From the perspective of individual ports, the development of these projects will allow the state to enhance its competitiveness along the Gulf Coast thereby allowing continued progress within the state's maritime industry.

In the early scoping phase of this study, representatives of the state's ports association identified the following overriding objectives:

- To provide a general overview of the economic impact of Louisiana ports—locally, nationally, and internationally
- To delineate the magnitude of the domestic and international marketplace in which the PAL member ports operate
- To identify a realistic and reliable list of capital improvement projects and associated costs needed within the next five years (2007-2011) for PAL member ports to be sustainable and to expand port related economic development along the Gulf Coast and inland
- To provide an evaluation of historical funding sources for Louisiana ports
- To identify funding approaches and mechanisms used by competitive Gulf coast ports

As a follow-up to the outlined objectives, presented below are findings offered as conclusions to the PAL five-year capital improvement plan and the process which led to the CIP.

Louisiana's ports are vital to the respective local economies, to the state's economy, and to the economic well-being of the nation.

Several port related studies were summarized and/or abstracted to present the broadly based impact of the state's port industry on the nation's economy. The economic data indicates that Louisiana has consistently ranked in the top two states nationally with regard to tonnage of waterborne imports and exports. According to the USACE, five of the top thirteen tonnage ports

in the U. S. during 2004 were Louisiana deep draft ports. These five large inland port jurisdictions generally transfer large quantities of port related cargo and lease land.

In contrast, the majority of the ports in the state are shallow-draft inland or shallow-draft coastal ports. Generally, the shallow-draft inland ports are cargo and/or industrially based while the coastal ports serve as industrial sites for water-related industries and for servicing the offshore oil and gas industry in the Gulf of Mexico. These shallow-draft ports provide a vital role in the nation's oil and gas industry. This role is significant in light of Louisiana's ranking as the nation's second largest producer of natural gas and the third largest producer of crude oil. Also, the Gulf accounts for more than 90% of U. S. offshore oil and gas production. With the recent discovery of another vast reserve in the Gulf of Mexico—Walker Ridge with an estimated 15 billion barrel reserve—coastal ports can be expected to play an increasingly important role in the economic viability of the state and the nation.

On the state level, economic data verifies the fact that Louisiana ports play a major role in the state's economy. For example, a study prepared by Dr. Timothy P. Ryan of the University of New Orleans in 2001 concluded that the economic impact of the state's ports constitutes 22.5% of the total dollar value of the state's goods and services (gross state product) with the ports producing approximately 5% of the personal income in the state. Correspondingly, the economic activities created by the ports result in approximately one of every eight jobs in the state.

Louisiana ports transfer commodities to and from local markets, regional markets, national markets, and international markets in a consistent and reliable manner.

The marketplace in which the PAL member ports operate is globally widespread and far-reaching. Current cargo activity data indicates that the PAL member ports are handling approximately 60 inbound and 50 outbound commodity groups. These commodities are inbound from 76 domestic and international origins and outbound to 81 regional and global destinations.

Following standards relative to the port industry, engineering principles, and construction industry standards, only qualified port projects are included in the PAL five-year capital improvement plan.

Projects listed in the capital improvement plan include only those rated as having the highest probability of potential development during the planning period. The probability function was based on a 1 to 10 sequenced rating system used to evaluate each project. As a qualified CIP project, each proposed improvement was required to have completed economic or

environmental feasibility review, preliminary engineering evaluations, and a preliminary cost estimate based on the engineering evaluation (minimum rating level of 5). Likewise, projects were not included if funding was in place (level 7) with no costs projected beyond 2006 as these projects were considered essentially complete.

Of the proposed capital projects, two-thirds are new revenue based (expanding economic development) and one-third are dedicated to revenue retention (sustaining the existing system).

Each anticipated improvement included in the PAL CIP was placed into one of two primary categories—"New Revenue Creation (Economic Development)" and "Revenue Maintenance (Preservation of System)." Approximately two-thirds of the 104 projects were classified as new revenue creation or economic development related. These projects were further segmented into project types intended to provide additional detail regarding the allocation of funding needs during the five-year planning period.

Of the projects classified as "revenue creation," greater than 80% of the projected costs were associated with three project types: cargo, dredging, and infrastructure improvements. Approximately 60% of the total projected costs for projects classified as "revenue maintenance" were associated with MRGO re-locations at the Port of New Orleans.

For the 2007 to 2011 planning period, PAL member ports have justified and anticipate 104 capital improvement projects valued at \$849 million (including projects-in-motion).

From the perspective of future port development, a comprehensive and well-substantiated statewide five-year CIP was created for PAL member ports covering the period 2007 through 2011. Because of the ongoing nature of many projects, 2006 related projects were included as "projects-in-motion" and are not included in the 2007-2011 project list unless development of the project extends into the five-year planning period. The CIP includes a total of 104 individual projects at 21 PAL member ports with a total estimated cost of approximately \$849 million.

Based upon historical indicators, the allocation of state and federal funds required to sustain and expand the state's maritime industry is both uncertain and inadequate. If the state is to maximize the benefit of current cargo trends and recent discoveries in the Gulf of Mexico, a stable, dependable, and adequate source of additional infrastructure capital will be required.

From the perspective of funding, findings suggest that historical and present means and allocation of funding will not be adequate to capitalize the projects identified. Louisiana Ports obtain greater than 89% of their funding for capital improvement projects from four sources: port generated revenue (38.8%), port bonds (20.4%), the Port Construction and Development Priority Program (21.0%), and capital outlay (8.9%). Combined, these and other less significant sources have provided an annual average of approximately \$91 million in funding for projects at PAL member ports during the period 2001 through 2005. The results of the CIP indicate that approximately \$164 million of non-private investment funding will be needed annually during the period 2007 through 2011 to fund approximately \$820 million worth of port-related public construction projects ($\$820\text{M}/5 \text{ yrs.} = \$164\text{M}/\text{yr.}$). Additional funding at the local, state, and federal levels will be necessary to eliminate the \$73 million annual deficit ($\$164\text{M} - 91\text{M} = \73M) and to support sustainable growth in the state's maritime sector including the projects identified.

Currently, the state—via the PCDPP—provides a consistent, objective, and respected source of funds for the development of Louisiana ports. This \$20 million annual source of funds should be significantly increased to fill the funding void and enable future development of Louisiana ports. As an added benefit, strenuous adherence to economically based principles inherent in the PCDPP application, its approval process, and the required 25% commitment from the ports themselves (10% of construction costs plus engineering and related service fees) will ensure a high degree of accountability and credibility to the future of Louisiana's port industry.

Correspondingly, data suggests that other than funds for dredging, federal funds for future port development cannot be anticipated unless earmarked. Regarding the relocation projects in the Port of New Orleans jurisdiction, hope is being held out for the availability of hurricane relief funds through the Louisiana Restoration Authority; but as of this writing, those funds had not been committed. A significant shortage of state funds required for many of the projects included in this CIP can be expected unless additional funds are allocated in upcoming legislative sessions. The same can be said for funding expectations at the local level.

An understanding of how neighboring Gulf of Mexico states manage port development and financial constraints provide ideas for future funding opportunities that may be utilized by Louisiana and its ports.

Numerous ports, nearly 50, located in Texas, Mississippi, Alabama, and Florida compete with Louisiana for cargo. Louisiana ports also compete with other ports along the Atlantic seaboard. Ports in neighboring states face similar challenges to those in Louisiana—the need for expansion and rehabilitation of infrastructure and equipment with limited funding availability. Each of these states employs various means of creating needed port funding. A few examples are noted below:

- Texas—The use of ad valorem or property taxes to facilitate the issuance of \$431 million in general obligation bonds during the period 1994 to 2004
- Mississippi—Execution of an agreement with a casino operating on port property that generates \$12 million annually in port revenue
- Alabama—Voter approval of a \$100 million amendment to the state’s constitution to support a \$300 million port revitalization program and a five percent corporate income tax credit to stimulate private investment
- Florida—The creation of a commission to provide a cost-effective means of financing various capital projects for Florida's ports by issuing bonds and transferring the proceeds to the individual ports. Approximately \$375 million in revenue bonds have been issued since 1996 as a result of this commission.

Also noteworthy, Florida requires that projects are compliant with state plans. Several agencies review funding applications in that regard. In Texas and Alabama, state funding initiatives are based on strategies developed from analyses based on regional logistics and the international marketplace. Of noteworthy significance is the fact that Texas recently surpassed Louisiana as the lead state in waterborne commerce.

PAL’s continued involvement with and participation in the Port Construction and Development Priority Program by way of project evaluation and increased funding is vital to the future success of the state’s maritime industry—deep-draft and shallow-draft; inland and coastal; cargo and oil and gas related.

Even with additional State support, State funding of vital port related infrastructure will likely still be distributed on a competitive basis for the vast majority of projects. As such, new

and/or emerging ports should carefully weigh their respective true economic benefit not only to the local economy but also to other nearby ports and to the burden of already limited state dollars. Forcing ports to split funding into even smaller portions will only worsen an already complex and difficult situation.

Additionally, because of the national interest and responsibility that Louisiana's ports have as a result of their proximity to the Gulf Coast (international commerce as well as oil and gas support services) and the Mississippi River (domestic and international cargo transfer), increased federal participation in projects deemed to be within the national interest should also be addressed. Accordingly, an increased share of federal funding (including but not limited to future Outer Continental Shelf revenues) dedicated to ports and port related infrastructure is imperative.

At the local level, future funding commitments account for a large proportion of private sector and/or local funding match. Close scrutiny and accountability of these proposed funds will be required if the justification, validity, and long-term viability of the listed CIP projects are to be maintained. Delving into the actual local funding potential is beyond the scope of this study; however, the concern is evident and worthy of closer review by the individual ports and PAL as well. If the strength of local funding support is, in essence, a weakness, then a closer re-evaluation of the CIP projects may be in order.

Port planning based upon standard transportation planning principles and a consensus-based approach is necessary to maintain long-term strategic development goals.

The findings of this five-year CIP suggest that allowing each port and its respective proposed infrastructure project to follow a strenuous set of economic, environmental, and engineering criteria early in the planning process encourages sustainable, market-based evaluations upon which to base future development projects. By way of example, following the initial listing of all proposed improvement projects noted by the member ports, the noted decision matrix rating system was applied, and approximately two-thirds of the projects were moved beyond the five-year planning period or eliminated entirely. Only the most practical and viable projects are included.

Another basic finding was that only 9 of PAL's 31 ports (approximately one-third) have current port master plans. Of the 104 projects identified as eligible for the PAL CIP, two-thirds of those projects are recommended projects at ports with current plans. Based upon the nature of port planning and planning in general, projects with logical, documented supporting evidence,

i.e., those that are feasible from an economic, environmental, and engineering perspective, are more likely to progress from planning to design, funding, and construction cycles.

This statement is not intended to connote that only planned projects should be developed at the state's ports, for it is often the case that many of the largest and most successful port projects surface unexpectedly as they are market driven and/or time sensitive. Nevertheless, with proper port planning, issues related to land acquisition, logistics, operational efficiency, and long-term funding requirements can be set in place when unanticipated market shifts are noted or special projects initiated.

Because long-term, stable and dependable funding is generally considered both a state and local responsibility in Louisiana, local port jurisdictions should develop plans that are well-coordinated with local, regional, and state interests in mind.

For the most part, much of the data offered by port staffs and provided in this study focused inwardly on individual ports. Seldom was it evident that a statewide comprehensive or strategic justification formed the basis for a listed project. In contrast, review of competing ports in neighboring states reflected a significant degree of statewide strategy and, in many cases, corresponding funding to improve the state's competitiveness on an international platform.

Granted, data indicates that not all of Louisiana's ports play a role in the international marketplace. Nonetheless, each port (and potential emerging ports) must consider a regional strategy and statewide strategy, i. e., one that incorporates surrounding ports and the respective marketplace.

PAL's approach to unifying the state's port interests will enhance Louisiana's competitiveness along the Gulf Coast and within the international marketplace. However, this goal can be accomplished only with cooperation and coordination in the preparation statewide port-based strategic plan.

PAL's goal to unify the ports of the state and to allow its member ports to generate a cohesive mission with a consensus-based approach to improving the maritime industry of Louisiana is certain to improve the economic vitality of the state. This fact is of particular interest to the state's competitiveness with the maritime industry of other coastal states.

Continued development in ports and port-related industries in terms of investment in new economic development activities (new revenue creation) related to new jobs, additional tonnage, and new industry is critical to the well-being of the state, a fact that has been well documented.

Concurrently, preservation of existing investment (revenue maintenance) to preserve jobs, economic activity, and other long-standing benefits is equally vital to the state's overall economy.

For these reasons, a strategic-based statewide port and maritime industry plan is imperative. PAL, DOTD, DED, other applicable state departments and agencies, the legislature, and the governor can and should work in concert to attain this objective.

This strategic plan must be public and transparent; it must be comprehensive; and it must include the entire Gulf Coast, other key competitive ports, and the corresponding worldwide marketplace if the true objectives of a statewide port plan are to be adequately addressed. The State of Louisiana and its maritime industry have an opportunity to develop a unifying focus—a common direction—upon which all ports can center attention to efficiently coordinate the expenditure of federal, state, and private investment in the waterborne component of the state's intermodal transportation system.

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Appendix
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REPORT ON STATE FINANCIAL ASSISTANCE
FOR CAPITAL IMPROVEMENTS
AT PUBLIC PORTS
IN THE UNITED STATES

Prepared
for
The Ports Association of Louisiana

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EXECUTIVE SUMMARY

The report for the Ports Association of Louisiana on State Financial Assistance for Capital Improvements at Public Ports in the United States is intended to present a comprehensive view of how states with deep and shallow draft public ports participate financially in the funding of port infrastructure.

Description of Study Methodology

The initial survey covered thirty one states that have commercial public ports. This initial survey was conducted by a combination of internet searches and personal contacts with individuals in both state governments and ports in the surveyed states. In addition, there were discussions with national trade organizations and consulting firms that may have conducted past work in this area. The states included in this first phase were: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Texas, Tennessee, Arkansas, Missouri, California, Oregon, Washington, Alaska, Ohio, Indiana, Illinois, Michigan, Minnesota, and Wisconsin. A summary of the findings on these states is included as Appendix A. The second phase of the study involved the collection of detailed information on ten key states. This analysis in most cases involved contact with key state and port officials involved in port funding to clarify information and gather greater details.

Summary of All States Surveyed

Information collected at the end of the first survey phase was reviewed for trends in a number of categories. In the Ownership of Ports, it was determined that eleven states own port facilities although in some states the ports themselves were operated independent of state government. In several states where the ports were owned by the state but operated independently, there was no financial support provided by the state (New Hampshire, North Carolina, South Carolina, and Indiana). In others the state had a significant financial role (Maryland, Virginia). In most states, the ports are owned and operated by local governments or are independent political entities. In Louisiana most ports are independent political subdivisions.

Under the State Provision of Port Capital Funding, the amount and nature of funding provided by states varies widely. Of thirty one states, twelve have no formal programs for funding port infrastructure development. The remaining nineteen states all have some type of program that ports can access for funds (grants, loans, bond funds). Some states have legislatively created programs for ports but have not funded them (Texas, Arkansas). In a number of states the programs that ports can access are not exclusively for ports but can be used

by local governments or other entities and are typically economic development or transportation infrastructure programs.

The Port Overview within States is usually in the states' departments of transportation or economic development. In over one half of the states, ports are considered an integral part of economic development in the state and as such their funding and support comes from the states' economic development departments. In other states, the state department of transportation has responsibility for port support usually due to the use of state transportation funds for port grants.

The Port Advocacy within States is handled by a variety of organizations. In some states such as Pennsylvania, Florida and Massachusetts, there are specific offices within state government to support ports. Several states have legislatively created councils to promote ports and in some cases administer funds. The effectiveness of these groups varies widely.

Other Notable Trends in State Funding of Ports include requirements for local matching funds and required planning processes. Almost every state requires some matching funds to access a grant. Most states require at least a 25% match and some require a 50% match. In Louisiana there is 10% match for Port Priority and usually a 50% match for Capital Outlay. Most states require projects to be in a port master plan or state master plan before funding.

Detailed Information for Ten Selected States

At the completion of the first phase of data collection, the consulting team recommended ten states for additional analysis. The recommendations were based on a set of criteria that included states having similar port characteristics to Louisiana, states that had unique funding programs for ports and states whose ports were viewed as major competitors to Louisiana ports. The recommendations were reviewed and approved by the Ports Association of Louisiana (PAL) executive committee. The states selected for detailed analysis included:

- Massachusetts—Unique Funding Program
- Pennsylvania---Unique Funding Mechanisms
- Virginia---Dedicated Funding Source
- Florida---Dedicated Funding Source and Unique Funding Programs
- Alabama—Competitor Ports
- Mississippi---Competitor Ports
- Texas---Competitor Ports
- Oregon—Similar Port System and Unique Funding Programs
- Washington—Similar Port System and Unique Funding Programs
- Ohio—Similar Port System and Unique Funding Programs

Details for each of the final ten states is included in the body of this report. For each state there is a description of their port system, a review of their state funding programs, and

observations by the consulting team concerning how these programs may or may not be appropriate for Louisiana.

Observations on State Funding of Ports

At the conclusion of this second phase of surveying, there were a number of overall observations concerning these final ten states.

In the area of **Dedicated Funds for Ports**, the states of Florida and Virginia both have successful programs for ports backed by dedicated funding sources. Florida dedicates \$25 million annually from motor vehicle registration fees and \$8 million annually from other transportation revenues. These dedicated funds support the sale of bonds and the provision of grants and loans to 14 deep water ports. Virginia dedicates 4.2% of its annual transportation revenues to a port fund administered by the Virginia Port Authority. This fund generates \$36 million annually and has allowed for the sale of \$400 million in bond funds to support port construction.

The **Sources of Funds for Ports** varies across the country. By far the two sources which are most prominent are General Fund Revenues and Transportation Fund Revenues. Of the initial thirty one states surveyed, seven provided no funds to ports; eleven used only general funds to support ports; seven states used only transportation funds to support ports; and six used a combination of general funds and transportation funds. Some of the unique funding sources included watercraft fuel taxes (Alaska), vessel registration fees (California), lottery revenues (Oregon) and federal stimulus funds (Maine). Appendix D lists the funding sources for all thirty one states.

The use of **Revolving Loan Funds** is used in many states. Such programs provide loans, bonding capacity or credit enhancements for borrowing ports or their tenants. States such as Mississippi, Ohio, Washington and Oregon make extensive use of these types of loan funds. In most cases, the legislature seeds the fund with a onetime appropriation and the funds become self supporting thereafter.

State Taxing Policy for Ports is a mechanism used in some states. Washington grants local taxing authority to its ports without the need for a local referendum although they limit the amount of tax that can be assessed. Ports in other states such as Texas, Ohio, and Florida make extensive use local taxes to support both capital and operating costs. Just as important, some states, such as Alabama, make extensive use of state tax incentives to attract private sector partners.

Port Planning Requirements for Funding exists in many states. In these states, ports may be required to have projects consistent with a port master plan or a state master plan before money can be granted or loaned to a project.

The concept of **State Owned and Operated Ports** is used in states such as Pennsylvania, Maryland, Delaware, Virginia, North Carolina, South Carolina, Georgia, Indiana, Alabama, and Mississippi. With the exception of Alabama, Georgia and Indiana, all other states have only one

or two ports owned by the state. Georgia has four ports. Indiana has three ports. Alabama has one major port (Mobile) and owns eleven shallow draft ports. However, all the shallow draft ports are leased out to local governments or private operators and the state has a very limited role in these ports. Those states which have many deep draft and shallow draft ports similar to Louisiana (Florida, Texas, California, Oregon and Washington) have no state owned ports.

The approach that **Deep Draft Ports and Shallow Draft Ports Require Different Funding Levels** is often used in states where both types of port exist. In Massachusetts, ports other than the large complex at Boston/Cambridge are funded through a “Second Tier” program. In Pennsylvania, the largest port at Philadelphia is funded differently than the ports of Pittsburgh and Erie. In Virginia, the large port complex at Norfolk actually distributes capital funds to the shallow draft ports. In Louisiana, the large number of ports (over 30) makes a large allocation of funds to any one port difficult, particularly affecting larger ports.

The establishment of **Ports as Economic Development Entities** is a key factor in how ports are viewed for funding in many states. States such as Oregon and Ohio consider ports to be important economic development entities. As such ports are granted broad powers to develop both water-related and non water-related facilities. Ports in these states have been instrumental in providing commercial, industrial, recreational, tourism, and cultural facilities in their role as economic developers. In these states, there a few programs exclusively for the use of ports. However ports compete for funds in much broader economic development programs and appear to be successful in this approach.

Public-Private Partnerships at Ports are encouraged in many states. Ports often play a facilitating role in channeling low interest loans, credit enhancements, tax exempt financing, and providing grant funds for private sector groups.

Appendix C at the end of this report summarizes all of the key funding programs for the final ten states in the survey.

Conclusions and Options for Future Actions

In the Conclusions and Options for Future Action part of this report, several areas for possible future action by PAL are outlined. These options are the opinion of the consulting team and have not been endorsed by PAL or its members.

The first option area is to **Create Statutorily Dedicated Funds for Ports Capital Construction**. This is an area that will prove extremely difficult to create in Louisiana at a time when the trend in the legislature and the present administration is to remove funding dedications, to reduce the size of government, and to lower taxes. However, the need for the state to solve the larger problem of inadequate transportation funds to support the ongoing highway needs program may give PAL an opportunity to seek a limited dedication of transportation funds to support port construction as part of a larger politically acceptable solution.

The second option area is to **Create and Fund a Revolving Loan Fund for Port Construction**. Louisiana previously had such a fund which was never funded by the legislature.

It was repealed in 2008. This type of fund has been very successful in other states. PAL should consider if this type of program would be used by ports in Louisiana before undertaking efforts to create the fund. Given the present debt constraints on many Louisiana ports, there is a question of whether ports could take on additional debt.

The third option is seek to **Modify the Port Priority Program** to be more beneficial to deep water ports and larger ports. As part of the effort to increase funding for the Port Priority Program to a level of \$50 million or more per year, PAL should consider if modifications to the program could be made to allow larger ports a more beneficial use of the program without negatively impacting the funding of smaller ports. Concepts such as removing the limits on project size, reserving certain funding levels for smaller ports, and requiring higher match rates for large projects are among the things that could be considered.

The fourth option is using **Port Planning as a Tool for New Funding**. In many states the requirement for projects to be included in port master plans and state master plans gives the state confidence that it is funding the most important projects. PAL should consider promoting a better port planning process as part of a strategy to seek larger funding levels for ports.

The fifth option is to consider **Port Overview within State Government**. The past study efforts by PAL recommending creation of an Office of Ports within state government have not led to fruition. Recent discussions at the state level concerning proper placement for the administration of the port priority program have created an opportunity for PAL to consider the overall concept of where within state government is the most beneficial place for port advocacy. States that place this function in their transportation departments do so mostly because their grants are funded with transportation funds. In many more states, ports are considered an integral part of the state's overall economic development strategy. PAL should consider where in Louisiana government is the most beneficial position into the future for the promotion and funding of Louisiana ports.

The final option is for PAL to aggressively pursue the implementation of recently passed tax incentive legislation and to educate its members on the use of these incentives to attract private sector partners for port capital construction.

Recent History of Port Capital Funding in Louisiana

This report also includes information on the funding of Louisiana ports over the past five years (2004-2008) and a discussion of some of the future funding issues facing Louisiana ports.

The consulting team conducted a survey of thirty Louisiana ports to collect information on all the capital construction projects completed by the ports within the previous five years. A similar survey was conducted by Shaw Environmental and Infrastructure, Inc. for PAL in 2006. This allowed for a comparison of surveys to determine positive and negative trends in capital spending by Louisiana ports.

In the period of 2004-2008, Louisiana ports spent \$567,587,992 on capital projects. This was an increase of \$112,542,309 or 24.7% over the previous survey period. This increase was

significantly influenced by three very large projects in the Port of New Orleans and the Port of Lake Charles.

Overall state funding was \$147,873,880. This was an increase of \$7,187,649 or 5.1%. This was greatly influenced by a single Department of Economic Development grant of \$15,000,000 for the Elaine Street Rail Ferry Project in New Orleans. Port Priority funds increased by \$5,113,405 or 5.3% and Capital Outlay Funds decreased by \$13,350,778 or 32.9%.

Overall federal funding was \$67,177,519. This was an increase of \$6,244,867 or 220.7%. This increase was influenced by a \$42,805,094 funding of the Florida Avenue Bridge Replacement in New Orleans. Absent this one project, there was modest growth in federal funds mostly in Homeland Security funds.

Port generated revenues were \$348,071,747. This was an increase of \$54,644,947 or 18.6%.

State funds accounted for 26.8% of construction costs. Federal funds accounted for 11.8%. Port generated funds accounted for 61.3%.

Of particular interest is the wide variety of funding sources used by Louisiana ports other than Port Priority and Capital Outlay. Sources included Louisiana Economic Development Grants, State Flood Control Grants, Parish Grants, City Grants, U.S.D.A. Grants, U.S. Commerce Department Grants, U.S. Coast Guard Grants, Federal Transit Grants, Homeland Security Grants, Delta Regional Authority Grants, Red River Waterway Grants, FEMA Grants and Private Sector Funds.

A review of the use of Port Priority Funds shows that nine ports used this funding source during the survey period. There were 42 projects of which four were over \$10 million, eight were between \$5 million and \$10 million, and twenty seven were under \$5 million. The port matching share for those projects over \$10 million was more than 80% on all four projects. The average port matching share for port priority projects in the largest ports was 52.3%. The average port matching share for all projects was 48.4% despite many smaller ports utilizing matching rates of 10-20%.

Key observations based on this latest survey include the decline of Capital Outlay Funds as a major funding source for ports, the larger matching shares for port priority funds used by larger ports and the downturn in the use of bond funds by ports. The survey showed very effective use of port priority for small and medium size projects (under \$10 million) and less effective use on larger projects.

I. Overview of State Funding of Ports

A. Description of Study Methodology

The report for the Ports Association of Louisiana on State Financial Assistance for Capital Improvements at Public Ports in the United States is intended to present a comprehensive view of how states with deep and shallow draft public ports participate financially in the funding of port infrastructure. In order to be as comprehensive as possible, it was determined that initial survey should cover thirty one states that have commercial public ports and where states may contribute to the infrastructure improvements at those ports. After collection of information on the initial thirty one states, the consulting team in concert with the Executive Committee of the Ports Association of Louisiana (PAL) would select ten states for a detailed analysis of their programs.

The selection of the initial thirty one states was made by the consulting team based on their knowledge of the U.S. port industry. The team's goal was to survey every U.S. state that had significant commercial port activity. The states to be surveyed come from four geographic regions of the country. In the Northeast/Mid-Atlantic, the states surveyed included Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland and Virginia. In the Southeast/Gulf, the states surveyed included North Carolina, South Carolina, Georgia, Florida, Mississippi, Alabama, Texas, Arkansas, Missouri, and Tennessee. On the West Coast, the states surveyed included California, Oregon, Washington, and Alaska. In the Great Lakes, the states surveyed included Ohio, Indiana, Illinois, Michigan, Minnesota and Wisconsin. It should be noted that the consultant team also briefly reviewed information on the states of Kentucky and West Virginia but did not include those states in the final report as the programs in those states were not significantly different then the adjacent states which were surveyed.

The survey of the initial thirty one states was conducted through a combination of internet searches and collection of information from a variety of port related organizations and other consultant work. Where key information was confusing or missing, phone contact was made with individuals in port management or state government to get clarification. In each state, websites of individual port organizations and state governments were searched to develop current information on the ports themselves and the capital and operating budgets of both ports and states. In each state, current and past capital and operating budgets were reviewed to determine the level of state support for ports if any. Additionally, discussions were held with various groups such as the American Association of Port Authorities, the National Waterways Conference, the UNO National Ports and Waterways and several consulting firms such as Shaw Environmental and Infrastructure, Inc., Norbridge and John Martin & Associates who had conducted relevant studies.

At the completion of the first phase of data collection, the consulting team recommended ten states for additional analysis. The recommendations were based on criteria that included states having similar port characteristics to Louisiana (multiple ports including both deep and shallow draft ports), states that had unique funding programs, and states that were currently major competitors to Louisiana ports. The recommendations were reviewed and approved by the PAL Executive Committee. States selected for detailed study included Massachusetts, Pennsylvania, Virginia, Florida, Alabama, Mississippi, Texas, Oregon, Washington and Ohio.

The second phase of analysis in most cases involved contact with key state officials and port officials in the states involved in port funding. These discussions clarified information gathered in the first phase and allowed the consulting team to gather greater detail about specific programs.

Upon completion of the second phase, the consulting team was able to develop summary conclusions about how states fund port infrastructure and which programs seem to be successful. These conclusions are presented later in this report and represent the opinions of the consulting team and have not been endorsed or approved by PAL.

B. Summary of all states surveyed

The initial survey of states includes thirty one states on the Atlantic, Gulf, and Pacific coasts, as well as the shores of the Great Lakes and the interior waterways of the country. Not all states provide funding for their ports and some provide very limited funding. Many states provide funding for ports through general transportation and economic development funding programs that are open to other public entities. The varied forms of port ownership and the wide spectrum of port funding programs make it hard to formulate conclusions that easily fit all ports. Nonetheless, in an attempt to highlight this diversity, there are categorizations of the thirty one states that will be useful. The following categories present summary information that show how these states fund port infrastructure improvements. An overview of state ownership of ports and state formal grant programs is shown in Appendix B. Information on the source of funds for states that fund ports is shown in Appendix D.

OWNERSHIP OF PORTS

Eleven states own the major port facilities in their states. In some cases the ports are actually operated by a unit of state government. In other instances, the state owns the facilities but has created a totally independent enterprise organization to operate the facilities. In this latter case the port entities are often independent from the state and may not receive any substantive financial support from the state. Examples of this are New Hampshire (Pease River Port Authority), Rhode Island (Port of Davisville); Delaware (Diamond State Port Authority), North Carolina (North Carolina States Port Authority), South Carolina (South Carolina States Port Authority), Georgia (Georgia States Port Authority), Alabama (Alabama State Port Authority),

Mississippi (Mississippi State Port Authority), and Indiana (Indiana Port Commission). States such as New Hampshire, North Carolina, South Carolina and Indiana have provided no state funding to their state owned ports in recent years and the ports operate solely from their own earned revenues. Ports in states such as Rhode Island, Delaware, Georgia, and Alabama do occasionally receive state funds but almost always for a project that the state has designated. States that provide a significant amount of funding to state owned ports are Maryland (Maryland Port Administration) and Virginia (Virginia Port Authority). In Maryland the port is a part of the State Department of Transportation and is funded directly from the State Transportation Fund for both capital construction and any operating deficits. In Virginia, the port directly receives an annual allocation of 4.2% of State Transportation Fund revenues which support capital construction projects. With the exception of Alabama, Georgia and Indiana, each of the states that own its ports has only one major port complex or one major port and one smaller port. Indiana has three ports. Georgia has one major port and three smaller ports. Alabama is unique in that the state owns the Port of Mobile and eleven shallow draft ports. Alabama leases out its shallow draft ports to public and private operators and the state has no day to day role in managing the operations of these ports. Three states have major ports that are owned and operated as independent regional entities with no substantive support from the states themselves. These include Massachusetts (MassPort), New York (Port Authority of New York/New Jersey), and New Jersey (Port Authority of New York/New Jersey and Port of South Jersey.)

In many other states, ports are owned and operated by local government entities although most are operated independent of the local government or they are operated as completely independent districts. In California and Alaska ports are typically owned by cities and counties. Ohio ports are created and commissions are appointed by units of local government. Washington ports are independent of local jurisdictions and their commissioners are elected. In Oregon, ports are special local districts under state law. Most of these entities have taxing authority and those taxes provide a substantial and sustainable revenue source that allows for the sale of bonds to support capital construction.

STATE PROVISION OF PORT CAPITAL FUNDING

The amount and nature of funds provided by states to ports varies widely. In the sections of the report which follow, there are detailed explanations of a number of specific programs in the ten states chosen for final analysis.

Of the thirty one states surveyed, twelve have no formal programs for providing funds to ports. Some states such as Maine, Rhode Island, Connecticut, New York, Delaware, North Carolina, Georgia, and Alabama have given one time grants to their ports to support specific projects. These grants are almost always special appropriations from the state's general fund. A few states such as New Hampshire, New Jersey, South Carolina, and Indiana have provided no funding directly to ports in recent years.

The remaining nineteen states all provide some type of program that ports can access for funding assistance. These programs include grants, loans and access to bonds. Funding is made available in some states for dredging, marketing studies, local share of federal security grants, new construction, repairs to facilities, and development of master plans. The only states which provide financial support for operations are Pennsylvania (see detailed state section following), Maryland (only when the port has a deficit) and Virginia (although possible by the enabling legislation, the Virginia Port Authority has had an operating profit for over 20 years and it uses all of its state funds for capital construction).

The use of revolving loan funds is present in many states. In most cases the state seeds the fund and the loan paybacks keep the fund solvent. Several states highlighted in the detailed states section such as Mississippi, Washington, Oregon and Ohio use this approach and the details are present later in this report.

Several states such as Texas and Arkansas have legislatively created funding programs for ports but have never allocated any appropriations to the programs.

In many states funding programs are not exclusively for ports. Some of these non-exclusive state programs can be used for port infrastructure and some can only be used for transportation connectivity projects.

SOURCE OF STATE FUNDS FOR PORTS

Those states which do provide funds to ports most often use general fund appropriations for their programs. This is somewhat misleading as many states provide only periodic or one time grants and this is almost always from their general fund.

Twelve states use transportation revenues of some kind. Virginia uses 4.2% of its annual Transportation Trust Fund revenues for ports. Florida uses \$25,000,000 annually from motor vehicle registration fees to fund its port bond program (details in the Florida analysis later in the report.) Maryland uses Transportation Trust fund revenues.

The use of revolving loan funds is present in at least five states. These are usually funded initially from the state's general fund and then become self supporting.

The state of Oregon uses lottery funds to support its Marine Navigation Fund and its Port Planning and Marketing Fund.

It should also be noted that in many states, ports are given broad authority to tax which allows for the sale of bonds to support capital construction. The states of Washington, Oregon, California, Ohio and Texas are prime examples of this approach.

Appendix D at the end of this report contains a listing of fund sources for all thirty one ports.

PORT OVERVIEW WITHIN STATES

One of the findings of the initial review of states concerns how states view the ports themselves and how they decide to support ports both from a funding and marketing standpoint.

In over half the states surveyed, ports are considered an integral part of economic development in the state. As such their funding and support comes from the state's economic development department. This is the case in Massachusetts, Ohio, Oregon, Pennsylvania, Virginia, California, Illinois, Rhode Island, Washington and Maine. In some cases the actual funding may come from transportation revenues but the administration and overview comes from the economic development department. In some of these states the ports themselves are a key component of economic development strategies and the programs that ports access for funds are the same programs available to other non-port economic generators.

In other states, the state departments of transportation administer the funding. This approach exists in Texas (although no funds have ever been appropriated), Alaska, Missouri, and Wisconsin. Pennsylvania had originally placed its Office of Penn Ports within its department of transportation. However after several years, it decided to move it to its economic development department to achieve greater visibility for ports which seemed to be lost in a department that spent 95% of its revenues on highways.

PORT ADVOCACY WITHIN STATES

In researching the initial thirty one states, it was discovered that many states have formal port advocacy groups often created legislatively.

A number of states such as Pennsylvania, Florida and Massachusetts have offices within the state government structure that support and promote ports. All three of these states are highlighted later in the report. In most cases the offices are one or two person entities. In Pennsylvania they are in the economic development department. In Massachusetts they are in the governor's office. In Florida they are in the department of transportation. The locations of the offices vary from state to state but they are generally viewed as a positive force by ports.

Several states have legislatively created councils that promote ports and in some cases either administers funds or make recommendations for funding. Florida has a Seaport Transportation and Economic Development Council. Massachusetts has a Seaport Advisory Council. Ohio has an Ohio Port Authority Council. Texas has a Port Authority Advisory Council. Washington has the Washington Ports Association which exists in Washington law. Arkansas has the Arkansas Waterways Commission. Connecticut has the Connecticut Maritime Commission. Mississippi has the Multimodal Fund Committee. The effectiveness of these groups varies widely. In Florida, Massachusetts and Ohio, they are a strong and meaningful part of the funding allocation process. In Texas, Arkansas and Connecticut, their usefulness has been restricted by a lack of state funding for ports.

OTHER NOTABLE TRENDS IN STATE FUNDING OF PORTS

Several additional trends are worthy of mention. These include requirements for local matching funds and requirements for state and local port master plans.

With the exception of states that give periodic and one time grants, almost every state that has an ongoing program for port funding requires local matching funds from the ports. Most states require at least a 25% local match and many states provide funds only on a 50% match basis. Florida requires a 25% match on projects involving dredging or rehabilitation and a 50% match on new construction. Texas requires a 50% match but has yet to provide any funding. Oregon requires either 25% match or 50% match depending on the type of program. Washington requires a 35% to 50% match on most of its programs.

There are states that provide 100% ongoing allocations. Pennsylvania and Virginia are prime examples. In both instances however the state has made a legislatively supported decision to provide a certain annual funding level to its ports and in each case the level of funding represents as portion of the overall capital program of their ports.

Throughout the states surveyed, there was a common element with regards to the planning processes required before ports could access funding. In most states, a port is required to have a master plan that has been approved by the state funding authority before funds are granted. In many states the port project for which funding is requested must also exist in state master plan. In some cases it is an overall state transportation plan and in other cases it is a statewide port master plan or economic development plan.

In many states, ports are encouraged to use public-private partnerships and limited public ownership of facilities. In some states ports represent an integral part of the state's economic development strategy and as such are given broad powers to engage in a wide variety of economic development activities including recreation, tourism and commercial projects.

C. States Selected for Detailed Study

After reviewing the information collected from the thirty one states involved in the initial survey, the consulting team recommended ten states worthy of detailed analysis. The PAL executive committee endorsed this recommendation. The consulting team based its recommendations on three basic criteria previously approved by PAL. The criteria included:

1. States that have port characteristics similar to Louisiana such as multiple ports including both deep draft and shallow draft ports.
2. States where the major ports are in direct competition with Louisiana ports.
3. States which have unique programs for funding ports or have funding programs and fund sources not used in Louisiana or have established permanent and ongoing funding sources.

Using these criteria, the study team recommended the states of Massachusetts, Pennsylvania, Virginia, Florida, Alabama, Mississippi, Texas, Oregon, Washington, and Ohio. Each of these states met one or more of the criteria outlined above.

The state of Massachusetts was selected because it has a unique funding program with a stable funding source. Although the major port in Massachusetts at Boston is owned and operated by an independent entity (Mass Port) without state support, the state has other smaller ports that required capital funding assistance. Massachusetts has a Seaport Advisory Council, created by a Governor's executive order which administers capital grants to ports other than Mass Port. The council is chaired by the Lieutenant Governor and has representatives of key government agencies and the ports themselves as well as private sector members. The council administers a large bond fund that is used to assist ports with dredging, freight rail service, and port infrastructure improvements.

The state of Pennsylvania was selected because it has a unique funding mechanism with many similarities to the recommendations contained in the recently completed Louisiana Ports Strategic Plan. The state supports three major port locations (Philadelphia, Pittsburgh, and Erie) with direct grants that involve both capital and operating funds. The program is administered by an Office of Penn Ports, a one person office, within the Department of Community and Economic Development. Penn Ports is the state's leader in planning, coordinating and funding state investments in ports. The state's total investment in ports over the past 20 years has exceeded \$1 billion.

The state of Virginia was selected because they have created a Port Fund that receives 4.2% of State Transportation Fund Revenues annually. This stable recurring funding for ports makes the state of Virginia a candidate for detailed study. The state owns and operates the major port complex at Hampton Roads through the Virginia Port Authority (VPA). There are also smaller ports in Virginia at Richmond, Hopewell and Alexandria. The mechanisms by which the state funds VPA are rather complex and involve a number of state entities. However, at the end of the funding process, VPA receives a significant, stable, and recurring funding source that allows it to sell bonds for major capital construction and to offer grants to the other smaller ports.

The state of Florida was selected because they dedicate a portion of motor vehicle fees to a port fund that is administered by the Florida Seaport and Economic Development Council. This revenue dedication allows Florida to sell bonds and support major port construction at fourteen deep water ports. The Florida Ports Financing Commission issues the bonds and distributes the funds. They also provide loans to ports for capital improvements. In the past 10 years, Florida has provided over \$500 million in funding for port infrastructure improvements.

The state of Alabama was selected because they are a major competitor to ports in Louisiana. The state owns the major port facilities at Mobile and several other inland locations. In recent years the state has granted up to \$100 for port improvements at the Port of Mobile.

The state of Mississippi was selected because they are a major competitor to the ports in Louisiana. The state owns the port at Gulfport and operates it as the Mississippi State Port Authority. There are also ports at Pascagoula, Biloxi and several inland locations. While state

support has not been as large as some other states, Mississippi has directed several non-state revenue sources that have provided significant capital to their port system. Additionally the use of casino revenues has aided their ports.

The state of Texas was selected because they are a major competitor to many Louisiana ports. The state of Texas has historically provided very little direct funding support for ports except for highway and intermodal connections. Texas recently created a grant program for ports that involves the ports themselves in the project selection process although the program has not been appropriated any funds. Ports in Texas have broad taxing authority and rely on that source of revenue to support bond programs for capital construction.

The state of Oregon was selected because it has a port system similar to Louisiana and it has several unique programs and funding sources. Oregon has twenty three public ports which are economic development entities with broad powers and taxing authority. The state provides support through a series of grant and loan programs that support dredging, marketing and infrastructure improvements. One program uses funds from the state lottery.

The state of Washington was selected because it has a port system similar to Louisiana and because the structure of its ports under state law is unique. The state has seventy five port districts including both deep draft and shallow draft ports. Each port district is an economic development entity with broad powers and taxing authority. Local taxation is the primary method of support for port funding although the state does provide a number of programs that ports can access for assistance. The state also has a Washington Ports Association that was created in state law to promote port interests.

The state of Ohio was selected because it has a port system similar to Louisiana and it has a variety of programs for assistance to ports. The state has fifty three established ports of which thirty are currently active as commercial ports. They have both deep draft and shallow draft ports. Ports are principal economic development entities under state law with taxing authority and the ability to own and operate non-port facilities. Ohio has an Ohio Port Authority Council which includes all of the port directors of active ports. The council is managed within the state economic development department and promotes port interests as well as assisting ports in securing state and federal funds. Ohio has no programs dedicated solely to ports but has eleven different grant, loan and bond programs from a variety of und sources in which ports can participate.

The following sections of this report provide details on each of these states activities in port funding including descriptions of their port systems, their funding programs and key observations on how these programs may or may not be appropriate in Louisiana.

II. Detailed Information for Ten Selected States

In this section of the report the ten states selected for additional study are included. Each of these states has been further researched for information on their port systems, their state funding mechanisms, and some observations about the appropriateness of their programs to the Louisiana port system. The ten states are arranged in alphabetical order and are as follows:

ALABAMA
FLORIDA
MASSACHUSETTS
MISSISSIPPI
OHIO
OREGON
PENNSYLVANIA
TEXAS
VIRGINIA
WASHINGTON

STATE OF ALABAMA FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

The public ports in Alabama are under the administration of the Alabama Ports Authority. The Alabama Ports Authority is a state agency with a board of directors consisting of eight members appointed by the Governor and one ex officio member. The ex officio member is either the Mayor of Mobile or the President of the Mobile County Commission each serving in alternate years.

In addition to the deepwater port complex at Mobile, the Alabama Ports Authority administers eleven shallow draft ports on the various navigable waters in the state. The port authority leases out these shallow draft ports to public and private operators. The authority has no role in the operations of these ports. They are managed as real estate assets.

The primary imports are: Coal, Aluminum, Iron, Steel, Copper, Lumber, Wood pulp, Plywood, Fence Posts, Veneers, Roll and Cut Paper, Cement, and Chemicals

The primary exports are: Coal, Lumber, Plywood, Woodpulp, OSB, Laminate, Flooring, Roll and Cut Paper, Iron, Steel, Frozen Poultry, Soybeans, and Chemicals. .

In 2008 the port handled 28.1 million tons of cargo and 129,119 container TEUs.

STATE FUNDING

The Port Authority receives no annual funding or grants from the State. In 2000 the legislature allocated to the Port a onetime grant totaling \$100 million dollars to rehabilitate existing facilities. A portion of the grant, \$10 million dollars, was used to supplement a federal grant and port revenue bonds to generate the capital funds necessary for the construction of the Port's new container terminal. The Authority does not have the power to impose ad valorem taxes. In 2008 and again in 2009 the Alabama legislature considered legislation that would have established an Inland Waterway Transportation Fund within the Department of Transportation. The legislation was not passed even though it had strong support from Coalition of Alabama Waterway Associations. It should be noted however that the legislation as drafted would "...expressly exempt from the purview of this act." the Alabama State Port Authority.

Although not technically a direct state grant, Alabama has a very extensive tax incentive program including tax incentives for private sector entities which invest in construction of port facilities. The incentives provide for a 5% annual rebate of corporate income taxes for up to 20 years based on the cost of construction. Since the legislation to include ports was passed by the legislature in 2001, there have been three port related projects that took advantage of the tax incentives. They include the Thyssen-Krupp steel facility (\$3.7 billion), the APM

Terminals/Terminal Link private sector share of the Choctaw Point Container Terminal and the Mobile Refrigerated Storage Services cold storage facility at the port.

OBSERVATIONS

Except for the tax incentives program, Alabama does not provide us with a model or a basis for study for direct state assistance. It has a single state port with no direct state support other than the one time grant and consequently, it depends solely on self generated revenue for its operating and capital needs. However, the port authority has begun a process which has as its goal the participation by a private sector partner in the development and operation of portions of the port including the Choctaw Point project. The Authority sees this public-private partnership a critical element in their plans for the Choctaw Point project.

The use of Alabama Corporate Income Tax Credits has been a key factor in the Alabama Ports Authority's success in attracting private sector partners for their port development projects. Louisiana has recently enacted similar provisions in its tax code and should aggressively utilize those provisions to market to potential private sector partners.

Of additional interest to Louisiana Ports are the conclusions and observations made by the Coalition of Alabama Waterway Associations in their presentation to the Alabama Joint Legislative Committee on Water Policy and Management. The recommendations the Coalition made while directed toward inland ports are ones that bear repeating and could be a motto for public ports throughout this country. We simply need to substitute ports for inland ports in the following Coalition recommendations:

- Recognize the importance of water transportation to the economy
- Promote state's support of inland waterways
- Support legislation to establish an Inland Waterway Transportation Fund within the Department of Transportation
- Establish waterways advisory board for Director of ALDOT
- Establish an Inland Waterways Trust Fund
- Establishing a waterways staff function within ALDOT

STATE OF FLORIDA FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

Florida has 14 deepwater ports on a 1350 mile coast line extending from the extreme northeastern corner of the state on the Atlantic Ocean to the Alabama border on the Gulf of Mexico. The deep water seaports are: Port Canaveral, Port Everglades, Port of Fernandina, Port of Fort Pierce, Port of Jacksonville, Port of Key West, Port Manatee, Port of Miami, Port of Palm Beach, Port of Panama City, Port of Pensacola, Port of Port St. Joe, Port of St. Petersburg, and the Port of Tampa. Florida's ports handle an extremely diverse cargo mix ranging from bulk cargos; liquids and ores, to the traditional break bulk and containerized cargoes. Florida ports handle more cruise passengers than any other state and boast the largest number of cruise vessel calls.

Public ports in Florida are as diverse in their governmental structure as they are in the cargo they handle. The governance extends from departments of city or county government to independent districts. Most ports in the state enjoy the right to impose ad valorem taxes within their territorial jurisdiction. Not all of the ports that have the power to impose property taxes however have chosen to do so. Those ports that do collect ad valorem taxes have in some cases used those funds to float bond issues for capital improvements. The following are four ports which are representative of the diversity of the seaports in Florida.

Port Everglades is located in Broward County and ranks as one of the nation's leading container and the second busiest cruise port in the world. The port has the deepest harbor south of Norfolk, Virginia, and boasts excellent inter modal connections. It handles break-bulk and containerized cargo, as well as petroleum products, other liquid and bulk cargo, yachts and other boats, vehicles and equipment. With more than 30 cruise ships, this second-busiest cruise port in the world. The port owns and operates Florida's first and largest operating Foreign Trade Zone, used by over 100 businesses. The port also has the nation's second-largest non-refinery petroleum storage tank farm, serving 12 counties. The port is a department of Broward County, Florida, however the port's enabling act requires that all revenues generated by the port shall be used exclusively for port purposes.

The Jacksonville Port Authority is a component unit of the City of Jacksonville, Florida and is governed by a seven-member board. Three board members are appointed by the Governor of Florida and four are appointed by the Mayor and confirmed by the City Council of the City of Jacksonville, Florida. Located on Florida's north Atlantic coast, Jacksonville serves the state and nation as a southeastern focal point for the intermodal movement of commodities on the world market. Port activities are divided between those under the control of the Port Authority and those owned by private interests. Leading cargoes include containerized and roll-on/roll-off general cargo, automobiles, break-bulk cargoes, and dry and liquid bulk products, including petroleum and phosphate. Between 1993 and 1996 the Authority received a total of \$94,915,000 for port expansion projects. The funds were part of an Excise Tax Revenue Bond issue of the City of Jacksonville. The City is responsible to the Bond Holders for payment of the debt service

on the excise tax bonds. The Authority receives a share of the communications service tax received by the City of Jacksonville (“City”) and ad valorem tax payments from the Jacksonville Electric Authority. In 2008 the port handled a total of 8,395,510 tons of cargo, 697,494 TEU’s and 76,474 passengers.

The Port of Miami is the world's busiest cruise port, with a fleet of more than 14 ships, including the newest megaships. One of the country's fastest-growing container ports, Miami serves markets in the Far East and Europe, as well as Central and South America. In addition, it handles break bulk and general cargo, automobiles, and heavy equipment. The Port of Miami is a department of Miami-Dade County. In 2008 the port handled 7,429,963 tons of cargo, 828,349 TEU’s and 4,137,531 passengers.

The Port of Tampa is Florida's largest seaport in both tonnage and area. The port handles bulk, break-bulk, general and containerized cargoes. Bulk cargoes include: petroleum products, phosphate and fertilizer products, cement and aggregates. General cargoes include: steel, refrigerated products and automobiles. Additionally, the Port also has ship repair facilities, is one of the nation's largest cruise home ports and plays a significant role in the local tourist economy with its waterfront retail and entertainment complex. In 2008 the port handled a total of 42,612,593 tons of break bulk and bulk cargo. The Tampa Port Authority, Board of Commissioners is composed of seven members, five of whom are appointed by the governor and the remaining two commissioners include the Mayor of the City of Tampa and a member of the Hillsborough County Board of Commissioners.

STATE FUNDING

Florida has established multiple funding programs at the state level for port capital needs. State funding for the years 2001 through 2010 is as follows:

2001	35,000,000
2002	35,000,000
2003	35,000,000
2004	35,000,000
2005	39,750,000
2006	58,183,000
2007	127,804,345
2008	56,877,045
2009	56,877,045
2010	46,916,910

In 2007 the Florida legislature added \$50 million additional dollars to the annual funding programs for ports.

The Florida Ports Financing Commission Loan Program

The Florida Ports Financing Commission was created in 1996 by interlocal agreement among public entities with the stated purpose of providing a cost effective means of financing various capital projects for Florida’s public ports. The Commission has issued two series of bonds, the

first in 1996 and the second in 1999 for a total \$ 375 million dollars. The funds derived from the bond sales were “loaned” to ports for projects approved by the Florida Seaport Transportation & Economic Development Council. The council consists of 17 members: the directors of the 14 deepwater ports or their designees and the Secretaries of the Departments of Transportation and Community Affairs, and The Director of the Office of Tourism, Trade, and Economic Development. The “loan agreements” provide for the repayment solely from the funds received from the State Transportation Fund generated from the motor vehicle registration fees. A total of \$25 million dollars is deposited annually in the fund to pay debt service. Intermodal access projects involving dredging, or the rehabilitation of wharves or similar structures require a 25% match, while other projects funded through this program require a 50% match.

The Florida Seaport Transportation and Economic Development Program

The State makes available in most years a total of \$15 million for port capital improvements through the Florida Seaport Transportation and Economic Development Program. Of that \$15 million dollars; \$8 million is dedicated by statute with the remaining \$7 million dollars of additional funding from the Florida Department of Transportation’s annual budget. Projects eligible for funding under this program include: transportation facilities, harbor dredging or deepening, construction or rehabilitation of docks, wharves or other maritime facilities, acquisition of Vessel Tracking Systems, container cranes, or other mechanized equipment, land acquisition, environmental protection projects, seaport inter-modal access projects which are part of the five year Florida Seaport Mission Plan and transportation facilities not part of the Department of Transportation work program. Funds are provided on a 50-50 match for approved projects. To be eligible for consideration for funding by the Florida Seaport Transportation and Economic Development Council the project must be consistent with the port’s comprehensive master plan.

The Council’s enabling statute provides that it shall develop rules for the evaluation of projects which include the economic benefit of the project measured by the potential for retention of existing or increased cargo or passenger movement, port revenues and job creation. The projects approved for funding shall be submitted to the Secretaries of the Departments of Transportation, and Community Affairs and the Director of the Office of Tourism, Trade, and Economic Development for their review and approval. Funding to any one port may not exceed \$7 million dollars in any one year and \$30 million dollars in any 5 calendar year period. Funding is subject to audit by the Department of Transportation and any jobs created are subject to equal opportunity hiring practices as provided in state law.

The State Infrastructure Bank

The State Infrastructure Bank is a financing option which is most often used in conjunction with a variety of other project financing tools. It is a revolving loan and credit enhancement program consisting of a federal-funded account capitalized by federal money matched with state money and a state-funded account capitalized by state money and bond proceeds. If needed, a third account may be used for declared state emergencies and would be capitalized by state money and bond proceeds. Participation from the federally-funded account is limited to projects which meet all federal requirements pursuant to the Safe, Accountable, Flexible, Efficient

Transportation Act: A Legacy for Users. Participation from the state-funded account is limited to a transportation facility project that is on the State Highway System or that provides for increased mobility on the state's transportation system or provides for inter modal connectivity with airports, seaports, rail facilities, transportation terminals, and other inter modal options for increased accessibility and movement of people, cargo, and freight. Loans may bear interest at or below market interest rates, as determined by the Florida Department of Transportation. Loan repayments to the State Infrastructure Bank must begin within 5 years after the project is completed or open to traffic whichever is later, and the repayment term may not exceed 30 years after the date of the first payment.

The Florida Strategic Intermodal System

The Florida Strategic Intermodal system is a network of high priority transportation facilities which includes 10 of the 14 deepwater ports. SIS funds are provided for capacity projects to serve the designated ports.

In addition to the funding sources noted above the State has as a part of its Transportation Department work program funded port related projects for roadway improvements. The cost of roadway projects funded and managed directly by the Florida Department of Transportation and primarily directed toward port access needs are estimated to range as high as \$1.64 billion dollars.

OBSERVATIONS

The structure of state funding for Florida's 14 deepwater seaports has a number of elements that could make it an attractive model for Louisiana, **IF**..... The big **IF** is a commitment to a dedicated revenue stream from the state. This is not to say that Florida ports receive all the funding they feel they need or all the funding that a more equitable distribution of state transportation resources to ports would provide, however it does mean the programs can provide assistance for local port infrastructure needs. The underlying premise in all Florida's port funding is a statutory mandate for comprehensive top down planning and state funding is provided only for those projects which are part of the port's approved plan. The comprehensive planning requirements that are mandated by statute in Florida could assist Louisiana ports to insure that the allocation of limited state funding is utilized in the most effective manner. From the state level that process is coordinated by the Florida Seaports Office which is part of the Department of Transportation. The Florida Seaports Office has an authorized staff of 3 and is responsible for coordinating the planning process and state funding.

The Florida Ports Financing Commission and the Florida Seaport Transportation & Economic Development Council could serve as a template for similar entities in Louisiana. Florida ports have utilized for infrastructure development the significant one time capital funding from the proceeds of two bond issues supported by state dedicated revenue. A onetime major capital program similar to the one administered by The Florida Ports Financing Commission is a model that would finance major critical port infrastructure improvements and provide an opportunity

for Louisiana ports to “catch up” to the competition. The basis for such a program however requires the **IF**.

Annual port funding, a portion of which is statutory with the remainder supplemented by annual appropriations is similar in most respects to Louisiana’s Port Priority Program. Some Florida seaports receive ad valorem taxes but such revenues are restricted by statute and may not be used to secure bonded debt but they can and are used to provide a portion of the local match for capital projects. While ad valorem taxes are a controversial political issue in Louisiana they never the less should be considered along with other permanent financing options for port capital projects. In all many of the current issues facing Louisiana ports are similar to those facing their counterparts in Florida and like Louisiana Ports, Florida seaports feel that they are invisible and they do not share equitably in the allocation of transportation resources.

STATE OF MASSACHUSETTS FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

There is one major port at Boston and four smaller cargo ports at Gloucester, New Bedford, Fall River and Salem.

The port at Boston is really a number of cargo facilities in Boston and Cambridge. It is owned and operated by the Massachusetts Port Authority, commonly called Mass Port. Mass Port is an independent public authority that is totally self funded from its own revenues and fees. Mass Port owns and operates three airports including Logan International Airport in Boston, the major seaport facilities in the greater Boston area and a toll bridge across the Cambridge River. In FY 2010, its operating budget is \$364 million with projected revenue of \$552 million. The port operations themselves have lost about \$25 annually in recent years and the two smaller airports lose about \$2.5 million annually. The revenue earned at Logan International Airport more than covers the deficits from these other facilities. Unlike many state created entities in other states, Mass Port pays a Payment in Lieu of Taxes to various localities including the City of Boston, the City of Chelsea and the City of Winthrop. Mass Port receives no state funds for operations or capital programs. It does receive federal grants including a recent \$600,000 grant from EPA and a \$100,000 Federal Stimulus Grant. The port is one of largest in the Northeast U.S. handling about 16 million tons of cargo per year including 1.3 million tons of general cargo, 1.5 million tons of dry bulk and 12.8 million tons of liquid bulk.

The Port of Fall River is owned by a combination of local and private entities. It handles about 3 million tons of cargo annually made up of lumber, paper and fish. Recently the port has been under consideration as the future site of an LNG operation which has stirred some local opposition.

The Port of New Bedford is owned and operated by the City of New Bedford. It is a major fishing center and receives imported fish for processing.

The Port of Salem and the Port of Gloucester handle petroleum, coal and fish products. These ports are owned by their respective municipalities.

There are also numerous smaller commercial fishing ports both on Cape Cod and along the coastline.

STATE FUNDING

Although its largest port at Mass Port receives no state funding the other ports, known in Massachusetts as “Second Tier Ports”, found themselves with significant capital funding needs in the late 1980s and early 1990s with no apparent means of finance. As a result in 1994 the state legislature passed a Seaport Bill that created a bond fund to provide assistance to the Second Tier Ports as well as the smaller commercial fishing ports. At about the same time the then Governor created by Executive Order the Massachusetts Commission on Commonwealth Port Development. The Commission produced a report on an integrated statewide strategy for seaports. It also recommended the establishment of a Seaports Advisory Council to coordinate and oversee the elements of their report. The Governor established the Seaport Advisory Council by Executive Order in December 1994.

Since 1994, the Seaport Advisory Council has operated as the major coordinator of seaport activities statewide other than at Mass Port which remains independent. The council has 15 members. It is chaired by the Lieutenant Governor and has representatives from the four state agencies (Transportation, Energy, Economic Affairs, and Administration/Finance), four appointees from the Mayors of the four Second Tier Port cities, and six representatives of various regions and private sector maritime groups. The council meets quarterly to review and approve capital funding grants and planning grants. The mission statement of the council is—Develop the commercial maritime resources of the Commonwealth both physically and institutionally into a “Port of Massachusetts”, each of the several ports working cooperatively doing better what each does best and thereby creating and enhancing an integrated land/sea transportation network as access to the global market place in support of the economic development needs of the Commonwealth.”

The council is supported by three staff members who include an Executive Secretary, a Deputy Director and a Program Coordinator. Staff is appointed by the Governor’s office. The council’s budget resides in the Governor’s office. Periodically, the Governor requests bond funds for the council as part of a larger bond package for state construction. The latest bond package was passed in the 2008 legislative session and contained \$110 million for the councils grant activities over the next 5 years. These funds are assigned to the Executive Office for Administration and Finance and the council may be restricted annually on how much of the fund may be used. In 2009 the council had \$10 million to allocate and in 2010 the funding level is \$8 million. Funding levels are a combination of capital needs of the council and the fiscal constraints of the state at the time.

The application process is very simple. It involves a three page form that includes information on the project description, the cost estimate, any local share, a project schedule, the name of any design consultants already selected, and the status of any permits required. After submission to

the council, the council staff gathers additional information from the applicant. Recently the state has begun requiring that all applicants for capital grants from the state answer a series of questions related to the economic benefits of their project including jobs created or saved. When all the relevant information is collected the council turns the application and information over to a group known as “The Port Professional Group” This group is comprised of the state harbor coordinators (assigned by the state to each port and paid by the state), a representative of the Massachusetts Maritime Academy, representatives from the four state agencies on the council and other professionals that may be asked by the council to participate. The Port Professional Group reviews the material and recommends approval or disapproval to the council. The council takes final action at its next quarterly meeting. Grant administration is then turned over to the state agency most aligned with the project type.

Ongoing projects for FY 2009 include Boston Navy Yard Dredging, Chatham Fish Pier , Town Fuel Dock at Cuttyhunk Island, Commercial Fishing facilities at Fairhaven, Port of Fall River engineering/construction of dock, Port of Gloucester Dredging, Port of Gloucester Planning Studies, Port of New Bedford Pier Expansion, Port of New Bedford Fireboat Restoration, Port of New Bedford Dredging, Port of New Bedford engineering/construction of pier Port of Salem New Wharf, and Matching Grants for Port Security Projects for four ports. The largest grant was for \$1,600,000; the smallest grant was for \$15,000; and the average size grant was around \$500,000.

The council has latitude to invest in a wide range of activities including commercial fishing infrastructure, dredging, port marketing, public access to water, port infrastructure, port planning studies and master plans, and safety and security. In the past several years the council has funded 100% of the local shares of federal port security grants for all ports except Mass Port. In the past four years they have awarded \$4 million for this purpose. The council is also funding studies and infrastructure improvements to support a “short sea shipping” program for coastal shipping in New England.

OBSERVATIONS

The Massachusetts Seaport Advisory Council has many elements that would make it an attractive model for Louisiana. Although the program is open to a wider variety of activities than just port infrastructure funding, all of its activities benefit the states maritime industries to some degree. Even at a restricted funding level of \$8-10 million per year, the council is meeting the needs of the four commercial ports and is creating a positive atmosphere for the maritime community with lots of small grants to other entities. As in Louisiana where the Port Priority Program draws on political support across the state, the council is widely viewed in a positive manner in Massachusetts partly due to breadth of applicants that it can serve. It is particularly important to note that the council decided very early on that it would fund the local matching

funds for federal security grants. Although the magnitude of the funding is not near as large as in Louisiana, this has been a sore point in Louisiana for the past several years as ports have had to seek capital outlay for these funds. There is also a great deal of similarity between the Seaport Advisory Council and the Office of Ports recommendation from the Louisiana Ports Strategic Plan. It has limited staff, a very small operating budget, and a shared decision making process with various state agency heads and private sector maritime persons. It is strikingly similar to the model discussed by PAL last spring concerning a conversion of the Governors Maritime Task Force into the advisory body for ports. The key in Massachusetts was having the Governor propose this council and create through executive order. The legislature has since given funding in three different bond bills and three governors since 1994 have continued the program likely because its benefits are so widespread among communities in the state and very high profile.

STATE OF MISSISSIPPI FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

Currently, there are 16 public ports in Mississippi: the state controls 2 and the remaining 14 ports are either independent local government entities or city or county owned and operated. The ports contribute \$1.4 billion to the State economy and represent almost 3 percent of the State's Gross Product. The ports along the Gulf of Mexico and the Mississippi River have historically been active in maritime trade and commerce; however the Tennessee-Tombigbee Waterway in the northeastern portion of the State has created a direct, navigable waterway for additional barge traffic serving the northeast portion of the state. The inland ports primarily handle general and bulk cargo, while the Gulf Coast ports handle containers and refrigerated products in addition to general and bulk cargo.

The six ports located on the Tenn-Tom Waterway in the northeastern portion of the State from north to south include: Yellow Creek Port, Port Itawamba, Port of Amory, Port of Aberdeen, Port of Clay County and Lowndes County Port.

The six Mississippi River ports are: Port of Rosedale, Port of Greenville, Yazoo County Port (The Yazoo County Port is located on the Yazoo River, a tributary of the Mississippi River.), Port of Vicksburg, Port of Claiborne County and Port of Natchez.

The four Gulf Coast ports are: Port of Pascagoula, Port of Biloxi, Port of Gulfport and Port Bienville.

STATE FUNDING

The Multimodal Transportation Capital Improvement Program Fund

The Multimodal Transportation Capital Improvement Program Fund was established by the legislature in 2000, as a funding mechanism for short line railroads, public airports, and mass transit, as well as ports. The Mississippi Water Resources Association, the state trade association for ports, first attempted to have the legislature establish a grant program solely to fund capital projects for the 16 public ports. Their efforts were unsuccessful because of a lack of broad support for a ports only fund. Approximately \$10 million is appropriated annually by legislature to The Multimodal Transportation Capital Improvement Program Fund of which the ports receive 38% or \$3.8 million for capital improvements. The Fund does not enjoy any dedicated funding nor is the annual amount fixed by statute. Of particular note is the fact that funds allocated must be expended by the port in the year in which the port's application is approved and no carry over is permitted.

Unlike most state programs of this type no local match is required and equally unique is the project selection process which is conducted by a Multimodal Fund Committee consisting of seven port directors (three from coastal ports and four from inland ports), the Executive Director of the Mississippi Development Authority, the Executive Director of MDOT, and the Executive Director of the Mississippi Water Resources Association. Each of the transportation modes

which receive funding through the program has a similar committee structure which provides the review, evaluation, and prioritization of the funding applications.

The Intermodal Connector Improvement Program

The Intermodal Connector Improvement Program which is dedicated to roadways, access roads, marshalling areas, etc. is administered by the Mississippi Department of Transportation from the federal funds that generally reflect the Departments multi-year construction schedule. To date the ports have received approximately \$14 million of these federal funds.

The Port Revitalization Revolving Loan Program

The Port Revitalization Revolving Loan Program administered by the Mississippi Development Authority provides low-interest loans not to exceed \$750,000, to public port authorities for improvement of port facilities to promote commerce and economic growth in the state. The maximum loan available for any one project is extremely modest and carries an interest rate of three percent with a payout period not to exceed 10 years.

Substantial federal funds were made available to states and local communities along the Coast of the Gulf of Mexico, through programs designed to address the severe devastation following Hurricane Katrina. The Port of Gulfport was a recipient of a major grant totaling \$570,000,000 dollars through the CDBG program administered by The Department of Housing and Urban Development. The port had completed a master plan for the future development of the port shortly before Katrina struck which has served as the blueprint for the use of those funds. Construction is currently under way to make the plan a reality.

OBSERVATIONS

The Multimodal Transportation Capital Improvement Program Fund is similar in some respects the Port Priority Program. The very modest funding of the program does not make it possible for any one port to do much more than minor construction or rehabilitation of an existing facility. That is especially true in view of the fact that projects have to be completed within the year in which the funds are made available.

What could be of interest to Louisiana ports however is the process by which the projects are selected, i.e. by a panel where the majority of the membership is made up of port professionals. This is an idea that deserves further consideration and study.

STATE OF OHIO FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

Ohio is bounded by 716 miles of navigable waterways. Water ports in Ohio involve a mix of public and privately-owned facilities and annually handle some 188 million tons of cargo. There are nine deep draft commercial ports on Lake Erie with 77 terminals, and some 132 terminals on the Ohio River. The Ohio River and Lake Erie ports serve barge and ship traffic, predominately bulk material such as coal and grain. Lake Erie ports handle inter-lake commerce from other Great Lakes states, as well as international commerce through the St. Lawrence Seaway. Ohio River ports connect to international destinations through the Ohio/Mississippi River systems and deep draft ports on the Gulf of Mexico.

There are 53 established port authorities in the state, with approximately 30 currently active. Port authorities are public entities which own waterfront property and can finance dock and other transportation infrastructure improvements. Public port authorities in Ohio usually own the land and some physical dock assets, and contract for operations (stevedoring, warehousing, etc) with private companies. While there are many water port authorities in Ohio, the most active are the Toledo-Lucas County, Cleveland-Cuyahoga County, and Columbiana County port authorities, all of which own physical water port and intermodal assets and property. The Columbiana County Port developed the Wellsville Intermodal Facility to serve local industry and to tap anticipated container-on-barge shipments once the Panama Canal is expanded. Privately owned water dock and terminal infrastructure is much more common in Ohio. Companies can locate terminal facilities on river and waterfront properties to directly serve their businesses. Examples include the Cargill grain terminals in Toledo; the taconite pellet terminal in Lorain, and numerous coal handling facilities on the Ohio River. Most private terminals exist for the sole use of their owners, though some are “general cargo” facilities which handle freight for any customer. It is estimated that Ohio has about 132 terminals on the Ohio River alone, though many of these are dedicated to bulk coal, bulk liquid or other single use purposes. Similarly, private water terminals are located at nine Ohio cities on Lake Erie: Ashtabula, Cleveland, Conneaut, Fairport Harbor, Huron, Lorain, Marblehead, Sandusky and Toledo.

Port authorities are principal mechanisms of economic development in Ohio and have broad powers to own and operate a variety of projects: maritime, other transportation, recreational, educational, governmental and cultural. State law authorizes any unit or units of local government to form a port authority and appoint its governing board. Ports have bonding authority (including the right to float conduit industrial revenue bonds), right of eminent domain, taxing authority, and the right to buy and sell property.

A key goal of the Ohio ports system is promotion of economic development through public-private partnerships. Ports are encouraged by state law to involve private enterprise in their activities and limit public ownership and operation of facilities. Ports have been very proactive in using this approach, particularly exemplified by development of the Rock and Roll Hall of

Fame in Cleveland, the Owens Corning headquarters in Toledo, and a 260 mile regional fiber optic network jointly controlled by the private developer and the Columbiana County Port.

Ohio Port Authority Council

The Ohio Port Authority Council acts as lobbying group for ports' interests and assists in identifying and securing state and federal funds for port development. The Council was formed by executive order of the governor and is composed of the directors of all the port authorities, and representatives of the state Rail Development Commission, state Department of Transportation and state Department of Development.

STATE FUNDING

There are a number of sources within the state to which ports can apply for funding, although none are exclusively for ports:

- Ohio Enterprise Bond Fund Program
- State Infrastructure Bank Direct Loan and Bond Fund Programs
- Tax Increment Financing
- Regional Bond Fund Programs
- Statewide Transportation Improvement Program
- Job Ready Sites (JRS) Program
- Logistics and Distribution Stimulus Program
- Ohio Rail Development Commission Grant and Loan Program

Ohio Enterprise Bond Fund Program

The Ohio Enterprise Bond Fund (OEBF) Program enables industrial, manufacturing, commercial, service, distribution and warehousing businesses to access the national capital markets. It passes this investment-grade rating to eligible borrowers for a nominal annual credit enhancement fee of 0.125%. The OEBF Program issues bonds on a project-by-project basis and provides long-term and fixed interest rate financing (current rates) to borrowers for eligible projects. Created in 1988 to promote economic development throughout Ohio by fostering job growth and investment in communities, the OEBF Program is sponsored by the Ohio Development Fund and is rated AA- by Standard & Poor's. The fund is administered by the Ohio Department of Development and is backed by profits from state liquor sales (currently \$10 million per year).

Eligible borrowers are corporations, partnerships, sole proprietorships, individuals and non-profit organizations (in certain instances). Bond amounts of \$1.5 million to \$10.0 million are available for up to 25 years. Eligible Projects include purchase of land and buildings, construction and renovation of buildings, and purchase of new and used equipment. Since 1998, OEBF has completed 91 projects for over \$425 million in bond proceeds

State Infrastructure Bank Direct Loan Program

The State Infrastructure Bank (SIB) Direct Loan program supports Ohio's transportation system,

including corridor completion, economic development, competitiveness in the global economy and quality of life. This revolving loan program enhances transportation projects that would not have been considered for traditional grant funds in the past, or are not ranked on the Statewide Transportation Improvement Program.

Created by the Ohio Department of Transportation in 1996, the State Infrastructure Bank Direct Loan program provides loans at below-market interest rates on a project-by-project basis. The program was capitalized with a \$40 million appropriation from the State legislature and \$87 million in Federal highway funds. The program is further backed by dedicated state gasoline taxes, fines, fees, penalties, interest, vehicle license plate and registration fees, property assessments, and tax increment financing. The program is administered by the director of Ohio Department of Transportation.

Eligible borrowers are Ohio political subdivisions, including cities, counties, townships, villages, port authorities and metropolitan planning districts. Loan Amounts of \$300,000 to \$5,000,000 are available for up to 10 years. Eligible projects include road construction and repair, bridges, rail, transit, airport and seaport infrastructure, docks and wharfs as well as other transportation enhancement projects

State Infrastructure Bank Bond Program

The Ohio State Infrastructure Bank Bond Program serves the connectivity of Ohio's transportation system, including corridor completion, infrastructure enhancements and economic development. The SIB bond program is meant to enhance the number of transportation projects that can be completed within the state that otherwise would not have been considered for traditional grant funds or are not ranked on the Statewide Transportation Improvement Program.

Established by the Ohio Department of Transportation in 2006, the SIB bond program was created to allow Ohio political subdivisions to access the national capital markets. The SIB Bond program has an AA- rating from Fitch Ratings and this investment grade credit enhancement is passed along to qualified borrowers with no annual ODOT fees. Bonds are issued on a project-by-project basis and bond proceeds are loaned to borrowers by ODOT.

Eligible borrowers are Ohio political subdivisions including cities, counties, townships, villages, port authorities and metropolitan planning districts. Loan amounts of \$1.5 million to \$10 million are available for up to 30 years. Eligible projects include road construction and repair, bridges, rail, transit and airport infrastructure, parking structures, docks and wharfs, as well as other transportation enhancement projects. Since 2006, two projects have been financed in the SIB Bond Program totaling more than \$12 million in bond proceeds.

Tax Incremental Financing (TIF)

Political subdivisions throughout Ohio are able to issue revenue bonds known as TIF bonds. TIF bond proceeds can be used to finance public improvements associated with new retail, commercial, residential or industrial development. Real estate taxes directly related to the incremental increases in the project property values are then pledged to pay the future debt

service on the TIF bonds. These payments are also known as Payments in Lieu of Taxes (PILOT). Eligible Issuers include any Ohio political subdivision. Bond amounts of \$2 million or more are available for up to 30 years. Eligible projects include purchasing land, rights-of-ways, construction of streets, water, sewer, drainage, parking structures, electrical substations, lighting and landscaping

Regional Bond Fund Programs

These are credit enhancement programs of individual port authorities and are supported by dedicated port funds.

The Northwest Ohio Bond Fund provides long-term, fixed-rate financing for qualified businesses. The Toledo-Lucas County Port Authority, which created the Northwest Ohio Bond Fund, maintains its own investment grade rating and is able to pass on this credit enhancement to qualified borrowers for a nominal annual fee. The Bond Fund program, which is rated BBB+ by Fitch, can issue investment-grade taxable or tax-exempt bonds for industrial, manufacturing, service, distribution, commercial and infrastructure projects. The Port Authority has authority to issue bonds in 28 counties across northwestern Ohio.

Eligible Borrowers include corporations, partnerships, individuals, cities, counties and non-profit corporations. Bond amounts of \$1.5 million to \$7 million are available for up to 30 years. Eligible projects include purchasing land, construction of new buildings, purchase of existing buildings, and purchase of new or used equipment. Bond proceeds also can be used for project infrastructure, including water and sewer, streets, parking structures, electrical substations and other public facilities. To date, the Port Authority has financed 56 projects for over \$202 million in bond proceeds.

A number of other port authorities in Ohio administer similar bond funds, including: Cleveland-Cuyahoga County Port Authority (25 projects for over \$115 million in bond proceeds); Summit County Port Authority (14 projects for over \$44 million in bond proceeds); Dayton-Montgomery County Port Authority (4 projects for over \$11 million in bond proceeds).

Statewide Transportation Improvement Program

Ohio's Statewide Transportation Improvement Program (STIP) is developed by the Ohio Department of Transportation (ODOT). It covers a four year period and is updated biennially. The STIP has two main purposes. First, it presents a fiscally balanced, multimodal transportation program, including projects funded with federal and state resources and scheduled for some phase of implementation for the next four years. Second, it serves as the reference document required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for use in approving federal funds for transportation projects in Ohio.

Ohio has seventeen Metropolitan Planning Organizations (MPOs) which cover transportation planning for the seventeen major cities in the state whose area population is over 50,000. Each MPO develops a Transportation Improvement Program (TIP) for their area, in cooperation with their regional partners, to implement their regional Transportation Plan. These TIPs are

incorporated by reference into the STIP. For non-MPO or rural areas of Ohio, ODOT develops the STIP in cooperation with local government officials through the rural consultation process.

In FY 2008 and FY 2009, the program amounted to approximately \$2 billion per year. No specific funding is included in this program for ports. This is primarily a roads program, although some funding is allocated to bridges, rail crossings and grade separations. The major funding source is the federal government, with state and local sources matching federal funding.

Job Ready Sites (JRS) Program

The Job Ready Sites program, administered by the Ohio Department of Development, is a competitive funding program designed to increase the supply and quality of inventory of available sites and facilities served by utilities and transportation infrastructure. Since its inception in 2005, the program has awarded \$102.5 million in grants. The JRS Program provides grants to certain political subdivisions, non-profit economic development organizations, and private, for-profit entities that obtain prior approval from the Director of the Ohio Department of Development (ODOD).

JRS Program grants cannot exceed \$5 million per site improvement project. Allowable costs are to acquire and improve land and building(s), plan or determine the feasibility or probability of a site improvement project, obtain surety bonds and pay insurance premiums, remediate environmental contaminated property and make infrastructure improvements.

In 2008/2009, Lucas County partnered with the Toledo-Lucas County Port Authority, the Lucas County Improvement Corporation (LCIC), the City of Toledo, Midwest Terminals of Toledo, Inc. and Hull and Associates on an application for a JRS grant. The grant dollars will facilitate infrastructure improvements at the Ironville Docks, which is the former Chevron property in the Port of Toledo. The project will upgrade rail lines, provide 19 acres of lay down area and develop the dock face and the waterfront. The total project cost is \$7.4 million, comprised of the award request for \$5 million and the local match of \$2.4 million, which will come in the form of privately invested funds from Midwest Terminals of Toledo. Within two to three years, the site will be developed into a manufacturing center for alternative energy companies in addition to the plans to further develop the Port of Toledo as a major distribution point on the Great Lakes.

Logistics and Distribution Stimulus Program

The Logistics and Distribution Stimulus Program, administered by the Ohio Department of Development, was created to promote economic development and job creation in the state of Ohio. The Department of Development, in cooperation with the Ohio Department of Transportation and the Ohio Rail Development Commission, allocated \$100 million in 2009/2010 in the form of loans for eligible transportation, logistics and infrastructure projects. Loans will be made on favorable terms, including interest at or below market rates, opportunities to earn forgiveness of principal and accrued interest based on attainment of defined performance measures and use of loan proceeds for construction financing. Public, private for-profit, and private not-for-profit organizations are eligible for funding. To be funded, a project must make fixed asset investments that will create jobs and improve Ohio's position as a leader in the

transportation and logistics industry. Funds from the Logistics and Distribution Stimulus Program may be used for the following: the purchase of land or buildings, purchase of machinery and equipment, building construction and/or renovation costs, purchase of ongoing business' fixed assets and general construction costs. The Logistics and Distribution Stimulus Program anticipates funding capital infrastructure projects, including road, rail line, air, or port improvement projects, that expand connectivity to logistics and/or intermodal centers, reduce chokepoints and freight bottlenecks, enhance the flow of freight and/or improve access to new markets for Ohio businesses. Loan funds awarded cannot exceed \$10 million or 75 percent of the total project costs, whichever is less. To be considered for funding, applicants must provide a matching investment of at least 25 percent of the total project costs.

The Columbiana County Port Authority received a \$4.5 million allocation from the program to make a \$6 million acquisition of land supporting private development of a \$6 billion coal-to-liquid fuel plant near their Wellsville Intermodal Facility. The Lucas County Improvement Corporation received a loan of \$7.5 million from the program for a Public Grain Transfer and Multi-Modal Delivery System at Ironville Docks in the Port of Toledo. The loan is for the purchase and improvement of property and the acquisition of capital equipment and may be forgiven upon attainment of the project's specific terms.

Ohio Rail Development Commission

The Ohio Rail Development Commission was created in 1994 and is an independent commission within the Ohio Department of Transportation. The Commission's mission is to plan, promote, and implement a coordinated freight and passenger rail system which is an integral part of a seamless, intermodal transportation. ORDC provides grants, loans, and other assistance to:

- provide rail spurs and other rail infrastructure to assist businesses locating or expanding in Ohio;
- rehabilitate light density branch lines on small short-line and regional railroads;
- assist in the acquisition and continued operation of branch lines;
- address special rail problems such as mainline congestion and assisting businesses with rail-related issues;
- assist with planning for intercity passenger rail service and promotion of the rail-related tourism industry.

OBSERVATIONS

The nature of ports in Ohio as discussed in the first section bears repeating. Port authorities are viewed as principal mechanisms of economic development in Ohio and have broad powers to own and operate a variety of projects: maritime, other transportation, recreational, educational, governmental and cultural. A key goal of the Ohio ports system is promotion of economic development through public-private partnerships. Ports are encouraged by state law to involve private enterprise in their activities and limit public ownership and operation of facilities.

The number of funding programs available to ports (and to other economic entities) in Ohio is truly remarkable: twelve in total, two grant programs, nine loan or bond programs (including four regional bond funds) and one program that provides both grants and loans. These programs are offered by a wide variety of public sources: state economic development and transportation

departments, an independent development bond fund, an independent rail commission, port authorities and political subdivisions. (There are even more programs used by ports in Ohio that are not discussed in this report because they are not applicable to Louisiana, such as the Governor's Office of Appalachia.) These programs are widely used by ports: the Columbiana County Port Authority has used six of the twelve programs discussed.

Interestingly, not one of those programs is exclusively or especially for ports. They are general purpose transportation or economic development programs, but they all recognize the importance of ports as part of the state's transportation and economic infrastructure. Ports in Ohio must vie with other state interests for available funding programs; but in doing so, they are widely recognized as important elements of the state's economy and as important facilitators of private economic activity.

Three elements of Ohio's approach are recommended for consideration in Louisiana:

- Ohio addresses economic development robustly with a variety of sizable, ongoing funding programs, with objective project selection processes and professional follow through to facilitate project accomplishment.
- Ports in Ohio are viewed as important elements of the state's economy and transportation system. It is because they are considered primary economic development entities (and not just ports) that they are able to compete for such a wide variety of funding programs on an equal (or even preferred) footing with other applicants. The Ohio Port Authority Council plays a valuable role by bringing together the ports with the state transportation and economic development entities.
- While many of these programs can be used for public infrastructure, their primary purpose is to facilitate private economic development ventures; public funding is leveraged and public entities form partnerships in which private entities take the lead as developers and operators.

STATE OF OREGON FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

There are 23 public ports in Oregon: nine on the Columbia River (of which Portland, Astoria and St. Helens are deep draft), and 14 on the coast (of which Newport and Coos Bay are deep draft). Forest products make up 99 percent of the cargo shipped at the Port of Coos Bay. The single largest commodity on the Columbia River is wheat, making the Columbia the largest wheat export area in the nation.

The largest public port in Oregon is the Port of Portland, a deep draft multi-modal port on the Columbia River overseeing both seaport and airport operations. The Portland harbor consists of both public marine terminals owned by the port authority and private marine terminals. Public terminals include an ocean container terminal, breakbulk, steel and automobile terminals and bulk terminals handling grain and minerals. Private terminals handle grain, petroleum, and dry bulks. In 2006, terminals in the Portland harbor handled 24 million tons of export and import cargo. The Port of Portland also owns and operates the Portland International Airport and two general aviation airports.

Ports in Oregon are established by state law as incorporated special local districts. Port districts are economic development entities and have broad powers to develop and market facilities and services related to agriculture, aviation, fishing, maritime commerce, transportation, tourism, and recreation and wood products. Port districts are authorized to generate income through user fees, bonding, local taxation and other sources.

STATE FUNDING

There are six major state funding programs either specifically for ports or in which ports are eligible to participate. The first four such programs discussed below are administered by the Oregon Business Development Division and the fifth and sixth are administered by the Oregon Department of Transportation. Primary responsibility for ports in state government rests in the Business Development Division.

Marine Navigation Improvement Fund

The Marine Navigation Improvement Fund is a grant and loan program that provides funding for projects that either:

- Are federally authorized, have received funding from the US Army Corps of Engineers and need matching funds or,
- Are non-federally authorized but directly support or provide access to a federally-authorized navigation improvement project

The 23 legally formed Port Districts are the only entities eligible for the Marine Navigation Improvement Fund. Funding for both types of projects is limited to funds appropriated by the Oregon Legislative Assembly. In 2001, \$28.78 million in lottery bonds were authorized to provide the local match for dredging the Columbia River channel to 43 feet for the Port of Portland. In 2003, \$3.5 million of lottery bond capacity was dedicated to small port dredging.

There are two types of eligible projects:

- Federally authorized - Projects that are designed and conducted by the U.S. Army Corps of Engineers. The federal government provides 75 percent of the funding; the state provides the 25 percent match through appropriations made by the Legislature. Project must be sponsored by a Port and listed in the Port's business or strategic plan.
- Non-Federally authorized - Projects that are smaller and cannot qualify for federal assistance. The proposed project must support a certain level of commercial or recreational activity in order to qualify for state funding. Project must meet the criteria of a freight project or a commercial/recreation project, must be a new water project that directly supports, or provides access to, a federally authorized navigation improvement project or a federally authorized navigation channel, must be ready to begin in the biennium for which funding is requested and must be listed in a Port's business or strategic plan.

Proposed new navigation facilities don't have an operating history and thus can't meet the criteria of a freight project. However, the project can still qualify if the project is reasonably forecasted to meet the criteria of a freight project within the first two years of operation and usage is forecasted to exceed the minimum criteria thereafter.

Non-federally authorized projects can be funded with:

- All loan, if the port can support that level of debt from its general fund
- Up to 75 percent state grant for projects with a record of activity that meets the minimum criteria
- Up to 50 percent state grant for new water projects that are anticipated to meet the minimum criteria within a couple of years of completion

When a local match is required, it may be in the form of cash or a combination of cash and in-kind services. If both cash and in-kind services are used for the required match, the in-kind services may not be more than 10 percent of the total project cost. Port must secure and be able to provide upon request a land use compatibility statement from the appropriate jurisdiction(s) in which the project is located.

Grants are available for projects that meet one or more of the following criteria:

- Job creation and/or retention will be a direct result for the project
- Project deals with critical public safety issues and the department's financial analysis determines that the Port's borrowing capacity is insufficient to finance the project; or
- There is an imminent threat that the Port will lose permits and the department's financial analysis determines that the Port's borrowing capacity is insufficient to finance the project

Port Planning & Marketing Fund

The program provides grant funding to assist ports in conducting planning or marketing studies relating to expanding their trade and commerce activities. The 23 legally formed Port Districts are the only entities eligible to apply.

The project must meet the following criteria:

- Enhance the port's ability to conduct trade and commerce
- Lead to economic diversification, development of new or emerging industry, or redevelopment of existing public facilities
- Maintain consistency with any applicable county or city comprehensive planning
- Not be an unnecessary duplication of marketing efforts among ports
- Funding cannot be used to subsidize regular port operating expenses
- Project will not require or rely upon continuing subsidies from the department

Funding for the Port Planning and Marketing Fund is provided through a transfer of the interest earned on the Oregon Port Revolving Fund. The Port Planning and Marketing Fund is primarily a grant program. Grants from the Port Planning and Marketing Fund are capped at \$25,000 or 75 percent of the total cost of the project, whichever is less. A 25 percent local match is required for all projects. The local match may be in the form of cash or a combination of cash and in-kind services. If both cash and in-kind services are used for the required match, the cash match must be 75 percent or more of the total local match.

Half of the funds available annually in the Port Planning and Marketing Fund are reserved for high priority projects. These funds are reserved for the first four months of the state fiscal year, after which any remaining funds will be made available for other eligible projects. High priority projects include:

- Development of strategic business, marketing or financial plans for ports
- Updates to such plans that are required to keep the plans current for a period of five years
- Regional or cooperative projects that benefit more than one port
- Projects that leverage other marketing and development efforts by the state or other government units

Projects must meet the standards set by the Peer Review Committee. The Peer Review Committee consists of four representatives from Oregon Ports that set the standards for projects and reviews products of funded projects prior to disbursement of final payments.

Port Revolving Fund

The fund is a port loan program for planning and construction of facilities and infrastructure that promote maritime shipping, aviation and commercial/industrial activities of ports. The fund is focused towards small- and medium-sized projects that are not suitable for financing through a large bond program. The 23 legally formed Port Districts are the only entities eligible to apply.

Funding may be used for port development projects (facilities or infrastructure) or to assist port-related private business development projects. The variety of eligible projects is very broad.

These include water-oriented facilities, industrial parks, airports and commercial or industrial developments. Eligible project costs can include engineering, acquisition, improvement, rehabilitation, construction, operation, maintenance or pre-project planning. Projects must be located within port district boundaries.

The applicant is limited to total loans awarded from the fund of no more than \$3 million outstanding at any one time. The loan term can be as long as 20 years or the useful life of the project, whichever is less. Interest rates are set at market levels, but not less than Treasury Notes of a similar term minus 1 percent.

The following information will be used in determining the financing awarded:

- The proposed project is feasible and a reasonable risk from practical and economic standpoints
- The applicant has received all necessary permits required by federal, state or local agencies
- There is a need for the proposed project, and the applicant's financial resources are adequate to provide the working capital needed to ensure success of the project
- The loan has reasonable prospect for repayment

Special Public Works Fund

This program provides funding for municipally-owned facilities that support economic and community development in Oregon. Established by the Legislature in 1985, the fund has grown into a revolving loan fund currently valued at about \$160 million. Loans and grants are available to municipalities for planning, designing, purchasing, improving and constructing municipally-owned facilities.

Examples of the many types of eligible municipally-owned facilities include: airport facilities, buildings and associated equipment, mitigation of environmental conditions on industrial lands, port facilities, wharves and docks, purchase of land, rights of way and easements necessary for a public facility, telecommunications facilities, railroads, roadways, bridges, solid waste disposal sites, storm drainage systems, wastewater systems and water systems.

The Special Public Works Fund is open to the following municipal entities: cities, counties, and county service districts, tribal councils of Indian tribes, ports, special purpose districts and airport districts. Loans range in size from less than \$100,000 to \$15 million. Interest rates reflect tax-exempt, market rates for good quality creditors. Loan terms can be up to 25 years or the useful life of the project whichever is less.

While primarily a loan program, grants are available for projects that will create or retain traded-sector jobs. A traded-sector industry sells its goods or services into nationally or internationally competitive markets. Grants are limited to \$500,000 or 85 percent of the project cost, whichever is less. The grant amount per project is based on up to \$5,000 per eligible job created or retained.

Loans are available for the purpose of early-stage planning work needed for the development of a potential project. Grants are available for planning work required for industrial land

development. Loan awards are calculated based on \$200 per acre up to \$20,000 per site. Loans can be amortized over seven years. Grant awards are calculated at \$200 per acre up to a maximum of \$40,000 per site or 85 percent of the total project cost, whichever is less.

Application Process for Above Four Programs Administered by the Business Development Division

Step 1 (application invited)

The application process begins by contacting the regional coordinator for the area in which the proposed project is/will be located. The regional coordinator will obtain basic information about the proposed project and will either complete a Project Notification & Intake form or send the form to the applicant for completion. Using the information on the Intake form, the department will then make a preliminary determination of the most appropriate funding program(s) for the project. When other state and federal agencies have funding programs that may be applicable to the project, the regional coordinator will schedule a "One-Stop" meeting to provide an opportunity to discuss the project with additional potential funders. Once the department has identified the most appropriate funding program(s) for the project, an application will be invited and the forms will be provided.

Step 2 (application submitted)

When the department receives an application, it conducts a programmatic analysis to ensure the project meets the eligibility criteria for the funding program and, in most instances, also will conduct a financial analysis to determine the applicant's ability to repay a loan and to verify the sufficiency of the collateral proposed to secure repayment of the loan.

Step 3 (award)

A letter will be sent to the applicant, notifying of the award amount, the terms and any conditions placed on the award. Shortly thereafter, contractual documents will be sent for signature. For most funding programs an applicant is allowed to begin work on the project once the award has been made and prior to the funding contract being signed, as long as the applicant meets the requirements of the funding program.

Transportation Infrastructure Bank (OTIB)

The Oregon Transportation Infrastructure Bank (OTIB) is a statewide revolving loan fund designed to promote innovative transportation funding solutions. Oregon's program was started in 1996 as part of a 10-state federal pilot program using federal highway funding. Staff support for the program is provided by the Oregon Department of Transportation (ODOT). Eligible borrowers include cities, counties, transit districts, other special districts, port authorities, tribal governments, state agencies, and private for-profit and not-for-profit entities.

In general, eligible projects include:

- Highway projects such as roads, signals, intersection improvements, and bridges.
- Transit capital projects such as buses, equipment, and maintenance or passenger facilities.
- Bikeway or pedestrian access projects on highway right-of-way.

To be eligible, roads must be open to public travel and functionally classified as a major collector or higher. Eligible project costs include preliminary engineering, required environmental studies, acquisition of right-of-way, equipment, construction including project management and engineering, inspections, financing costs and contingencies. The OTIB currently offers direct loans for eligible projects. Loans may be funded from available OTIB resources or through the sale of revenue bonds

Projects are evaluated on established criteria by OTIB staff and a regional advisory committee. Based on the overall rankings, ODOT's Chief Financial Officer recommends projects to the Oregon Transportation Commission for final approval. Prudent underwriting standards are applied to ensure that the OTIB operates as a self-sufficient revolving loan fund. OTIB staff will assess the credit quality of the applicant and determine if there are sufficient resources to repay the loan. The applicant's audited financial statements, budget and other information provided in the application will be used to make this determination.

Loan interest rates will be based on the term of the loan and an evaluation of the credit quality of the applicant. For public sector applicants, a widely published index of tax-exempt municipal borrowing rates will be used to determine a fixed interest rate for the loan. Repayment of OTIB loans must begin within five years of project completion and must be complete within 30 years or at the end of the useful life of the project, if shorter. Preference is given to projects with quick loan repayment.

ConnectOregon

ConnectOregon, also known as the Multimodal Transportation Fund, is an initiative first approved by the 2005 Oregon Legislature to invest in air, rail, and marine and transit infrastructure. ConnectOregon is focused on improving the connections between the highway system and the other modes of transportation to better integrate the components of the system, improve flow of commerce and remove delays. The program utilizes dedicated lottery proceeds to fund state bond issuance. Both grants (up to 80% of project costs) and loans (up to 100% of project costs) are available. The program is administered by the Oregon Department of Transportation, and there is a detailed application and evaluation process for selecting projects to be funded. From 2005 through 2008, the Oregon Legislature authorized \$200 million in lottery-backed bonds for ConnectOregon, funding 68 projects. The 2009 Oregon Legislature approved an additional bond authorization of \$100 million; projects for this authorization have not been selected.

OBSERVATIONS

Oregon has three state programs specifically for ports and three other programs in which ports can participate as elements of the state's economic development infrastructure or the state's intermodal transportation system. Oregon emphasizes the use of loan programs, particularly revolving loan funds. Grant funding is more restricted in amount or directed toward entities which are not able to repay loans. Loan amounts for an individual project can be significant: \$3 million maximum from the Port Revolving Fund, \$15 million maximum from the Special Public Works Fund. The larger programs require competing with other economic development and transportation modes, and two of those programs only fund landside transportation or modal

connectivity infrastructure. Oregon funds these programs primarily through the use of dedicated lottery proceeds and, in the case of the Transportation Infrastructure Bank, federal funds.

The Oregon Business Development Division, which administers four of the programs discussed, provides coordinators to identify state and federal funding sources assist applicants in preparing application documents and evaluate the applicant's eligibility and repayment capability. This is a valuable resource particularly for smaller entities with limited staff.

STATE OF PENNSYLVANIA FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

The State of Pennsylvania has three major port complexes—the Port of Philadelphia, the Port of Pittsburgh and the Port of Erie.

The Port of Philadelphia and all the public port facilities on the Pennsylvania side of the Delaware River in the greater Philadelphia area are owned and operate by the Philadelphia Regional Port Authority (PRPA.) PRPA was formed as an independent agency of the State of Pennsylvania in 1989. The State of Pennsylvania purchased all of the major public port facilities in the area (mostly from the City of Philadelphia) and turned them over to the newly created PRPA. PRPA has been charged with operating and improving these assets. PRPA is heavily subsidized by the State of Pennsylvania for both its operations and capital programs. In 2008, PRPA had an operating cash loss of \$9 million before state grants of \$9 million to offset the loss. Additionally the state granted almost \$40 million to PRPA for capital improvements. In 2008, the Governor publicly pledged \$300 million in state aid to PRPA over the next several years to upgrade the port facilities. Additionally although the debt from the original purchase of port facilities is assigned to PRPA, the State of Pennsylvania grants to PRPA the annual debt service of approximately \$5 million. PRPA handles 5,300,000 tons of general cargo annually including 250,000 containers. Commodities handled include steel, paper, lumber and perishable goods.

The Port of Pittsburgh is operated by the Pittsburgh Port Commission (PPC) which is an independent agency of the State of Pennsylvania. PPC has jurisdiction over 200 miles of navigable waterways in a 28 county area of SW Pennsylvania. Most of the facilities within its jurisdiction are private terminals and the total cargo volume handled exceeds 38 million tons annually. Although this volume is a 40% decrease from ten years ago (mostly downturn in coal shipments), it still makes PPC the 2nd largest inland port in the country. PPC is also heavily subsidized by the State of Pennsylvania. They receive an annual appropriation from the state. In 2009 it was \$1,500,000. PPC provides small grants to local governments and non-profits to promote economic development and they administer a revolving loan fund for private maritime related businesses. PPC is also a conduit for private activity bonds backed by the revenues from the project being bonded. A major emphasis of PPC is to promote the improvements to the lock and dam system of waterways in SW Pennsylvania. In this regard, they assisted in lobbying efforts to receive federal stimulus money for these types of projects and the Corps of Engineers was granted \$84 million for improvements to locks in the Pittsburgh area.

The Port of Erie is owned and operated by the Erie-Western Pennsylvania Port Authority (EWPPA), an independent public entity. EWPPA owns and operates port facilities and local

public transit in the greater Erie area. They also develop and lease significant amounts of commercial and recreational properties on the Lake Erie waterfront. While they do not receive state funds to support operations like Pittsburgh and Philadelphia, they do receive grants for capital construction. In 2010, they are scheduled to receive \$2,640,000 from the state.

STATE FUNDING

The State of Pennsylvania has been heavily involved in both capital and operating assistance funding for ports for over 20 years. In 1989 the state received a report outlining the need for the state to take a leadership role in port development as the port systems in both Philadelphia and Pittsburgh were struggling. In 1990 the State created the Governor's Office of Penn Ports. Originally placed in the Transportation Department, it was charged with acting as an economic engine, overseeing port activity in Philadelphia, Pittsburgh and Erie, and playing an integral role in paying off the debt service for the PRPA. In 1994, the Governor issued an Executive Order moving the Office of Penn Ports to the Department of Commerce (now called the Department of Community and Economic Development) and charging the office with administering state appropriations to the three ports, promoting goods movement and providing assistance to port authorities. The change in placement of the office was designed to more properly align it with its major function of economic development and to avoid past problems with competing for funds within the very large highway oriented transportation department. Although the office exists in a state agency, its budget and funds flow directly from the Governor's Office and do not compete with other economic grant programs.

Penn Ports is a one man operation that relies on the Department of Community and Economic Development for administrative support. The individual ports submit funding requests to Penn Ports. Penn Ports submits an annual request to the Governor and funds are included in future state budgets. In the 2009 state budget, Penn Ports was appropriated \$16,400,000. Of this \$421,000 was for an operation of the office and the remainder was for specific grant allocations to the three ports and other maritime related entities. Pittsburgh received \$1,500,000; Philadelphia received \$5,648,000 for operations and \$4,525,000 for debt service; Erie received \$2,640,000; allocations were also made to support PIERS (the data information service), the Delaware River Maritime Council and improvements to the navigation system.

To apply for funds, the ports submit an application which is reviewed and approved by Penn Ports. There is a written set of program guidelines that are followed in the acceptance and administration of the grants. Penn Ports also administers interagency funding transfers. All of the funding for Penn Ports comes from the state general fund in an annual appropriation. Since it is subject to annual appropriation, it is also subject to cutbacks unrelated to the worthiness of a particular grant request. In the 2010 state budget, the Governor was required to make significant line item vetoes to stay within a constitutionally mandated balanced budget. In doing so he cut

funds scheduled to go to the Philadelphia port in the amount of \$2,328,000 and left in the budget the funds for debt service of \$4,606,000. He also cut funds to the Pittsburgh port (\$475,000) and the Erie port (\$895,000).

OBSERVATIONS

The Office of Penn Ports model is very close to that proposed in the original Louisiana Ports Strategic Plan. The ultimate location of the office in the economic development entity rather than the transportation department underscores some of the same issues debated by PAL. The fact that it can function as a one person office with administrative support from the state agency where it resides reinforces the fact that this type of office can operate rather efficiently with limited staff. Their annual operating budget of \$400,000 is well below the estimates that PAL made for a similar office in Louisiana. The presence of three ports in different regions of the state is similar to Louisiana and helps politically to gain support for the various port programs. The major drawback to this setup in Pennsylvania is that funds flow from the general fund and are subject to radical change from year to year. The office of Penn Ports has handled funds as high as \$40-50 million in some years and as low as \$5-6 million (likely this year). The Penn Ports staff person does have opportunity to periodically meet directly with the Governor and that access assures the Governor is aware of major port issues. Although the opportunity to create such an office in Louisiana does not seem to be supported by the Governor at this time, the streamlined model used in Pennsylvania is worth consideration by PAL as future opportunities come about.

STATE OF TEXAS FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

There are 10 deepwater and 2 shallow draft public cargo ports in Texas. There are a number of additional ports along the Texas coast that cater primarily to commercial fishing and pleasure boating interests. Public ports in Texas are as diverse in their governmental structure as they are in the cargo they handle. The governance extends from units of city or county government to independent districts. Most ports in the state enjoy the right to impose ad valorem taxes within their territorial jurisdiction. Texas ports employ over one million people and contribute in excess of \$135 billion dollars annually to the economy. Port activity generates approximately \$5 billion in local and state tax revenues. Texas ports handled 12,123 deep-sea vessel calls in 2006 which represented 18.7 percent of the national total.

STATE FUNDING

The Texas legislature in 2001 enacted legislation creating a new chapter in the Transportation Code entitled Funding of Port Security, Projects and Studies. The three primary focus areas within the chapter are the Port Authority Advisory Committee, the Port Access Account Fund, and the Capital Program.

The Port Authority Advisory Committee acts as a forum for information exchange between the Transportation Commission, Texas Department of Transportation and the members of the committee representing the port industry in Texas and others who have an interest in ports. The Port Advisory Committee's goal is to develop and share from the port's perspective advice and recommendations that provide information regarding ports and transportation-related matters to be considered in formulating the Department of Transportation's policies that relate to the Texas port system. The committee also prepares an annual Capital Report which sets forth the various port's capital projects and funding needs. The Advisory Committee is composed of seven members who are from Texas ports and they serve three year terms and are appointed by the Texas Transportation Commission. The Port of Houston of Harris County has a permanent seat on the committee with the remaining seats filled by three ports that represent the upper Texas coast and three ports that represent the lower Texas coast. The Port Access Account Fund is the means by which the state provides matching funds for the port projects identified in the Capital Report. No funds have been appropriated by the Texas legislature to the Access Account Fund since it was established.

OBSERVATIONS

Texas has enacted a comprehensive system for the identification and funding of port capital needs. However it has to date omitted the key component of the process **it has not funded the program**. The concept of an entity in Louisiana such as the Port Authority Advisory Committee whose function is to provide transportation-related information from the maritime perspective as well as a comprehensive annual report containing port funding needs is worthy of further study.

STATE OF VIRGINIA PROGRAMS FOR FUNDING PORTS

PORT SYSTEM

The State of Virginia has one very large port complex at Hampton Roads, one second tier port at Richmond and two small ports at Hopewell and Alexandria.

The port complex at Hampton Roads consists of port facilities at Norfolk, Portsmouth and Newport News. The entire port system in the greater Norfolk-Hampton roads area is owned and managed by the Virginia Port Authority (VPA.) VPA is a unit of government within the Commonwealth of Virginia. Although they operate independent of the state, they rely on a biannual appropriation to supplement their operating and capital budgets. VPA was formed in 1952 to own and operate the three major port complexes at the mouth of the James River. The structure of the authority is unique in the United States port industry. In 1982, VPA created the Virginia International Terminals (VIT) as a non-profit corporation to operate all of its facilities. VIT is controlled by VPA as VPA appoints all of its board members and approves its annual budget. VIT remits its operating profits back to VPA. In 2008 this was over \$60 million. As a private corporation, VIT can perform functions that VPA is unable to do under state law. They can enter into labor agreements (they employ International Longshoreman); they can pay wages and benefits higher than VPA which is restricted by state policies; and they can avoid disclosing key business arrangements outside of state sunshine laws. VPA handles cargoes such as coal, cocoa beans and break bulk but is primarily a container port. They handle over 2 million containers a year and are one of largest container ports on the U.S. East Coast. They control assets of over \$1 billion and have an annual operating and capital budget exceeding \$100 million.

The Port of Richmond is owned by the City of Richmond but operates as a financially independent body. It is primarily a container on barge and break bulk port. It recently lost the only scheduled carrier service it had as the ocean carrier relocated to Wilmington, N.C. The port receives funds from the city from a Port of Richmond Fund which the city allocates biannually. The port also receives capital assistance from the state via VPA with periodic grants.

The ports at Hopewell and Alexandria are small ports with limited business.

STATE FUNDING

The State of Virginia created a Commonwealth Port Fund in 1986. At that time legislation was enacted to create several non-highway funds within the state's Transportation Trust Fund. Funds

were also created for Aviation and Mass Transit. The impetus for creating the fund was both in a need for Virginia to contribute some fairly large sums of money to the Washington Metro Transit System which serves Northern Virginia and to invest in a port system at Hampton Roads that was in a fierce competition with the Port of Baltimore for cargo. The VPA was under great pressure to improve its facilities in order to retain and grow its business.

The port fund receives 4.2% of Transportation Trust Fund revenues annually. The fund is allocated directly to the Virginia Ports Authority to administer. The enabling legislation requires the VPA to use the funds to foster and stimulate the flow of maritime commerce through the ports of Virginia, including but not limited to Richmond, Hopewell and Alexandria. The source of the funds coming from the Transportation Trust Fund include a portion of the retail sales tax, motor vehicle fuel tax, the state sales tax on fuels and other motor vehicle registration fees. The port fund generated \$24,700,000 in 1998 and has grown over the years to \$36,100,000 in 2008. VPA has used a large portion of the fund to support bond sales. Since 1998, VPA had five separate bond sales totaling almost \$400 million. The guaranteed allocation from the port fund has allowed VPA to back the bonds solely with this revenue source. The debt payments for 2010 on these series of bonds will be \$17,400,000. With an annual allocation of over \$36,000,000, VPA can use the remainder of the port fund to support other capital projects or even additional bond sales. The fund retains any unused funds at the end of each allocation period and funds do not revert back to the state.

Other ports can and do apply to VPA for assistance from the port fund proceeds. However, due to the size of the other three ports the demand on the funds is rather small. In 2008, VPA granted \$1,255,000 to other ports. A typical annual allocation to other ports over the past 10 years has been approximately \$500,000 to \$700,000. The other ports must apply to VPA for funds and they must be approved by the VPA board. The VPA board consists of 12 members. Eleven of these members are appointed by the Governor for 5 year terms (maximum of two terms) and the twelfth member is the State Treasurer who is an ex-officio member.

The dedicated use of funding in this situation has been a major element in the ability of the ports in Virginia to grow and prosper. VPA has increased its container cargo volume by 526% and its revenues by 622% since the inception of the fund. While there are many factors contributing to this growth, VPAs access to a stable funding source was a major factor in their ability to meet demands for new and improved facilities that attracted and retained their shipping line customers. It should also be noted that over the years VPA has increased their pricing for services and fees fairly significantly. They are capable of doing this because they provide such superior facilities and service.

OBSERVATIONS

Virginia is a prime example of how a reliable and stable source of funding can be a key factor in the growth of economic activity at a port. The politics may have been ripe at the time the original legislation was passed as it was part of a package that involved funding for other parts of the state transportation network at the same time. In any event, this type of fund is exactly what the Louisiana Ports Strategic Plan was trying to move forward. The creation of such a stable funding source in Louisiana would allow the sale of bonds to support a very large capital infusion for ports. As with any change in funding, timing is everything. With a \$14 billion shortfall in highway funding in Louisiana, the state must address the transportation funding issue sooner rather than later. The opportunity to create a stable funding source for ports at the same time may exist. As with Virginia, the key may be to find allies in areas such as Aviation and Transit to carve out an appropriate share of any new revenues. It would also be important to find an administrator of the funds. In Virginia it was simple as the VPA would use 98% of the fund and the Board was all governor appointed. In Louisiana there needs to be a process and an independent entity to receive and distribute funds. This solution may require also using one of the other processes shown in this report for states such as Massachusetts, Pennsylvania or Florida.

STATE OF WASHINGTON FUNDING PROGRAMS FOR PORTS

PORT SYSTEM

Washington has 75 port districts within the state which move freight regionally, nationally, and internationally via the Pacific Ocean and the Columbia/Snake River system. Washington has the world's largest locally controlled port system, handling eight percent of all U.S. exports and receiving six percent of the nation's imports. In 2006, the value of all documented international trade entering or departing Washington ports reached \$150 billion.

Washington's ports include 11 deep-draft ports; seven of which are located in Puget Sound, one in Grays Harbor on the coast, and three on the Columbia River. The largest ports are the Ports of Seattle and Tacoma, which combined represent the third largest container load center in the US. The Columbia/Snake River system stretches 365 miles inland from the Pacific Ocean. The three deep-draft ports along this system are located in Longview, Kalama and Vancouver. Upstream, the Ports of Klickitat, Pasco, Kennewick, and Benton are served by barge along the Columbia. The Ports of Whitman County, Walla Walla, and Clarkston are served by barge along the Snake River.

Port districts in Washington are governed by elected commissions, independent of other local jurisdictions. Port commissions establish long-term strategies for a port district, and create policies to guide the development, growth, and operation of the port. They are also responsible for a port's annual budgets, approving tax levy amounts, and hiring the senior staff member.

The primary purpose of a port district in Washington State is economic development. Being located on a navigable waterway or handling maritime cargo is not an essential element of a port district. The Legislature has given ports broad authority to promote economic development - they can build and operate airports, marine terminals, marinas, railroads, industrial parks, commercial properties and ventures (in one case a fiber optic/internet system), and tourism facilities.

The Port District Act, which authorized citizens to form a port district, also authorized a tax levy to finance the district. Initially, ports were authorized to collect \$2 for every \$1,000 of assessed value on taxable property. The funds provided the initial capital needed to construct and operate facilities and to establish the necessary reserve of funds. Since that time, the Legislature has reduced the rate at which a port district may levy taxes (its millage rate) to 45 cents per \$1,000 of assessed value. The amount of this levy has been restricted over the last decade to prohibit port authorities from reaping windfalls from escalating property values. This levy may be used for any legal purpose and does not require approval of local voters. In addition, special property tax levies are authorized (with voter approval) for dredging, canal construction, land leveling or filling; these levies cannot exceed the 45 cents per \$1,000 millage rate. Ports may also levy property taxes up to 45 cents per \$1,000 of assessed value within an Industrial Development District established by the port; this levy is limited to 12 years and must be used to redevelop marginal areas. Most ports use the funds generated through the tax levy to pay for capital

development - marine terminals, industrial parks, development of needed infrastructure, updated airport facilities.

Ports pay sales taxes on their purchases, and also pay a business and occupation tax on services they provide to their customers. Businesses which lease port property pay a leasehold tax, approximately equal to a property tax. Ports collect these taxes on behalf of the state, and the funds are distributed back to state and local governments.

Ports may issue a variety of municipal bonds - these bonds are used almost exclusively for capital construction projects. General Obligation bonds are repaid with the revenue from property taxes. Ports may also issue revenue bonds, which are guaranteed by the general revenues of the port, or special facility bonds which are guaranteed by the revenues generated by a specific project. Ports may also establish an Industrial Development Corporation that can provide conduit financing for qualified industrial projects. The bonds are issued for a specific company, and that company is responsible for payment. No taxes or port funds are used to retire these bonds.

The Washington Public Ports Association was formed by the Legislature in 1961. WPPA promotes the interests of the port community through effective government relations, ongoing education, and strong advocacy programs.

STATE FUNDING

The most important funding source for Washington ports is the ad valorem tax levy. Most Washington ports surveyed collect the full amount of the tax permitted under law that does not require local voter approval, and the amount collected is a substantial portion of their total revenues.

Washington ports may also tap the following state sources for funding:

- Washington State Department of Transportation
- Freight Mobility Strategic Investment Board
- Transportation Improvement Board
- Community Economic Revitalization Board
- Recreation and Conservation Office

None of these programs is exclusively for ports. They are intended to fund general transportation infrastructure improvements and not port facilities.

It should be noted that the Washington legislature attempted unsuccessfully in 2007 to pass legislation to assess fees on containers moving through Puget Sound ports in order to fund freight transportation projects. A study commissioned by the legislature's Joint Transportation Committee is considering potential user fees on beneficiaries of freight mobility projects: shippers, truckers, railroads and ports. New taxes and fees being considered could raise \$200 million per year and include:

- A 1% motor vehicle excise tax on trucks
- A \$30 fee on each container transiting Seattle and Tacoma ports

- A \$0.20 per ton fee on bulk cargo
- A \$1.00 fee for every rail car that moves on the Everett – Spokane line
- A surcharge on customs duties and a waybill fee

Washington State Department of Transportation

The State of Washington has two relatively small rail assistance programs administered by WSDOT:

- The Rail Bank, a loan program authorized by the Washington State Legislature. The program was created to promote economic development through the advancement of freight rail activities. The goal of the Rail Bank is to assist with the funding of smaller capital rail projects that help improve freight movement by rail throughout the state. In 2007-2009, the legislature allocated \$2.5 million to this program. This is a loan program and is open to organizations in the public sector only. The maximum loan is \$250,000 and all applicants have to prove a minimum 20% match. It is anticipated that there will be \$5 million allocated to this program in the 2009-2011 biennium.
- Freight Rail Assistance Program, a program that provides loans and grants directed toward large projects where it is difficult to gain a contribution and where the rail location or the project concerned is of strategic importance to the state as well as the local community. This program provides \$2.5 million in loans and grants per biennium. It is not restricted in the size of award. This is a loan and grant program and is open to cities, county rail districts, counties, economic development councils, port districts, and privately or publicly owned railroads. Projects must be shown to maintain or improve the freight rail system in the state and benefit the state's interests.

Both programs are administered by WSDOT, require the applicants to provide a business plan for the project and are subject to a cost/benefit calculation to ensure that they are cost effective. In the most recent biennium there were 12 projects submitted to the Rail Bank and 27 projects that were submitted to the Freight Rail Assistance program.

Freight Mobility Strategic Investment Board

The FMSIB was created in 1998 by the state legislature to create a comprehensive and coordinated state program to facilitate freight movement between and among local, national and international markets which enhances trade opportunities. The Board is also charged with finding solutions that lessen the impact of the movement of freight on local communities. The Board proposes and promotes policies and projects to the legislature for approval and funding and provides technical assistance to local project sponsors. The legislature recently approved an average of \$3 million per year to fund the activities of the Board. The FMSIB Capital Account was established in 2005 to receive levies from license fees, weight fees, motor vehicle or multimodal fees and private funds, although these sources have not been dedicated to the fund.

FMSIB provides matching funds for freight improvement projects of regional or statewide significance. Every other year, the board receives a slate of potential freight improvement project proposals from cities, towns, counties, ports, and Washington DOT. Potential projects must

meet three important criteria:

- The project must be included in an established regional or state transportation plan;
- The project must fall on one of Washington's defined Strategic Freight Corridors or emerging corridors; and
- The project must provide a minimum 35 percent match.

Projects must directly improve freight movements and/or mitigate freight movements on communities, not be a secondary beneficiary. Studies are not considered at this time due to the large unmet backlog of freight construction projects.

Over the past 10 years, the Board has been instrumental in completion of 35 freight mobility projects valued at \$280 million. 42 additional projects amounting to almost \$5.5 billion are currently under development. In past projects, FMSIB has leveraged state funds 5 to 1 with local partners, which include local communities, counties, ports, steamship operators and shippers, railroads and trucking interests. Projects funded through the FMSIB program include on-dock rail access, grade separations, improved off-ramps, ITS improvements, bridge replacements, all weather roads and alternate truck routes.

A detailed project application and evaluation process is administered by the FMSIB. The Board issues a call for projects and maintains a six year list of active projects. The legislature has approved staggered funding for most of the projects on the existing list. Funding additional projects is on a case by case basis and is at the discretion of the Governor and the legislature. Additionally, inclusion on the FMSIB list may better position a project to compete for federal funds. FMSIB advocates for project funding based upon an individual projects ability to proceed to construction. FMSIB has the flexibility to shift funds from projects that encounter delays to those ready to go for construction with the approval of the Governor and the legislature.

Eligible entities are cities, counties, ports, and Washington DOT. A 35% match is required by statute and higher matches will improve project scoring. The Board has not approved a match of less than 50% in the last four calls for projects and the legislature favors higher matches.

FMSIB participated with the Transportation Improvement Board (see below) and other state, local and federal entities in funding a continuing program of \$864 million in rail and road access improvement projects for the Ports of Seattle, Tacoma and Everett in the Puget Sound area, with \$93 million contributed by FMSIB.

Transportation Improvement Board

The Washington State Legislature created the Transportation Improvement Board (TIB) to foster state investment in quality local transportation projects. TIB is an independent state agency that makes and manages street and road construction and maintenance grants to 320 cities and urban counties throughout Washington State. TIB typically issues a Call for Projects each summer with applications due at the end of August. There is a detailed application and evaluation process. Funding comes from dedication of revenue generated by three cents of the statewide gasoline tax.

TIB provides funding to urban areas through three state-funded grant programs: the Urban Arterial Program (UAP) –for roadway projects that improve safety and mobility; Urban Corridor Program (UCP) –for roadway projects with multiple funding partners that expand capacity; and the Urban Sidewalk Program (SP) –for sidewalk projects that improve safety and connectivity. Projects are usually large in scale with multiple funding sources ranging from local contribution to private developer fees. These projects are selected annually on a competitive basis. Each program has distinct characteristics for the best suited project. Qualifications and criteria are different within each program.

TIB also offers a number of funding programs to the state's small cities. Cities and towns with a population under 5,000 are eligible for funding from programs that reconstruct or maintain the transportation infrastructure. Such programs include: Small City Arterial Program (SCAP) – provides funding for projects that improve safety and roadway conditions; Small City Preservation Program (SCPP) – provides funding for rehabilitation and maintenance of the small city roadway system, in some cases in partnership with WSDOT or county paving projects; and Small City Sidewalk Program (SC-SP) – provides funding for sidewalk projects that improve safety and connectivity. These programs fund projects with the intent of reconstructing or maintaining the transportation infrastructure. Funding for these programs is distributed regionally, with projects competing only in their own region. TIB's programs for small cities have been developed to require little or no local match. Match requirements are determined by population. TIB's small city funding is awarded annually through a competitive process. Applications are reviewed by TIB staff and projects are rated based on criteria developed by the Board. The highest rated projects within the available funding are presented to the Board for selection. TIB awards approximately \$10 million to new small city projects each year.

Community Economic Revitalization Board

The Community Economic Revitalization Board (CERB) is a statutorily authorized state board charged with funding public infrastructure improvements that encourage new business development and expansion in areas seeking economic growth. Eligible public facilities include: bridges, roads, domestic and industrial water, earth stabilization, sanitary sewer, storm sewer, railroad, telecommunications, electricity, transportation, natural gas, buildings or structures, and port facilities. CERB's focus is on creating and retaining jobs in partnership with local governments. In addition to funding construction projects, CERB provides limited funding for studies that evaluate high-priority economic development projects.

CERB receives staffing and administrative support from the Washington State Department of Commerce's International Trade and Economic Development Division. Staff helps each applicant for funding identify project barriers, evaluate project feasibility, and develop funding and implementation strategies when the project is ready to proceed. Staff prepares a complete analysis of each project with recommendations to the board. Staff also helps applicants work out emergent problems towards final contract development and project implementation.

Board funds are prioritized to support publicly owned infrastructure linked to economic development. Between 1982 and 2009, \$142 million of CERB investment leveraged \$2.5 billion in private capital investment: a ratio of \$17 private dollars invested in business facilities and

machinery for every CERB dollar. For 2009-2011, CERB received \$6.253 million in appropriation authority to assist local governments and federally recognized Indian Tribes in meeting the infrastructure needs of business and industry.

Programs administered by CERB include:

- **Committed Private Partner Program** - As a public/private partnership, CERB provides funding assistance to communities to finance public facility construction necessary to create private sector jobs. The Committed Private Partner Construction Program requires an eligible private business commitment as part of the public entity's application. The applicant and business must provide evidence that a private development or expansion is ready to occur and that the private development is contingent upon the approval of CERB funds. CERB requires that the project generate either significant job creation or significant private investment in order to be eligible for funding.
- **Prospective Development Construction Program** - CERB assists rural communities with funding economic development infrastructure for CERB-eligible prospective development projects when feasibility is demonstrated. Jurisdictions in rural counties and rural communities are eligible for Prospective Development awards. The applicant must provide evidence that a private development or expansion is likely to occur as a result of the public improvements. CERB requires that the project generate either significant job creation or significant private investment in order to be eligible for funding.
- **Planning Projects** - CERB provides limited funding for studies which evaluate high-priority economic development projects. Projects should target job growth and long-term economic prosperity and can include: site-specific plans, studies, and analyses that address environmental impacts, capital facilities, land use, permitting, feasibility, marketing, project engineering, design, site planning, and project debt and revenue impacts. When considering planning applications, the Board will give priority to those projects which could ultimately result in a type of project eligible for CERB construction funds.
- **Local Infrastructure Financing Tool (LIFT)** - Established during the 2006 Legislative Session, the LIFT Competitive Program allows selected local governments to take advantage of tax revenue generated by private investment in a Revenue Development Area (RDA) to make payments on bonds used to finance public infrastructure improvements. Incremental revenue increases in the RDA and revenue from other local public sources are used to match state money and must also be used to repay the same bonds. The state revenue earned is distributed through local sales and use tax that is credited against the state's sales and use tax. CERB is responsible for approving use of the LIFT Program to both legislatively and competitively selected projects.

Recreation and Conservation Office

The Washington Wildlife and Recreation Program provide funding for parks, water access sites, trails, and wildlife habitat and farmland preservation. It is administered by a state agency, the

Recreation and Conservation Office or RCO (formerly Interagency Committee for Outdoor Recreation or IAC), and funded by the legislature in the state's capital construction budget. Funding is split evenly between Habitat Conservation and Outdoor Recreation and distributed as grants, with 50 percent matching funds from local agencies required. Eligible grant recipients include: Municipal subdivisions (cities; towns; counties; port, park, recreation and school districts); State agencies; and Tribal governments. All applicants must have a current parks, recreation, habitat, or open space plan on file to establish eligibility. Applications are evaluated in a competitive process by teams with expertise specific to those categories. The Recreation and Conservation Funding Board (RCFB) submits prioritized lists of projects to the Governor and Legislature for final approval. Funds are allocated to each category by formulas established in statute.

In April 2009, the state legislature allocated \$70 million for the Washington Wildlife and Recreation Program. This funds 95 projects in the state's capital construction budget. In its first decade, the Legislature appropriated an average of \$33 million for WWRP each year, enabling it to fund programs at about half of the amount requested. More than 600 projects have been funded and \$362 million appropriated, protecting more than 150,000 acres.

OBSERVATIONS

The most important funding source for Washington ports is the ad valorem tax levy, which essentially makes the ports self sufficient. Ports are able to levy multiple ad valorem taxes for a variety of purposes. Certain of these taxes may be collected without local voter approval; others require voter approval. Most Washington ports surveyed collect the full amount of the tax permitted by law that does not require local voter approval, and the amount collected is a substantial portion of their total revenues. Washington ports are granted the power to issue a variety of bonds, some of which can be repaid with tax revenues.

Other than the right to tax, there is no dedicated state funding program specifically for ports, but there are a number of state funding sources in which ports can participate. The most important are programs of the Freight Mobility Strategic Investment Board and the Transportation Improvement Board. These are road and rail improvement programs and are funded by legislative appropriation and dedication of vehicle fuel taxes, respectively. These and other state funding programs applicable to ports emphasize significant private commitment and significant leveraging of public funds with private financial participation.

III. Observations on State Funding of Ports

Dedicated Funds for Ports

Several states with very successful programs have a dedicated funding source for their program, most notably Virginia and Florida. This dedication has allowed the sale of significant amounts of bonds backed by the dedicated revenues. Florida has a dedication of \$25 million annually from motor vehicle registration fees. This has allowed Florida to sell \$375 million in bonds to assist 14 deep water ports with major capital projects. Florida also has an \$8 million annual statutory dedication of transportation funds that supports their capital grants program. Virginia has a dedication of 4.2% of transportation trust funds (\$36 million annually) that has supported the sale of \$400 million in bonds to support critical projects at the Virginia Port Authority. In both Florida and Virginia, these bonded projects have been a major stimulus to business growth in their ports. Louisiana has no dedicated funds.

Source of Funds for Ports

The source of funds for state funding of ports varies across the country. By far the two sources which are most prominent are General Fund Revenue (usually either a special appropriation or an annual appropriation) and Transportation Fund Revenues. Of the thirty one states in the initial survey, seven states provide no substantive funding of their ports. Of the remaining twenty four states, eleven states (46%) use only general fund revenues to support port construction. In most cases, these are one time appropriations of funds for a particular project or to seed a loan fund. In a limited number of instances, an annual appropriation supports an ongoing program. Seven states (29%) use only transportation related revenues to support port infrastructure improvements. The remaining six states (25%) use a combination of revenue sources which may include general fund revenues, transportation revenues or other revenue sources. Some of the more unique funding sources include watercraft fuel taxes (Alaska), fisheries business tax (Alaska), vessel registration fees (California), lottery revenues (Oregon), and federal stimulus funds (Maine). Those states which utilize transportation revenues do so in a variety of ways. Florida uses an annual fixed dollar (\$25 million) from its motor vehicle registration fees. Virginia uses a fixed percentage (4.2%) of its total annual transportation revenues including gas tax and motor vehicle fees. Most other states using transportation revenues rely on an annual allocation in their transportation departments' budget to fund their programs and grants. Appendix D lists the funding sources for all the ports surveyed.

Revolving Loan Programs

Many states have revolving loan programs for ports. Such programs provide low interest loans, bonding capacity or credit enhancement for borrowing by ports or their tenants or customers. States such as Mississippi, Ohio, Washington, and Oregon make extensive use of

these types of loan funds. In most cases, the legislature seeds the fund with a onetime appropriation and the funds become self-supporting thereafter. Louisiana had such a program in the Louisiana Waterways Infrastructure and Development Fund introduced by Senator Walter Boasso and Representative James Tucker and passed into law. It was never funded and the statute was repealed in 2008. Appendix C lists the funding programs for the final 10 states in the selected for detailed analysis.

State Taxing Policies for Ports

Several states provide ports the authority to collect ad valorem taxes, and many ports use taxation as a major funding source in conjunction with or in lieu of state funding. Washington grants this authority to its ports without the need for a local referendum, although with limitations on the amount of tax that can be collected. Other states such as Texas, Ohio and Florida make extensive use of local taxes to support both capital and operating costs. In Louisiana, a number of ports have the authority to impose local taxes although some have chosen not to because of local conditions. Even more critical is the possible use of state tax incentives to attract private sector port partners. Alabama in particular has made extensive use of Corporate Income Tax incentives to attract capital construction partners. Louisiana has recently enacted similar legislation and the state and its ports could use these incentives to aggressively pursue private sector partners for port development.

Port Planning Requirements for Funding

Many states require projects to be consistent with a port master plan or state master development plan before funding or loaning money to a project. This requirement allows state governments to have confidence that the project is worthwhile and is a priority for the port and the state. Louisiana has no such requirements but may require it if additional funding or dedicated funding is given.

State Owned and Operated Ports

State owned and operated ports exist in several states--- Pennsylvania, Maryland, Delaware, Virginia, North Carolina, South Carolina, Georgia, Indiana, Alabama, and Mississippi. With the exception of Alabama, Georgia and Indiana, all the other states have only one or two port locations owned by the state. Indiana has three port locations and Georgia has one major port and three smaller ports. Alabama has one very large port Mobile and several inland ports. The state provides very limited funding and oversight of these inland ports. Indiana has one deep water port on Lake Michigan and two shallow draft ports on the Ohio River. States that have many ports—Florida, Texas, Oregon, California, Washington and Ohio--- have no state owned ports. The breadth and complexity of their ports systems makes state ownership

impractical. The state of Louisiana has ventured into the consideration of such state ownership on a number of occasions. Indications from other states' experiences are that this is not a practical operations approach for Louisiana ports because of the large number of ports and their geographic and functional diversity.

Deep Draft Ports and Shallow Draft Ports Require Different Funding Levels

In states where there both large deep draft ports and smaller shallow drafts ports, there is often a distinction between the two with regards to funding. In Florida only the top fourteen deep draft ports are eligible for funding under the state's very extensive capital funding programs. In Massachusetts, the very large port complex of Boston/Cambridge is treated separately from the smaller coastal ports which are labeled as "Second Tier" ports. In Pennsylvania, the very large port complex of Philadelphia has received special funding by the state although the state funds both Pittsburgh and Erie also. In Virginia, the large port complex at Hampton Roads receives the state's port fund money directly and the smaller ports of Richmond, Hopewell and Alexandria must apply to the Virginia Port Authority for funds. In Louisiana the large number of ports (31) both deep draft and shallow draft makes a large allocation of funds to any one port difficult, particularly affecting larger ports.

Ports as Economic Development Entities

Many states have established ports as economic development entities with broad powers to develop a wide variety of both water-related and non water-related facilities. Ports in those states have been instrumental in providing commercial, industrial, recreational, tourism and cultural facilities in support of their role as economic developers. Many of those states offer a wide variety of funding programs to support economic development and transportation infrastructure that ports can access for funds but that are open to a variety of economic development entities. In most of these states there are few if any programs dedicated exclusively to ports. While this requires ports to compete with a wider spectrum of potential fund users, it also broadens the type and number of programs that ports can access for funds. This concept has worked well in both Oregon and Ohio. In Louisiana, ports can access capital outlay funds as an alternative to the structured port priority program but the allocation of these funds is often dependent on a port's political strengths as well as the projects worthiness.

Public-Private Partnerships at Ports

Many states encourage ports to form partnerships with private entities to develop and operate facilities. Private ownership is encouraged to minimize public funding requirements. Ports play a facilitating role, channeling low interest loans, credit enhancements, tax-exempt financing, and outside sources of funding for infrastructure.

IV. Conclusions and Options for Future Action

This section is intended to give the Ports Association of Louisiana a series of possible options for creating a better funding situation for ports in the state. The consulting team has developed these options based on a review of the funding scenarios of many other states with major port systems. The opinions expressed herein are solely those of the consulting team and have not been endorsed by the Ports Association of Louisiana.

Create Statutorily Dedicated Funds for Ports Capital Construction

Louisiana has no statutorily dedicated funds for port construction. A dedicated funding source allows for a number of positive benefits for ports. First, it creates the opportunity for the use of bonds backed by the annual dedication of funds. The use of bonds allows creation of a large capital source that can be used to support a revolving loan fund or a grant program capable of providing money for both large and small projects. Those states which use dedicated funds are among the national leaders in the growth of their ports. Virginia's extensive use of dedicated funds has been a key element in allowing its port system to grow to one of the largest on the U.S. East coast. Similarly, Florida's use of bonds backed by dedicated funds has been crucial in the growth on many of its major ports. In both instances these states have reaped huge economic benefits from the growth of their ports.

The creation of a dedicated fund source for ports in Louisiana will be very difficult to achieve. The present political climate in the state is for less dedication of funds. In recent years, there have been efforts to remove the existing dedication of funds for other purposes. Many legislators feel that finding solutions to Louisiana's overall financial situation has been restrained by the number and size of the existing dedicated fund programs. When you add in a present administration with a goal to reduce the size of government and lower taxes, the creation of a new dedicated fund source seems unlikely in the near future.

However, the ongoing crisis in overall transportation funding, particularly highway funding, may create some opportunities for finding a dedicated funding source for port capital construction. It is possible given the present shortfall in the state's transportation fund that Louisiana may have to give strong consideration to changes in the gasoline tax structure of the state or in other transportation related fees. If this occurs, it may open a window for the Ports Association to advocate some limited dedicated funding for ports as part of an overall solution to transportation funding. In other states (Virginia in particular), the creation of dedicated funding for ports occurred as part of larger overhaul of transportation funding. In most instances it allowed ports to provide major political support for taxing changes for highway and other transportation or economic development needs in exchange for having ports share in the new funding.

Create and Fund a Revolving Loan Fund for Port Construction

The Louisiana legislature created a revolving loan program for ports several years ago. Senator Walter Boasso and Representative James Tucker introduced legislation entitled the Louisiana Waterways Infrastructure and Development Fund. It was passed by the legislature and signed into law. No funds were ever appropriated for the fund and there appeared to be little pressure from Louisiana ports to utilize such a fund. In 2005, the legislation was repealed as part of a larger cleanup of unused legislation.

Many states effectively use a revolving loan program to fund both public and private port construction projects. The programs usually offer very favorable loan terms and most programs are self supporting after an initial seed funding of the loan account.

PAL could give consideration to promoting creation of such a program in Louisiana. However, before embarking on an effort to create a loan program, PAL should determine from its members if the program is needed by its members and would be used. The use of loans would obviously require taking on additional debt for the port involved. This could be problematic as a number of Louisiana ports appear to be close to their debt limits. In some cases the debt limits may be statutory and in others the limit may be set by the ability of the port to cover the debt service coverage.

Modify the Port Priority Program

The Port Priority Program has been a major success in providing funding for port capital projects in Louisiana. Based on a review of similar programs across the country, the Port Priority Program is one of the best in the country from the standpoint of providing funding for small and medium sized port projects. It has a selection process based on economic benefit factors and the program has been administered without serious problems for many years.

There are several things that the present program lacks. It is not an adequate funding source for larger ports seeking support for capital projects costing more than \$10-20 million. The level of funding being provided is not statutorily dedicated so ports have no guarantee of funding level from year to year. The amount of annual funding provided by appropriation is not sufficient to fund all of the projects that meet the economic qualifications.

PAL should consider proposing a series of revisions to the present program to enhance its effectiveness. PAL's past efforts to increase the annual funding level have met with some success. Consideration should be given to proposing a funding level of at least \$40-50 million annually with several concurrent changes to the funding distribution methods. One option for making the program more beneficial to large ports would be to eliminate the present cap on project size and at the same time guarantee a certain portion of the funds would go to shallow draft ports. Consideration should be given to creating a higher required match rate for the large grants (up to 50%). In this way deep draft ports could access funds for large projects and shallow draft ports could still be guaranteed that each year's annual allocation would not be used up by

the deep draft ports. A second option would be for completely separate funding categories for deep draft and shallow draft ports. This approach is simpler from a funding perspective but may be harder to set up when determining which ports go into which program.

Port Planning as a Tool for New Funding

Most states that have significant funding programs for ports require that the port projects be in an approved port master plan or statewide master plan. This adds considerable credibility to the project and provides the state with assurance that the project is valuable to the port and to the state.

While some ports in Louisiana have port master plans, many do not. None of the existing port plans are reviewed or approved by any entity at the state level. There also is no statewide port plan at the present time.

Consideration should be given for PAL to offer a better port planning process as part of any proposal for a significant increase in funding. By PAL placing this on the table, it can provide credibility to the ports willingness to give assurance to the state that the projects being funded are beneficial to the state as a whole.

Port Overview within State Government

The Economic Development Strategic Plan for Louisiana Ports recommended the creation of an Office of Ports within state government. There was considerable discussion during the development of the plan concerning the proper placement of such an office within state government. The debate at the time concentrated on placement within the Governor's Office, the State Department of Transportation and Development or the State Department of Economic Development. Although the plan recommended placement within the Governor's Office, there was no support from the Governor or his staff for such a move and the proposal died.

More recently the state has been considering a streamlining of government functions that may result in moving the administration of the Port Priority Program from the State Department of Transportation and Development to the State Department of Economic Development.

PAL should give serious consideration to developing a position on the proper placement of not only the Port Priority Program but of the major focus point for ports at the state level. Absent support from the Governor's Office on any placement of port overview functions within the Governor's Office, the major advocacy for ports will ultimately rest either in State Department of Transportation and Development or in the State Department of Economic Development. There are positives and negatives for the ports in each of these options.

In the majority of states surveyed in this study, the overview and advocacy of ports is placed within the states' economic development departments. Most of these states consider the ports to be a critical part of the overall economic health of their state. As such ports in these states may have programs specifically for ports but also routinely access other economic

development grant and loan programs. In some states, port representatives sit on advisory panels that influence the allocation of funds for ports and as well as overall economic development policy. In some states, such as Pennsylvania, the port overview function was originally placed within the transportation function and later relocated to the economic development function. This was usually the result of the port overview being overshadowed by the larger highway related responsibilities of the transportation function.

In states where the port overview function exists in the transportation departments, it is because the transportation department administers the port funding which is coming from transportation related revenues. In addition, there are elements of efficiency as departments of transportation have the administrative and engineering resources to support capital project overview. Departments of transportation also have responsibility for other projects linking ports such as railroads, highway connectors and trucking oversight.

In the end, it is a partly an argument in philosophy. Are ports primarily transportation entities or are they primarily economic development entities? Regardless of the short term decision by the state on placement of the port priority program administration, PAL should consider a review of the future benefits and opportunities for ports being linked to the Department of Transportation and Development or the Department of Economic Development. This is particularly critical if there is no Office of Ports in the near future. PAL needs to look at where the “port advocacy function” should exist within state government.

Pursue the Use of Tax Credits

Recently enacted tax incentive legislation in Louisiana gives the ports a new tool to use in attracting private sector investment in port facilities. PAL should work aggressively with the State to place these incentives into place as quickly as possible. PAL should also encourage its members through an educational effort on how to market these incentives to potential private sector investors.

V. Recent History of Port Capital Funding in Louisiana

A. Survey Process

In order to evaluate the recent funding of Louisiana ports capital infrastructure spending, a survey was distributed to thirty Louisiana ports. The survey asked information on capital spending by each port for the years 2004 through 2008. Information to be collected included project name/type, total cost, and the source of funds used. Sources could include the port priority program, capital outlay, state economic development funds, U.S. Army Corps of Engineer funds, U.S. Department of Commerce funds, Homeland Security funds, private funds, Parish/Local funds, Delta Regional Authority funds, and Port Self Generated funds including bond funds. Only projects that were completed or capitalized within the time period were included. In addition the survey requested information on the taxing authority of the port and if such authority was being used.

The survey was similar to a survey conducted by Shaw Environmental Infrastructure, Inc. in 2006. The previous survey covered the years 2001 through 2005. Comparisons between the two surveys shows the growth or decline of overall port capital construction and changes in the use of specific funding sources.

A chart comparing the 2004-2008 timeframe to the previous survey of 2001-2005 timeframe is shown on the following page.

B. Survey Results

Comparison of the two timeframes of 2004-2008 and 2001-2005 show that overall port spending on capital projects increased by \$112,542,309 or 24.7%. While there is growth in spending in a number of ports, the overall growth figure is significantly influenced by three very large projects occurring in the surveyed time period. They include the Florida Avenue Replacement Bridge in the Port of New Orleans (\$48,196,375), the Erato Street Cruise Terminal in the Port of New Orleans (\$36,989,724) and the Semi-Auto Bag Handling Facility in Port of Lake Charles (\$34,203,707).

The total amount of state funds used from all state sources increased by \$7,187,649 or 5.1%. This increase is greatly affected by a Department of Economic Development grant of \$15,000,000 for the Elaine Street Rail Ferry in Port of New Orleans. The use of Port Priority Funds increased by \$5,113,405 or 5.3% while the use of Capital Outlay funds decreased by \$13,350,778 or 32.9%. Absent the one large grant for the Elaine Street project, overall state funding was fairly static as compared to previous timeframes.

The total amount of federal funds increased dramatically by \$46,244,867 or 220.9%. This was directly related to the use of U.S. Coast Guard Truman Hobbs funds for the Florida Avenue Bridge Replacement in the Port of New Orleans. That project used \$42,805,094 of federal funds.

LOUISIANA PORTS CAPITAL SPENDING

	<u>2004-2008</u>	<u>2001-2005</u>	<u>CHANGE</u>	<u>%</u>
Total Expenditures	\$567,587,992	\$455,045,683	+\$112,542,309	+24.7%
Port Priority	\$100,701,029	\$95,587,624	+\$5,113,405	+5.3%
Cap Outlay	\$27,172,851	\$40,523,629	-\$13,350,778	-32.9%
LED	\$20,000,000	\$4,574,978	+\$15,425,022	+337.2%
Federal	\$67,177,519	\$20,932,652	+\$46,244,867	+220.9%
Port Generated	\$348,071,747	\$293,426,800	+\$54,644,947	+18.6%
% State Funded	26.8%	30.9%		
% Fed Funded	11.8%	4.6%		
% Port Funded	61.3%	64.5%		

Absent that project, overall federal funds grew modestly mostly in the use of Homeland Security funds.

For survey comparison, the total of other revenues which are not state or federal funds is considered port generated. This includes port capital funds, bond funds, local funds and other categories. Port generated revenues increased by \$54,644,947 or 18.6%. A very large portion of these port generated revenues is in bond proceeds particularly in the Port of New Orleans and the Port of Caddo-Bossier.

Of particular interest is the share of state and federal funds in overall port capital spending. In the 2001-2005 survey, state funds accounted for 30.9% of port capital spending. In the latest survey that participation fell to 26.8%. In the 2001-2005 survey, federal funds accounted for 4.6% of port capital spending. In the latest survey that participation grew to 11.8% due to the previously mentioned Florida Avenue Replacement Bridge project. The use of non-state and non-federal funds (port generated revenue) fell slightly from 64.5% in 2001-2005 to 61.3% in the latest survey. Again this is greatly influenced by the large amount of federal funds used on the Florida Avenue Bridge Replacement project. Without that one project, the federal share would fall to the more typical 4.6% and port generated revenue would be 65.9% or a slight increase from the last survey.

Of additional interest, the wide variety of funding sources used by Louisiana ports is remarkable. Since the use of traditional sources of funding such as capital outlay or port priority are either not available or do not fit the particular project proposed, Louisiana ports have found a multiplicity of other programs to use for capital funding. In this most recent survey the following funding sources were used by at least one port and in many cases more than one port---Louisiana Department of Economic Development Grants, State Flood Control Grants, Parish Grants, City Grants, U.S. Department of Agriculture Grants, U.S. Department of Commerce Grants, U.S. Coast Guard Grants, Federal Transit Grants, Homeland Security Grants, Delta Regional Authority Grants, Red River Waterways Grants, FEMA Grants, and Private Sector Grants.

C. Additional Analysis of Port Priority Funds

A review of the use of port priority funds for the period 2004-2008 reveals some interesting information.

In the surveyed timeframe there were nine ports that used port priority funds to construct 42 projects. Four of these projects exceeded \$10 million in total cost. Eight projects had a total cost between \$5 million and \$10 million. The remaining twenty seven projects were all less than \$5 million in total cost.

The matching share for port priority funds (that is the percentage of non-port priority funds used on a project) was more than 80% on all the projects over \$10 million. These projects were in the Port of Lake Charles, the Port of Greater Fourchon and the Port of New Orleans.

The average matching rate for all port priority projects for the three large deep water ports (New Orleans, South Louisiana, and Lake Charles) plus the large coastal Port of Greater

Fourchon was 52.3%. These four ports used \$61,298,853 of the port priority funds used in the survey period or 61% of the funds.

The average matching rate for all port priority projects in the survey period for all ports was 48.4%. This number is greatly influenced by the high matching shares in the deep water ports. Many of the non-deep draft ports used matching rates in the 10-20% range but the smaller nature of the projects has less influence on the total average match rate.

C. Observations

The decline in the use Capital Outlay funds has been occurring over a number of years.. The latest survey shows that the availability of Capital Outlay funds has declined by over 30% in the past 5 years. This decline puts more pressure on the use of Port Priority funds. While there has been a modest growth in port priority funds (5%), they are not filling the gap left by less Capital Outlay funds.

While ports seem to be generating a larger share of the cost of their project, this may be a well that is running dry. The fact that ports are using many different sources of funds implies that they are searching for any source of funding to supplement their limited resources. Outside of the Port of New Orleans, the use of port bond funds has also declined rather dramatically. Only 5 ports used bond funds in the survey period. On average bond funds accounted for less than 20% of the total construction cost of projects at these ports. The Port of New Orleans has reached or is very close to its bond capacity limits. This portends a funding future that is not very bright for many ports.

On the positive side, many of the larger deep draft ports still seem capable of matching state funds with up to a 50% match. This is evident by the high matching percentage shown in the survey for those ports when using port priority funds. As efforts are made to try to increase the annual allocation to the port priority program, consideration should be given to creating a mechanism where deep draft and larger ports can access these funds for large projects with a higher match than the current 10%. The past use of port priority funds show that it is a very effective program for shallow draft ports where total project costs seldom exceed \$5 million. For larger ports with individual project costs exceeding \$15-20 Million, it is a less than effective funding tool.

APPENDIX A

PORT FUNDING INFORMATION ON THIRTY ONE STATES

ALABAMA
ALASKA
ARKANSAS
CALIFORNIA
CONNECTICUT
DELAWARE
FLORIDA
GEORGIA
ILLINOIS
INDIANA
MAINE
MARYLAND
MASSACHUSETTS
MICHIGAN
MINNESOTA
MISSISSIPPI
MISSOURI
NEW HAMPSHIRE
NEW JERSEY
NEW YORK
NORTH CAROLINA
OHIO
OREGON
PENNSYLVANIA
RHODE ISLAND
SOUTH CAROLINA
TENNESSEE
TEXAS
VIRGINIA
WASHINGTON
WISCONSIN

STATE OF ALABAMA

PORTS: The State of Alabama has one large deep draft port—Mobile—and 11 inland ports. All of the ports are both owned by the Alabama State Port Authority or have local ownership. The inland ports include Bridgeport, Claiborne, Columbia, Cordova, Demopolis, Axis, Eufaula, Montgomery, Phoenix City and Selma. These ports are leased out by the authority to public and private operators and the authority has no role in operating them. The inland ports of Florence-Lauderdale and Decatur/Morgan County are county owned authorities.

The Port of Mobile has 37 ship berths and over 4 million s.f. of warehouse space. It handles 28 million tons of cargo annually including 130,000 containers. Major commodities include coal, aluminum, steel copper, lumber, wood pulp and numerous other break bulk commodities. The port is owned and operated by the Alabama State Port Authority which is an agency of the State of Alabama. They operate as a free enterprise entity

STATE FUNDING: In recent years, the Alabama Legislature has appropriated significant funds to provide public-private matching funds for development of new and expanded container facilities in the Port of Mobile. A pledge of \$100 million was made to Port of Mobile in 2000. Of that total \$10 million has been allocated to assist in the development of the Choctaw Container Facility.

CONTACTS: Alabama Ports Authority—251-441-7238

STATE OF ALASKA

PORTS: Alaska public ports are municipally owned and operated and cater to local fishing and recreation uses. There are 97 harbor facilities in 60 locations in Alaska. These facilities consist of 10,661 individual slips plus docks, grids, gangways and other infrastructure.

At Juneau, the Docks and Harbors Department operates and manages multiple waterfront facilities and properties. These includes two cruise ship docks, several small boat harbors and small boat floats, six launch ramps, two commercial loading facilities, two boat yards, and several hundred acres of tidelands and waterfront properties under lease. The Docks and Harbors Department is an enterprise fund meaning that it operates without a local property or sales tax subsidy. The Department is financed through a combination of user fees, lease fees, fisheries business taxes, state and federal grants, and local special sale taxes for specific projects.

The Ketchikan Port & Harbors Department operates and maintains six boat harbors and three launch ramps. Valdez Small Boat Harbor is a 511 slip harbor operated by the City of Valdez. The Whittier Small Boat Harbor includes 350 slips for both transient and permanent berth holders. Wrangell operates three full service recreational and commercial harbors and

deepwater docking facilities that can accommodate small vessels, transients and larger commercial vessels including tugs, barges, and commercial fishing boats.

STATE FUNDING: Alaska has one program specifically for ports (although ports also participate in the Alaska DOT's Statewide Transportation Improvement Program):

Municipal Harbor Facility Grant Program

In 2006, Alaska legislature established the Municipal Harbor Facility Grant Program to provide matching funds (50/50) for community investment in harbor capital improvements. Permitted projects include construction, expansion, major repair and major maintenance. The program is administered by the Alaska Department of Transportation, with an established application and evaluation process. It is funded at the discretion of the state legislature from watercraft fuel taxes, fisheries business taxes and other appropriations. No more than \$5 M can go to any municipality in one fiscal year.

CONTACTS: Juneau Docks and Harbor—907-586-0292

STATE OF ARKANSAS

PORTS: The State of Arkansas has 9 ports on five navigable waterways—Mississippi, Arkansas, Red, White, and Ouachita Rivers.

STATE FUNDING: The state established the Arkansas Waterways Commission in 1967 to promote the development of commercial navigation in Arkansas. The commission does not give grants to ports and it is mainly a conduit for studies and reports aimed at improving waterway commerce. Although the state has a Port Development Fund it has never received any funds from the state.

CONTACTS: Arkansas Waterways Commission---501-682-1173

STATE OF CALIFORNIA

PORTS: There are eleven publically-owned commercial ports in California. All are components of local government and are generally self-supporting.

International trade is a major force in California's economy, accounting for nearly 25 percent of the state's economy. With major port facilities in the San Francisco and Los Angeles areas, California is a major gateway for products entering and leaving the United States. More

than 40% of the total containerized cargo entering the United States arrived at California ports, and almost 30% of the nation's exports flowed through the state's ports. Port activities employ more than half-a-million people in California and generate an estimated \$7 billion in state and local tax revenues annually. California's ports also provide non-cargo related services and facilities, such as passenger cruise line services, restaurant and hotel accommodations, entertainment, and tourist attractions. In San Francisco, for example, the port has day and nighttime activities on the waterfront. The Port of San Diego boasts sixteen parks and numerous bike paths within its trust properties, as well as boating, dining, lodging, fishing, shopping and touring accommodations.

Many ports also develop and maintain commercial fishing facilities and recreational harbors and marinas.

STATE FUNDING: California has three programs with applicability to ports:

Infrastructure and Economic Development Bank (I-Bank) State Revolving Fund (ISRF)

The California I-Bank's Infrastructure State Revolving Fund (ISRF) Program provides low-cost financing to public agencies for a wide variety of infrastructure projects, including city streets, county highways, state highways, drainage, water supply and flood control, educational facilities, environmental mitigation measures, parks and recreational facilities, port facilities, public transit, sewage collection and treatment, solid waste collection and disposal, water treatment and distribution, defense conversion, public safety facilities, and power and communications facilities. ISRF Program funding is available in amounts ranging from \$250,000 to \$10,000,000. There is no required match or leverage amount, and ISRF financing can be the sole source of financing for a project.

California Maritime Infrastructure Bank (CMIB)

The CMIB was established in 1994 as the first statewide, maritime-specific public investment bank in the United States. The idea behind CMIB is that the bank would request a one-time grant from federal or state sources for initial capitalization. Once capitalized, CMIB's potential tools for financing would include long-term, low-interest loans, and taxable and tax-exempt bonds. CMIB has been heralded as an innovative financing mechanism in the maritime industry, but it has yet to gain the financial support needed to capitalize the bank and begin loaning to projects. Although, lacking in funding capacity, CMIB has been able to provide conduit financing using its status as a public agency with Joint Powers Authority (JPA). As a JPA, CMIB has been able to issue bonds to finance several port projects. To date, CMIB has issued \$200 million in bonds for several port projects.

Harbors and Watercraft Revolving Fund

The fund provides loans for the development, expansion, and improvement of recreational boating facilities. Loans may be made to cities, counties and districts for small craft harbor planning and development. Grants may be made for the construction of small craft launching facilities. The program is funded by taxes imposed on fuel for recreational vessels, vessel registration fees, and other fees.

Alameda Corridor – A Case Study

The \$2.4 billion Alameda Corridor project is being funded by a combination of revenue bonds, payments from the ports, a federal subordinate loan, and direct federal grants (both direct and those passed through to the project by other agencies such as the local transit agency). The bonds are to be repaid with fees paid by the railroads for use of the corridor. However, the bonds are secured not by the railroads' assets but by the ports of Los Angeles and Long Beach. In fact, pro forma projections show that the fees paid by the railroads will not be sufficient to service debt until 2018. Until then, the ports will make "shortfall" advances to cover required payments on both the bonds and the federal loan.

CONTACTS: California Association of Port Authorities—916-446-6339

STATE OF CONNECTICUT

PORTS: There are three commercial ports in Connecticut—Bridgeport, New Haven and New London.

The Port of New Haven is owned and operated by the New Haven Port Authority and is an entity of the City of New Haven. The port encompasses 366 acres of public and private marine facilities. They handle about 10 million tons of cargo annually consisting of petroleum, chemicals, and Iron/Steel. The port has received very little capital funds from either the city or state in recent years.

The Port of Bridgeport is owned by the City of Bridgeport. They provide both cargo and ferry services. Annual volumes are about 5 million tons including fruit, coal, and sand/gravel. Additionally there is a small shipyard and a business development site at the port.

The Port of New London is owned by the City of New London. It is a small commercial port handling 1.7 million tons annually mostly petroleum.

STATE FUNDING: The State of Connecticut provides very little capital funding to ports. The State DOT has a division of Aviation and Ports but their major maritime role seems to be supporting the Connecticut Maritime Commission (CMC). CMC was established by the legislature in 2004 to replace the Connecticut Port Authority which evidently was not providing any substantive policy leadership. The CMC has 15 members appointed by the Governor and various legislators. There are 5 state agencies and 10 private sector members. There is a general guideline for qualifying membership related to maritime activity. However, at the present time there are no port members on the Board and several members appear to be politicians. The role of CMC is to provide recommendations to the Governor and General assembly on maritime policy and to develop long term strategic plans for ports. Through its 5 years of existence the CMC has published a number of studies and recommendations. Their most recent success was establishing a Harbor Maintenance Fund in the state to support the required local share on dredging projects. Although the fund exists it has not been funded by the legislature or the Governor. CMC recently recommended that the legislature provide funds for a Strategic Study of the Future of Connecticut Deep Draft Ports. The Legislature failed to act on this bill in the past session. Additionally

there is a Connecticut Maritime Coalition, a private non profit trade association established to promote ports and maritime trade. They are comprised of 20 small and medium sized maritime business including 2 ports. While they have a very lengthy and comprehensive agenda of policy initiatives, it appears their success in convincing the state to pay more attention to maritime needs have been less then successful. They were instrumental in obtaining \$1.9 million in state funds to support the development of a barge feeder system but it is unclear how these funds are allocated and for what specific purpose.

CONTACTS: Port of Bridgeport—203-384-9777
Port of New Haven—203-946-6778
Connecticut DOT—860-594-2550

STATE OF DELAWARE

PORTS: The only major cargo port in Delaware is the Port of Wilmington.

The Port of Wilmington is owned and operated by the Diamond State Port Corporation (DSPC), a corporate entity of the State of Delaware. The state purchased the port and its facilities in 1995 from the City of Wilmington. At that time the state created the DSPC to own and operate the port. The port covers 308 acres and has seven deep water general cargo berths as well as berths for tankers and Ro-Ro vessels. It handles about 4,000,000 tons of general cargo annually. Major commodities are containers, produce and autos. The port is one of largest importers of fresh produce (over 1.5 million tons annually) and a major importer of automobiles. The port is financially self sufficient in its operations but does receive periodic capital grants from the state to support its capital program. In 2010, the port is scheduled to receive a \$2,000,000 grant from the state.

STATE FUNDING: Although the state owns and operates the Port of Wilmington through the independent corporate entity DSPC, it does not provide any operating subsidies to the port. The state does not appear to have a permanent program specifically for supporting the capital needs of the port. However they do provide grants periodically. The most recent was a \$2,000,000 grant in the 2010 state budget.

CONTACTS: Diamond State Port Corporation—302-472-7800

STATE OF FLORIDA

PORTS: The State of Florida has 21 ports of which 14 are deep draft ports. The deep draft ports include Port Canaveral, Port Everglades, Port of Fernandina, Port of Fort Pierce, Port of Jacksonville,

Port of Key West, Port Manatee, Port of Miami, Port of Palm Beach, Port of Panama City, Port of Pensacola, Port of St. Joe, Port of St. Petersburg, and the Port of Tampa.

The deep draft ports in Florida are independent districts or either components of county or municipal governments. Port Everglades, a large container and cruise port in Fort Lauderdale, is a department of Broward County. The Port of Jacksonville, which is also a major container and auto import port, is part of a port authority that owns and operates the airport and the port and is a component of the City of Jacksonville. The Port of Tampa which is the largest tonnage port in Florida handles bulk, break bulk and general cargo and is an independent district encompassing Hillsborough County. The Port of Miami in addition to being the world's busiest cruise port also handles considerable general cargo mostly related to Latin America trade. The port is a department of Miami-Dade County.

STATE FUNDING: The State of Florida has one of the most progressive port funding mechanisms in the country. The Florida Seaport Transportation and Economic Development Program (FSTEDP) provides annual grants to Ports for capital projects that are consistent with approved state and local master plans and require a 50% local match. To complement the FSTEDP the state created the Florida Seaport Transportation and Economic Development Council (FSTEDC) to review and approve port capital project applications for funding from the FSTEDP. The Florida Ports Financing Commission (FPFC) established in 1996 has issued \$375 million in bonds the proceeds from which were used to fund port capital projects. The bonds are supported by an annual allocation of a portion of motor vehicle fees.

CONTACTS: Port Everglades-- 954-523-3404
Tampa Port Authority --813-905-5162
Florida Department of Transportation--850-414-4551
Florida Ports Council—850-822-8028

STATE OF GEORGIA

PORTS: The State of Georgia owns and operates the four ports of state through the Georgia Ports Authority (GPA). The ports include the Port of Savannah and the Port of Brunswick, both deep draft ports and the Port of Columbus and the Port of Bainbridge which are both inland ports.

The Port of Savannah is one of largest container reports on the U.S. east coast. They handle over 25 million tons of general cargo annually of which 80% is containers. GPA is a quasi state agency operated by a board appointed by the governor.

STATE FUNDING: GPA is almost entirely self funded from its own revenues and fees. It generates a net return on operations of over \$16 million annually. The state allocates periodic grants to the port to supplement their own capital for major projects.

CONTACTS: Georgia Ports Authority—912-964-3877

STATE OF ILLINOIS

PORTS: Illinois has 1,118 miles of navigable waterways linking to the Atlantic Ocean via the Great Lakes and the Gulf of Mexico via the Mississippi River system. Thirteen port districts serve Illinois. The Port of Chicago is owned by the Illinois International Port District and offers terminals that handle ocean and lake vessels, as well as barges. The port is served by four railroads and has access to Interstates 90 & 94. Two ports – the Illinois International Port District in Chicago and the Tri-City Port District in the Metro East region of St. Louis – are Foreign Trade Zones, providing low-cost production and warehousing facilities for imported and export-bound products.

STATE FUNDING: Illinois has three programs with applicability to ports:

Port District Revolving Loan Program

Administered by the Illinois Department of Commerce and Economic Opportunity, the program provides below market rate loans to Illinois port districts to facilitate and enhance the utilization of Illinois' navigable waterways and the development of inland intermodal freight facilities. Up to \$3 million can be made available for a project based on a competitive application process and must be matched at least 50/50 by the recipient. The Department annually invites submission of applications and conducts a benefit/cost evaluation of proposed projects.

Business Development Public Infrastructure Program (BDPIP)

The BDPIP program is designed to provide loans or grants to units of local government for public improvements on public property on behalf of businesses undertaking a major expansion or relocation project that will result in substantial private investment and the creation and/or retention of a large amount of Illinois jobs. Administered by the Illinois Department of Commerce and Economic Opportunity, program funds may be used for a wide variety of public infrastructure improvements including local roads and streets, access roads, bridges, sidewalks, waste disposal systems, water and sewer line extensions, water distribution and purification facilities, sewage treatment facilities, rail and air or water port improvements, gas and electric utility extensions, public transit systems, and the development and improvement of publicly owned industrial and commercial sites. Typically, the department will limit its assistance to \$500,000 or less. Approved infrastructure projects for the most part will be financed as loans. Grants are available on a very limited basis.

Illinois Rail Freight Program

The program was established in 1983 by the Illinois DOT to facilitate investments in rail service. Illinois DOT generally provides low-interest loans and, in some cases, provide grants. The focus of the program is on those projects that have the greatest potential for improving access to markets and maintaining transportation cost savings, and those where state

participation will leverage private investments to foster permanent solutions to rail service problems. The program uses federal and state funding to support this loan program. The federal funds came originally from the Local Freight Rail Assistance Program (LFRA), which was eliminated in the 1990s. State funding comes from General Fund appropriations.

CONTACTS: Illinois Department of Commerce and Economic Opportunity
—312-814-7179

STATE OF INDIANA

PORTS: There are 3 public ports in Indiana—Burns Harbor, Mount Vernon, and Jeffersonville. These ports are owned and operated by the Indiana Port Commission. It is a quasi government agency that is considered an instrumentality of the state. It has broad powers including owning and developing land for water, truck, rail and airports, issuing bonds, and controlling access to facilities.

STATE FUNDING: The Indiana Port Commission operates and finances its own facilities and receives no funding from the state government. There are presently no other state programs to provide any capital support to ports.

CONTACTS: Ports of Indiana—317-232-9200

STATE OF MAINE

PORTS: Three major cargo ports—Portland, Searsport and Eastport. There are several inland shallow draft ports—Bucksport and Bangor and numerous fishing ports.

Port of Portland is owned by the City of Portland but in recent months has leased its major cargo terminal to the Maine Ports Authority (MPA). MPA is a division of the Maine Department of Transportation. Port of Portland still operates ferry and passenger facilities. The major cargo of the port is petroleum (29 million tons), some bulk and a small amount of containers (3,000).

Port of Searsport belongs to MPA and handles mostly petroleum and some dry cargo such as containers.

Port of Eastport belongs to the City of Eastport and handled 358,000 tons in 2006 mostly petroleum and some general cargo.

The inland ports of Bangor (15 feet depth) and Bucksport (29 foot depth) handled mostly petroleum products.

STATE FUNDING: The State of Maine has provided grants to various ports over the years, usually one time grants from the general fund budget. Various programs in both Maine DOT and Maine Economic Development have been used in the past. A Small Harbor Improvement Program has offered grants periodically mostly to fishing ports. Funds are granted by MDOT based on availability of funds in State Transportation Fund. Funding is typically set aside every 2-4 years. The most recent amount of funding was \$750,000. The program allows a maximum of \$150,000 to any one port with a required 25% match. Projects are ranked on several criteria and the higher percent of match gets more points in the ranking. In July 2009 the state published a Moving People and Goods Plan as a funding program for 2010 and 2011. This program allocates about \$173 million over two years to various railroad, highway access and port improvements. The majority of the money (\$131 million) is dedicated to rail improvements. Ports are scheduled to receive \$2 million for 4 projects---Port of Eastport Capacity Improvements (\$5 million); Port of Portland Intermodal Improvements (\$13.5 million); Port of Searsport Capacity Improvements (\$7 million); and Channel Dredging for Searsport (\$15.5 million). Funds for this initiative come mostly from the Federal Stimulus Package (\$148 million) and the Corps of Engineers (\$15.25 million). The state share is only \$9.75 million and it comes from state bonds backed from the general fund.

OTHER POINTS: The State of Maine has several other programs of some interest. There is a Maine Coastal Program under the Economic Development Department that deals with planning of coastal resources including commercial fishing ports. They are funded by U.S. Department of Commerce but do not appear to have any capital funding capabilities. There is also a private non-profit group called Coastal Enterprises, Inc. that is a very large entity involved in numerous economic development programs in New England. They are funded by grants from hundreds of organizations and have given grants and loans of over \$400 million. They have a Working Waterfront Loan Fund that provides low interest loans to commercial fishing entities. Maine is also well known for their efforts in creating career opportunities in the maritime industry. The state funds the Maine Maritime Academy, one of the top schools in the country for training merchant seaman. There is also a nonprofit Maine Marine Trades Association that supports career and education opportunities in the maritime industry.

CONTACTS: Maine Ports Authority—207-624-3564
Maine Coastal Program—207-287-3261
Port of Portland—207-874-8892

STATE OF MARYLAND

PORTS: The State of Maryland has one major port—the Port of Baltimore. At one time the state also owned and operated the Port of Cambridge on the lower eastern shore of the Chesapeake Bay. The Port of Cambridge was a consistent money loser and was sold by the state to private interests several years ago. It is presently not operating as a cargo port.

The Port of Baltimore is owned and operated as a part of the Maryland Department of Transportation (MDOT). The Port of Baltimore is a major deep draft port handling more than 33 million

tons of cargo annually including 9 million tons of general cargo. Major products include coal, iron ore and containers. The ports operations are totally funded by the Maryland Department of Transportation from the Transportation Trust Fund. The port contributes all its operating revenues to the fund and draws out its expenses. As a general rule the port is a net positive contributor to the trust fund from operations although in some years it has been a negative contributor. The annual operating budget of the port is \$113 million. In 2009, their capital program totaled \$125 million and in 2010 it is projected to be \$115 million. Most of the port's capital needs are funded through MDOT and the trust fund. Several very large projects (such as Seagirt Marine Terminal) were funded through a special arrangement with the Maryland Transportation Authority (the toll facilities arm of MDOT). The authority had considerable excess funds from toll collections and was required by their statutes to reinvest such funds into transportation infrastructure. The authority paid for the construction of Seagirt Marine Terminal (\$170 million) and then leased the facility to the port in a long term lease arrangement. The port has established a goal of funding 10% of future capital projects through public-private partnerships.

STATE FUNDING: The State of Maryland provides 100% of the funding for the Port of Baltimore through its Department of Transportation. The Maryland Port Administration is one of six modal administrations within MDOT. The others are Motor Vehicles, Mass Transit, Aviation, Highways, and Toll Facilities. MDOT is totally funded for both operations and capital from the Maryland Transportation Trust Fund. Revenue sources for the trust and include motor vehicle fees (registration and licensing), aviation fees (mostly Baltimore-Washington Airport), port fees, and transit fees. Toll revenues remain with the Maryland Transportation Authority. Although the Maryland Transportation Authority is a part of MDOT its funding and bonds are separate and solely supported by tolls on various bridges and highways. The majority of revenues come from motor vehicle fees (54%) with other sources being federal aid (17%), operating revenues (11%), sales and corporate income tax (11%) and bonds (7%). The trust fund allocates 14% of its annual revenue back to local government transportation programs and 1% is pledged to the state's general fund. The fund earns about \$1.9 billion annually. In 2010, MDOT is expected to spend \$3.7 billion. Of this total, 42 % is for operating expenses of the various agencies, 39% is for capital projects, 14 % to local governments and 5 % to debt coverage.

CONTACTS: Port of Baltimore—410-385-4400
Maryland DOT—410-865-1125

STATE OF MASSACHUSETTS

PORTS: There is one major port at Boston and four smaller ports at Gloucester, New Bedford, Fall River and Salem.

The Port of Boston is in reality a number of cargo facilities in Boston and Cambridge. It is owned and operated by the Massachusetts Port Authority (Mass Port). Mass Port owns and operates three airports including Boston's Logan Airport, the major seaport facilities in the Boston Harbor and a toll bridge. Mass Port is an independent public authority that is totally self-funded from its own revenues and

fees. Its 2010 operating budget is \$364 million with a total revenue of \$552 million. The port operations have lost about \$25 million annually and two of the small airports lose about \$2.5 million per year. The revenue earned at Logan International Airport subsidizes these facilities. Mass Port also pays a Payment in Lieu of Taxes to the cities of Boston, Chelsea and Winthrop totaling \$18.5 million annually. Although Mass Port receives no state funds it does receive federal grants. Most recently, they received a \$600,000 EPA grant and \$100,000 Federal Stimulus Grant to construct ship to shore power facilities. The port handles about 16 million tons of cargo per year including 1.3 million tons of general cargo, 1.5 million tons of dry bulk and 12.8 million tons of liquid bulk.

The Port of Fall River is owned by a combination of local public and private entities. It handles about 3 million tons of cargo annually made up of lumber, paper, and fish. Recently the port has been the proposed site of a major LNG facility that has stirred considerable local opposition.

The Port of New Bedford is owned and operated by the City of New Bedford. It is a major port for receiving and processing fish.

The Port of Salem (mostly Coal and Oil cargo) and the Port of Gloucester (mostly fish) are two additional ports owned by their respective municipalities.

STATE FUNDING: Although the state provides no funds to the Massachusetts Port Authority it does provide capital funding grants to the other smaller ports. In 1994, the governor of Massachusetts created the Massachusetts Seaport Advisory Council by Executive Order. This council is chaired by the Lieutenant Governor and includes the Secretaries of four major agencies (Energy, Admin/Finance, Transportation, and Economic Development), mayors of the four seaport towns, the Executive Director of Mass Port and 5 representatives of port users. Initially this council was authorized to create a \$280 million bond fund for capital support of dredging, reconstruction of freight rail lines, infrastructure improvements at ports and support for marine based ferries. Ports were required to develop a port master plan before seeking any funds from the council. This group receives an annual budget allocation in the Governors budget and distributes grants for various port related projects. In 2008 they awarded approximately \$8 million in grants to various small ports. Eligible projects include commercial fishing infrastructure, dredging, port marketing, public access, port infrastructure, port institutional structure, and security. Ports can submit projects which are consistent with their master plan to the council for funding. The project review is assigned to the state agency most closely associated with the type of project. The agency then reviews and recommends approval of the project to the council. Funds and contracts are then included in that agencies budget and they administer the project. The state also provides some small grants through the Department of Conservation and Resources mostly for seawalls and bulk heading to protect shoreline. Interestingly, the state created a 10 year transportation plan in 2006 that proposed \$7 billion in improvements. Although the plan devoted several sections to ports and their contributions to the state's economy, there were no funds allocated in the plan for port improvements except for rail and highway access projects.

CONTACTS: Mass Port—617-946-4413

Massachusetts Seaports Advisory Council—508-999-3030

STATE OF MICHIGAN

PORTS: There are several ports in the State of Michigan. They include ports on the Great Lakes Michigan and Ontario and the connecting bodies of water. Many of the ports in Michigan are privately owned and operated. The creation of port districts is authorized in state law. Cities and counties can request authorization from the Governor to create a port district. Once created the districts can own, develop, and lease port facilities and issue bonds. Any taxing authority would rest with the city or county involved. State law requires these authorities to have a development plan and a 2 year operating budget both subject to review and approval by the State Departments of Commerce and Transportation.

STATE FUNDING: The state does not presently provide funding for ports. However, a recently completed analysis of Michigan ports prepared by John Martin & Associates has presented recommendations for a larger role for state government. To date those recommendations have not been implemented.

CONTACTS: Port of Detroit—313-331-3842

STATE OF MINNESOTA

PORTS: The State of Minnesota has 9 public ports (4 on Lake Superior and 5 on the Mississippi River. The Port of Duluth-Superior is the largest of the ports handling 45 million tons of cargo annually. The vast majority of cargo is bulk consisting of iron ore and grains. The port is open seasonally usually from March to December-January. The port is an independent public agency under Minnesota law.

STATE FUNDING: The state has a Port Development Assistance fund that provides 80% grants for repairs and infrastructure improvements to private sector operators of public port facilities. Funds can be as a grant or a loan from a revolving loan fund. Eligible projects include dredging, dock wall reconstruction, building rehab and bringing facilities up to code. There have been \$17.5 million in grants total over the past 10 years.

CONTACTS: Duluth Seaways Authority—218-727-8525

STATE OF MISSISSIPPI

PORTS: There are 16 public ports in Mississippi. The two largest ports are Gulfport which is owned by the state and Pascagoula which is an agency of Jackson County. The other ports are locally owned and operated and include Yellow Creek, Itawamba, Amory, Aberdeen, Clay County and Lowndes County all on the Tenn–Tom Waterway and Rosedale, Greenville, Yazoo County, Vicksburg, Claiborne County and Natchez all on the Mississippi River and Biloxi and Bienville on the Gulf of Mexico.

The Port of Gulfport the largest port in Mississippi handles bulk, break bulk and containers and occupies 204 acres with 6,000 feet of berthing space. It handles 2,000,000 tons of cargo annually including 200,000 containers. It also is the second largest import port for green fruit in the U.S. The Port of Gulfport is owned and operated by the Mississippi State Port Authority, an enterprise agency of the state.

The Port of Pascagoula is owned and operated by the Jackson County Port Authority which is an agency of Jackson County. Their board is appointed by both the governor of state and the local county government.

The Port of Bienville is owned and operated by the Hancock County Port and Harbor Commission. The commission also owns and controls an industrial park, a short line railroad and Stennis International Airport. The port is a shallow draft port with a 12 foot channel.

The 12 inland ports handle bulk and some general cargo.

STATE FUNDING: The State of Mississippi supports its ports through direct periodic direct capital grants and a loan program. The Mississippi Port Revitalization Loan program provides loans to state, county or municipal ports to assist with the location and expansion of business and for the improvement of port facilities. Loans under the program are for a maximum of 10 years and in amounts not to exceed \$750,000 per project with an annual interest rate of 3%. Ports can also apply for funding through a Multi-Modal Transportation Capital Improvement Program that includes railroads, airports, mass transit and ports. The program is funded through annual appropriations.

CONTACTS: Port of Gulfport—228-865-4300
Port of Pascagoula--228-762-4041

STATE OF MISSOURI

PORTS: The State of Missouri has 14 active ports including ports in major cities such as St. Louis and Kansas City. Ports include Howard/Cooper County Regional Port, Kansas City Port, Mid-America Port, Bourbon Regional Port, New Madrid County Port, Pemiscot County Port, St. Joseph Regional Port, City of St. Louis Port Southeast Missouri Regional Port, Jefferson County Port, Lewis County-Canton Port, Marion County Port and Mississippi County Port. Ports are typically departments of county and city governments.

STATE FUNDING: The Missouri Department of Transportation has a Multimodal Operations Division that contains a Waterways Program Manager. They administer three funding programs to support ports. One to assist ports with operational costs budgeted at \$450,000 per year, one for Port Capital grants budgeted at \$2,000,000 per year and one involving a revolving loan program that also supports aviation.

CONTACT: St. Louis Port—314-622-3400
Missouri Port Authorities Association—888-667-6787

STATE OF NEW HAMPSHIRE

PORTS: One major port—Market Street Terminal under the Ports/Harbors Division of the Pease Development Authority. The port is owned by an agency of the state—Pease Development Authority. The authority also owns numerous development sites along the Pease River as well as the airport for Portsmouth, NH. A division of this agency—Division of Ports and Harbors operates the marine facility.

The port has two berths—one 612 feet long with 35 feet of water depth and one 312 feet long with 22 feet of water depth. Additionally the port has 50,000 s.f. of covered storage and 8 acres of open storage. The port handles Bulk (woodchips, salt, and scrap), break-bulk (machinery), project cargo and some containers. In 2006 they handled a total of 300,000 tons.

STATE FUNDING: The Pease Development Authority is budgeted through the State of New Hampshire Budget but is self supported from revenues collected from rents and fees. Their operating budget in 2007 was approximately \$12,000,000. The State Department of Transportation's 10 year Capital Program (2009-2018) contains no port or maritime projects except for limited access road improvements. There is no evidence of any capital funding from the state to the port in recent years. It is assumed that the port could request grant funds from the state for specific projects to be funded by general fund.

CONTACTS: NH Ports and Harbors Division—603-436-8500
Pease Development—603-433-6088
NH DOT Finance Department—603-271-2531

STATE OF NEW JERSEY

PORTS: The State of New Jersey has two major port complexes—Port of New York/New Jersey in the New York City area and Delaware River Ports in the Philadelphia area.

The Port Authority of New York and New Jersey controls the major airports in the New York City area (including Newark Airport in NJ), the toll bridges and tunnels, the PATH transit system, the World Trade Center and port facilities in the greater New York City and northern New Jersey area. The port facilities are operated by the Port Commerce Department, a division of the authority and are one of the largest complexes of docks and wharves in the U.S. The port handles about 5 million containers per year as well as 32 million tons of general cargo and 54 million tons of bulk cargo. The Port Authority of NY/NJ is financially self sufficient. It receives no tax dollars from the State of NY or the State of NJ nor does it have any taxing authority. Its revenue stream comes from fees and charges at its facilities. It has an overall budget of over \$2 million annually. The port operation generates \$220 million in revenues annually and has an operating budget of \$136 million. The excess revenue generated goes toward capital construction but with an annual capital program exceeding \$200 million it has to be subsidized from other authority revenues. As with other authorities which control both ports and airports, the airports generate considerable excess cash that can be used to pay for non-airport improvements. The Delaware River Port Authority (DRPA) is the major port planning agencies in the Philadelphia/South New Jersey region. They own and operate the toll bridges across the Delaware River, the PATCO transit system, and the Philadelphia Cruise Terminal. They are a bi-state independent public authority. They have also historically been a lead agency in planning and promoting the regional consolidation of the various ports in the greater Philadelphia area. DRPA built and operated a major intermodal rail facility (Ameriport) on the Philadelphia side of the river in the early 1990s. It proved to be a considerable financial drain on the DRPA and they ceased operations in 2006 and leased the facility to the Norfolk Southern Railroad. At present DRPA has no port facilities or operations other than the cruise terminal. Similar to the NY/NJ Port Authority, DRPA is also financially self sufficient without state tax revenues from either Pennsylvania or New Jersey.

The South Jersey Port Corporation (SJPC) is an independent public corporation that owns and operates port facilities on the New Jersey side of the Delaware River. They have berths and warehouses in Camden and Salem. They handle approximately 2.5 million tons of cargo annually. Their Beckett St Terminal is the largest U.S. importer of plywood with over 400,000 tons per year. The Del Monte Fruit Terminal handles over 600,000 tons annually of fruits and vegetables. The Corporation is presently planning a major new general cargo facility at Paulsboro, NJ which is 13 miles downriver from Camden. The City of Paulsboro has purchased the 40 acre site and SJPC will be the developer and operator. SJPC has dedicated \$14 million in recent bond proceeds for the planning and design phase which includes a considerable amount of environmental studies. The construction cost of the project is \$324 million for which no funding source has been identified.

STATE FUNDING: New Jersey does not have specific funding programs for ports as their two major port complexes are both self sufficient entities. The New Jersey Department of Transportation has a Marine Resources unit. This unit is responsible for maritime planning and policy for the state and coordinating statewide activities in the maritime area. Their major work in recent years has been dedicated to dredging issue, particularly spoil disposal which has historically been a critical problem in the NE U.S. due to contaminated spoil materials. The State of New Jersey has acted as the local sponsor

on some Corps of Engineers dredging projects supplying the matching funds. The Marine Resource Unit has also conducted studies in inland freight distribution and recreational boating. The New Jersey Maritime Pilots and Docking Commission is the state organization that licenses and trains pilots as well as approves pilot rates and investigates incidents. They have authority over any pilot operating within the waters of the state.

Some additional discussion of the port situation in the greater Philadelphia/Camden area is worthwhile. For many years the operation of various port facilities on the Delaware River by separate entities has caused confusion and at times unhealthy competition between terminals directly across the river from each other but in separate states. Over the past 25 years there have been several attempts to consolidate all of the port operations on the Delaware River into a single owner/operator port authority. Since this consolidation involves two states, several cities and at least 3 different public agencies, it is easy to see how it has been very hard to accomplish. The latest attempt was made in the early 1990s. Legislation was passed in the States of New Jersey and Pennsylvania as well as the U.S. Congress to give the DRPA authority over all port facilities in the greater Philadelphia area. Several additional approvals in each state were required to fully implement this consolidation. That has not happened as of 2009. Today the Philadelphia Regional Port Authority operates facilities on the Pennsylvania side of the river; the South Jersey Port Corporation operates facilities on the New Jersey side of the river; and the DRPA operates the cruise terminal which is on the Pennsylvania side of the river.

CONTACTS: NJ DOT, Office of Marine Resources—609-530-4770
Delaware River Port Authority—215-218-3750
South Jersey Port Corporation—856-757-4927
Port of NY/NJ—212-435-4299

STATE OF NEW YORK

PORTS: The state of New York has 5 major cargo ports—Port of NY/NJ, Port of Albany, Port of Buffalo, Port of Ogdensburg, and the Port of Oswego.

The Port Authority of NY/NJ controls the major airports in the New York City area, the toll bridges and tunnels, the PATH transit system, the World Trade Center and the port facilities in the greater New York City area, both in New York and New Jersey. The port facilities are operated by the Port Commerce Department, a division of the authority. It is one of the largest complexes of docks and wharves in the U.S. The port handles about 5 million containers per year as well as 32 million tons of general cargo and 54 million tons of bulk cargo. The Port Authority of NY/NY is financially self sufficient. It receives no tax dollars from the State of New York or the State of New Jersey nor does it have taxing authority. Its revenue stream comes mostly from fees and charges at its facilities. It has an overall annual budget of over \$2 billion. The port operation generates \$220 million annually in revenues and has an operating budget of \$136 million. The excess revenue goes toward capital construction but with an annual capital program of over \$200 million, it has to be cross subsidized from other authority revenues. As with similar authorities elsewhere, the airports generate most of the excess cash; in this case

over \$800 million in net operating cash (offset by \$500 million in capital much of which is covered by federal grants). Overall the Authority received \$846 million in grants in 2008 mostly from federal sources (aviation and transit).

The Port of Albany is a unit of government of the City of Albany. It is an inland port on the Hudson River with two wharves, four sheds, a grain elevator and a liquid bulk storage facility. They handle about 700,000 tons of cargo annually with grain, scrap iron, salt, steel and wood pulp as commodities. They have received state grants for capital projects in the past. In 2000, they received a \$750,000 state grant rail access improvements. The funds were 60% grant and 40% zero interest loan. Additionally the port received an \$806,000 grant from the U.S. Department of Commerce toward the purchase of a crane that costs \$2.5 million. Recently, the City of Albany floated a \$4 million bond to redevelop the downtown waterfront for recreation. The port is responsible for the debt payments. The port received a federal grant in 2005 to pay the principal payment on the loan for that year.

The Port of Buffalo is owned and operated by Gateway Metroport, an independent public entity. The port has 7 berths and 27 feet of depth. They handle mostly bulk cargo of coke and stone with some general cargo of lumber and steel. The annual volume in 2008 was 565,000 tons. Additionally several port related facilities outside the downtown port area are owned and managed by the Niagara Frontier Transportation Authority which operates the transit system and other transportation facilities in the greater Buffalo area. Most of these facilities are warehouses or former production facilities that have been vacated. There was no indication that the Port of Buffalo has received any state funds in recent years.

The Port of Ogdensburg is owned and operated by the Ogdensburg Bridge and Port Authority. It is an independent and self supporting public entity. The port has one 1200 foot berth with 27 feet of water. It handles about 160,000 tons annually made up of generators, zinc, corn and dry bulk. There is no indication of receipt of any state funds in recent years. Interestingly, the port was started in the 1950s with a loan from the State of NY for \$22,000,000. It is to be repaid from excess revenues from bridge tolls and port services. For the port, it means every dollar over \$250,000 earned in revenues goes back to the state. Evidently this has not worked too well for the state as the port still owes over \$19,000,000 through 2008.

The Port of Oswego is operated by the Port of Oswego Authority an independent public entity. They handle over 1 million tons annually of aluminum, fertilizers, salt and cement. They have several berths plus 160,000 s.f. covered space for bulk and 400,000 s.f. covered space for general cargo.

STATE FUNDING: The State of New York has provided grants and loans periodically to various ports. Based on the vast differences between the terms of the loans and grants to different ports, it appears that each circumstance is weighed by the legislature on a case by case basis. No ongoing program to support port activity was found in a review of the state's budget and its transportation capital spending. Additionally, the state is facing serious budget shortfalls (over \$6 billion) in 2010. It has raised numerous taxes in fees in effort to cover the shortfall including a 2% surcharge on incomes over \$500,000; a 1% surcharge on incomes over \$200,000; a 50% increase in vehicle registration and licensing fees and numerous other increases in fees and nuisance taxes.

CONTACTS: Port of Buffalo—716-826-7310
Port of Albany—518-463-8763
Port of NY/NJ—212-435-4299

STATE OF NORTH CAROLINA

PORTS: The state of North Carolina has two major ports—Port of Wilmington and Port of Morehead City. Both ports are owned and operated by the North Carolina State Ports Authority a part of the State of North Carolina government. Although they operate with an independent board, the board itself has the state Secretary of Commerce as a voting member. All of the funding for the two ports comes from operating revenues, bonds and periodic grants from the state.

The Port of Morehead City handled almost 2 million tons of cargo in 2008 with the vast majority being bulk cargoes.

The Port of Wilmington handles over 3 million tons of cargo annually. About 40% of their business is containers and 40% is bulk cargo with the remaining 10% being break bulk cargo. The port has a 42 foot deep channel and facilities for both general cargo and containers. The port also operates inland terminals at Greenville and Charlotte.

STATE FUNDING: The North Carolina Ports Authority is a part of the state government of North Carolina although they operated by independent board appointed by the governor and members of the state legislature. The authority pays for its operating expenses from its operating revenues but the state supplies periodic grants for capital construction. In 2007, the state granted \$7.5 million to the authority for expansion and improvement of port facilities.

CONTACTS: NC Ports Authority—910-763-1621

STATE OF OHIO

PORTS: The State of Ohio has 30 active ports. There are several large ports on Lake Erie and numerous inland ports mostly on the Ohio River. State law allows any unit of local government to form a port authority. Port Authorities are usually economic development entities with broad powers and a variety of functions including airports, business parks and ports. They have bonding authority and taxing authority.

STATE FUNDING: The State of Ohio has an Ohio Port Authority Council that is managed out of the Ohio Department of Development. This organization has representatives of ports and various state departments. They evaluate proposals from port authorities for assistance in capital construction. They oversee an Enterprise Bond Fund and a State Infrastructure Bank.

CONTACTS: Columbiana Port Authority—330-386-9051

STATE OF OREGON

PORTS: The State of Oregon has 23 public ports—9 on the Columbia River and 14 on the Pacific Coast. The Port of Portland is the largest port. Ports in Oregon are usually port districts with taxing authority. They are economic development entities that often own other types of facilities in addition to ports.

STATE FUNDING: The State of Oregon provides several programs to support the development of ports. These programs are administered by the Oregon Business Development Division. There is a Marine Navigation Improvement Fund that gives grants and loans to pay the non-federal share of channel dredging projects. There is a Port Planning and Marketing Fund that gives grants to assist ports in planning and marketing of their facilities. There is a Port Revolving Loan Fund for planning and construction of port infrastructure. There is also a Special Public Works Fund that has grants and loans to municipally owned facilities including ports.

CONTACTS: Portland Port Authority—503-944-7013

STATE OF PENNSYLVANIA

PORTS: The State of Pennsylvania has three major port complexes—the Port of Philadelphia, the Port of Pittsburgh and the Port of Erie.

The Port of Philadelphia and all the public port facilities on the Pennsylvania side of the Delaware River in the greater Philadelphia area are owned and operated by the Philadelphia Regional Port Authority (PRPA). PRPA was formed as an independent agency of the State of Pennsylvania in 1990. The state of Pennsylvania purchased all of the major maritime facilities in the area (mostly from the City of Philadelphia) and turned them over to the newly created PRPA. PRPA has been charged with operating and improving these assets. Annual cargo volumes are 250,000 containers and 5,300,000 tons of general cargo. Commodities include steel, paper, lumber and perishable goods. The PRPA is heavily subsidized by the State of Pennsylvania for both its operations and capital improvements. In 2008, the PRPA had an operating cash loss of \$9 million before direct state grants of \$9 million offset the loss. Additionally the state granted almost \$40 million to PRPA for capital improvements. In 2008, the Governor of Pennsylvania pledge \$300 million to the PRPA over the next several years to upgrade the port's facilities. It should also be noted that the Delaware River Port Authority (DRPA) also owns and operates the Philadelphia Cruise Ship Terminal in Philadelphia and for a brief time owned and operated the intermodal yard (Ameriport) in Philadelphia before determining it was a financial loser and leasing it out to the Norfolk Southern Railroad.

The Port of Pittsburgh is operated by the Pittsburgh Port Commission (PPC) which is an independent agency of the state. The PPC has jurisdiction over 200 miles of navigable waterways in a 28 county area of SW Pennsylvania. The facilities within their jurisdiction (public and private) handled 38,000,000 tons of cargo in 2008. Although this is a 40% decrease in tonnage from 10 years earlier

(mostly due to downturn in coal shipments), it still makes PPC the 2nd largest inland port in the U.S. PPC is also heavily subsidized by the State of Pennsylvania. They receive an annual appropriation from Penn Ports (a unit within the State Department of Community and Economic Development) that covers the majority of their operations. PPC provides small grants to local governments and non-profits to promote economic development and recreation development. They also administer a revolving loan fund for private maritime businesses. PPC is also a conduit for private activity bonds backed private company revenues from the improvement being bonded. A major emphasis of PPC is to promote the improvements to the lock and dam system of the waterways in SW Pennsylvania. In this regard, they assisted in the lobbying efforts to receive stimulus money for these type projects and the Corps of Engineers was granted \$84 million of such funds for improvements to locks in the Pittsburgh area.

The Port of Erie is owned and operated by the Erie-Western Pennsylvania Port Authority (EWPPA), an independent public entity. EWPPA owns and operates ports facilities and local transit in the greater Erie area. They also develop and lease significant amounts of commercial and recreational properties on the Lake Erie waterfront. In recent years a very large part of the formerly cargo waterfront has been turned into condos, parks, entertainment and other kinds of private development. EWPPA periodically receives grant funds from the state. Most recently they were given a \$2,000,000 grant to assist in the improvements to a dry-dock and shipyard. They do not receive direct operating grants from the state like Philadelphia and Pittsburgh.

STATE FUNDING: The State of Pennsylvania has been heavily involved in both capital improvements funding and operating assistance funding for ports for the past 20 years. In 1989, the state received an Economic Report outlining the need for the state to take a leadership role in port development as the port systems in Philadelphia and Pittsburgh were struggling. In 1990, the State created the Office of Penn Ports, a one person office within the Department of Community and Economic Development to be the leader in planning, coordinating and funding a major state effort in ports. PennPorts was originally under the state DOT but was moved as it was in continual conflict with the allocation of funds for highways. It was determined that as a catalyst for jobs creation, it better fit into the Department of Community and Economic Development. The state also created the Philadelphia Regional Port Authority in Philadelphia and the Pittsburgh Port Commission in Pittsburgh. Each was an independent unit of state government but with direct financial reliance on the state. In Philadelphia, the state purchased all the public port facilities and placed them in the new authority. In both Philadelphia and Pittsburgh, the state provided both operating and capital subsidies and has been doing so for almost 20 years. Although the subsidies are subject to an annual appropriation which has varied from year to year, neither port could effectively operate without them. PennPorts also administers a revolving fund for low interest loans for private marine terminal improvements. Additionally the state has given periodic grants through its Department of Community and Economic Development and its Department of General Services. A detailed review of the past state budgets would be required to accurately determine the level of state investment. However, just looking at recent levels of support, it could easily be a total state investment of over \$1-2 billion dollars over the past 20 years.

CONTACTS: Port of Pittsburgh—412-201-7335
Port of Erie—814-455-7557 x222
Port of Philadelphia—215-426-2600
Penn Ports—717-720-7335

STATE OF RHODE ISLAND

PORTS: There are two major commercial ports in Rhode Island—Providence and Davisville and a number of smaller harbors that concentrate on recreational boating.

The Port of Providence is owned by the City of Providence but entirely leased to a private non-profit called ProvPort, Inc. This entity is wholly owned by Waterson Terminal Services and they provide the terminaling and stevedoring services at the port facilities. The port has 6 berths, three of which have 35 feet of depth, and 105 acres of land including 300,000 s.f. of covered storage. The port's major commodities are stone, fuel oil, salt, break bulk and other dry bulks. The port's recent capital projects have been funded with their own excess operating revenues. At present they are seeking funds of \$30,000,000 from the State of Rhode Island for major capital improvements.

The Port of Davisville is a part of the Quonset Development Corporation (QDC). QDC is a subsidiary of the Rhode Island Development Corporation which is a part of Rhode Island state government. QDC was formed to purchase and manage the former military base at Quonset Point (3160 acres). It now encompasses a large business park, an airport and the Port of Davisville. The port has two 1200 foot piers with 29 feet of depth plus 14 acres of storage and 120,000 of covered storage. They are a major handler of import automobiles, presently #5 in the U.S. in that commodity. Volkswagen is their major customer having relocated from Wilmington, Delaware. QDC, including the port, has been funded for capital needs by a state bond issue totaling \$48,000,000 that is a general obligation bond of the state.

STATE FUNDING: Rhode Island has funded capital improvements for ports on a case by case basis. They funded the acquisition and development of the Port of Davisville as part of a large economic development project for the entire Quonset Business Park. The state legislature recently formed a legislative commission to study the economic potential of Rhode Island ports as a way to improve a stagnant economy in the state. The commission came about after a 2008 study by the University of Rhode Island on the potential of economic growth by ports was presented to the legislature. The commission is presently touring the state's ports and gathering information. The Port of Providence presented a \$30 million capital program to the commission as their needs. There have been previous efforts in Rhode Island to improve ports which have failed. When Quonset Point was purchased, there was a push to create a major container terminal. This was championed by the then Governor Almond in 2000-2002. When Governor Carcieri took office in 2003, he killed the proposal and has since continued to reiterate his opposition. He has proposed a deepwater wind project as an alternative for the site.

CONTACTS: Port of Davisville—401-278-9237
ProvPort—401-461-9900

STATE OF SOUTH CAROLINA

PORTS: The State of South Carolina has two ports—Port of Charleston and Port of Georgetown.

The Port of Charleston is a major container terminal complex on the U.S. east coast. In 2008 they handled 1.7 million containers.

The Port of Georgetown is a smaller port that handles mostly forest products.

STATE FUNDING: Both ports in South Carolina are owned and operated by the South Carolina Ports Authority (SCPA). SCPA is an entity of the state and operates as an independent public entity of the state. They are controlled by a board appointed by the governor. SPCA does not receive any operating or capital funds from the state. Its capital program is funded through bonds supported by its own operating revenues. The authority generates over \$50 million in excess operating revenues annually.

CONTACTS: South Carolina Ports Authority—843-577-8115

STATE OF TENNESSEE

PORTS: Tennessee has 3 operating ports and 1 developing port. The Mississippi River, Tennessee River and Cumberland River are the 3 waterways that are navigable.

The Port of Memphis is the largest of the ports and is the 4th largest inland port in the country. The International port of Memphis is a bi-state entity operating on both sides of the Mississippi River (Arkansas and Tennessee). It is a shallow draft port that handles grain, liquid bulk, and general cargo.

There are also shallow draft ports in the Chattanooga and Nashville areas

STATE FUNDING: At the present time there are no loans or grant programs in Tennessee state government for ports. In 2008, a report was prepared by Hanson Consultants that recommends a series of state actions aimed at assisting ports. The report's recommendations have not been implemented to date.

CONTACTS: Port of Memphis—901-948-4422

STATE OF TEXAS

PORTS: The State of Texas has 12 ports on the Gulf of Mexico and its tributaries. The largest port complex is the Port of Houston. Other ports include Beaumont, Brownsville, Corpus Christi,

Freeport, Galveston, Harlingen, Orange, Port Arthur, Port Isabel, Port Lavaca-Point Comfort and Victoria.

The ports of Texas extend along the coast from Louisiana to the boarder with Mexico and handle a wide variety of import and export cargoes. The ports of Texas are navigation districts with the authority to impose ad valorem taxes.

The Port of Houston which is owned and operated by the Port of Houston Authority of Harris County is the largest U.S. port for foreign waterborne commerce due in large measure to oil imports. The port complex handles more than 225 million tons of cargo annually with over 8,000 vessel calls.

STATE FUNDING: The Texas legislature in 2001 enacted legislation which provided for the Funding of Port Security, Projects and Studies. As a part of that legislation a Port Authority Advisory Committee, Port Access Account Fund and Capital Program were created. The Port Authority Advisory Committee which is composed of 7 port representatives, who review and approve requests for capital funding. Approved projects are then submitted to the Texas Transportation Commission for final approval. Although the Texas Port Advisory Committee has met biannually since 2001 and has routinely prepared a 2 year projection of funding needs for Texas ports, no funds have been appropriated by the Texas legislature since the inception of the program.

CONTACTS: Port of Freeport--800-362-5743

THE STATE OF VIRGINIA

PORTS: The State of Virginia has two major cargo ports—The Virginia Port Authority (Norfolk, Portsmouth, Newport News) and the Port of Richmond.

The Virginia Port Authority (VPA) is a unit of government within the State of Virginia. Although they operate independent of the state, they rely on a biannual appropriation of the state legislature to supplement their operating and capital budget. VPA was formed in 1952 to own and operate three major port complexes at the mouth of the James River. Norfolk International Terminal, Portsmouth Marine Terminal and Newport News Marine Terminal are the three major facilities of the port. While the port handles a variety of cargos such as coal, cocoa beans and break-bulk, it is primarily known as one of the largest container terminal handlers in the U.S. VPA handles over 2,000,000 containers annually and has been growing at a brisk pace for over 25 years. VPA has assets totaling almost \$1 billion. Their annual operating budget is approximately \$70 million and their annual capital program is approximately \$65 million. The structure of the authority is rather unique in the U.S. port industry. In 1982, VPA created a private not for profit corporation, Virginia International Terminals (VIT), to operate all of its facilities. VIT is controlled by VPA as it appoints all of its board members and approves its annual budget. VIT remits its annual operating profits back to VPA. As a private corporation VIT can perform many functions that VIT is unable to do under Virginia law. As an example they can enter into labor agreements with the International Longshoreman's Association; they can pay key staff personnel wages and benefits that are competitive with large corporations; and they can avoid the Virginia open records laws which

allows them to keep confidential their contracts with major customers. The budget process for VPA is closely tied to the state. VPA prepares a projected budget for the following two years and submits it to the state Department of Planning and Budget and it is incorporated in the Governor's budget. After approval by the state legislature and the governor, the funds then are available to VPA in their normal budget cycle. In 2008, VPA's total revenue was composed 42% from VIT net revenues, 4% from VPA revenues, 2% from interest income, 21% from the state budget, 12% from other state sources, 5% from the federal government and 14% transfers from internal capital accounts. The state's overall allocation to VPA in 2008 was \$36 million directly from the state budget. On a strict operations basis the authority covers its expenses and generates net positive income. The state funds allow the authority to pursue an aggressive annual capital program. Funds were also received from other state agencies through the state's general fund rail for activities conducted by the port on behalf of those agencies. These funds amounted to a net of \$5 million to the VPA. This rail relocation project which benefited both local as well as VPA interests was funded by a \$50 million general fund grant from the state.

The Port of Richmond is owned by the City of Richmond and is primarily container on barge port supporting the Norfolk area terminals. The port has a 1500 foot berth with 25 feet depth of water and 121 acres of storage. The port receives periodic grants from the city and is eligible to receive periodic grants from the state.

STATE FUNDING: The State of Virginia dedicates 4.2% of its Transportation Trust Fund annual revenues to a Port Fund. This revenue comes primarily from a combination of a portion of the state sales tax and various motor vehicle fuel and related taxes. The fund generates approximately \$36 million annually. Almost all of this money goes to the Virginia Port Authority and can be used for both operating and capital costs. It appears that the Port of Richmond could also receive grants from this fund but that is unclear without further investigation. The annual allocation to VPA is based on their submission of an annual budget to the state. It appears that VPA has been requesting the total allocation of all Port Funds in recent years. This is due mostly to an extensive capital improvement program at the port.

CONTACTS: Virginia Port Authority---757-622-2639
Port of Richmond—804-646-2020
Virginia Dept of Planning & Budget---804-786-7455

STATE OF WASHINGTON

PORTS: The State of Washington has 75 port districts including 11 deep draft ports. Ports are located on Puget Sound, the Pacific Ocean and the Columbia/Snake River system. The largest ports are the Port of Seattle and the Port of Tacoma. Together those two ports form one of the largest port complexes in the country handling 8% of all U.S. exports and 6% of all U.S. imports. The ports in Washington are all in port districts governed by elected commissioners and are independent of cities and counties. All of the port districts have taxing authority under state law.

STATE FUNDING: The State of Washington provides no capital or operating grants to port

districts. As each district has its own taxing authority they are capable of issuing municipal bonds or providing special assessments to cover the cost of infrastructure improvements.

CONTACTS: Washington Ports Association—360-943-0760

STATE OF WISCONSIN

PORTS: The State of Wisconsin has 23 ports on Lake Superior, Lake Michigan and the Mississippi river.

STATE FUNDING: The State of Wisconsin has a Harbor Assistance Program to maintain and improve waterborne commerce in the state. The state provides grants for up to 80 percent of the costs for dock reconstruction, dredging and mooring structures. The projects must be a public or privately owned harbor facility, pass a rigorous cost benefit analysis, and have been identified in a current 3 year Harbor Development Plan. Project selection is based on economic impact, urgency of project and priority within a plan. There is a council of state and federal reps that recommends projects to the Wisconsin Department of Transportation for funding. Recent grants have included \$2 million for a new dock wall in the City of Manitowoc and \$1 million to the City of Milwaukee for a ferry dock.

CONTACTS: Wisconsin DOT—608-267-9319

APPENDIX B—SUMMARY OF STATE PORT OWNERSHIP/GRANTS

<u>STATE</u>	<u>OWNS PORTS</u>	<u>PROVIDES GRANTS</u>	<u>FORMAL PROGRAM</u>	<u>TYPICAL GRANT \$</u>
MAINE	NO	YES	NO	\$500,000
N.H.	YES	NO	NO	NONE
MASS.	NO	YES	YES	\$2,000,000
R.I.	YES	YES	NO	\$48,000,000*
CONN.	NO	YES	NO	NONE
N.Y.	NO	YES	NO	\$750,000
N.J.	NO	NO	NO	NONE
PENN.	NO**	YES	YES	\$50,000,000
DEL.	YES	YES	NO	\$2,000,000***
MD.	YES	YES	NO	\$125,000,000
VA.	YES	YES	YES	\$36,000,000
N.C.	YES	YES	NO	\$7,500,000***
S.C.	YES	NO	NO	NONE
GA.	YES	YES	NO	NONE RECENTLY
FLA.	NO	YES	YES	\$25,000,000
AL.	YES	YES	NO	\$10,000,000***
MISS.	YES	YES	YES	\$750,000
TX.	NO	YES	YES	NONE FUNDED
CAL.	NO	NO	YES	LOAN FUNDS
OR.	NO	YES	YES	MANY PROGRAMS
WASH.	NO	YES	YES	NO MAXIMUM
ALASKA	NO	YES	YES	\$5,000,000 MAX
OHIO	NO	YES	YES	MANY PROGRAMS
IND.	YES	NO	NO	NONE
ILL.	NO	YES	YES	LOAN FUNDS
MICH.	NO	YES	YES	PUBLIC-PRIV ONLY
WISC.	NO	YES	YES	MOSTLY DREDGING
MINN.	NO	YES	YES	\$1,500,000
TENN.	NO	YES	YES	PLANNING ONLY
ARK.	NO	YES	YES	NONE FUNDED
MO.	NO	YES	YES	\$400,000

*One time grant for Quonset Industrial Park including port

**Pennsylvania bought the Philadelphia ports facilities and turned them over to the Philadelphia Regional Port Authority

***One time grant

APPENDIX C—SUMMARY OF FUNDING PROGRAMS FOR PORTS

<u>State</u>	<u>Program</u>	<u>Grant/Loan</u>	<u>Fund Source</u>	<u>Max\$</u>	<u>Other</u>
Alabama	None	-----	-----	-----	-----
Florida	FPFC	L	Auto Reg. Fees	No Limit	25-50% Match
Florida	FSTED	G	Transp. Fund	No Limit	50% Match
Florida	Infrastr. Bank	L	Fed/State DOTs	No Limit	Restrictions
Mass.	SAC Grant	G	Gen. Fund Bonds	No Limit	2 nd Tier Ports
Miss.	Multimodal CIP	G	Gen. Fund	\$3.8 Mill	Non-ports too
Miss.	Port Revitalization	L	Gen. Fund	\$750,000	3% & 10 years
Ohio	Enterprise Bonds	L	Liquor Sales	\$10 Mill.	Mostly Priv.
Ohio	Infrastr. Bank Fund	L	Multiple Sources	\$5-10 Mill.	Non-ports too
Ohio	Tax Increment	L	Property Tax	No Limit	Non-ports too
Ohio	Regional Bond Fund	L	Credit Enhance	\$7 Mill.	Port Bonds
Ohio	Job Ready Sites	G	Gen. Fund	\$5 Mill.	Non-ports too
Ohio	Logistics Stimulus	L	State Bonds	\$10 Mill.	Non-ports too
Ohio	Rail Dev. Comm.	G/L	Gen. Funds	No Limit	Rail only
Oregon	Marit. Nav. Fund	G/L	Lottery Funds	No Limit	Ports only
Oregon	Port Plan/Mkt Fund	G	Interest Loan Fund	\$25,000	Ports only
Oregon	Port Revolving Loan	L	Gen. Fund	\$3 Mill.	Ports only
Oregon	Publ. Wks. Fund	G/L	Gen. Fund	\$15 Mill.	Non-ports too
Oregon	Connect Oregon	G/L	Lottery Funds	No Limit	Non-ports too

<u>State</u>	<u>Program</u>	<u>Grant/Loan</u>	<u>Fund Source</u>	<u>Max \$</u>	<u>Other</u>
Penn.	Penn Ports	G/L	Gen. Funds	No Limit	Varies
Texas	Port Capital Prog.	G	Not Funded	-----	Not Funded
Va.	Va. Port Fund	G	4.2% Transp \$	Set Amnt	Direct to VPA
Wash.	Rail Bank	L	Gen. Fund	\$250,000	Rail only
Wash.	Freight Rail Asst.	G/L	Gen. Fund	No Limit	Rail Only
Wash.	Strat. Inv. Bd.	G	GF/Auto Fees	No Limit	Non-ports too
Wash.	Transp. Imp. Bd.	G	3 ct gas tax	No Limit	Road Access
Wash.	Co. Econ. Rev.	G	Gen. Fund	No Limit	Non-ports too
Wash.	Recr/Conserv.	G	Gen. Fund	No Limit	Water Access

APPENDIX D--SOURCES OF STATE FUNDS FOR PORTS

Alabama—General Fund Revenues
Alaska---Watercraft Fuel Tax; Fisheries Business Tax
Arkansas—No Funds
California---General Fund Revenues; Recreational Vessels Fuel Tax; Vessel
Registration Fees
Connecticut—General Fund Revenues
Delaware---General Fund Revenues
Florida---Motor Vehicle Registration Fees; Transportation Revenues
Georgia---General Fund Revenues
Illinois---General Fund Revenues
Indiana---No Funds
Maine---General Fund Revenues; Federal Stimulus Funds
Maryland---Transportation Trust Fund Revenues
Massachusetts---General Fund Revenues
Michigan---No Funds
Minnesota---General Fund Revenues
Mississippi---General Fund Revenues; Transportation Revenues
Missouri---Transportation Revenues
New Hampshire---No Funds
New Jersey---Transportation Revenues
New York---General Fund Revenues
North Carolina---General Fund Revenues
Ohio---General Fund Revenues; Transportation Funds
Oregon---General Fund Revenues; Lottery Revenues; Transportation Revenues
Pennsylvania---General Fund Revenues
Rhode Island---General Fund Revenues
South Carolina---No Funds
Tennessee---No Funds
Texas---No Funds
Virginia---Transportation Trust Fund Revenues
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Wisconsin---Transportation Revenues

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www.arkansashighways.com, Arkansas Highway and Transportation Department
4. California

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5. Connecticut
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www.portofbridgeport.com, Port of Bridgeport
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www.dot.state.fl.us, Florida Department of Transportation
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8. Georgia
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www.commerce.state.il.us, Illinois Department of Commerce and Economic Opportunity
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www.portsofindiana.com, Ports of Indiana
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team expresses our sincere gratitude for the assistance provided by these particular individuals:

- Smitty Thorne, Executive Vice President, Alabama State Port Authority
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- Donna Nichols, Director of Finance and Administration, Port of Coos Bay
- A.J. "Pete" Reixach, Jr., Executive Port Director, Port of Freeport
- Hillary Hunt and Sean Egan, Port of Tacoma
- Elizabeth Morrison, Port of Seattle



FIVE-YEAR PORTS AND MARITIME PLAN

MARITIME ADVISORY TASK FORCE

December 8, 2009

BATON ROUGE, LOUISIANA

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 - d. Agenda of October 28, 2009 Task Force meeting
 - e. Recommendations Matrix
 - f. Louisiana Maritime Transportation System Report
 - g. BRAC and GNO, Inc. Trade Study
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**EXECUTIVE DEPARTMENT
THE MARITIME ADVISORY TASK FORCE**

December 8, 2009

The Honorable Bobby Jindal
Governor
State of Louisiana
Post Office Box 94004
Baton Rouge, Louisiana 70804-9004

Dear Governor Jindal:

I am pleased to present the attached Maritime Advisory Task Force Report for 2009 for your review and consideration. Your insightful choice of Task Force members comprising all aspects of the maritime industry has allowed us to provide you a clear, concise, and comprehensive set of recommendations spanning the next five years. These recommendations, taken as a whole, will greatly improve the future of Louisiana's maritime economy, create jobs for our citizens, and improve our competitive position in global commerce.

Key features of your Task Force's recommendations are:

- an initial focus on structural and organizational changes to facilitate a comprehensive five year plan
- a plan that requires no immediate outlay of state tax dollars but addresses development of a continuing, sustainable funding mechanism
- an integrated approach to the development of all aspects of our maritime economy such that we prosper as a whole (jobs, infrastructure, industry, transportation, and global presence)

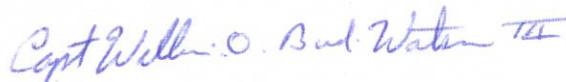
In looking to 2010 and beyond, your Task Force needs to flesh out the overall integrated concept and provide a detailed plan of action for each of the recommendations. We need to include an understanding of all modes of transportation that depend on waterborne commerce as a source or destination. Most of all, we need to stay firmly focused on your tasking to provide you with a plan to enhance the competitiveness of Louisiana's maritime industry in national and international markets while benefiting the general population of the State.

The Honorable Bobby Jindal
December 8, 2009
Page 2

We ask for your considered approval of our concept and active support and assistance in further development of what should become the basis for your plan for the economic future of Louisiana as a world class maritime complex.

Thank you for the opportunity to contribute to the growth and prosperity of Louisiana. We look forward to continuing that contribution as your Maritime Advisory Task Force.

Very truly yours,



Captain William O. (Bud) Watson III
Chairman

WOWIII/lbs
Attachment

Governor's Maritime Advisory Task Force 2010 – 2015 Ports and Maritime Plan

The history of Louisiana begins with its waterways. The State's economy, culture, and character are all shaped by the influence of the Gulf of Mexico, Mississippi River, and the thousands of miles of coast and waterways.

The Governor's Maritime Advisory Task Force, having studied the broadest, most current data, observations, findings and recommendations in the past 5 years, make five (5) recommendations that constitute a 5-year ports and maritime plan. Among many recommendations made by the Maritime Advisory Task Force, we determined that the five presented in this document are the highest, most achievable priorities.

Conceptually, these recommendations are simple, but if implemented, we believe their impact to be profound. Some recommendations are more administrative than programmatic, and therefore cost the State very little if anything at all.

Other recommendations will likely require State investment; however, the Task Force is highly sensitive to the current, and sometimes persistent, financial challenges facing the State. Recommendations associated with some investment are offered with the expectation that any investment will achieve a lasting, impactful return.

The Maritime Advisory Task Force will hold hearings on each of the recommendations in 2010 and shall revisit them annually. Hearings will also be held on all other recommendations as well as any timely issue that arises periodically.

Finally, the Task Force notes that the terms "vision," "strategy" and "plan" are frequently invoked but rarely described in the reports we studied. Often it is suggested in the numerous studies and reports that the State of Louisiana needs a maritime "vision" or "strategy" or "plan" without attempting to describe what these things mean or what a State vision, strategy or plan should look like or how it should be conceived.

We, too, invoke these terms, but we do so recognizing that, first, we have attempted to outline a 5-step path forward that will necessarily require continued vetting, scrutiny, and shaping. Like a dynamic ports and maritime economy, this living document will likewise be dynamic.

Second, because the State leadership is so influential and important to the maritime economy, a State strategy requires buy-in from our State leaders. In the future, as in the past and present, recommendations will be made to improve our economy, and they will be vetted. But unless a vision and strategy are adopted at the highest State levels, the status quo will prevail, and our economic competitors will take the field. The Maritime Advisory Task Force can and will make the absolute best recommendations we can, but ultimately direction will necessarily emanate from State government leadership.

I. Create a dedicated long-term funding source for incentivizing maritime development through private/public partnerships.

The main source of ports and maritime capital is the Louisiana Port Construction and Development Priority Program, popularly known as the Port Priority Program. The program can be characterized as successful and well-managed; however, the program's funding levels, combined with sporadic contributions from other funding sources, are sometimes random and oftentimes unpredictable.

The randomness reflects the resourcefulness of the ports and local communities to rise to the challenge, but it occurs in a relative vacuum of State strategy and direction. Reliable, full funding is necessary and is most compatible with a state strategy.

The Port Priority Program was created in 1989 to increase the State's participation in port infrastructure construction and to foster economic development. Port projects are assessed for program eligibility then prioritized for funding based on the number of jobs created and the size of non-State contributions to the project. Port authorities are required to pay no less than 10% of construction costs and the private sector is encouraged to maximize their investment in candidate projects.

Annual budgets for the program have widely varied throughout its existence and have occasionally been augmented by surplus and Capital Outlay funds. Annual Port Priority Program budgets have recently trended toward \$20 million.

Funding for the program is provided by the Transportation Trust Fund. According to the 16th Annual Report on the program, as of March 2009 \$472,799,692 had been allocated, which has allowed funding for 174 projects. Of the allocation, \$281 million in State funds have been spent for port infrastructure development.

In a December 2009 analysis sponsored by the Ports Association of Louisiana (PAL), in the period of 2004-2008, Louisiana ports spent \$567,587,992 on capital projects, which is an increase of \$112,542,309, or 24.7%, over the previous survey period.

This increase was significantly influenced by three very large projects in two ports. Overall state funding was \$147,873,880. This was an increase of \$7,187,649 or 5.1% and was greatly influenced by a single Louisiana Economic Development grant of \$15,000,000 for one port project.

Port Priority funds increased by \$5,113,405 or 5.3%, and Capital Outlay Funds decreased by \$13,350,778 or 32.9%. Overall federal funding was \$67,177,519, which was an increase of \$6,244,867 or 220.7%. This increase was influenced by a single \$43 million port project.

Port generated revenues were \$348,071,747. This was an increase of \$54,644,947 or 18.6%.

State funds accounted for 26.8% of construction costs. Federal funds accounted for 11.8%. Port generated funds accounted for 61.3%.

Of particular interest is the wide variety of funding sources used by Louisiana ports other than Port Priority and Capital Outlay. Sources included Louisiana Economic Development grants, State Flood

Control grants, local municipal funds, USDA grants, U.S. Department of Commerce grants, U.S. Coast Guard grants, Federal Transit Administration grants, Homeland Security grants, Delta Regional Authority grants, Red River Waterway grants, FEMA grants and private sector investments.

The average port matching share for port priority projects in the largest ports was 52.3%.

The average port matching share for all projects was 48.4% despite many smaller ports utilizing higher matching rates of 10-20%.

Key observations based on PAL's latest survey include the decline of Capital Outlay Funds as a major funding source for ports, the larger matching shares for port priority funds used by larger ports and the downturn in the use of bond funds by ports. The survey showed very effective use of port priority for small and medium size projects (under \$10 million) and less effective use on larger projects.

The Maritime Advisory Task Force observes this data as further evidence that ports and maritime funding is random and unpredictable. It also suggests the absence of a comprehensive Louisiana ports and maritime vision and strategy.

The Task Force recognizes that with regard to Louisiana's port system, the return on public and private investment has greatly benefitted the State's economy.

Numerous reports studied by the Task Force, some of which are included in the Appendix of the 5-year plan, demonstrate that 1 in 7 Louisiana jobs are waterway dependent, and that direct impacts from waterway-related employment generate \$3.8 billion in earnings, \$22 billion in output, and approximately 13% in State GDP. Notably, the maritime industry contributes nearly \$2 billion in tax revenue from direct, indirect, and induced sources.

Historically, ports have generated approximately 60% of the investment capital to develop port infrastructure, but they are rapidly reaching the limits of their financing capacity.

Moreover, the federal government faces significant financial challenges fulfilling its maintenance dredging and channel deepening roles in all Louisiana waterways. The effect of this decline in service greatly compromises the State's port system to maximize its capabilities.

While federal funding does not directly configure into the concept of dedicated, long-term funding, it is relevant to the pressures and obstacles inhibiting dynamic ports and maritime development, which is exacerbated by random, unpredictable, and directionless State funding.

The Task Force notes that the ports and maritime system faces considerable demand in terms of capital improvements and projected system volume. The potential for such growth signals an opportunity for significant economic development or a trap to preserve the status quo.

The Ports Association of Louisiana's 2007 five-year capital improvement plan identified \$820 million in port and port-related infrastructure investment requirements. The Department of Transportation and Development's 2007 Marine Transportation System Report identifies hundreds of millions of dollars in necessary waterway infrastructure maintenance and

improvements. The Port of New Orleans 2020 Master Plan includes \$1 billion in capital improvements.

Most analyses reviewed by the Task Force project that in addition to the increasing trade flow between Latin America and the U.S. Gulf region, international trade will dramatically increase with the expansion of the Panama Canal.

Analyses featured in the Appendix assert that Louisiana waterborne cargo is expected to grow 40.1% from 2005 to 2030. Domestic cargo sector will grow 33.5% by 2030 and foreign cargo sector will grow 57.6% by 2030.

Latin America accounts for approximately 141 million metric tons of all cargo moving through Gulf regional ports. This volume is expected to grow until 2015 at an annual rate of 6.64% for exports and 7.75% for imports.

Upon completion of the Panama Canal expansion in 2014, traffic is expected to grow at a compounded annual rate of 4%, of which 12% is expected to flow to and from the Gulf.

Louisiana already accounts for 20% of the national waterborne commerce. Louisiana ports also account for 20% of national imports and exports of petroleum products and 53% of national exports of grains and cereals.

Indeed, Louisiana's ports system already plays a significant role in maritime commerce, and potentially stands to gain from growing trade. Yet, in the face of growing demand and system volume, the Ports Association of Louisiana asserts that State port authorities are reaching the limits of what they can finance for port development.

Meanwhile, regional competing ports are concentrating their resources to accept the challenge of higher Gulf growth. Their spending patterns are based on larger vision and strategy, targeting significant investments in infrastructure in general and container facilities in particular. For example, since 2001 the State of Alabama and the Port of Houston have invested more than \$500 million and \$400 million respectively in port infrastructure. The Port of Tampa's Master Plan plots \$1.3 billion in investment by 2027.

The Maritime Advisory Task Force recognizes the current financial constraints binding the State's ability to provide all services to all constituencies, including ports and maritime. However, the maritime economy produces jobs and can produce more. We believe it necessary for the State leadership to work with its maritime industry partners to identify funding and financing opportunities that address the capital and operating needs of ports and waterway users, that create new jobs and economic growth, and which recognize the financial wherewithal of the State. We should encourage additional federal investments in Louisiana's waterway system that benefits all Americans, and we should encourage additional private investment, recognizing that the public sector is limited in its capabilities, but likewise recognizing that a thriving, job-creating, economically viable maritime economy relies on access to capital, public or private.

The Task Force could declare categorically that a Port Priority Program annually capitalized at \$50 million a year would dramatically strengthen Louisiana's position in the global maritime

economy. Such funding would maximize efficient, productive port development and create thousands of water-related jobs. We believe it could minimize extracurricular Capital Outlay port line-items, and mitigate the need for massive one-time port investments. Of this we are confident.

However, we concede that the State has not expressed a preference for this approach. Accordingly, recognizing the irrefutable influence of State government on Louisiana's ports and maritime economy, it is imperative for State leaders to explore ways to develop additional state funding sources.

In addition to the Maritime Advisory Task Force's efforts, the Joint Subcommittee on Ports, Airports, and Freight of the Joint Committee on Transportation, Highways, and Public Works, the House Committee on Ways and Means and the Senate Committee on Revenue and Fiscal Affairs are likewise exploring new opportunities for funding for all modes of transportation and freight movement in the State. Their conclusions will not be published until January 2010. It is possible this committee might have discovered the best, most achievable means by which to fund and finance maritime.

The Ports Association of Louisiana has likewise recently investigated this subject by conducting a thorough analysis of funding and financing programs and concepts in states across the country. As of this writing, their report is not yet published. Here, too, may be opportunities worth exploring.

The Maritime Advisory Task Force will explore this topic thoroughly in 2010 with the objective to present options for the Administration and Legislature's consideration. Options presented to the Administration and Legislature should be considered best practices that might require customizing to suit the unique needs and circumstances of Louisiana. We expect that such options will reflect the best, most current thinking of industry practitioners and should be considered a representation of Louisiana's maritime zeitgeist. Therefore, we further recommend that the Administration and Legislature entertain specific funding suggestions with an attitude of cooperation and collaboration and with the objective to implement the best policies to promote our maritime economy.

II. Centralize the maritime industry development, marketing, and incentive functions to include port priority funding under a single fully staffed office within the LED. It should be the “one-stop-shop” for maritime issues at the State level. The office must have strong ties with DOTD, and other State Departments. The staff must be prepared and empowered to coordinate the State’s maritime vision and provide services and advocacy to industry.

Louisiana’s maritime economy is a multi-modal enterprise, relying mainly on waterways to carry freight while depending on rail and trucking to support the system. Because of its reliance on transportation, oversight of the maritime industry has traditionally been housed at the Department of Transportation and Development (DOTD). This department is charged with building, operating, maintaining, and regulating the State’s transportation system, ranging from highway development to modest rail and aviation support.

DOTD can be credited for administering the popular, though oversubscribed, Port Priority Program, which is the only exclusive State funding source for ports and maritime development. The department can also be credited as the non-federal partner for most civil works and navigation projects on the State’s waterways. The department’s experience and capabilities with regard to waterway system construction, operations and maintenance are unrivaled in State government.

Yet, the maritime economy is best described as a commercial enterprise that relies on transportation. It is not, per se, a mode of transportation any more than, say, Wal-Mart’s retail distribution system. Similarly, ports are not modes of transportation but rather nodes of transportation commerce.

The State’s ports, which are subdivisions of State government, are the primary marketers of the State’s waterways and maritime economy. The ports collaborate with the various maritime stakeholder groups to recruit customers, tenants, and users of the State’s waterways. Ports market State incentives, promote the advantages of State resources, and negotiate leases and business agreements with these firms. In a sense, the ports are more economic developers than they are transportation custodians and their docks and warehouses are more akin to industrial parks than they are “modes” of transportation.

Ports share more in common with chambers of commerce and economic development organizations than they do with transportation management organizations like transit and highway authorities.

As the lead agency for economic development, Louisiana Economic Development (LED) possesses many of the qualities and expertise compatible with the economic development nature of ports and the maritime economy. To wit,

- LED’s Office of Business Development and its Industry Directors have marketing and outreach capabilities to promote Louisiana’s maritime economy and engage waterway users.
- LED’s Office of Business Intelligence has data collection and analysis capabilities to monitor and study trends in the maritime economy.

- LED's Louisiana FastStart demonstrates workforce development capabilities, though the Louisiana Workforce Development Commission would be expected to assume leadership in this regard.
- LED is the newly charged agency responsible for administering the port tax credits program for cargo and infrastructure, and therefore has a direct interest in ports and maritime development.
- LED does business grant making and financing, and has past experience in administering a Port Development Program.
- LED maintains a portfolio of discretionary and statutory incentives and programs to expand, retain and recruit business in Louisiana. Such businesses are often port tenants and waterway users.

Ports are transfer points for goods to and from other modes of transportation. Considerable value is created when ports host or are near warehouses, distribution, and manufacturing centers. Manufacturing centers create even greater value by demanding feedstock and supplying products that require port access. The ports and maritime economy will benefit from such value-added business. Louisiana's waterways need to attract, retain and grow more users. LED is designed to expand, retain and recruit these users of Louisiana's waterways.

Again to entertain the notion that the maritime economy is a mode of transportation and more appropriately characterized as a commercial enterprise that relies on transportation, it is therefore logical to represent the interests of growing this vital sector of Louisiana's economy in the agency best equipped to support it as such instead of viewing it mainly as a transportation system.

The Maritime Advisory Task Force notes that there are more than 30 port authorities in the State of Louisiana, all of whom must necessarily concentrate on localized, parochial concerns involving their specific port. Indeed, if ports are economic development agencies, their duty is to optimize their facilities to promote the local, and sometimes regional, economy.

Ports are not, however, engineered to consider themselves as part of a holistic system designed to contribute to the greater good of the economy. They are no more expected to suboptimize their business than, say, a small business sacrificing its business plans for the greater good of the local economy.

The result, however, is a balkanized ports and maritime system that is dynamic, fortunately, but not strategic. Again, it is not necessarily the role of the individual port to think in these terms, but it is worth considering that the performance and success of the relatively random collection of Louisiana's thirty-plus ports could be maximized were they to be organized strategically toward some greater goal.

The Task Force is not suggesting port consolidation, which is more a discussion of governance than economic development. Rather, the Task Force agrees that within the context of a comprehensive State ports and maritime vision and strategy, all Louisiana ports will function more coherently, collaboratively, and for the greater benefit of Louisiana's maritime economy.

Because of the State's considerable importance to and influence with the maritime economy, such a strategy is best established and implemented at the State leadership level. The best place for this to happen is Louisiana Economic Development.

III. Direct LED, with the participation of representative members of the maritime industry, to develop an ongoing, comprehensive, coordinated, and integrated marketing plan directed at foreign, domestic, and local interests in product and logistics that emphasizes what a world class Louisiana commerce portal can do for them.

IV. Strongly pursue the deepening of the navigation channel of the Mississippi River ultimately to an internationally competitive depth of 55 feet using federal funds (since the river is a national commerce thoroughfare). This will allow the State to initiate coordinated private/public projects to capitalize on the improved commerce potential.

Taken together, Recommendations III and IV state the importance of a statewide maritime marketing plan and suggest a logical initiative from which to launch it.

Stated simply, Louisiana is a major player in North America's maritime economy. Our strength is in bulk and break-bulk cargo, which is expected to grow.

There is a predominance of non-containerized commodities at the ports of the Lower Mississippi River and Calcasieu Ship Channel as these waterways create a logistical advantage for bulk and break-bulk cargo. Opportunities for carriers to trade inbound and outbound bulk and break-bulk enhance Louisiana's attractiveness to shippers.

As previously noted, Louisiana accounts for 20% of the national waterborne commerce. The State's port system claims 20% of national imports and exports of petroleum products and 53% of national exports of grains and cereals, all of which are considered bulk and break-bulk.

Louisiana's combined port system handles nearly 500 million tons of annual cargo, 227 million of which is foreign trade. The vast majority of this trade occurs in Louisiana's deepwater ports.

Moreover, trade to and from the State is expected to grow 40.1% from 2005 to 2030. Louisiana's domestic cargo sector will grow 33.5% by 2030 and foreign cargo sector will grow 57.6% by 2030.

Trade volume in the Gulf of Mexico is growing rapidly and expected to grow dramatically upon completion of expansion efforts to widen the Panama Canal. The Task Force observes that opportunities currently exist to maximize existing bulk and break-bulk capacity in the Louisiana port system that play to our natural strengths while potentially opening doors to new, impactful markets.

For example, trade with Latin America and Mexico represents a sizable opportunity with approximately 141 million metric tons of all cargo moving through Gulf regional ports, which is largely driven by non-containerized trade.

Latin America's growth in trade has exceeded that of Asia, Western Europe and North America in recent years and is forecasted to grow until 2015 at an annual rate of 6.64% for exports and 7.75% for imports.

The top 5 commodities for Latin American non-containerized imports and exports present an opportunity for trade growth. They are,

- Cereals
- Food industry residues & waste; prep animal feed
- Oil seeds, miscellaneous grain, seed, fruit
- Animal or vegetable fats, oils, waxes
- Iron and steel

There has been a gradual shift to containers for some key commodities including rubber, food oils, and chemicals.

The top 5 commodities for Latin American containerized imports and exports present an opportunity for trade growth. They are,

- Plastics and articles thereof
- Paper and paperboard
- Cotton (yarn and woven fabrics)
- Nuclear reactors, boilers and machinery
- Wood pulp

Though not specifically a recommendation, the Task Force believes it worth considering that by deepening the channels for our deepwater ports, Louisiana potentially invites larger bulk and break-bulk vessels to move greater volumes of cargo through the State. Considering the trend (not industry standard, but *trend*) of possibly containerizing traditionally bulk and break-bulk products, an opportunity emerges to create new container-related jobs from a bulk and break-bulk dynamic. Growing markets like Latin America become more promising. And niche industry models like container-on-barge become more feasible.

Moreover, Louisiana's inland river system is a key driver of state maritime competitiveness because of low cost transport options for regional and Midwest commodities. In other words, greater bulk and break-bulk trades in Louisiana's deepwater ports present trade opportunities for the inland waterways.

The Task Force notes that the Panama Canal is scheduled to expand in 2014, accommodating larger vessels that require 50 feet or more of draft. The Task Force recognizes that there is consensus that Louisiana is not expected to enjoy the same percentage of container growth as our competitor ports in the Gulf, but accommodation for larger vessels will itself create incentives for shippers to use deepwater ports. While container shipping is not necessarily a State objective, Louisiana can broaden our dominant position in bulk and break-bulk by dredging for larger vessels.

Dredging to 55-foot draft will help maintain our strong position in bulk and break-bulk. Considering that Panama Canal expansion will lead to considerably larger volume in the Gulf, 55-foot draft can lead to new, “blue ocean” opportunities in container-on-barge and containerized bulk commodities.

The Task Force is mindful that 55-foot draft should be viewed primarily as a benefit to the State’s bulk and break-bulk strengths; however, we are equally mindful that by bolstering our current competitive position, Louisiana is in a better position to leverage new, fruitful opportunities in the maritime economy.

V. Direct the Louisiana Workforce Commission and the Department of Education to work directly with LED to incentivize training and education programs specifically designed to provide a skilled maritime workforce ranging from deckhands to management that is constantly in demand in the State.

Existing Louisiana maritime businesses and those new or outside businesses seeking to locate here find it difficult to identify and attract local workers with even the basic maritime skills necessary to work in the industry. The US Coast Guard licensing requirements demand a higher educational threshold and increased certified training in unique skills well beyond the traditional easy entry to the profession of years past. Additionally, the requirement for at least some college education in order to be eligible for the higher paying jobs in maritime professions is becoming common place. There is a paucity of state supported high school vocational programs and post-high school training programs for maritime jobs of any kind at any level in Louisiana.

It is becoming increasingly difficult to attract local maritime workers. Businesses are being forced to look for qualified workers from outside Louisiana. These workers do not re-locate. Instead, they take advantage of the traditional practice of working several consecutive weeks aboard a vessel with commensurate weeks off to commute to their out-of-state residence. Louisiana does not benefit from these jobs to the degree it should were the workers trained, skilled, local residents.

Programs are needed to educate, train, recruit and retain high school graduates. Out-of-state colleges, and neighboring state-sponsored training and vo-tec programs are the major suppliers of the maritime workforce working but not living in Louisiana. Training a maritime workforce to boost our economy and bolster our tax base is critical. It is equally critical to develop a significant, compelling marketing program to new and outside businesses that includes the provision of a trained workforce as part of an overall attraction program.

The State has already elevated workforce development as a top priority. The Maritime Advisory Task Force observes that there are opportunities in which to collaborate with the State. For example,

- Integrate workforce development and social support programs across agencies to provide one-door service for businesses and seekers.
- Strengthen the role of community and technical colleges in maritime workforce development.
- Quickly improve the ability to address workforce shortages in high-demand maritime occupations.
- Improve the capacity to respond to new business or expansion opportunities with customized workforce solutions.
- Create a demand-driven system that ties workforce development to business and industry needs.
- Ensure that the voices of ports and the maritime industry are heard and the needs are understood.

February 2009
FTP 020209

Ports Association of Louisiana Strategic Economic Development Plan

Summary Report



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SUMMARY REPORT
(Final Draft)

PORTS ASSOCIATION OF LOUISIANA
Strategic Economic Development Plan

prepared
for the

PORTS ASSOCIATION of LOUISIANA

in concert with the

U. S. Department of Commerce Economic Development Administration

Louisiana Economic Development
Stephen Moret, Secretary

Louisiana Department of Transportation and Development
William Ankner, Secretary

February 2009

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Partial List of Acronyms and Definitions

- AGMAC:** Acadiana to the Gulf of Mexico Access Channel
- CAGR:** compound annual growth rate
- CIP:** Capital Improvement Plan
- Compensatory:** revenues are sufficient to cover all operating and capital costs
- DNR:** Louisiana Department of Natural Resources
- DOL:** Louisiana Department of Labor
- DOTD:** the Louisiana Department of Transportation and Development
- GIWW:** Gulf Intracoastal Waterway
- Global Insight:** a macroeconomic forecasting firm and member of the SEDP consulting team responsible for providing macroeconomic analyses and trade forecast data to support the preparation of the SEDP
- Gulf Coast States:** Texas, Louisiana, Mississippi and Alabama
- LED:** Louisiana Department of Economic Development
- LPMPA:** same as PMPA
- LNG:** Liquefied Natural Gas
- O & G:** Oil and Gas industry
- PMPA:** Louisiana Ports and Maritime Policy Authority
- POL:** Ports of Louisiana, i.e. the public ports system
- PAL:** Ports Association of Louisiana
- SEDP:** Ports Association of Louisiana Strategic Economic Development Plan
- STIP:** State Transportation Improvement Plan
- Stakeholders:** any organization or entity with an investment in or commitment to Louisiana's ports.
- SWOT:** Strengths, Weaknesses, Opportunities and Threats
- The State:** the governing authority of the State of Louisiana
- Tons:** short tons of 2,000 pounds
- TWIC:** Transportation Worker Identification Card
- USACE:** United States Army Corps of Engineers

1.0 INTRODUCTION—Background and Strategic Economic Development Plan Process

1.1 The Ports Association of Louisiana—PAL

The Louisiana public ports system is comprised of 35 public authorities with wide ranging charters. These charters regulate the planning, design, development, operation, and management of port



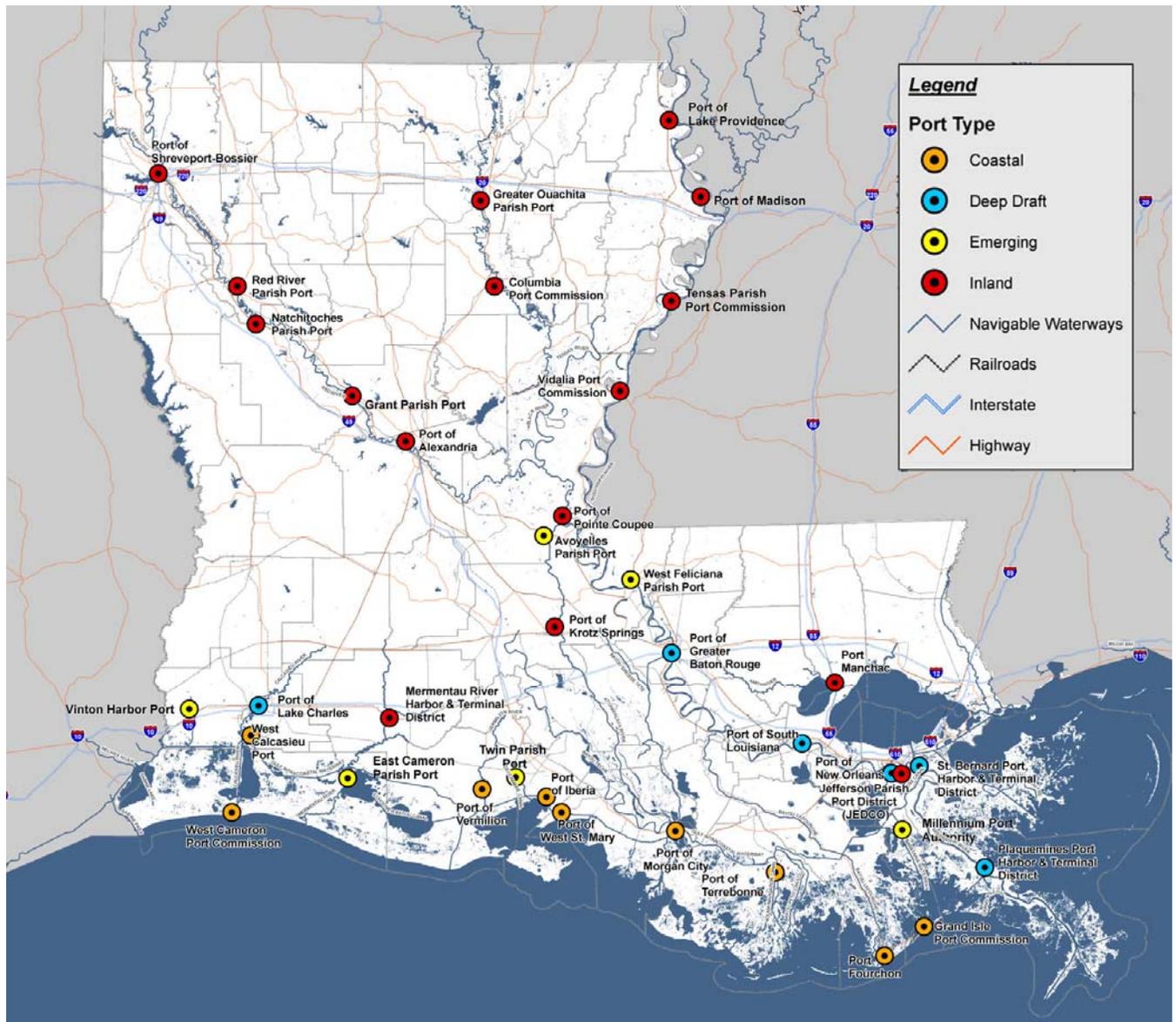
facilities, related infrastructure, and services across the state as more than half of the state’s parishes have navigable waterways within their respective borders.

As an association of virtually all active ports, the Ports Association of Louisiana (PAL) was founded in 1984 to aid in the advancement of Louisiana ports. PAL is a non-profit trade association representing voluntary member ports and affiliated organizations which helps to encourage economic development within the state of Louisiana. Its mission is to represent the collective interests of Louisiana’s ports before the state and U. S. governments and regulatory agencies and authorities. A map of the state depicting the public ports is shown on the following page.

Because of the broad array of geographical conditions and maritime services offered by the many ports in Louisiana, ports and port related information was categorized into the following interest groups: deep-draft, coastal, and inland. In general terms, the deep-draft ports focus on freight movements with national and international connotations. The coastal ports concentrate on the oil and gas (O&G) service industries, shipbuilding, and O&G fabrication. The inland ports service local markets relative to cargo movement, manufacturing, and related service industries. All of these port groups create jobs and promote economic development for the state. Recent studies, including the *Louisiana Marine Transportation System Plan*, indicate that one in seven jobs in the state is waterways dependent.

Another group of ports included in the study are the state’s emerging ports—those with enabling legislation but not yet developed or otherwise operational. A listing of the state’s public ports classified as noted above is also shown on the state map on the following page.

Public Ports of Louisiana



PORTS OF LOUISIANA			
Coastal	Deep-draft	Inland	Emerging
Port Fourchon	Port of Lake Charles	Port of Shreveport-Bossier	Avoyelles Parish Port
Port of Terrebonne	Plaquemines Port	Red River Parish Port	West Feliciana Parish Port
Port of Morgan City	Port of St. Bernard	Natchitoches Parish Port	Vinton Harbor Port
Port of West St. Mary	Port of New Orleans	Port of Alexandria	Port of Tensas Parish
Port of Iberia	Port of South Louisiana	Port of Lake Providence	East Cameron Parish Port
Port of Vermilion	Port of Greater B. R.	Port of Madison	Port of Vidalia
Port of Mermentau		Jefferson Parish Port (JEDCO)	Grant Parish Port
West Calcasieu Port		Port of Krotz Springs	Grand Isle Port
West Cameron Port		Port of Columbia	
		Greater Ouachita Parish Port	
		Port of Pointe Coupee	
		Twin Parish Port	
		Port of Manchac	

1.2 *Strategic Economic Development Plan (SEDP) Background*

In 2007, PAL and its member ports prepared its first statewide port *Five-year (2007-2011) Capital Improvement Plan (CIP)* for the ports system. The purpose of the CIP was to collectively prepare an inventory of the port owned and port infrastructure related capital investment requirements of the state. These improvements include but are not limited to the following:

- Marine terminals and related infrastructure
- Road and rail connections
- Waterways and channel (deepening, maintenance) requirements

The result was an \$820 million dollar program the scope and total cost of which presented several challenges for PAL, the ports, and the State of Louisiana. For example, by way of scope, the breadth of projects extended well beyond traditional port investment projects, e.g., industrial parks. Additionally, the \$820 million in projects significantly exceeded the capital investment resources of the ports and annual state funding programs. Furthermore, the initial magnitude of projects submitted by ports constituted a need of over \$2 billion. Many of those additional projects were not included in the CIP as the criteria for incorporating projects dictated that a certain point in the concept-to-design process had to have been reached.

Also, since the five-year plan represented a comprehensive inventory of capital programs, no priorities were established, i.e., every project was of equal importance.

The magnitude of these challenges necessitated that PAL and the ports establish a consensus on capital investment priorities and associated projects, something that was acceptable not only to the ports themselves, but also to the state's departments of Transportation and Development and (DOTD) and Economic Development (LED) as well as the legislature.

As a result, the state's ports, through PAL, initiated a strategic planning process to develop consensus on the long-term strategic priorities for the public ports system. The objective was to initialize the development of a single roadmap that set strategic priorities and the future direction of the public ports system as a whole by addressing the following approach:

- Assessing the competitive positioning of Louisiana's public ports
- Identifying current and emerging market opportunities potentially available to the public ports system: cargo, passengers, businesses, employment, etc.
- Setting business and investment priorities
- Establishing a significant, sustainable source of capital funding for the ports system

1.3 *The Strategic Economic Development Plan for Louisiana's Public Port System—Approach and Methodology*

Though comprehensive, the scope of the project focused on a single integrated plan for the public port authorities within the state of Louisiana. It was based on an immediate time horizon of the next 10 years with particular emphasis on the next five years, while considering two decades and beyond.

The initial SEDP goal was to develop an action-oriented plan for the ports as a whole that defines strategic priorities and the actions required to successfully pursue defined those priorities. The plan is to be used to develop a consensus view among the public ports, the governor, applicable state departments, and the legislature as well as the maritime community regarding the value, role, priorities, and needs of the public ports system.

1.4 *The SEDP Planning Process*

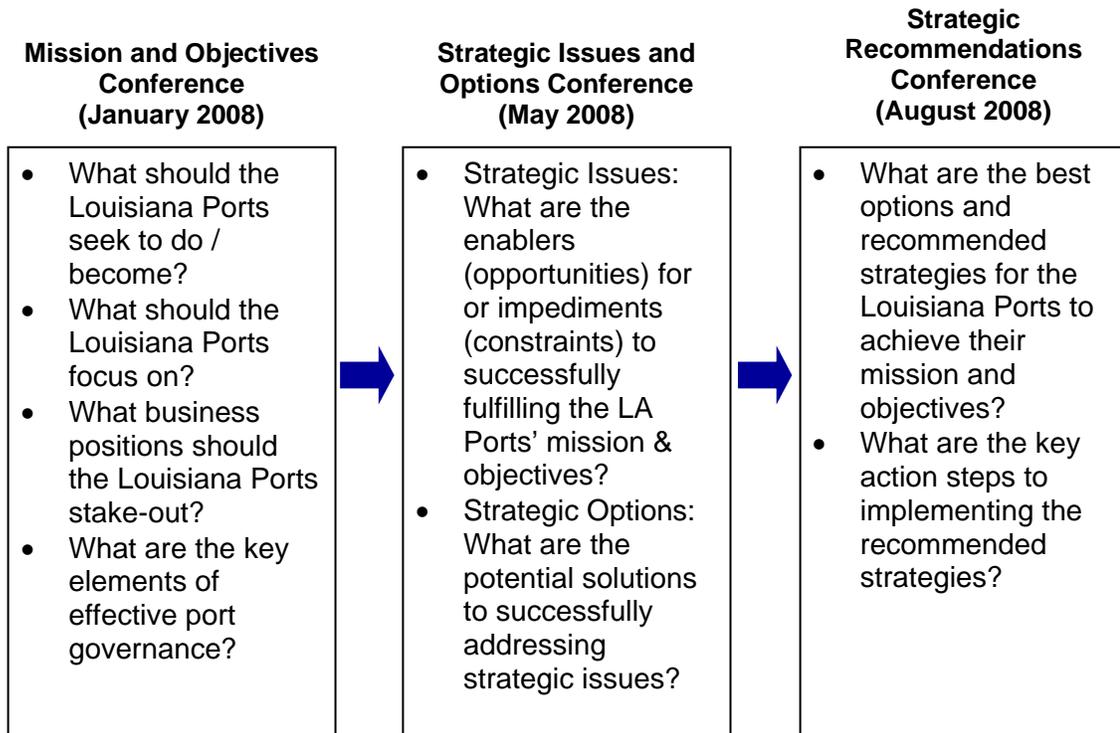
The 12-month process required extensive data collection and analysis and included but is not limited to the following:

- An extensive review of literature that included national reporting, plans from other state's ports, and plans from Louisiana ports as well as the following State documents: *Louisiana Transportation System Plan* (2003) with emphasis on freight movements, *Vision 20/20* (as updated), and the *DOTD Marine Transportation System Plan* (2007)
- International, domestic, and local market assessment data
- Current conditions in the state and of the state's ports, waterways, and intermodal connectivity (A 14-page survey was distributed to all of the state's ports, the results of which were tallied and presented to PAL along with the complete original submittals from each port.)
- Current conditions assessment of the Gulf Coast, domestic, and international marketplaces
- An evaluation of competitors and Louisiana's competitiveness (inland, coastal, Gulf Coast, East Coast, and West Coast)
- The identification of freight movement futures as a function of national and international trends with emphasis on waterborne cargo as well as rail and highway movements
- An in-depth SWOT analysis—strengths, weaknesses, opportunities, and threats—contributed by port directors and a comprehensive list of stakeholders

The year long process included primary and secondary research and analysis and an extensive participatory process summarized as listed below:

- Kickoff meeting and three planning sessions attended by port directors
- Initial stakeholder briefing (approximately 100 attendees)
- Seven industry focus group sessions throughout the state
- Briefings with the Secretaries of the Louisiana Department of Transportation and Development and Louisiana Economic Development as well as the Governor’s Office.

The three planning conferences developed consensus positions among the public ports on strategic imperatives following the approach defined below.



The noted stakeholder and focus group meetings reflected a conscientious effort to include industry, shippers, and carriers in the SEDP process. As an extensive outreach effort, PAL members and consultant staff traveled the state, met with port-related industry representatives, and collected information in face-to-face meetings. Input from the focus group sessions was incorporated in the analyses and presented and discussed at the planning conferences. This process is abstracted below.

- An industry and government stakeholder briefing was held in Baton Rouge at the start of the project. The stakeholders list included representatives of port and waterway users as well as federal, state, and local agencies and representatives that govern waterborne and related commerce. The stakeholders list is attached as Appendix A of the Strategic Economic Development Plan's *Working Papers* section included in the final report presentation.
- Seven industry focus group sessions were held.
 - Two deep draft port industry stakeholder focus group sessions
 - Two coastal port industry stakeholder focus group sessions
 - One inland port industry stakeholder focus group session
 - One west Louisiana industry stakeholder focus group session
 - One final statewide industry stakeholder focus group session held in New Orleans

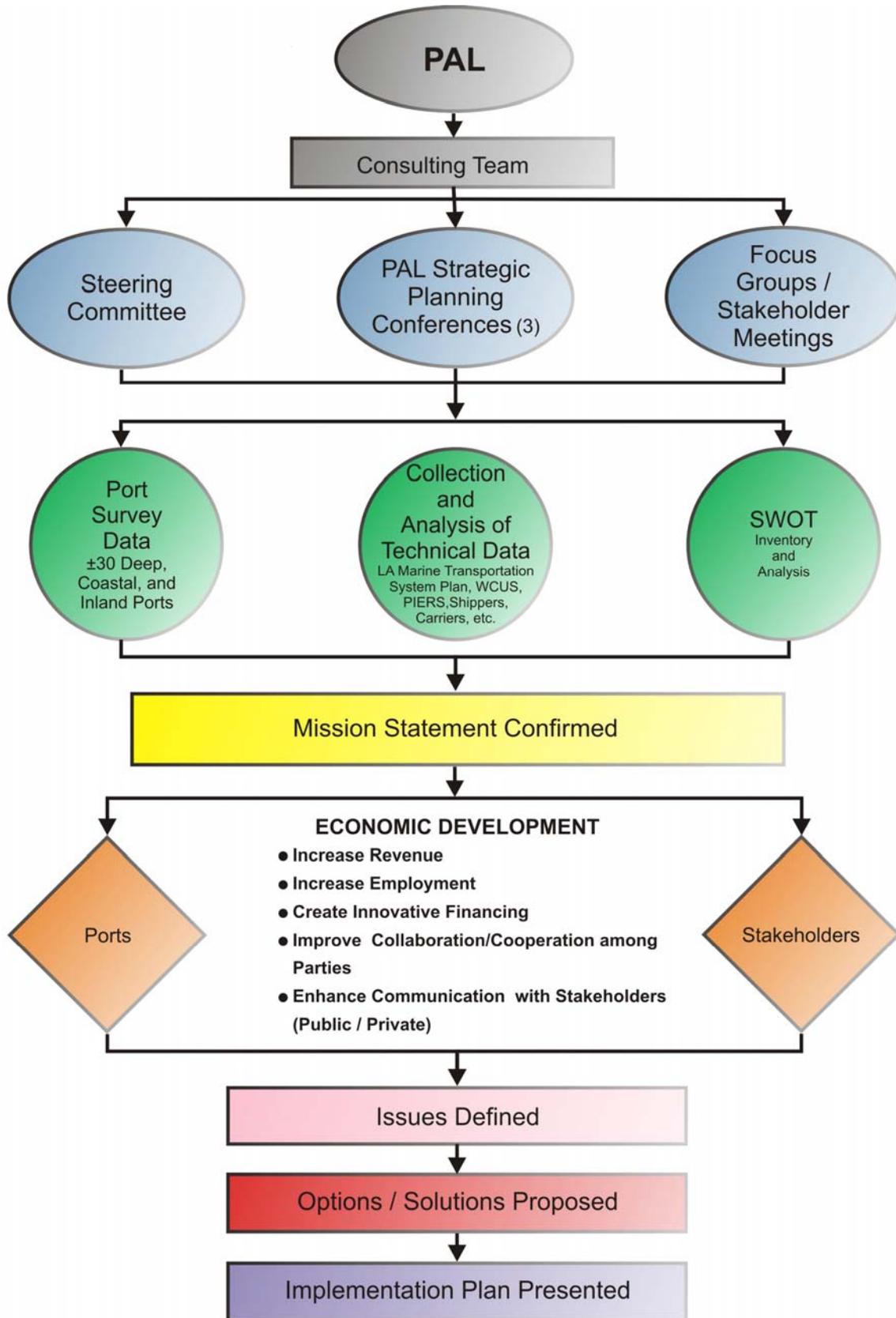
An abstract graphic highlighting the components and flow of the planning process is offered on the next page. The organization structure (PAL, consultants, steering committee, stakeholders, etc.), approach, and process are depicted.

1.5 *SEDP Report Summary Presentation—Recommended SEDP*

This summary document is presented as an abbreviated version of the full project working papers. The remaining portions of this presentation are organized in sections as listed below:

- **Data Collection and Analysis—Key findings: markets and competition**—an overview of marine cargo, shipbuilding, and oil and gas-related markets and opportunities followed by a competitive assessment of the state of Louisiana and its ports relative to other Gulf Coast port systems
- **SEDP Mission and Objectives**—consensus mission, objectives, etc.
- **Strategic Issues and Options**—strategic issues developed during the planning conferences and range of options addressed
- **Strategic Recommendations**—conclusions selected by PAL and discussed with DOTD and LED secretaries and staff
- **Implementation**—the consensus strategies and actions plans the ports of Louisiana will pursue to fulfill their mission and objectives and successfully address the strategic issues

The Ports Association of Louisiana (PAL) has final responsibility for accepting and implementing the SEDP recommendations.



2.0 DATA COLLECTION AND ANALYSIS—KEY FINDINGS

2.1 Summary Assessment

2.1.1 Louisiana Ports Breakbulk Market Challenges and Opportunities

Challenges	Opportunities
<ul style="list-style-type: none"> • Louisiana ports already have significant shares of the Louisiana and Regional breakbulk markets. Therefore, increasing shares could be a challenge. • The Louisiana and Regional markets are comparatively fragmented in terms of trade lanes and shipping lines. Chartered vessels have the largest share of the market. This somewhat restricts the ability to build carrier commitments. • The core breakbulk markets are commodity driven markets and therefore subject to significant year to year fluctuations. • Long-term viability of inland river infrastructure to support container-on – barge operations requires future state investment in infrastructure and federal investment in waterways and control features. 	<ul style="list-style-type: none"> • General: Future expansion of port and port related economic development depends upon maintaining and expanding Louisiana ports’ existing economies of scale and market share. • State port leadership should seek opportunities to expand the use of the inland river system to expand the market reach of Louisiana’s river-served ports. • Potential carrier targets include <ul style="list-style-type: none"> - Gearbulk - Saga - Oldendorf - Pan Ocean - Toko Line • Potential commodity targets include the following: <ul style="list-style-type: none"> - Additional iron and steel - Forest products - Project cargoes, particularly oil and gas and alternative energy related commodities

2.1.2 *Gulf Coast Dry Bulk Market*

- The dry bulk trades are comparatively low value commodity businesses with growth (or decline) subject to a number of factors beyond the control of ports such as the following:
 - Production costs
 - Exchange rates
 - Foreign trade policies
 - Weather
 - International shipping rates
- The dry bulk trades are controlled to a large degree by major multinational companies which frequently invest in proprietary port facilities.
- The inland river system is a key driver of the competitiveness of the state's ports since it provides the lowest cost transport option for Regional and Midwest bulk commodities. Preserving and enhancing this system is a key to sustaining participation by the ports of Louisiana in the dry bulk cargo trades.
- The collective ability ports of Louisiana to accommodate deep draft bulk carriers (45 - 47 foot drafts) following the opening of the expanded Panama Canal in 2014-2015 (or later as some industry experts suggest) will be a key driver of future growth.
- The opportunity for bulk carriers to trade in inbound bulk or breakbulk cargoes and outbound bulk cargoes enhances the attractiveness of Louisiana to bulk carrier shipping lines.

2.1.3 *Gulf Coast Liquid Bulk Market*

- Crude oil imports have and will continue to drive Gulf Coast liquid bulk trade. LOOP and western Gulf lightening operations have been and will remain key drivers.
- West Gulf refinery expansions should result in increased domestic coastwise shipments of refined petroleum products.
- A majority of Gulf Coast and Louisiana liquid bulk traffic will continue to move via proprietary facilities.
- Colonial Pipeline capacity should be carefully monitored over the next 20+ years. If the pipeline reaches capacity, more waterborne shipments of petroleum products might be required.
- LNG terminals will likely represent a limited opportunity for ports.

2.1.4 Louisiana Ports Container Market Challenges and Opportunities

Challenges

- Comparatively small local market activity limits Louisiana’s ability to attract first port of call inbound Asian services which are key to expanding Louisiana’s reach in the Regional and Midwest markets. Analysis focused on
 - Increased transit times vs. other gateways
 - Reduced economy of scale opportunities
- Competition from Houston, Mobile, the Pacific Coast, and the Atlantic gateways in the Regional and Midwest markets is keen.
- Lack of efficient and intermodal rail connections surrounding New Orleans and intermodal services below New Orleans limits operational efficiency.
- Long-term viability of inland river infrastructure to support container-on-barge operations requires future state investment in infrastructure and federal investment in waterways and control features.
- River transit times and potential for delay is a factor on both the Mississippi and Calcasieu Rivers.
- The potential for overbuilding container capacity resulting in overlapping intrastate competition is a reality (e.g., four MS River container options simultaneously under consideration).
- Lack of statewide focus on port, waterways, and maritime policy indicates a lack of state focus and direction relative to challenges and opportunities.

Opportunities

- The expansion of the Panama Canal will create opportunities for new Asian all-water services that are potentially more competitive than intermodal rail services.
- Louisiana and Regional markets— attracting Asia all-water services to serve the local and regional market place bears statewide focus.
- Midwest Market: Selected, carrier specific opportunities to service the Midwest market via rail should be addressed. That service must be...
 - Dependent upon attracting a first port of call inbound service
 - Dependent upon an efficient port-rail interface
 - Dependent upon competitive rail transit times and rates

2.1.5 Oil and Gas Implications for Louisiana's Coastal Ports

- Oil and gas ports are competitively positioned to support ongoing and expanded oil and gas activity. However, challenges are noteworthy relative to channel depth and assembly area capacity to accommodate new and existing leases expanding west, south, and east. Competition is keen in locations such as Baytown, Texas City, and Ingleside, Texas; Mobile, Alabama; and Pascagoula, Mississippi). Emerging foreign reserves (Brazil, Nigeria, etc.) suggest shipping opportunities as well as a transfer of jobs out of state. Further developing O&G service centers off the Mississippi River at the Gulf and in most southwestern Louisiana is opportune, and regional coordination could be considered if advantageous to the state and locale.



Port Fourchon—O&G service facilities near the Gulf of Mexico in southeast Louisiana

2.1.6 Shipbuilding Industry Implications for Louisiana Ports

- Implications for Louisiana's shipbuilding industry are summarized below:
 - Labor: inadequate supply and skill sets and ability to apply for TWIC
 - Inability to define demand relative to sustaining shipbuilding activity
 - Potential for increasingly stringent implementation of safety and environmental laws (emission controls, etc.) over time
 - Potential opportunities to attract related industries to Louisiana if competitiveness issues can be successfully addressed
 - Channel depth and eroding state and federal infrastructure

2.2 *Competition Summary*

2.2.1 *Louisiana Deep Draft Ports: Advantages and Challenges*

Advantages	Challenges
<ul style="list-style-type: none"> • Channel and berth drafts deeper or comparable to competitors • Diversity of facilities and services • Inland river system connections • Rail connections, particularly CN north-south route • In most cases, availability of developable land • Foreign trade zones • Private facilities and industrial base 	<ul style="list-style-type: none"> • Small local or regional markets • River transit issues: time, potential for fog delays, congestion, risk • Significant interstate port competition and some degree of or potential for intrastate competition • Lack of sufficient capital funding • Significant dependence on bulk commodities which are subject to significant volume volatility • Comparatively small number of major liner and specialty carriers (e.g., WWL, Intermarine, Gearbulk, etc.) • Limited ability to date to create value-added services from the base of existing services is tantamount to economic growth relative to deep water ports and the state as a whole.

2.2.2 *Louisiana Deep Draft Ports: Container Competition*

- Container market opportunities for Louisiana ports are twofold:
 - Expanding their share of Louisiana container traffic
 - Expanding their share of the Regional and potentially gaining some share of the Midwest container market
- The deep draft ports of the state face significant competition in pursuing these potential opportunities
 - Louisiana market: Asian traffic is routed via the West Coast and feeder vessels via Caribbean transshipment ports.
 - Regional market: Asian traffic is routed via the West Coast and Europe traffic is partially routed via the South Atlantic container ports.
 - Competition: The new Mobile container facility is well-positioned (e.g., geographic proximity to the Gulf and marketplace, vessel access, and inland connections) for serving portions of the Regional market. Pacific and Atlantic coast gateways are also well positioned in terms of container shipping line customers, customer commitments, and inland connections.

- Survey respondents indicated that Louisiana rail service leaves much to be desired. Particular emphasis was noted in the New Orleans area where delays are often excessive beyond the Public Belt Railroad as it transitions to the six rail companies. Complaints ranging from to days to weeks were noted.

2.2.3 Louisiana Coastal Ports: Competitive Advantages and Challenges

Advantages	Challenges
<ul style="list-style-type: none"> • Geographic location along central Gulf coast is dominant. • Diversity of facilities and services continue to expand by private sector initiative. • Coastal river system connections (GIWW, upper and lower MS, Red River, Ouachita, etc.) offer continued connectivity. • Long history: Knowledge and workforce has been sustained and distributed worldwide. • In most cases, availability of developable land has been positive; opportunities to create land for industrial and port related use by way of routine dredge disposal is promising. • Private facilities and industrial base are well entrenched. • Opportunities exist to expand manufacturing base because of existing labor skills, services. 	<ul style="list-style-type: none"> • Primary areas of competition are the oil and gas, fabrication, boat/shipbuilding and repair industries • Need for additional channel depth to accommodate deep draft oil and gas units is chronic. • Significant intrastate and interstate port competition is a reality. • Capital funding is limited. • The region, like all of the Gulf Coast, is prone to hurricanes, coastal erosion, and siltation. • The market place is subject to fluctuations in oil and gas activity. • The need to develop a consistent, accurate reporting system for documenting operations and cargo activity as an aid to determine demand requirements for coastal ports is paramount. • Rehab/upgrading of out-dated inland infrastructure and maintaining authorized depths consistently is critical. • Creating diversified value-added services from existing services is tantamount to economic growth relative to ports and otherwise.

2.2.4 Louisiana Inland Ports: Advantages and Challenges

Advantages

- An extensive system of inland ports and waterways throughout the state exists.
- Generally broad charters enable ports to pursue and invest in diverse lines of business and therefore provide the opportunity for relatively small inland ports to serve as major local economic development generators.
- Consistent with their charters, a diversity of facilities and services offers opportunities for value added industries.
- Actual and potential synergies between inland and deepwater ports in moving Louisiana industrial cargoes to and from international markets can be expanded/developed.
- Private facilities and the resulting industrial base form a major component of rural Louisiana's economic climate.
- Interstate port competition is minimized by the localized nature of markets and cargoes.

Challenges

- Maintenance and capital improvement of inland waterways system is a major concern.
 - USACE is facing increasing financial challenges in maintaining and improving waterways and current modus operandi is commonly recognized as being highly inefficient and delay prone.
 - Rapidly aging inland waterways infrastructure (state and federal) continues to worsen.
- Need for deeper channels to achieve scale economies in barge transportation is growing faster than improvements.
- Ports share significant dependence on cyclical, commodity-based industries.
- Potential changes in U.S. inland waterways user charges may affect the competitive positioning (relative cost of using) of individual waterways in general and lower density (traffic volumes) waterways in particular.
- Creating value-added services from existing services is tantamount to economic growth relative to ports and otherwise.
- The philosophy of a port in every parish will be detrimental to existing facilities and will further dilute capital investment resources.

3.0 MISSION AND OBJECTIVES

3.1 Introduction

- Formulating a mission statement and objectives was the first critical steps to developing the SEDP.
- The mission statement defined the purpose of the Strategic Economic Development Plan relative to the state's ports and established consensus of all participants—ports and stakeholders alike.
- The objectives established the metrics for evaluating success in fulfilling the mission relative to each issue defined and developed within the SEDP planning process.
- Collectively, the mission and objectives established the foundation upon which the SEDP was developed by (a) providing the basis for defining strategic issues and options and (b) by providing the basis for defining strategies and developing action plans.

3.2 Mission Statement for the Ports of Louisiana

- The Ports of Louisiana are the public port authorities entrusted with the planning, design, development, management, and operation of the State of Louisiana's (the State) public ports. The Ports' mission is to contribute to the growth of the state's and the nation's economies by providing superior port and port-related facilities and services to meet the diverse needs of port related businesses in the Louisiana and U. S. marketplaces.
- The Ports will fulfill their mission by complying with the following:
 - Expanding Louisiana's port-related market opportunities
 - Collaborating with the State to formulate an effective port policy
 - Securing dedicated, reliable, recurring infrastructure funding
 - Developing a statewide blueprint to guide port development
 - Coordinating and collaborating among ports as well as with DOTD, LED, and DOL

3.3 *Implications for Louisiana Ports*

- **Primary Purpose:** The primary purpose of the ports of Louisiana is economic development, i.e., to contribute to the growth of the local, state, and national economies. Given its economic development focus, ports must work closely with the State (Governor, LED, DOTD, DOL, legislature, etc.) to insure that State and PAL strategies and action plans related to economic development are aligned.
- **Business Focus:** The business focus is to provide superior port and port-related facilities and services to port-related businesses. The business of the ports of Louisiana is clear: port and port related facilities and services. The ports will need to work closely with the State (Governor, LED, DOTD, and DOL in particular) to insure the SEDP is an integral part of the state's overall economic development and transportation strategy with particular emphasis on operationally efficient freight movements.

3.4 *Objectives for Louisiana Ports*

- Increase port revenues by expanding existing lines of business and developing new lines of business
- Increase employment
- Develop a long-term, sustainable source of financing for port infrastructure
- Continuously improve the breadth and depth of cooperation and collaboration among the Louisiana Ports
- Assist in the development of value-added industry as a function of existing port-related enterprises
- Develop and continuously enhance a communications strategy to support the mission of the ports of Louisiana

4.0 STRATEGIC ISSUES AND OPTIONS

Identifying and defining issues and options of the port system of Louisiana was the second critical step in the strategic planning process.

- The *Mission and Objectives* of Louisiana's port system drive the plan.
- *Strategic issues* are the enablers (opportunities) or impediments (constraints) to successfully fulfilling the mission and objectives.
- *Strategic Options* (and resulting action plans) are the potential solutions to successfully addressing strategic issues.
- The *Strategic Plan* codifies the strategic direction of the state's ports, defines the actions the ports and State will take in pursuing this strategic direction, and establishes the metrics (objectives) against which the ports and State will measure success.

4.1 Introduction to Defining Strategic Issues and Options

- Strategic issues, by their definition, drive the planning process. They are opportunities or threats that fundamentally affect an organization's ability to fulfill its mission and reflect consensus view. The hallmarks of a strategic issue include the following:
 1. Involves major uncertainties and risks
 2. Affects the ability of an organization to achieve sustainable competitive advantages
 3. Commands significant resources
 4. Requires the focus of senior management for action and/or implementation
- By successfully addressing strategic issues, the Louisiana ports, as a collective, integrated unit, will fulfill their mission and meet their objectives.
- Strategic options are alternative directions or courses of actions an organization—in this case, the ports of Louisiana—can pursue to successfully address a strategic issue.
- Generic examples of strategic options for growing a business include the following:
 - Improving communication, cooperation, and collaboration
 - Geographic expansion
 - Introducing new products or services
 - Expanding into upstream or downstream businesses
 - Diversifying into new lines of business

- The strategic issues are based on the mission and objectives of the ports of Louisiana, the market and competitive analyses, input from the industry focus groups, and the issues and options conference deliberations
- The strategic options represent a practical range of actions available to the state’s ports based on their mission and objectives, strengths and weaknesses, and the issues and options planning conference deliberations based upon port as well as stakeholder input. The following fundamental precepts were accepted upon entering the collaborative defining of issues and options.
 1. The range of options is not exhaustive. Rather, it represents several practical alternatives along a continuum of options identified by the consulting team and discussed with the ports and stakeholders.
 2. The range of options would be presented and considered as part of the recommended strategies.

As a result of this process, six major issues were identified. These issues are fundamental to all ports of the state and not specific to any. While other major issues surfaced, each is addressed as a subset of the overriding issues. The strategic issues are identified below and summarized in the following section.

ISSUE	DEFINITION
Governance	What is the optimal governance structure enabling the Louisiana ports system to fulfill its statewide mission and achieve the respective objectives?
Workforce Development	What role should the ports of Louisiana play in assuring an adequate supply of appropriately trained labor to meet the needs of Louisiana ports and industries in general?
State and Port Competitiveness	How do the State and ports of Louisiana enhance and sustain the state’s competitiveness in attracting and retaining businesses and people to expand, diversify, and grow the port industry as well as related and value-added industries?
Infrastructure	How do the ports of Louisiana best provide the superior port and port-related facilities required to fulfill their mission <u>and</u> insure that the state's freight transportation infrastructure can adequately support the ports' superior facilities?
Funding	What is the optimal strategy for funding the planning and construction of superior port and port-related facilities in Louisiana?
Container Industry	What is the Louisiana port system’s optimal role in the future North American and Gulf Coast container industries <u>and</u> how do the State and ports fulfill this role?

5.0 STRATEGIC RECOMMENDATIONS

General Approach

- The final steps in the SEDP process involved the following approach:
 - An evaluation of identified strategic options to address each strategic issue
 - Selection of a consensus set of preferred strategies (strategic options) by representatives of the State's ports as decision-makers
 - The formulation of broad action plans for implementing each preferred strategy
- The evaluation of the strategic options was based on the market and competitive analyses, the consulting team's evaluation of each option against a series of evaluation criteria, and strategy conference deliberations.
- The recommended action plans were formulated with guidance and direction provided by PAL's Executive Committee.

A consensus view on preferred strategic options was based on the following three step process:

1. The Consulting Team evaluated and ranked all options.
2. The results were presented and discussed with port representatives attending strategic planning conferences to which representatives of all ports of the state were invited.
3. A consensus view among the state's port decision-makers was reached on a preferred option to address each strategic issue.

A summary presentation of each of the six strategic issues follows.

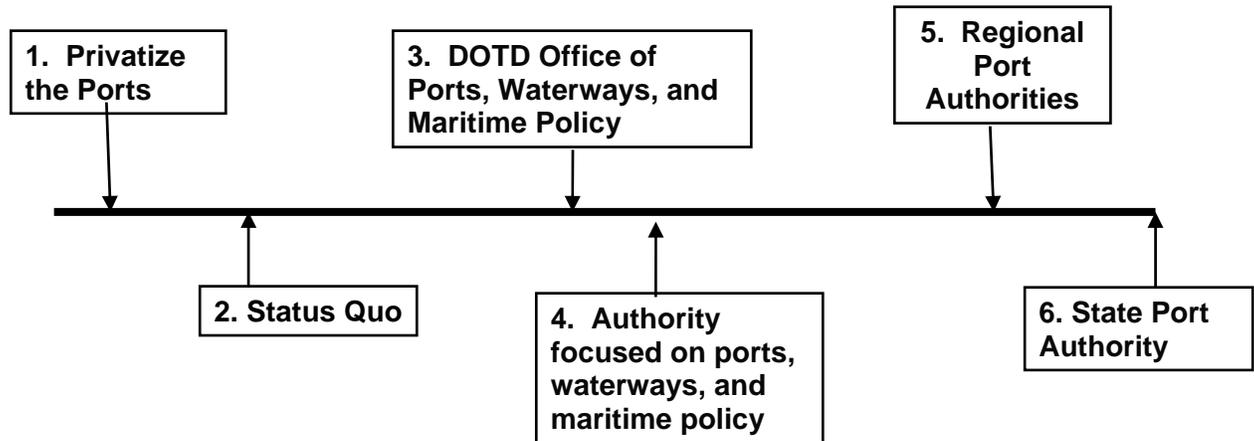
5.1 STRATEGIC ISSUE: GOVERNANCE

What is the optimal governance structure enabling the Louisiana ports system to fulfill its mission and achieve its objectives?

5.1.1 Background

- Port governance has been identified as a strategic issue and strategic recommendation.
- Enhancing port governance is critical to achieving several goals including but not limited to the following:
 - To establish a long-term, sustainable funding source for port infrastructure needs.
 - To more closely align the diverse needs of the state's port industry with the state's economic development and transportation strategies
 - To establish, implement, and continuously enhance a statewide port policy that aligns the ports long-term business and development strategies with the state's economic development and transport strategies
 - To expand the port industry's contributions to the State's economy including jobs (direct, indirect, and induced), taxes, and revenues to businesses
- A state level port entity is required to fulfill the ports' mission given the scope (number of ports), complexity (number of different businesses, infrastructure, and competitive drivers), and need for significant support from and coordination with the State (Governor, DOTD, LED, legislature).
- Port Governance is relevant to the **Mission** of the ports of Louisiana: ".... providing superior port and port-related facilities and services to meet the diverse needs of port related businesses in the Louisiana and US marketplaces
 - Collaborating with the State to formulate an effective port policy
 - Securing dedicated, reliable, recurring infrastructure funding
 - Developing a statewide blueprint to guide port development.

5.1.2 Governance—Continuum of Strategic Options



5.1.3 Consensus Recommendation

Establish an office or authority focused on ports, waterways, and maritime policy (PMPA—the Louisiana Ports and Maritime Policy Authority). The PMPA, together with PAL, becomes the leading advocate and center of port industry expertise within state government for the ports of Louisiana.

5.1.4 Recommended Structure

- The operations and office facilities of the PMPA would ideally be situated within the Office of the Governor, DOTD, or LED to assure maximum coordination among state agencies such as DOTD, LED, DOL, and DNR.
- The PMPA would work directly with DOTD, LED, and DOD staffs to align, coordinate, and integrate transportation, economic development, and port policies.
- The PMPA would have an independent board of directors comprised of port members (separate deep, coastal, and inland representatives), industry representatives (shippers, carriers, LABI, etc.), and the secretaries of key departments. The board would establish policy and provide governance.
- A PMPA director would have a staff of functional experts to "do the work" and would be industry experts within state government.
- Individual ports retain independent management and operations authority.

5.1.5 *Recommended Responsibilities*

- Conduct a detailed evaluation of alternative long-term, sustainable funding sources for port capital needs, then draft and pursue approval of appropriate legislation to implement that (those) funding source(s)
- Have lead responsibility for formulating long-term port policy and strategic direction for the state
- Work with public ports and maritime industry on strategic, commercial, competitive, funding, infrastructure, capital investment, environmental, and security issues
- Formulate a comprehensive plan for improving the competitiveness of the State's port system to include attraction and retention strategies for port related businesses
- Work with PAL and other ports in developing the first consensus-based prioritized Capital Needs Program for ports
- Coordinate port and maritime interests and input into the State's Workforce Initiative
- Serve as a lead entity to ensure that the State invests its funds dedicated to ports and waterways in the fairest, most economically justifiable, and most efficient manner possible

The PMPA's initial focus is implementing the SEDP recommendations on funding, infrastructure, and unified and justified future container facility development.

5.1.6 *Governance: Rationale for Consensus Recommendation*

- Louisiana's port system is a unique component of Louisiana's economy and transport system, especially in terms of the following characteristics:
 - Statewide geographic scope
 - Multimodal focus: maritime (ocean and inland river system), highway, and rail
 - Diverse set of businesses, customers, facilities, and operations
 - Complexity in terms of governance structures, competitive factors, and infrastructure requirements
- It requires a high degree of State support and collaboration to successfully fulfill its mission and achieve its objectives.
 - Governor's office, DOTD, LED, DOL, congressional liaison, legislative liaison
 - Local, state and federal government involvement

- The state port system requires a unique set of expertise and skill sets including international trade, international and domestic waterborne transport, intermodal transportation, federal and state regulatory processes, etc.
- Some existing state authorities appear to offer practical models. The Coastal Protection and Restoration Authority and the Louisiana Offshore Terminal Authority are two examples with similar and complementary objectives.
- The functional aspects of the PMPA should establish an ideal domicile, for example, DOTD, LED, the governor’s office, etc. Details in this regard are presented in the final section of this report summary, Implementation.

5.1.7 Recommended Action Plan

Step	DESCRIPTION	Jan '09	Feb '09	Mar '09	Apr '09	May '09	June '09	July '09	Aug '09	Sept '09	Oct '09	Nov '09	Dec '09
1	Define the structure, role, responsibilities, and capabilities of the PMPA												
2	Seek input of Governor, DOTD, and LED for the PMPA												
3	Draft legislation bill for creating PMPA												
4	With Governor, DOTD and LED support, lobby for key legislative support for PMPA legislation												
5	Introduce and pass legislation												
6	PMPA Implementation												
7	Evaluate the optimal future role of PAL within the context of implementing the PMPA												

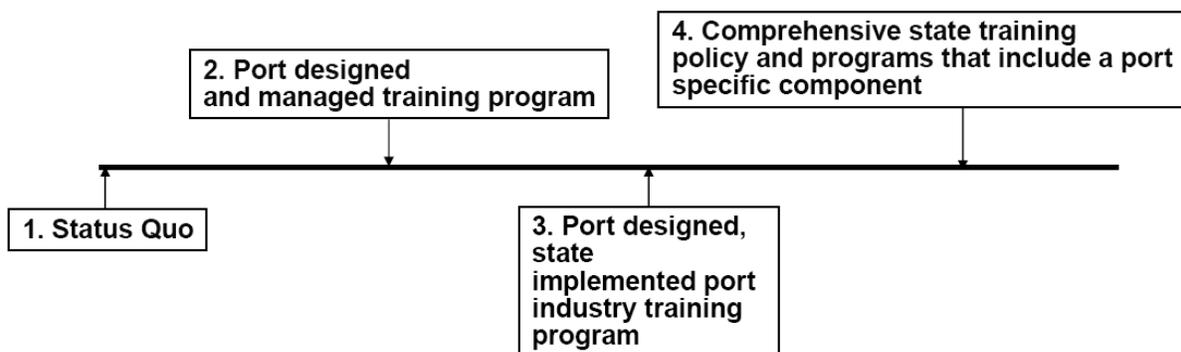
5.2 STRATEGIC ISSUE: WORKFORCE DEVELOPMENT

What role should the ports play in assuring an adequate supply of appropriately trained labor to meet the needs of Louisiana ports and industries in general?

5.2.1 *Workforce Development: Background*

- Industry focus groups and Louisiana port representatives agreed that the port labor force is a significant source of competitive advantage for Louisiana's ports and identified the following attributes: flexibility, skills, productivity, and 24/7 service in oil and gas services. Simultaneously, the ability to maintain that labor force is tenuous.
- Industry focus groups and the ports cite increasing challenges to sustaining this competitive advantage, noting the following:
 - It is becoming increasingly difficult to attract workers.
 - Worker's are retiring and/or leaving the state.
 - Programs are needed to recruit and retain high school students. Out of state colleges are major competitors as are neighboring states and emerging O&G coastal countries such as in Central and South America.
 - Training of the blue collar workforce is critical.
 - Developing a significant, compelling marketing program as part of an overall attraction program is critical.

5.2.2 *Work Force Development Issue: Continuum of Strategic Options*



Because the State is working actively on workforce reform and, therefore, provides an appropriately timed opportunity for the ports to participate in the process, PAL SEDP strategic objectives include the following:

- Integrating workforce development and social support programs across agencies to provide one-door service for businesses and seekers
- Strengthening the role of community and technical colleges in workforce development
- Quickly improving the ability to address workforce shortages in high-demand occupations
- Improving the capacity to respond to new business or expansion opportunities
- Creating a demand-driven system that ties workforce development to business and industry needs
- Expanding the workforce to help fill nearly 100,000 current job vacancies
- Ramping up the State's workforce reform
- Ensuring that the voices of ports and the maritime industry are heard and the needs are understood
- Participating (PAL and industry representatives) in all regional and state workforce summits to insure that port and maritime needs are identified and incorporated in the State's workforce development efforts

5.2.3 *Consensus Recommendation*

- *The State DOL continues to take the lead role in defining and implementing port workforce initiatives, while PAL and the PMPA ensure that port labor needs are addressed.*
- The Governor and his administration have recognized workforce reform as one of the State's major initiatives (second to ethics).
- Ports have multiple, higher priority items to address in the SEDP.
- Ports should proactively participate in the State's new workforce program to insure there is an adequate supply of properly trained labor to support the port industry.

5.2.4 *Workforce Development: Recommended Action Plan*

STEP	DESCRIPTION	Jan '09	Feb '09	Mar '09	Apr '09	May '09	Jun '09	Jul '09	Aug '09	Sep '09	Oct '09	Nov '09	Dec '09	
1	Participate in State work force summits													
2	Prepare list of port industry workforce needs and requirements by job and skill category													
3	Submit list of port industry workforce requirements to Secretary of LED													
4	Work with LED, the Louisiana Workforce Commission, and the Workforce Investment Council to insure that the State's ports' workforce requirements are addressed													

5.3 *STRATEGIC ISSUE: STATE and PORT COMPETITIVENESS*

How do the State and ports of Louisiana enhance and sustain the state's competitiveness in attracting and retaining business and people to expand, diversify, and grow the port industry as well as related and value-added industries?

5.3.1 *Issues*

- Simplistically, there are two key drivers of port throughput relative to port growth initiatives: industry and people. However, logistical proximity and operational efficiency are also paramount.
- The State is competitively disadvantaged across most key site selection and quality of life criteria.
- The State's population and density are relatively small and minimal growth is projected in the future.
- Therefore, retaining current industries and attracting new industries, including value added industries, are critical to increasing port-related market opportunities and contributing to the growth of the state's economy.

- In support of federal funding initiatives for coastal ports, the State needs a unified means (staff, funding, approach, and methodology) to collect data as a means to measure O&G operations, cargo type, tonnage data, etc.
- In similar fashion, the State needs an integrated means to create a unified mechanism that allows PAL, DOTD, and LED to actively pursue completion of projects identified in DOTD’s *Marine Transportation System Plan* (September 2007) to improve port and maritime efficiencies and capacity and therefore competitiveness. Besides the coastal data collection noted in the above bulleted item, known examples include but are not limited the following:
 - Simmesport Railroad Bridge Alteration
 - Bayou Sorrel Lock Replacement
 - Inner Harbor Navigation Canal Lock Replacement to 225 ft. width
 - Atchafalaya River channel maintenance at -20 ft. and in a constant location
 - GIWW/Commercial Canal/Port of Iberia Channel Deepening to 16 ft. (Acadiana Gulf of Mexico Access Channel--AGMAC)
 - GIWW Deepening to -16 ft. of the AGMAC westward to the Port of West St. Mary
 - Widening of the Calcasieu Ship Channel to provide consistent unimpeded shipping lanes to the Port of Lake Charles providing fill material for expanding nearby potential O&G southwest Louisiana port and industrial service facilities
 - Deepening of the Red River to -12 ft. from Alexandria to Shreveport
 - Deepening of the Houma Navigation Can (HNC) to -20 ft.
 - Deepening of Baptiste Collette to accommodate eastern Gulf O&G services and facilities growth
 - Replacement and upgrade GIWW locks
 - Deepening of Bayou Fourchon from Port Fourchon to Belle Pass
 - Improve rail service
- Focus on improving railroad operational efficiency in the New Orleans vicinity (immediately beyond N. O. Public Belt Railroad jurisdiction)

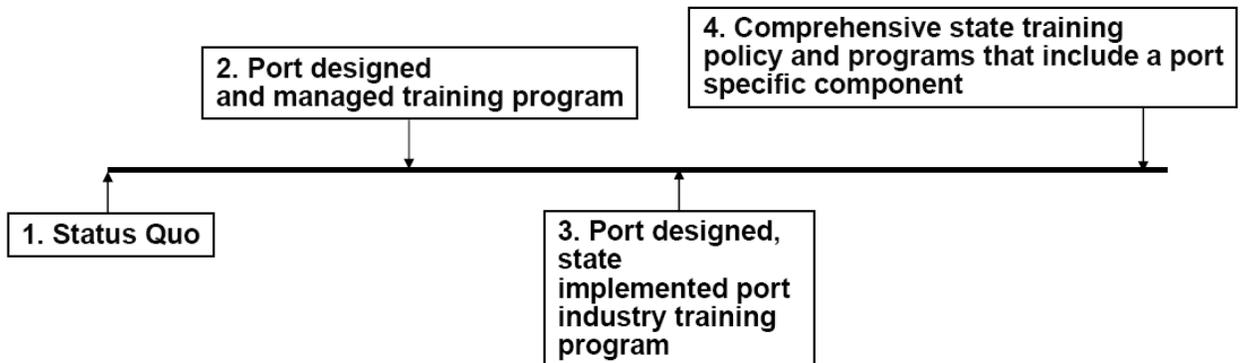


Port of Iberia



Port of Lake Providence

5.3.2 Continuum of Strategic Options



5.3.3 Consensus Competitiveness Recommendation

The Ports partner with DOTD, LED, and regional economic development organizations on a port dependent industry attraction program.

- The Ports and respective state agencies, through a newly created mechanism (an office or authority focused on ports waterways, and maritime policy), formulate a comprehensive plan for improving the competitiveness of Louisiana and the port system. (See Governance Issue)
 - The office/authority benchmarks attraction and retention strategies from competitor states and other port industries.
 - The office/authority reviews the State's port-dependent industry attraction and retention strategies:
 - The office/authority, in concert with LED and other pertinent agencies, completes a gap analysis and targets high potential industries
 - The office/authority prepares a draft port-dependent industry attraction and retention program
- The port, through the unified governance office/authority, works with LED to incorporate the port industry attraction plan into LED's overall industry attraction and retention program.

5.3.4 State and Port Competitiveness: Recommended Action Plan

STEP	DESCRIPTION	Feb '10	Mar '10	Apr '10	May '10	Jun '10	Jul '10	Aug '10	Sep '10	Oct '10	Nov '10	Dec '10	Jan '11
1	PMPA conducts a port summit on port industry competitiveness	█											
2	PMPA develops a port competitiveness enhancement strategy	█	█	█									
3	PMPA seeks input and support from Governor, LED, and DOTD				█								
4	PMPA works with LED in implementing port competitiveness plan					█	█	█					
5	PMPA incorporates the port competitiveness strategy element into the annual update of the port's SEDP								█	█	█	█	
6	PMPA works with the Governor, LED, and DOTD to continuously refine and improve the port's and State economic development strategy												



Port of Lake Charles



Port of New Orleans

5.4 *STRATEGIC ISSUE: INFRASTRUCTURE*

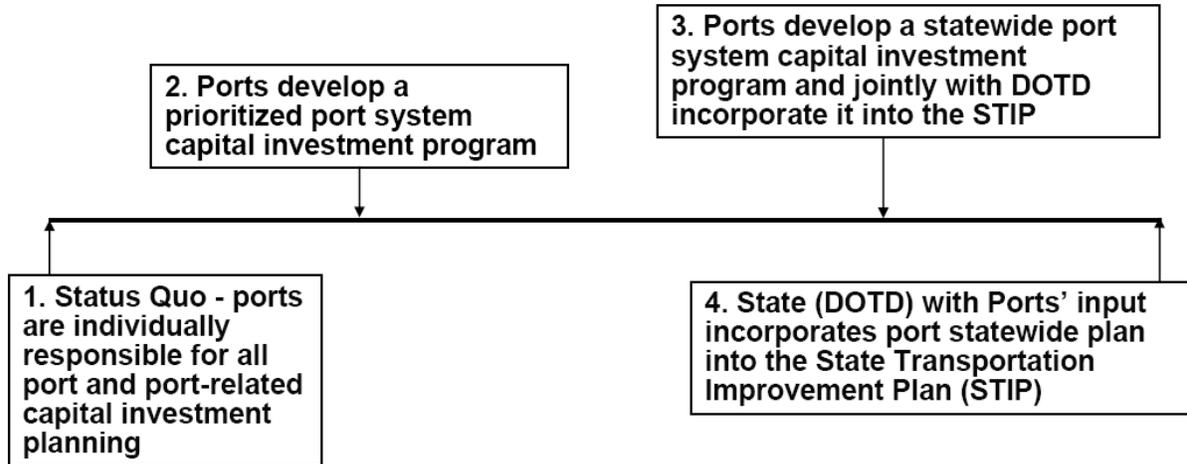
How do the Ports of Louisiana best provide the superior port and port-related facilities required to fulfill their mission and insure that the State's freight transportation infrastructure can adequately support the ports superior facilities?

- Port and port-related facilities include channels (harbor, rivers, and port facilities), locks, berths, terminals, port-road/rail interfaces.
- State freight transportation infrastructure includes interstate and state controlled access highways and rail infrastructure.

5.4.1 *Infrastructure: Background*

- Port and port-related infrastructure is a core focus of the ports.
- The strategic issues conference and the focus groups have identified the current conditions and capabilities of existing port and port-related infrastructure as key issues.
- Port and port-related infrastructure are key components of the competitive positioning of the ports.
- The Ports 2007 Five-year CIP identified \$820 million in port and port-related infrastructure investment requirements.
- The Port of New Orleans 2020 Master Plan (completed in 2007) includes \$1 billion in capital improvements to port and port-related infrastructure.
- Gulf Coast ports continue to make significant investments in port and port related infrastructure in general and container terminal facilities in particular.
- Communication with rail shippers indicates matters of significant concern relative to transfer and delay attributed to infrastructure inadequacies in and/or through the New Orleans area. Stakeholder participants indicated that major innovations are needed in port-rail matters in this area of the state. Having six major rail providers in New Orleans was presented as both an asset and a liability in numerous focus group and strategic planning conferences.

5.4.2 *Infrastructure Issue: Continuum of Strategic Options*



Note: Options 3 and 4 could also include collaboration with and/or the involvement of DOTD and the Governor's Office

5.4.3 *Consensus Recommendation*

Ports develop a prioritized statewide port system capital investment plan to be reviewed, approved, and supported by a newly formed port oriented office/authority.

- The ports of the state, through PAL, develop a single, integrated, prioritized statewide capital investment plan for fulfilling their mission and achieving their objectives
 - Driven by the SEDP, i.e., SEDP sets the priorities
 - Built bottom up from each port's individual plans and vice versa
- The plan would be reviewed by, approved by, and proactively promoted by the proposed port office/authority.
- The single, integrated statewide plan drives the PAL's funding strategy which is coordinated with DOTD, LED, the governor's office, and the legislature.

5.4.4 Port Infrastructure Investment Plan: Recommended Action Plan

STEP	DESCRIPTION	Jan '10	Feb '10	Mar '10	Apr '10	May '10	June '10	July '10	Aug '10	Sept '10	Oct '10	Nov '10	Dec '10	
1	PAL to update the five-year Capital Development Plan and prepare a ten-year Capital Development Plan													
2	Seek PMPA support													
3	Brief Secretaries of DOTD and LED and define a plan for integrating port investment plan with STIP and Economic Development Plan													
4	Incorporate the port capital investment plan into the STIP													
5	Incorporate the port capital investment plan into the State Economic Development Plan													
6	Hold a series of briefings with key legislators													
7	PMPA assumes and/or conjoins some of PAL's responsibilities												Ongoing 	
8	Develop process for annually updating all of above	Ongoing 												

5.5 STRATEGIC ISSUE: PORT FUNDING

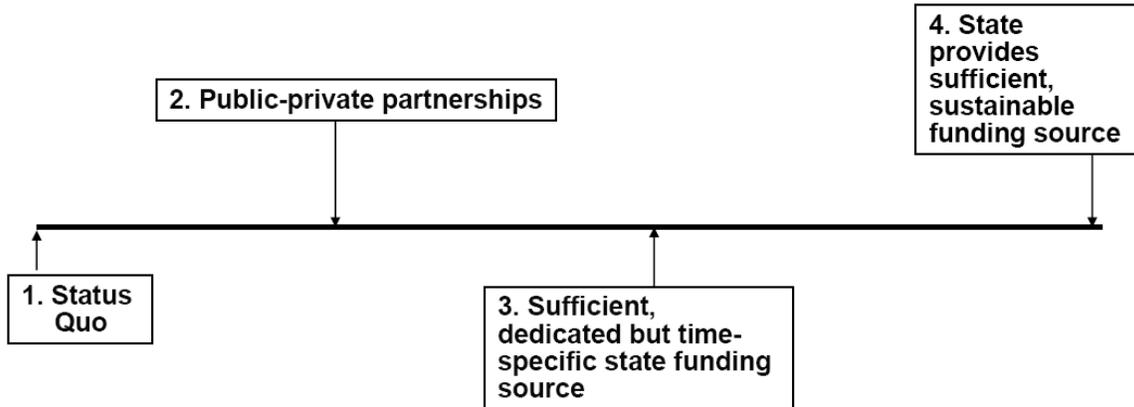
What is the optimal strategy for funding the planning and construction of superior port and port-related facilities within the State of Louisiana?

5.5.1 Port Funding: Background

- The 2007 Five-year CIP identified over \$820 million in port related capital investment requirements.
- Historically, ports have generated approximately 60% of their invested capital.
- Louisiana's ports report they are rapidly reaching the limits of their financing capacity.
- The USACE faces significant financial challenges fulfilling its maintenance dredging and channel deepening roles.

- Funding superior port and port-related facilities is a critical component of the ports' SEDP mission statement and is becoming more costly, e.g., escalating material prices, longer lead times, increased permitting complexity, etc.

5.5.2 Continuum of Strategic Options



5.5.3 Consensus Funding Recommendation

PAL works with the State to develop a sufficient, sustainable funding source for port capital development.

- PAL, in conjunction with a new office/authority geared to ports and maritime needs, develops a recommended long-term, sustainable source of port infrastructure funding.
- Conduct a detailed evaluation of alternative funding sources including a review of other states' policies as well as implications for Louisiana's state budget, tax levels, and taxing policies. Funding options to be evaluated should include the options listed below:
 - A State port development infrastructure bank
 - A dedicated portion of gas tax
 - Dedication of existing taxes paid by maritime industries
 - Investment tax credits
 - *Ad valorem* taxes
 - Luxury taxes
 - Enhancement of existing port funding sources

PAL and the port and maritime office/authority (PMPA) proactively seek key legislative support for selected funding strategies and pursue adoption of legislation.

5.5.4 *Rationale for Consensus Recommendation*

- Any funding mechanism that significantly increases state funding support for Louisiana's ports will have significant consequences for the State government, its finances, and the totality of needs of the state's citizens and businesses.
- The success of any funding mechanism is dependent on addressing a large number of key success factors (see the following pages).
- The success of any funding mechanism requires the collaboration of the governor, DOTD, LED, and the legislature in the following:
 - Defining practical options
 - Providing input on the financial, legal, and political ramifications of alternative tools
 - Defining implementation and oversight actions
- Consequently, PAL cannot by itself practically prescribe a preferred funding mechanism, particularly since the ultimate solution may be multiple funding mechanisms.

5.5.5 *Sustainable Port Funding: Key Success Factors*

If a sustainable ports, waterways, and maritime related funding mechanism is to be found, created, or otherwise obtained, the criteria outlined below should be integral components.

- **Sustainable:** An independent source of funding insulated to the fullest degree possible from changes in administrations, legislative majorities, and the general budgeting process is imperative.
- **Sufficient:** The funds need to be sufficient to directly fund and/or finance major port and related infrastructure projects.
- **Independent:** The funds should be dedicated to port and port-related capital investment projects and not available for other uses. Port and related investment projects need to be clearly defined within the context of the PAL's mission and objectives and defined as collaborative among PAL, DOTD, LED, and the state's office/authority dedicated to ports, waterways, and maritime policy.
- **Transparent Prioritization and Funding Process:** The process of applying for, qualifying, prioritizing, and funding port development projects to be funded needs to be transparent and participatory.

- The criteria used to evaluate, prioritize, and select port development projects should be clearly defined, quantifiable wherever possible, and directly linked to the SEDP mission, objectives, and strategic priorities.
- Port and other transportation professionals need to be involved in the evaluation and prioritization process.
- Funding levels need to be consistent with the costs of modern day port capital projects and market driven.
- **A Clear Periodic Evaluation Process:** The funding program needs an audit process to periodically review the success or failure of funded projects. Examples of warranted audit criteria are noted:
 - Was the project completed within its scope, budget, and schedule?
 - Did the targeted business materialize?
 - Did the project meet the projected performance as submitted by the sponsoring port?
 - If the project failed, why did it fail?
 - What are the implications for the funding program and process?
- **Port Participation Requirement:** The program should include a port contribution requirement. A sliding scale of port investment consistent with the level of state funding is an alternative.
- **Evolutionary, not Revolutionary:** The funding program should build off the current PCDDP and not replace it. The current PCDDP limits eligibility of many capital needs of ports. The proposed funding mechanism is intended to complement the PCDDP and not affect the current program in any negative manner. Creating an evolutionary process will allow for anticipated refinement to include the following:
 - Application process
 - Prioritization process with refinements to the criteria and evaluation processes
 - Funding guidelines with fine tuning to limits, timing, etc.
- **Linked to the benefits that Louisiana's ports provide:** Louisiana ports generate significant economic benefits to the state. The state's funding should be linked to these benefits, examples of which are as follows:
 - Attraction and retention of industry
 - Job creation
 - Revenues to businesses
 - Taxes to governments
 - Port investments in property and infrastructure

5.5.6 Port Funding Plan (Infrastructure Investment): Recommended Action Plan

STEP	DESCRIPTION	Jan '09	Feb '09	Mar '09	Apr '09	May '09	June '09	July '09	Aug '09	Sept '09	Oct '09	Nov '09	Dec '09
1	Seek to increase the annual level of PCDDP funding	█											
2	Seek Governor and DOTD support for the interim increase in PCDDP funding			█									
3	Work with Governor's Office and DOTD to implement interim increase in PCDDP or other funding			█									
4	Develop new port funding program proposal							█					
5	Obtain support of Governor, DOTD, and LED										█		
6	Develop strategy for gaining legislative support										█		
7	Implement legislative support strategy												▶ 2010
8	Implement new funding program												▶ 2010

5.6 STRATEGIC ISSUE: CONTAINER INDUSTRY

What is the Louisiana ports system's optimal role in the future North American and Gulf Coast container industries and how do the State and ports fulfill this role?

5.6.1 Container Issue: Background

- Louisiana faces a number of significant challenges in competing for U.S. and Gulf Coast container traffic.
 - Local and regional markets (Louisiana, Mississippi, Arkansas, and Missouri) are comparatively small.
 - The local and regional markets are comparatively fragmented in terms of trade lanes, carriers, and the gateway ports through which this trade moves.
- There are numerous and apparently independent Louisiana players and proposed container development projects ongoing simultaneously.
 - Port of New Orleans' long-term capital investment plan: about \$500 million in container-related projects
 - Lower Mississippi River proposed developments

- a. Citrus Lands: estimated \$500 million or more for port infrastructure; landside, transport improvements likely to be additional
 - b. Seaport: about \$400 million
 - c. Louisiana International Gulf Transfer Terminal: \$1-2 billion
 - d. Port of South Louisiana: \$1 billion
- The funding requirements of any one of these projects significantly exceed the State's estimated total contribution to the Louisiana ports during the past ten years.
 - State funding of any of these projects would likely consume the majority of State's future port capital funding.

5.6.2 Challenges

Louisiana ports also face significant challenges that are unrelated to capacity in serving the target Regional and Midwest markets

5.6.2.1 Shippers' Supply Chain Strategies

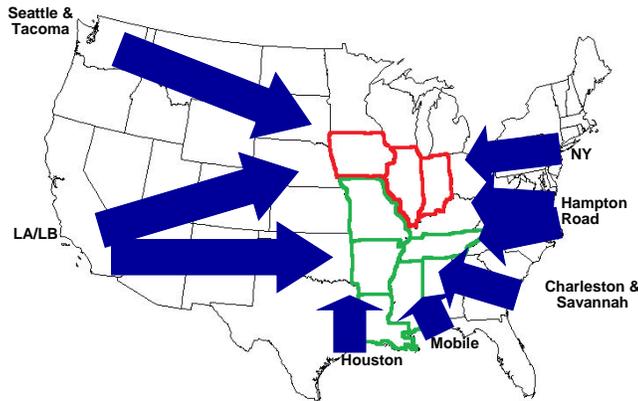
- Shippers' supply chain strategies emphasize the following:
 - Diversity of trade lanes, routings, ports and distribution patterns
 - Competitive transit times and reliability
 - Costs: total supply chain, not just transport costs
- Shippers have made major investments in their respective international (Asian, Indian Subcontinent, Europe, etc.) supply chains.
- Attracting major shippers to reorient their major supply chains towards Louisiana will be a challenge.

5.6.2.2 Container Shipping Lines

- Global (15 largest) container shipping lines have made major investments in West Coast terminal capacity.
- Several have also invested in Atlantic and Gulf Coast terminal capacity.
- The global container lines collectively offer more than 60 services per week between Asia, the Indian Subcontinent, and Europe to U.S. Pacific and Atlantic Coast ports.
- Prior to Panama Canal expansion being complete, only limited opportunities to expand Gulf Coast services, particularly to Asia, are possible. (Note: Recent downturns in the international economy have offer speculation that the completion of the Panama Canal widening may be delayed substantially.)

5.6.2.3 Service and Economic Challenges

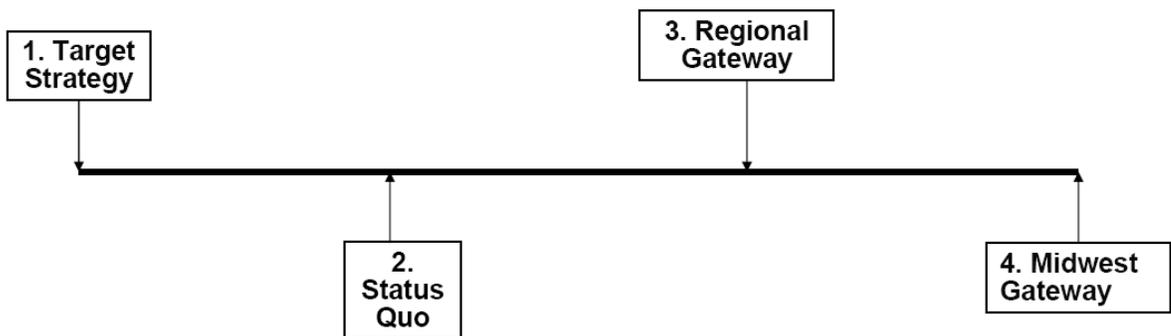
- Service challenges
 - Trade lane coverage is limited.
 - Carrier selection is limited. Only a limited number of the Global container lines serve Louisiana ports.
 - Weekly service frequency is limited as the result of a lack of carrier options and geographic coverage.
 - Intermodal rail service, as a function of low demand, is limited.
- Economic challenges
 - Major West and East Coast container ports are competitively positioned to serve the Midwest.



Includes: LA, AR, MS, TN, MO, IA, IN, and IL

- Louisiana ports face heavy competition from multiple, large, well-capitalized ports for the Midwest (red) and the Regional (green) container markets highlighted above.

5.6.3 Container: Continuum of Strategic Options



5.6.4 *Consensus Container Recommendation*

Concentrate marketing and development efforts on the U.S. South Central Regional market while targeting the Midwest market in the long-term.

- The initial focus of the State should be to assure that existing facilities are capable of handling the near term needs (5 - 7 years, i.e., leading up to the opening of the expanded Panama Canal) of the container marketplace through gradual and fundamental enhancement of existing facilities as required.
- The major market opportunity for Louisiana ports, i.e., the market where it can be most competitive, is the Regional Market.
- The State, by way of the Ports and Maritime Policy Authority, in conjunction with the deepwater ports, should identify and pursue the following:
 - The market and service strategy required to position Louisiana as the preferred container gateway for the Regional Market
 - Determination of the optimal future capacity improvements required to meet the long-term growth of the Regional Market
- The State should support use of capital funds only in future container capacity development where the amount of state investment is supported by realistic, independent market and technical feasibility studies. LED and the proposed new office/authority of ports and maritime policy should participate in the scoping and management of this endeavor.
- The investment emphasis of the state should focus on the following approach:
 1. Maximizing the utilization and efficiency of existing container terminal assets and related infrastructure
 2. Identifying long-term investment, service, and cost-reduction initiatives to support successful penetration of the regional market
 3. A newly created office/authority focused on ports, waterways, and maritime policy (Section 5.1) should support use of State capital funds only in future container capacity development where the amount of state investment is supported by realistic, independent market and technical feasibility studies.

5.6.5 Regional Container Gateway Strategy: Recommended Action Plan

STEP	DESCRIPTION	Jan '09	Feb '09	Mar '09	Apr '09	May '09	Jun '09	July '09	Aug '09	Sept '09	Oct '09	Nov '09	Dec '09
1	Prepare, on the basis of the SEDP and the Port of New Orleans' recently initiated container market and development study, a market development plan for implementing the recommended strategy												
2	Assist PMPA, DOTD, LED, etc. in ascertaining additional objective, rational data regarding the true potential for container operation south of New Orleans												
3	Determine Louisiana's current container terminal capacity and long-term requirements to serve the target market												
4	Obtain endorsement and support of PMPA, the governor, DOTD, and LED regarding state's container market and development strategy												
5	Implement the recommended container terminal market development plan												

2009-2010 

6.0 IMPLEMENTATION—RECOMMENDED ACTION PLAN SUMMARY

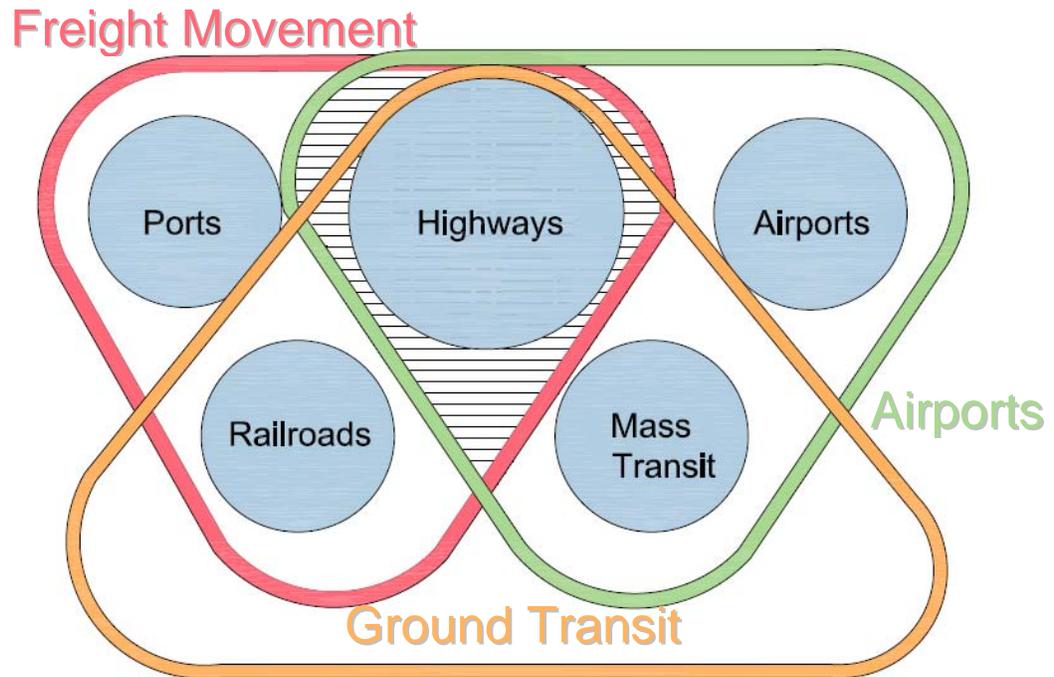
In PAL meetings with the secretaries of DOTD and LED during the preparation of the Louisiana port’s Strategic Economic Development Plan, the SEDP six collaborative initiatives identified as “issues” were well received and generated long anticipated and beneficial PAL-DOTD-LED interaction relative to the State’s port program. Among other things, these discussions addressed port consolidation; a unified approach to evaluating container market growth; a means to objectively create and utilize infrastructure enhancement funds in the most objective and economically efficient manner; and a central office/authority location in state government focused on the business of ports while allowing individual ports commissions to continue the role of operating and maintaining their respective ports. For purposes of the SEDP, this office or authority for ports is termed Louisiana Ports and Maritime Policy Authority (PMPA).

In discussions relative to domicile of the PMPA—governor’s office, DOTD, LED, etc.—consensus indicated that while LED specialists would be needed, the grander need focuses on infrastructure and infrastructure funding policy more closely aligned with existing DOTD services. The SEDP process, by design, incorporated findings and overall objectives of the *State Transportation Improvement Plan, Vision 20/20 (updated)* and DOTD’s *Louisiana Marine Transportation System Plan*. Therefore, rather than delve among “isolated” silos, the ports must relate with DOTD and other state entities as “integrated,” i.e., as parts of the whole in linked, coordinated fashion, while still retaining its independent focus on ports.

One of the most critical elements in the creation of a Ports and Maritime Policy Authority is independence, particularly independence in pursuing policies which are focused first and foremost on ports. It must be clear to ports and port users that this new entity serves as the focal point in the state’s role relative to ports, waterways, and maritime activity. Critical, then, is to achieve this objective while also creating the means to integrate port and maritime programs into the larger role of transportation and economic development in DOTD and LED.

In Louisiana, DOTD serves as a coordinating entity relative to highways, airports, railroads, and mass transit—moving people and cargo. From DOTD’s perspective, the program diagram on the following page illustrates the “silo” concept as defined by the secretary of DOTD, but, in this case, as silos working in concert with each other, i.e., in integrated fashion with ports/rail, airports, and mass transit all linked to highways. Freight movement, people movement, and components of both are positioned within this framework, and the PMPA also must be positioned in state government to attain maximum benefit and credibility—*independent yet integrated*.

DOTD INTEGRATED SILOS



(Note: Though not graphically depicted above, freight movements occur via airborne transportation in Louisiana. However, compared to water, rail, and highway movements and tonnage, air cargo activity is negligible relative to the issues presented herein.)

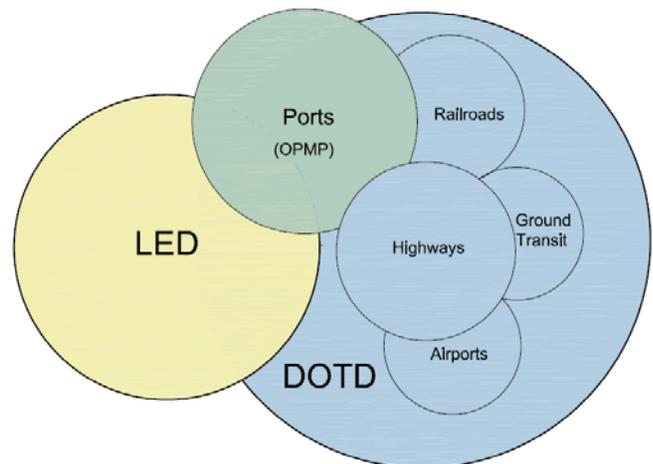
As a function of PAL, and as noted previously, PAL must relate integrally with not only DOTD but also LED, DOL, the governor’s office, and stakeholders. Listed in the table on the following page are some of the variables that must be successfully integrated into the ports system if Louisiana is to be more competitive nationally and successful in its endeavor to optimally and efficiently improve its water-based economic impact to the state and the nation. This listing also denotes the quantity of variables inherent in defining the domicile of the PMPA.

**LOUISIANA FREIGHT MOVEMENTS
(including freight, oil and gas services, fabrication products, project lifts, etc.)**

PAL	DOTD	LED	DOL	GOVERNOR
Professional and social interaction	Administration	Study/evaluation	Workforce development	Legislative liaison
Consensus building	Highways	Funding	Workforce maintenance	Funding
Consensus maintenance	Data collection	Value-added industry functions		Coordination
Education	Engineering	Industrial inducement		Political support
Current Events	Waterways	International marketing		
Lobbying (state, federal)	Rail Interface	National marketing		
Monitoring legislation	Funding (PCDPP, O&M budgets, etc.)	Monitoring competitive measurements		
Informing/educating legislators	Funding (other)			
Port/Rail interfacing	Funding evaluation			
COE interaction	Evaluated of dedicated/self-generated funds			
	COE/State interface			
	State sponsorship			

In summary, if the Louisiana port’s SEDP is to be fully implemented, governance is the first and foremost issue that must be addressed by PAL, State department heads, the governor, and the legislature to insure coordinated implementation. Leadership among these entities and stakeholders must be focused on the same goals, and they must work in unison to attain that goal as soon as practical with a timeframe of less than one-year being ideal. Legislation prepared by PAL as the first draft can be complete within the first quarter of 2009 shortly after completion and acceptance of the SEDP.

The diagram shown to the right presents the ideal inter-relationship between PAL and DOTD as well as having the PMPA closely affiliated with LED. Milestones relative to the governance issue and other major components of SEDP implementation are highlighted on the following page.



Implementation Strategy in Calendar Quarters

STRATEGY	1Q '09	2Q '09	3Q '09	4Q '09	1Q '10	2Q '10	3Q '10	4Q '10	1Q '11	2Q '11	3Q '11	4Q '11
Port Governance	[Black bar]				[Blue arrow with 'Ongoing']							
Prioritized Port Infrastructure Development Plan					[Black bar]				[Blue arrow with 'Ongoing']			
Port Capital Funding Program	[Black bar]				[Blue arrow with 'Ongoing']							
Regional Container Gateway Strategy	[Black bar]				[Blue arrow with 'Ongoing']							
State and Port Competitiveness					[Black bar]				[Blue arrow with 'Ongoing']			
Workforce Development	[Blue arrow with 'Ongoing']											

Once formed and operational, the first set of tasks to be accomplished by the PMPA should be focused on a dedicated source of additional funding for the ports and waterways system and an approach to a prioritized capital program.



Port of Shreveport-Bossier along the Red River



Charting the Future of the Port of New Orleans



**2020
MASTER PLAN**





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2020 Master Plan: Charting the Future of the Port of New Orleans

EXECUTIVE SUMMARY

The *2020 Master Plan* is a blueprint to guide short and long term growth for the Port of New Orleans. The document contains six chapters:

- Chapter I, Introduction
- Chapter II, Existing Facilities
- Chapter III, Strategic Issues
- Chapter IV, Market Assessment
- Chapter V, Capital Improvement Plan
- Chapter VI, Financing Opportunities

The **Introduction** gives an overview of the governance and mission of the Board of Commissioners Port of New Orleans and summarizes the economic importance of the Port on the local, state and national levels.

The **Existing Facilities** chapter is a snapshot of the Port describing the 22 million square feet of publicly owned cargo handling and cruise facilities at the Port of New Orleans.

Strategic Issues examines the current challenges facing the Port. The most pressing issue over the next decade is recovery from the damages inflicted by Hurricane Katrina in August 2005. Port facilities located in the traditional footprint on the Mississippi River experienced heavy winds but limited damage. River terminals received no flooding and are presently fully operational.

Port facilities located in eastern New Orleans on the Mississippi River Gulf Outlet (MRGO) and the Inner Harbor Navigation Canal (IHNC) bore the brunt of the hurricane. In addition to wind damage, water inundated these navigation canals and overtopped the flood protection system. Floodwaters were more than ten feet at many properties.

The U. S. Army Corps of Engineers has suspended dredging of the MRGO since August 2005. This has led to a lack of deep water navigation via the MRGO, compounding the impacts of the hurricane on Port maritime facilities and accelerating plans to move facilities from the MRGO/IHNC area and the Mississippi Riverfront.

Pressure and competition for limited space on the Mississippi River is increasing because of the mass relocation of Port tenants and other industries away from the MRGO and IHNC. The Port may have to look to alternative sites within its jurisdiction to accommodate new development to aid in regional economic recovery.

The Strategic Issues chapter examines alternate locales for port facilities in the region and reviews initiatives taken over the last 15 years to promote economic development on the West Bank of Jefferson and Orleans parishes.

Another strategic issue noted in this chapter is intermodal rail. The Port of New Orleans is a major gateway for international rail traffic to the interior of the United States. New Orleans is served by six Class I railroads, more than any other port city in the United States.

Over the last several decades, intermodal rail has emerged as the preferred delivery method for customers shipping ocean containers. In the post-Katrina environment, the cost of truck transportation in New Orleans has escalated to a point that intermodal rail is economically attractive.

Additionally, intermodal on-dock rail will likely prove to be an essential element in the support and growth of container volumes at the Port. An intermodal rail facility is included in the list of short term, immediate projects included in Chapter V, Capital Improvement Plan.

The **Market Assessment** is a thorough analysis of the regional and global marketplace conditions at the Port of New Orleans. Port regional strengths and weaknesses are presented in the context of worldwide trends. Factors and trends affecting the breakbulk, container and cruise business are examined in depth.

Findings of the Market Assessment suggest an overall trend for future portwide

breakbulk cargo growth over the next 10-20 years. This overall growth is likely to be in the 2-3% range with periods of occasional “spikes” and “troughs” in cargo activity. Fluctuations in cargo must be anticipated in planning capital improvements for facilities that can accommodate peaks while maintaining efficient service at regular cargo levels.

Post-Katrina, breakbulk conditions have changed dramatically. Because of damage to transit sheds and storm siltation of the MRGO, refrigerated breakbulk facilities must shift from the IHNC to the riverfront, warranting additional breakbulk capacity on the Mississippi River.

A survey of competing East Coast and Gulf Coast ports in the [Market Assessment](#) supports the expectation of growth in container traffic for all coastal ranges in the United States. In addition, the following industry trends are highlighted: growth in world trade and containerized cargo as a percentage of world trade; relocation of manufacturing to Northeast Asia (China); growth in regional and intraregional demand; and the increase in container terminal capacity and related infrastructure at East Coast ports.

Strategic and master planning for competing ports affirms continuing growth in the volume of containerized cargo in the North American market. A significant six percent annual growth rate is anticipated through 2020.

Growth in the United States Gulf container trade can be expected to echo this trend based on increasing market share of Asian cargo and the expansion of Panama Canal capacity

Port of New Orleans Photo: Donn Young



The cargo handled by the Port of New Orleans generates about 160,500 jobs statewide.

by 2014. Projected growth rates support the provision of expanded container terminal capacity on the East and Gulf Coast.

A major factor in port selection is inland transportation costs. Rising rail costs at West Coast ports, coupled with port congestion and lengthy transit times, are causing shippers to seek cost-effective alternatives. As a result, the market share of Asian cargo has dramatically increased on the East and Gulf Coasts and ports are expanding terminal capacity and improving the inland transportation infrastructure in response.

The Port of New Orleans can provide less expensive inland transportation and faster transit times to the industrial Midwest and the East Coast than Houston, which continues to experience inland congestion because of its large local market to the north and west, including Dallas and Kansas City.

Labor issues that affect the reliability of West Coast ports may also help New Orleans and other Gulf Coast ports. Contracts with chief labor organizations at West Coast



2020 Master Plan: Charting the Future of the Port of New Orleans

ports expire in 2008. Shippers and carriers are seeking to have terminal capacity in place to hedge against possible future labor disruptions.

Carriers and their affiliated terminal operating companies are investing in the development of their own terminals or jointly investing and obtaining long term leases for exclusive operation of port-owned facilities throughout the United States. These trends afford the Port of New Orleans the opportunity

to work with carriers to supply needed capacity. Of particular interest would be to work with a carrier who can provide the Port with all water service to Asia.

The above factors support efforts by the Port of New Orleans to expand container terminal capacity and indicate opportunities to capitalize on projected growth in container traffic.

Based on a comparative analysis of capital plans contained in the Market Assessment, the Port's competitors are clearly making major investments in terminal capacity to take advantage of market growth. Planned capital improvements for competing ports total \$10.3 billion, and average \$858 million per port. Of the twelve ports examined, Houston and Tampa are planning the highest dollar amount for long term capital improvements, amounting to \$4.6 billion and \$1.6 billion, respectively.

Market conditions can and do change rapidly and for the Port of New Orleans to be able to respond to opportunities as they arise, additional terminal capacity must be in place either to accommodate projected growth or provide exclusive space to a carrier seeking a reliable, cost-effective alternative and greater control over its container traffic.

The Market Assessment also evaluates the global and regional trends of the cruise industry at the Port of New Orleans. The cruise industry retains the title of the fastest growing segment of the leisure market at an average of 8.1% per

year.

The North American market comprises 155 ships, more than half of the worldwide fleet of 282 ships. Within the next three years, another 18 ships are to be delivered, 14 of these ships to those cruise lines targeted by New Orleans. The majority of those new ships will go into the Caribbean trade, which remains the number one destination for passengers. As new cruise ships are added to a line, it frees existing ships to be available

for service at the Port of New Orleans. As the cruise industry matures at the Port, the potential for new ships to be assigned to New Orleans increases.

The cruise industry in New Orleans is closely tied to tourism. As tourism has rebounded from Hurricane Katrina, so has the cruise industry.

New Orleans' cruise occupancy in 2004 was 104%, the same as the industry average. However, the per diem rates in the Caribbean in 2005/06 declined due to concerns about weather, inflation and terrorism, and the occupancies declined accordingly. After 9/11, the cruise lines returned many ships to the North American market, but now are starting to return the ships overseas where the per diems are higher.

The potentially lucrative Asian market is starting to expand, and cruise companies (such as Royal Caribbean Cruise Lines) are testing the waters there. Although the industry is currently expanding its fleet, it is also expanding its territory to spread the risk of a continuing inflationary market.

Planned capital improvements to the two existing cruise terminals and creation of a new third terminal in the immediate future will help the Board successfully anticipate the needs of the burgeoning cruise industry in New Orleans and assist in the regional recovery from Hurricane Katrina.

The Market Assessment concludes with

These trends afford the Port of New Orleans the opportunity to work with carriers to supply needed capacity. Of particular interest would be to work with a carrier who can provide the Port with all water service to Asia.



a discussion of capacity and throughput for breakbulk, container and cruise facilities at the Port of New Orleans, how effectively each facility is being utilized, and if there is additional capacity to handle growth opportunities.

The **Capital Improvement Plan** is based on the strategic issues and market assessment outlined in respective chapters and articulates the vision for growth that will successfully carry the Port of New Orleans into the future over the next 20 years.

Goals and objectives have been formulated to define this vision for growth as follows:

- Nurture historic “niche” breakbulk cargoes such as steel, metal, plywood, and rubber, etc.
- Create new container terminal capacity to position the Port to capture its share of double digit growth presently occurring in the worldwide container market.
- Nurture recovery of cruise business and add more terminal capacity.
- Complete relocation from the MRGO and consolidation of deep draft terminals on the Mississippi River.
- Create new breakbulk cargo capacity beyond the traditional riverfront footprint of the Port.
- Continue the major maintenance program of all Port facilities.
- Continue to extract maximum revenue from industrial properties that are leased to private companies.

The methodology employed in project selection for the CIP began with identification of projects that would help bring the Port’s vision for the future to fruition. A feasibility study for each project was then conducted followed by a site analysis identifying potential sites available for the project within the jurisdiction of the Board. A preliminary cost estimate was developed for each project.

The projects were then prioritized in order of importance and divided into two categories: short term projects and long term projects. Short term projects will answer immediate needs critical to the Port over the next five years from 2008 through 2012. Long term projects, covering 2013 through 2020, will serve to guide the future development of maritime related businesses and the replacement or repair of aging high maintenance facilities.

Ten short term projects in the CIP total **\$574.4million**. Six long term projects total **\$465.1 million**. The grand total for all fifteen short and long term projects included in the plan is **\$1.04 billion**. This total for the Port of New Orleans is on par with the \$848 million average for capital improvement plans noted for competing ports in the Market Assessment portion of this document.

The short and long term projects are summarized in a table followed by descriptions for each project listed.

A third category for regional and national projects is included in the CIP chapter. These projects serve as major transportation links, are of regional and/or national interest and require federal funding. The regional and national projects are critical to the Port of New Orleans and are described in detail. The regional and national projects are not included in the cost estimates for short and long term projects.

Financing Opportunities are detailed in the final chapter of this master plan, including an assessment of current debt structure and potential funding sources to implement capital improvements necessary to carry the Port of New Orleans into the future.



2020 Master Plan: Charting the Future of the Port of New Orleans

I. INTRODUCTION

A. Purpose

The purpose of the *2020 Master Plan* is to provide a blueprint for long-term growth and a business strategy to address immediate needs over the next decade. This juncture is particularly critical due to the devastating impacts and abrupt changes wreaked by Hurricane Katrina last year on the Port of New Orleans, the City of New Orleans and the southeast Louisiana region.

Hurricane Katrina was the most destructive and costly natural disaster to strike the United States. The storm's full impact on the Gulf Coast is yet to be realized. Preliminary post-disaster investigation indicates a death toll of at least 1,200, displacement of more than one million people, and \$200 billion in property damage.

B. Location

Located in southeast Louisiana near the mouth of the Mississippi River, the Port of New Orleans serves as a gateway linking America to the global market. New Orleans has been a center for international trade since it was founded by the French in 1718.

Today, the Port of New Orleans is at the center of the world's busiest port complex, Louisiana's Lower Mississippi River. Proximity to the American Midwest via a 14,500 mile inland waterway system positions the Port of New Orleans as the port of choice for the movement of cargo such as steel, grain, containers and manufactured goods.

In addition, the Port of New Orleans is the only deepwater port in the United States served

by six Class I railroads. This gives port users direct and economical rail service reaching anywhere in the country.

C. Governance

The Board of Commissioners Port of New Orleans ("Board") governs the Port of New Orleans. The Board sets policies and regulates traffic and commerce of the Port.

The Board is made up of seven commissioners. They are unsalaried and serve five-year staggered terms. The governor of Louisiana appoints board members from a list of three nominees submitted by 19 local business, civic, labor, education and maritime groups.

The seven-person board reflects the three-parish (county) jurisdiction of the Board. Four members are selected from Orleans Parish, two from Jefferson Parish and one from St. Bernard Parish.

D. Mission

The Board has formulated a mission statement that summarizes its function as follows:

The Board's mission is to maximize the flow of foreign and domestic waterborne commerce throughout the Port of New Orleans.

E. Cargo

New Orleans is one of America's leading general cargo ports. A productive and efficient private maritime industry has placed the Port of New Orleans in the top market share of the United States for imported steel, rubber, plywood and coffee.

Port of New Orleans Commodity Market Share U.S. Gulf & Atlantic Ports, 2006 Imports

Commodity	Tonnage (short tons)	Market share (%)	Rank
Steel	4,150,73	16	3
Natural Rubber	413,948	39	1
Coffee	209,042	20	2
Plywood Imports	123,110	6	8



Figure 1
Inland Waterway Map



More than 9.3 million tons of general cargo and more than 20 million tons of bulk cargo were handled at Port of New Orleans facilities in 2006.

The Port of New Orleans handles cargo from trade partners all over the world. Trade routes for 2006 indicate that two-thirds of trade at the Port of New Orleans is with Europe (34.3%) and Asia (32.5%). The remaining one-third consists of trade with South America (15.4%), Central America (6.2%), Africa (6.0%), the Indian Sub-continent (2.3%), the Caribbean (2.0%), Australia/New Zealand (0.8%) and the Middle East (0.5%).

F. Economic Importance

The Port of New Orleans has traditionally had a dramatic impact on the national, state and local economies. Some 380,000 jobs and

\$47 billion in national economic output in the United States are related to cargo at the Port of New Orleans. This cargo creates \$16.9 billion in annual earnings and \$2.8 billion in federal tax revenue.

The statewide economic impact of the Port of New Orleans is significant. The Port is responsible for 160,500 jobs, \$17 billion in spending and \$800 million in taxes statewide.

On a regional level, the Port of New Orleans supports 52,000 jobs in the New Orleans metropolitan area and contributes \$4.4 billion in earnings, \$6 billion in spending and \$112 million in taxes.



II. EXISTING FACILITIES

A. General Layout

Existing facilities at the Port of New Orleans include 20 million square feet of cargo handling area, more than 3.1 million square feet of covered storage area and 1.7 million square feet of cruise and parking facilities located along three major navigational channels, the Mississippi River, the Inner Harbor Navigation Canal (IHNC), commonly referred to as the Industrial Canal, and the Mississippi River Gulf Outlet (MRGO).

The IHNC connects Lake Pontchartrain, the MRGO and Intracoastal Waterway to the Mississippi River. The MRGO is a man made channel that is designed to provide deep sea ships a shortcut access to the Gulf Intracoastal Waterway System.

B. Industrial Properties

The Board owns approximately 1,200 acres that make up the Inner Harbor-Navigation Canal (IHNC), better known as the Industrial Canal. The canal itself is a 400 foot wide by 5.1 mile-long and 30-foot deep waterway that connects the Mississippi River with the Intracoastal Waterway and Lake Pontchartrain. The IHNC forms the division between Gentilly and New Orleans East and the upper and lower Ninth Wards.

There are about 750 acres of developed land along the IHNC of which 550 acres are leased or available for lease to industrial and commercial users.

The other 200 acres are marine terminals used for cargo trans-shipment. The industrial properties are leased to a variety of companies including ship repair, boat building, trucking, cement, warehousing, scrap recycling and basic material handling. The advantages to leasing on the IHNC are the ready availability of sites zoned heavy industrial with deep-water and rail access.

The following figures depict the location of facilities at the Port of New Orleans by location including: Mississippi River Facilities; Cruise Terminal and Port of New Orleans Headquarters; and Industrial Canal Facilities.

Figure 2
Board Owned Facilities



2020 Master Plan: Existing Facilities





III. STRATEGIC ISSUES

A. Hurricane Katrina Damage

The major strategic issue over the next decade facing the Port of New Orleans and the southeast Louisiana region is recovery from the damages inflicted by Hurricane Katrina in August 2005.

Port facilities located on the Mississippi River experienced heavy winds and limited damage to cargo transit sheds, wharves, container cranes and electrical equipment. Fortunately, the terminals on the Mississippi River received no flooding and are fully operational.

Port facilities located in eastern New Orleans located on the MRGO and the IHNC bore the brunt of the hurricane's fury. In addition to wind damage, water inundated these navigation canals and overtopped the flood protection system. Floodwaters were more than ten feet at many properties.

Environmental studies of the impacts of Hurricane Katrina relative to the MRGO are presently underway. De-authorization of the channel and/or the construction of barriers that would permanently close all or part of the MRGO are under consideration by federal agencies. Should total or partial closure of the MRGO occur, a number of established maritime facilities will cease to operate for deep draft vessels. Vessels will be limited to the size of the existing Inner Harbor Navigational Canal lock. The affected facilities include the Port's France Road Terminal on the west bank of the IHNC and the Jourdan Road Terminal on the east bank.



The France Road container berths (top) had severe damage after Hurricane Katrina. The Napoleon Avenue Container Terminal, along the Mississippi River, had moderate damage and welcomed its first container ship, the Lykes Flyer (right) less than two weeks after the city flooded.



Port of New Orleans Photos: Donn Young

The Corps of Engineers has suspended dredging of the MRGO since August of 2005. This has led to a lack of deep water navigation via the MRGO, compounding the impacts of the hurricane on port maritime facilities.

This accelerates the Port's plan to move facilities from the MRGO/IHNC area to the Mississippi Riverfront. Towards that end, \$333 million in relocation costs have been identified for existing port facilities dependent on the deep water access provided by the MRGO. Of this total, \$150 million is estimated to relocate existing Port terminals and \$183 million is estimated to relocate other private industries.



B. Alternate Locales

Due to the potential mass relocation of Port tenants and other industries to Mississippi Riverfront facilities resulting from the devastation of Hurricane Katrina noted above, the Port may have to look to other areas within its existing jurisdiction for future new development to aid

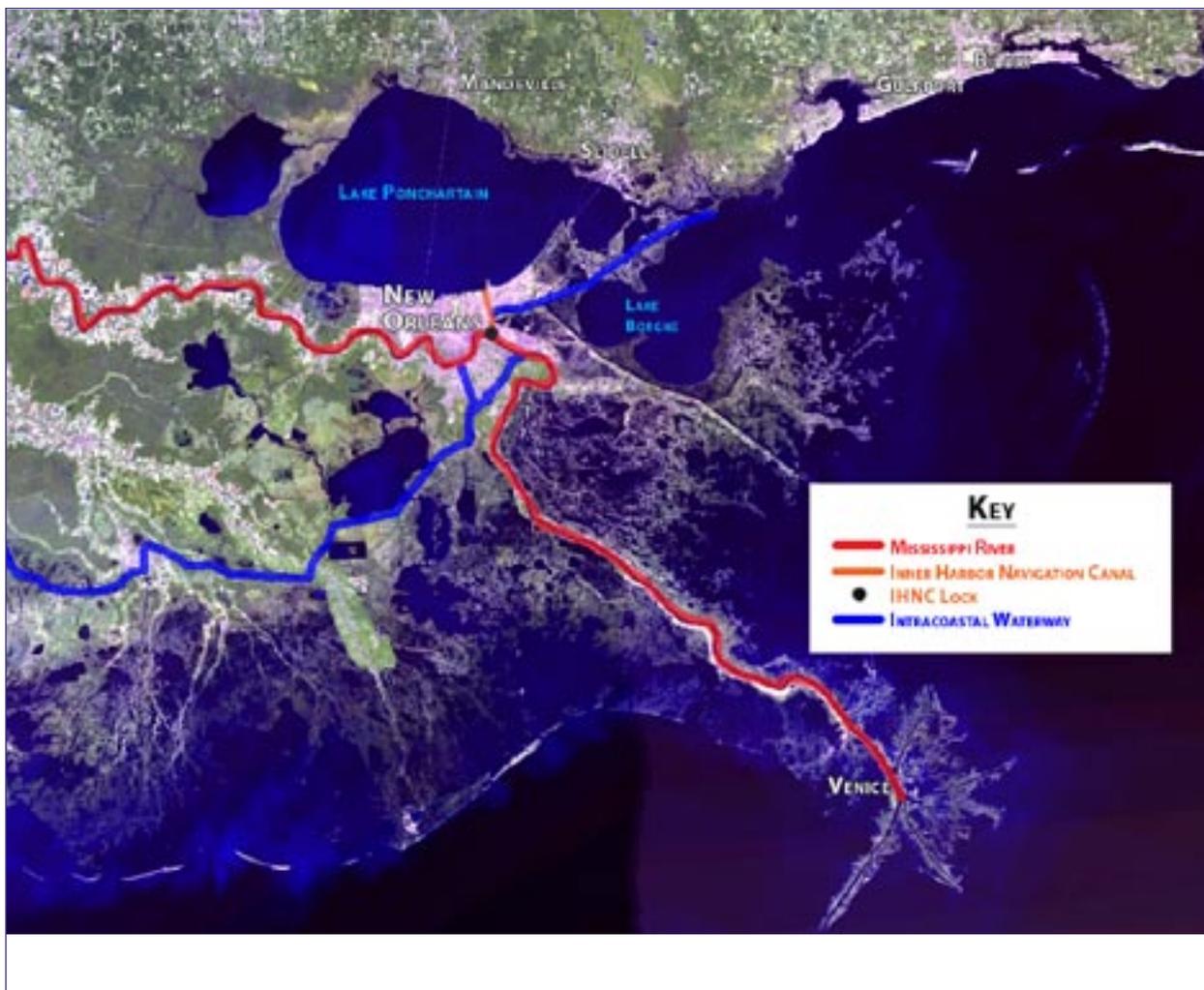
in the economic recovery. Space for additional facilities in the historic footprint of the Port of New Orleans on the East Bank of Orleans Parish is limited.

The Board of Commissioners of the Port of New Orleans (Board) has jurisdiction in Orleans, Jefferson and St. Bernard parishes. The West

Table 1.
Relocation Costs for Port Terminals
Using MRGO

Industry	Est. Relocation Cost
France Road Terminal	\$100 million
Jourdan Road Terminal	\$50 million
Total	\$150 million

Figure 4. Navigation Channels





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Bank of Orleans and Jefferson parishes has been underutilized in the past. These areas are located across the Mississippi River and south of existing facilities at the Port of New Orleans.

Other parishes in the New Orleans metropolitan region may be interested in working with the Port of New Orleans in establishing new maritime facilities.

The Board has considered developing facilities on the West Bank of the Mississippi River on a number of occasions. Following is a summary of initiatives taken over the last 15 years to promote economic and industrial development on the westbank of Jefferson and Orleans Parishes:

- The Board identifies the need for a commerce park outside of the traditional footprint. A master plan investigates the commerce park concept and potential locations. (1989-1992)
- Nineteen potential sites on the West Bank of Jefferson Parish are evaluated, most of which are considered too small to be of practical maritime use. Three sites are studied further: Hydril (50 acres) in Westwego, Union Pacific (950 acres) in Westwego and Union Pacific (57 acres) in Gretna adjacent to the Perry Street Wharf. Hydril has listed the property for \$2.7 million, three times the appraised value. Hydril ultimately decides it is not interested in selling. The Perry Street property is preferred over the Westwego properties because of the existing wharf and warehouse shed and potential riverfront usage conflicts at the Westwego locations. (1993-1995)
- The Perry Street Wharf is purchased from Union Pacific for \$2.275 million. The property includes 57 acres of land and 3,885 feet of Mississippi River frontage. The wharf includes 1,009 linear feet of wharf, 283,000 square feet of wharf area, a 160,000 square foot warehouse and direct rail access to the front apron. (1996-1997)
- Seven acres and 96,000 square feet of buildings at the Ward Lumber Company located south of the Perry Street Wharf in Gretna, La., are considered for acquisition. Negotiations are unsuccessful due to the wide disparity between the asking price and the appraised values and the cost of remediating environmental conditions on the property. (1996 -1997)
- Funding the *West Bank Corridor Improvement Study* to identify potential development sites and opportunities, access and infrastructure improvements. (1998)
- Twenty acres of riverfront property in the South Kenner portion of Jefferson Parish associated with an airport noise abatement area is evaluated for acquisition. An airport master plan projects a need for an intermodal park adjacent to the existing airport but finds the wharf facility commercially infeasible and problematic due to flight path height limitations. Negotiations for purchase are unsuccessful because of the wide disparity between the asking price and the appraised value. (1995)
- A donation of 1,750 linear feet of bature property in Marrero on the West Bank of Jefferson Parish is offered to the Board. Findings from an environmental review of the property indicate a presence of asbestos throughout the site, formerly a dump of unknown content. The Board declines to take ownership of the property and the property owner declines to clean the site. (2000)
- The Board leases the former Todd Shipyard property located on the West Bank of Orleans Parish to a topside ship repair operation. A number of attempts are made to lease the adjacent wharf for government vessel lay berthing, without success. (2001)
- A 1,500 foot dock at Northrop Grumman Avondale Shipyard located on the West Bank of Jefferson Parish is evaluated for potential maritime use. It is determined that the dock is best suited for top-side ship repair, lay berthing or ship-to-barge transfer. The configuration of the dock and backup area was determined not suitable for typical cargo stevedoring and terminal operations. (2005)

The West Bank of Jefferson and Orleans parishes presents a potential for location of future facilities for the Port of New Orleans as the existing historic footprint on the eastbank of Orleans Parish reaches full capacity.



C. Regional Port Cooperation

The Port of New Orleans has fostered partnerships with other Louisiana ports through cooperative endeavor agreements including the two ports located downriver from New Orleans. These partnerships extend the regional outlook of long-term port planning and broaden the landscape in which future port development could take place.

The Port of New Orleans has signed agreements with the St. Bernard Port, Terminal and Harbor District and the Plaquemines Parish Port, Harbor and Terminal District. The Port authorities in Plaquemines, St. Bernard and New Orleans together control the first 121 miles of Mississippi river frontage, extending from the mouth of the Mississippi River to the area near Louis Armstrong International Airport.

The Board of Commissioners of the Port of New Orleans supports a proposal by Plaquemines Parish officials to expand the energy port at Venice, La., to service new oil and gas exploration leases opened in the eastern Gulf of Mexico. Officials hope to improve access to Venice by dredging Baptiste Collette Bayou to a depth of 27 feet. Venice is closer than any other Gulf Coast port to the new lease area, which is set for drilling in 2008.

The cooperative endeavor agreements have led to coordinated efforts in terms of marketing the ports on the Lower Mississippi River, and each agreement says that the ports will consider coordinated investments in the future. The cooperative endeavor agreements raise the possibility that the ports could work together to create new facilities along the Mississippi River. Those partnerships could extend to some of the port development projects mentioned in this plan.

D. Commercial Riverfront Development

Interest in the Mississippi Riverfront was renewed following the World's Fair held in New Orleans in 1984. Redevelopment of the World's Fair structures contributed to a mixture of maritime and commercial uses leading to redevelopment of the riverfront and the adjacent "Warehouse District" in the City of New Orleans.

Today this area boasts of a vibrant mixture of offices (including the Port of New Orleans Administration Building), the Ernest Morial Convention Center, condominiums, hotels, restaurants, a casino, an aquarium, museums, parks, retail shopping areas and cruise terminals.

The extension of existing mixed riverfront uses has been under consideration by the Board for some time. The effect of Hurricane Katrina on the New Orleans commercial, residential and tourism landscapes has brought an air of caution to the wide variety of non-maritime development initiatives long planned in the area from Jackson Avenue to the Industrial Canal.

These include:

Redevelopment of the World's Fair structures contributed to a mixture of maritime and commercial uses leading to redevelopment of the riverfront and the adjacent "Warehouse District" in the City of New Orleans.

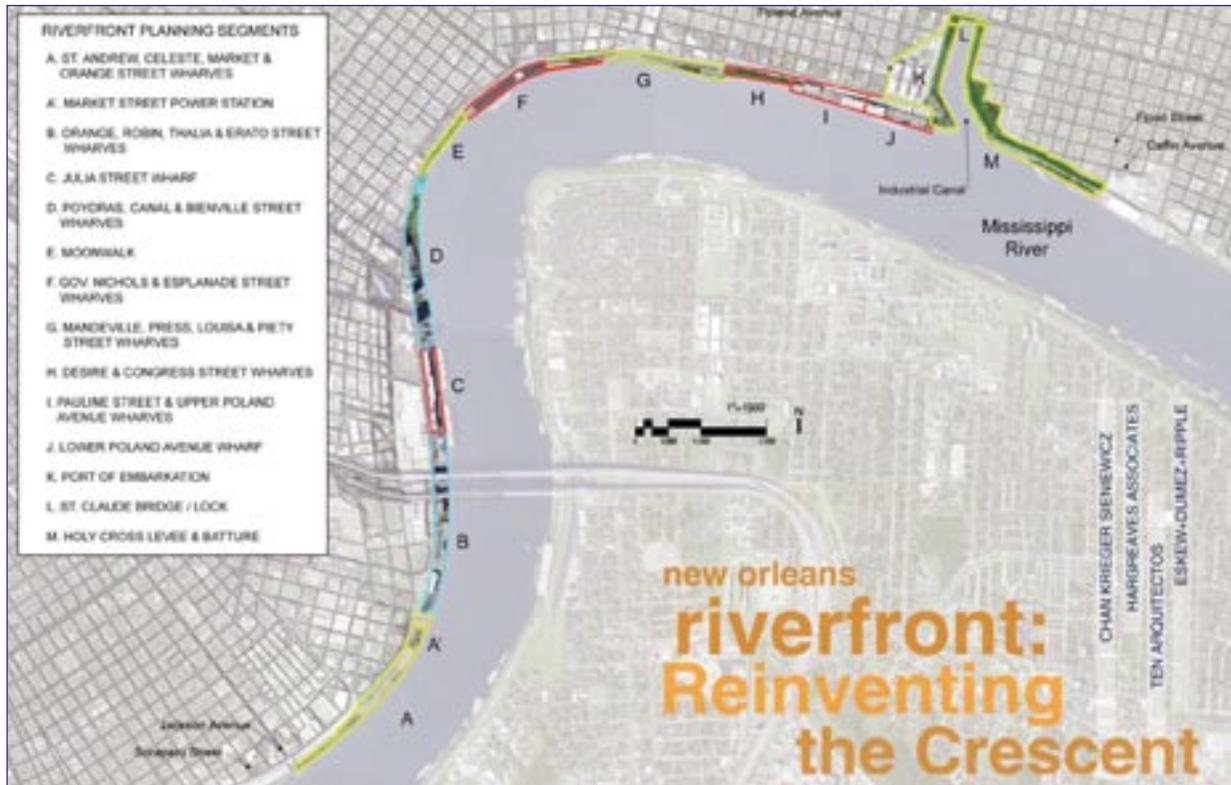
1. The Trust for Public Land River Park
2. Tulane University Riversphere
3. Morial Convention Center Phase 4 Expansion
4. Julia Hotel, including new cruise terminal
5. Regional Transit Authority Riverfront Streetcar Extension

The Convention Center expansion is under reevaluation. The Julia Hotel, The Trust's River Park, Tulane's Riversphere and



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Figure 5.
Riverfront Development Map



the Riverfront Streetcar Extension continue to be pursued but have been slowed considerably.

The Erato Street Cruise Terminal and Garage were completed in October 2006, and construction of the new Poland Avenue Cruise Terminal project could begin in the fall of 2008, given the release of State Capital Outlay funds previously committed.

The Board has succeeded in executing a Riverfront Development Agreement with the City of New Orleans to facilitate non-maritime development. The agreement provides a vehicle to ease the process of riverfront development by coordinating Board and City reviews and approvals and by laying out ground rules for locations and parameters for non-maritime development.

Additionally, the New Orleans City Council has approved the City Planning

Commission's Riverfront Vision 2005 as the City's official land use planning document for the riverfront. The New Orleans Building Corporation, with the assistance of the Board, has selected a consortium of architects and planners to provide a conceptual riverfront development plan which will serve as the basis for prospective developers.

The dilemma faced by riverfront projects is the uncertain nature of the New Orleans post-Katrina marketplace, both in terms of resident population and tourist visitation. The state of the city's tourism also affects decision-making by cruise lines on vessel deployment and thus affects the Board's cruise terminal development program.

Federal and state disaster response programs may provide an opportunity to tap previously unavailable funding sources for infrastructure improvements and development of tax credits, which could



make riverfront development more desirable and feasible.

The number of concurrent prospective developments remains remarkable and could foreshadow a radical change in the face of the New Orleans downtown riverfront, potentially affecting not only the public's relationship to the Mississippi River but also the Board's maritime activities in the same area.

The Board will continue to promote and facilitate non-maritime development and assist credible prospective developers of underutilized Board wharves, while supporting the interests of viable maritime tenants. The Board will participate with the City in drafting development plans and criteria and reviewing development proposals.

E. Industrial Property

An independent study is underway to determine the feasibility of the Board selling some or all of its industrial properties. Selected properties have been targeted for initial disposition investigation.

There are currently three basic types of lease prospects for existing industrial properties:

1. Storm-recovery prospects. These include basic materials, building materials and construction companies. Demand from these types of prospects will most likely continue through 2008. Leases are expected to be medium term, i.e., two to eight years. The Board is currently negotiating with a number of storm recovery firms but no leases have been consummated to date.
2. Companies that see an immediate opportunity but that also have longer-term ambitions. These companies include the foregoing plus boat/ship repair, light manufacturing

and warehousing businesses. A half dozen of these leases have been entered into over the last year and two more are close to being finalized.

3. The usual prospects, those companies needing industrial land and facilities including direct rail and water access. There have not been many of the usual prospects since Katrina but it is anticipated that they will resurface when/if the recovery is successful.

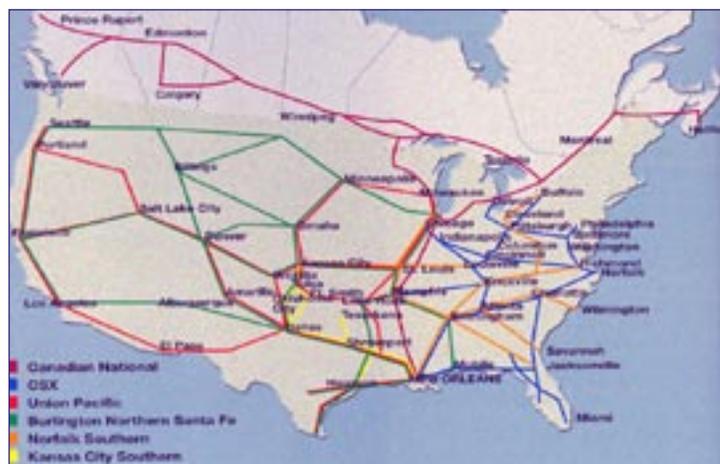
Most of the companies listed under category 1 and 2 above have shown a keen interest in purchasing the property rather than leasing.

F. Intermodal Rail

The Port of New Orleans is very fortunate to be served by six Class I railroads, more than any other port city in the United States. These carriers, two to the west, two to the north and two to the east, have helped to establish the Port as a major gateway for international rail traffic to the interior of the United States.

Given its location, the Port of New Orleans is more aligned with those international cargoes traveling within the United States in a north/south direction. The majority of the cargo moving through the Port is headed for or arriving from the major markets of

Figure 6
Railroads Serving New Orleans





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Port of New Orleans Photo: Donn Young

The former location of the Stuy Docks rail yard provides space to nurture on-dock container rail transfer. The railyard, which the Port purchased, is located next to the existing Napoleon Avenue Container Terminal. Developing an on-dock service would help attract containerized cargo from other states.

Memphis, Kansas City, Chicago and points in the Midwest.

These locales are considered the Port's major cargo sourcing areas, as opposed to the markets on the east and west coasts. Thus the rail carriers serving these more northern areas, the Canadian National and the Kansas City Southern, are particularly well positioned to handle the preponderance of the Port's rail traffic.

Over the last several decades, intermodal rail (via ocean containers carried on railcars) has emerged as the preferred delivery methodology for customers shipping containers to/from United States seaports from many inland points. Intermodal rail is usually less expensive from longer distances than the alternative of over-the-road trucking.

There are a myriad of factors which determine or can affect how a container is delivered to a port. By and large, the longer the distance traveled, the more likely the container is to arrive by rail.

In some major port cities, containers arriving by rail can be delivered by the rail carrier directly on to the port area. This is called on-dock rail. Typically, the port is served by one or two rail carriers. The intermodal rail yard, owned by the Port or the rail carrier, is located on Port property. Containers are unloaded from the rail cars and delivered directly to shipside.

The alternative to on-dock rail is off-dock rail. This is the case in New Orleans. The six Class I railroads each have their intermodal yards in areas within five miles of the Port, but not actually on Port property. The containers are unloaded from railcars at these intermodal yards and drayed (delivered by truck) to/from the Port's maritime terminals.

Traditionally, up until last year, this cross-town dray from the rail yard to the Port area in New Orleans has been inexpensive, ranging from \$50 to \$75. The supply of willing drivers has kept this rate extremely low and has made the economics of developing an on-dock alternative cost prohibitive.



Driven primarily by the aftermath of Hurricane Katrina and the shortage of drivers, the cost of this cross-town dray has risen threefold. The expenses associate with developing Port property and the corresponding intermodal rail service to the Port area is now becoming an attractive alternative.



Port of New Orleans Photo: Donn Young

The CN Railroad, the largest volume railroad serving the Port, and the two operators of the Port's Napoleon Avenue Container Terminal have recognized this fact.

These parties are close to finalizing an operating agreement between these two terminal operators that will utilize a portion of the Napoleon Avenue Container Terminal. This will effectively establish an on-dock rail service serving the Port of New Orleans. The timing, the economics and customer response all appear favorable to furthering this endeavor.

As the Board continues in its master planning, it is essential that the future of the former Stuy Docks intermodal yard be completely understood and nurtured. On-dock rail will likely prove to be an essential element in the support and growth of the

New Orleans' excellent rail connections provide a way to increase container volumes without increasing truck traffic.

container volumes at the Napoleon Avenue Container Terminal. Moving containers to/from port areas in the most economical, time-sensitive fashion is a key component in the importer/exporter port-of-choice decision-making process. The Port of New Orleans has much to gain in this regard with the further development of this on-dock rail asset.

**Table 2.
Port of New Orleans Cargo Tonnage
for Board-Owned Facilities**

Year	Breakbulk	Container	Total General Cargo
2002	4,231,049	2,831,167	7,062,216
2003	3,473,312	3,050,508	6,523,820
2004	4,918,106	3,165,964	8,084,070
2005	4,035,504	2,565,879	6,601,383
2006	5,753,085	2,344,186	8,097,271



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IV. MARKET ASSESSMENT

The two major business activities of the Board of Commissioners Port of New Orleans (Board) are the provision of cargo and cruise facilities.

The focus of Board-owned cargo facilities is the accommodation of general cargo. General cargo includes two types of cargo modes: breakbulk and container. Historically, breakbulk cargo has been the predominant cargo handled at Board facilities. In addition, a significant volume of containerized cargo is handled at Board terminals.

In the five-year period between 2002 and 2006, the volume of general cargo handled at Board-owned facilities has increased from more than 7 million tons to nearly 8.1 million tons. Table 3 on the next page documents cargo volumes for Board-owned facilities over the last five years.

This, however, has not been a period of steady growth. Cargo flows through the Port are characterized by significant fluctuations.

A variety of economic and trade-related factors contribute to this volatility, particularly in breakbulk cargo volumes. Volatility in cargo flows and anticipated cargo growth are significant factors in port facility utilization and planning. Since 1994, the Port has experienced rapid growth in its cruise business. The following table traces cruise growth at Board facilities over the last five years by the number of cruise passengers.

The passenger trend in New Orleans continued to grow between 2002 and 2005 because of the improved facilities in New Orleans and the tremendous magnetic pull of the City itself to the individual tourist who wanted to combine a trip to New Orleans with a cruise to the Caribbean. New Orleans was attracting more cruise lines, such as Princess Cruise Lines, as it continued to fill the ships already committed.

Unfortunately, Hurricane Katrina stepped in and diverted the progress. The cruise industry returned to New Orleans on December 30, 2005, and the Port hosted four ships prior to



Port of New Orleans Photo: Donn Young

Breakbulk cargo has been the predominant cargo in New Orleans, but containerized cargo (above) represents a significant volume for the Board's terminals

the home- ported cruise ships returning on October 15, 2006.

The cruise industry in New Orleans has a strong relationship to tourism. As the New Orleans tourist base rebuilds, the cruise passengers are returning.

The recent completion of the Erato Street Cruise Terminal and plans to redevelop the Poland Avenue Wharf as a cruise terminal will enable the Board to accommodate projected growth in cruise operations.

Breakbulk and cruise operations have traditionally taken place at facilities located on the East Bank of the Mississippi River in Orleans Parish. In 2001, the Board opened the Napoleon Avenue Container Terminal, its first dedicated container facility located on the



Table 3.
Board-Owned
Cruise Terminal Growth

Year	Cruise Passengers
2002	587,000
2003	592,583
2004	734,643
2005	579,867
2006	155,806

Mississippi River. Prior to Hurricane Katrina, container operations were accommodated at the France Road Terminal situated on the Inner Harbor Navigation Canal (IHNC).

A number of factors have emerged simultaneously that affect the Board’s cargo markets as well as capacity for both breakbulk and container cargo terminal operations. These factors afford the Board with opportunities for growth and affect the future location and development of cargo facilities, which include:

1. Shifts in global commerce, including an upturn in the volume of imported steel as well as anticipated growth in other major breakbulk commodities handled at the Port and anticipated long term global growth in containerized cargo.
2. Increased competition for space on the Mississippi Riverfront from a multitude of factors:
 - Post-Katrina siltation and the anticipated closure of the Mississippi River Gulf Outlet (MRGO), resulting in the relocation of much-needed breakbulk and container terminal capacity to the riverfront.
 - The anticipated reduction of breakbulk capacity due to the removal of the Napoleon “C” and Milan Street Wharves to enable the expansion of the Napoleon Avenue Container Terminal.
 - Further reduction in breakbulk capacity resulting from redevelopment

of the Poland Avenue Wharf for needed additional cruise terminal capacity.

As noted, the Board’s other major business involves the provision of cruise terminals to accommodate the Port’s emerging cruise industry. Although Hurricane Katrina has temporarily dampened New Orleans’ market capture, anticipated industry growth provides the Board with an enormous opportunity.

To take advantage of potential industry growth, adequate terminal capacity must be in place. The recent completion of the Erato Street Cruise Terminal and plans to redevelop the Poland Avenue Wharf as a cruise terminal will enable the Board to accommodate projected growth in cruise operations.

A. Marketplace Assessment

The following sections of this plan thoroughly examine the Board’s breakbulk, container and cruise business through a marketplace assessment and facility capacity and utilization analysis. This market-based approach forms the rationale for Port capital improvement recommendations for both the short and long term, which are presented in Chapter V, Capital Improvement Plan.

1. Breakbulk Cargo

Worldwide breakbulk cargo volumes are projected to grow 3% to 7% annually. The Port of New Orleans is not expected to share in the upper range of growth primarily due to increased containerization of certain breakbulk cargo presently handled at the Port. Based on commodity analysis and historical trends, breakbulk cargo handled at the Port is projected to grow 2% annually through 2020.

Several factors are responsible for projected growth in the breakbulk market sector, including:

- Global economic growth, especially the emergence of China and the resulting "bounce" of the other Asian countries.
- Large scale infrastructure projects in emerging economies, including the expansion of oil and gas exploration



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Port of New Orleans Photo: Donn Young

Volatility in the volume of breakbulk cargo, such as steel, is based on global economic trends. The Port has to make allowances for these fluctuations in planning its capacity for breakbulk cargo.

ventures and plants.

- Worldwide restructuring of the steel industry.
- Recovery of the forest products sector.
- Better cost economies and improved service from breakbulk carriers.

Typically, the Port experiences volatility in breakbulk volumes based on national and global economic trends. Fluctuations in breakbulk tonnages occurring on a year-to-year basis complicates planning for port capacity for breakbulk cargo.

The availability of adequate transit shed capacity is a major consideration in accommodating growth in breakbulk cargo volumes. Given the amount of transit shed capacity currently available, the Port may not experience capacity constraints under normal conditions in the near future.

However, the potential for unpredictable

surges in breakbulk cargo accentuates the need for increased transit shed capacity to both capitalize on higher cargo volumes and retain existing business.

Conditions impacting availability of sufficient transit shed capacity include:

1. The Port's transit shed capacity is divided among discrete, privately operated terminals. Shifting shed capacity from one private terminal to a competing operation in the event of a spike cannot be accomplished easily.
2. Capacity constraints will arise if all of Port breakbulk commodities increase simultaneously.
3. Flexible space capacity has been lost to urban development and container terminal capacity on the Mississippi River, valuable spill-over space that previously accommodated spikes in cargo activity.



In the long term, site and funding alternatives will be examined to assure that transit shed capacity will be available when required.

In the interim, non-structural methods of increasing short-term capacity should be considered, including cargo stacking, reduced free time and demurrage. Stevedore initiatives will play an important role in dealing with spikes in cargo volumes.

The primary characteristic of breakbulk cargo tonnage levels during the past decade has been a flat trend with considerable year-to-year volatility. Generally, economic trends and commodity-specific factors account for the volatile nature of breakbulk cargo performance.

The Port's specific commodity mix, related competitive factors and changing business conditions significantly impact the overall trend for breakbulk cargo. Cargo-handling requirements for specific commodities also have a direct bearing on the use and types of storage space the Board must make available to assure continued growth in breakbulk cargo.

Breakbulk cargoes consist primarily of construction and manufacturing-related commodities, e.g., steel, forest products, rubber and nonferrous metals. Cargo volumes tend to track national and global economic growth trends.

High breakbulk cargo volumes in the mid to late 90s corresponded with exuberant national economic growth. Declining volumes between 2001 and 2003 reflected global and national economic recession. Likewise, the recent rebound in breakbulk volumes tracks recovering national and global economies.

From 2000 through 2006, the level of breakbulk cargo activity at Board-owned facilities was largely stable, albeit with significant fluctuations in volumes. The lack of growth in breakbulk cargo can be partially attributed to shifts in traditional breakbulk commodities, e.g. coffee and paper products, to containers.

Breakbulk cargo volume at Board wharves

averaged approximately 4.5 million tons between 2002 and 2006. Volumes declined to 2.5 million tons in 2003 but rebounded to more than 3.7 million tons in 2004, a 47.9 percent increase over 2003.

Hurricane Katrina curtailed operations at the Port of New Orleans for four months and adversely impacted cargo volumes in 2005 and 2006. Port operations are beginning to recover, as is the region and State.

Factors relating to the accommodation and outlook of the Port's four principal breakbulk commodity groupings -- steel, non-ferrous metals, natural rubber and forest products-- are discussed below.

Steel

Steel imports are the Port's primary breakbulk commodity, typically accounting for more than 50 percent of the Port's total general cargo. Steel import volumes accounted for much of the growth in Port cargo in the mid to late 90s, accounting for more than 70 percent of total general cargo in 1998.

Tariffs imposed on steel imports in 2002 had a significant adverse impact on the Port's cargo activity. The tariffs were most profoundly felt in 2003. Notably, in 2003, steel imports accounted for only 40.7 percent of the Port's total general cargo. Import steel volumes increased significantly with the lifting of the tariffs in December, 2003.

Probably the most volatile of all the breakbulk commodities handled at the Port, steel is certainly the most important. While it will definitely continue to be the mainstay of the Port's breakbulk business, the shipping and handling of this commodity is expected to undergo some changes in the next decade, including some containerization and packaging modification.

Because steel represents such a large portion of the Port's cargo, significant fluctuations in tonnage movements have a much larger impact on port capacity than similar fluctuations in other commodities.



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According to the American Institute of International Steel (AIIS), steel demand in the United States is projected to rise at a rate of one percent to two percent per year for the next decade. With the apparent supply of steel averaging 118 million tons per year (with a range of 108 million tons to 133 million tons), increases in demand would equal approximately 1 million to 2.4 million more tons of steel each year. Of course, the value of the dollar, the United States economy, the economies of steel producing countries, and other trade-related factors will play a large role in affecting this volume.

Over the past 10 years, imported steel has accounted for an average of 28 percent of the apparent supply of steel in the United States. Imports represented only 21 percent of apparent supply in 2003, down from a high of 33 percent in 1998. Given the recent history with tariffs, it is unlikely that imported steel will attain more than a 30 percent market share in the near future. However, domestic demand will virtually ensure that imports continue to comprise a significant portion of this market.

Construction of new plants and closure of old plants will impact steel import levels. However, the types of plants built and closed will impact imports in different fashions. It is unlikely that any integrated mills will be constructed in the United States in the near future, if ever. Costing billions of dollars to build, these plants are considered too expensive for the United States marketplace.

The likely alternatives will be mini-mills and finishing plants. Of the two, finishing plants would increase the likelihood of steel imports due to their reliance upon raw steel as feedstock. Perhaps even more important than the type of mill is the location of these facilities. Factories located at sites connected by the Mississippi River waterway system would greatly benefit this Port.

The AIIS reports that the Port of New Orleans (portwide) has averaged 13 percent of all steel imported into the United States (including Canadian steel) over the last ten years. On average, and barring any major upheavals in the marketplace, New Orleans should expect

to handle anywhere from 12 percent to 15 percent of the steel imported into the United States. The location of new automobile plants in the Southeast, the location of new steel mills, and competitive port development will all impact the Port's steel future.

However, none of the steel imports moving through the Port remain in Louisiana with the exception of those bound for a steel processing plant that recently opened in Shreveport. The lack of more steel processing facilities in Louisiana eliminates the Port and the state from receiving the economic benefits of any possible vertical integration scheme.

Nonferrous Metals

Nonferrous metals such as copper, zinc and aluminum are generally counter-cyclical, meaning that when the economy is good, volumes are down and vice-versa. Industries generally store product in London Metal



Port of New Orleans Photo: Donn Young

The Port of New Orleans has more certified warehouses to handle nonferrous metals, such as copper (shown above), than any other U.S. port.

2020 Master Plan: Market Assessment



Exchange (LME) Warehouses. The Port of New Orleans is unique in that it contains more certified LME warehouses than any port in the United States.

This alone ensures a continuous flow of nonferrous metals to the Port. The LME warehouse distributors store nonferrous metals during slow periods and distribute from these warehouses when the market is active. LME warehouses in New Orleans serve a global market, including China.

Continued growth of nonferrous metal cargo moving through the Port to manufacturing in the industrial Midwest is anticipated due to the availability of low priced aluminum from Russia.

In recent years, the volume of copper handled at the Port has declined. The location of copper processing facilities in Carrollton, Ga., caused a shift of a significant volume of copper imports to Panama City, Fla., because of the lower inland costs available at that port.

Natural Rubber

The United States is considered a “mature market” in the rubber industry. It is a marketplace unlikely to produce radical changes in consumption or demand for natural rubber. In 2004, the demand for natural rubber in the United States was 1.1 million tons.

According to the International Rubber Study Group, that figure is expected to increase to 1.3 million tons during the next 15 years. If these projections are accurate, the annualized growth rate would be approximately 1.7 percent per year.

The United States produces no natural rubber. Thus, 100 percent of the demand for this product will be satisfied by imports.

The Port of New Orleans is the number one port in the United States for natural rubber imports. Rubber imports move through the Port to tire manufacturers located in the Midwest.

New Orleans has been the port of choice for rubber importers for four reasons:



Port of New Orleans Photo: Donn Young

New Orleans is the leading port of entry for natural rubber entering the United States.

1. Availability of liner service.
2. Superior inland rail connections.
3. Local expertise in handling rubber imports.
4. Free-time and warehousing.

Natural rubber is expected to remain a major import. Currently, rubber arrives at the Port in metal baskets. However, rubber can be easily containerized which minimizes specialized handling requirements.

Despite the potential for increases in the containerization, growth and retention of the Port's rubber business is expected due to the availability of excellent liner service connections.

Rubber imports in the United States emanate primarily from Indonesia and Malaysia. A shift to West Coast ports is possible due to increased containerization of rubber and the possible development of a rubber distribution center in Memphis, Tenn. Rubber would be off-loaded at West Coast ports and transported by train to Memphis or other distribution points in the Midwest.

Forest Products

Demand for forest products is closely tied to population growth. According to the United Nations, global population is projected to grow



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from 6.1 billion in 2000 to 10 billion in 2050, thereby indicating continued growth in forest product demand. Demand for both imports and exports will continue to grow due to increasing specialization and shifting production to countries with low labor costs. For these reasons, the Port anticipates continued growth in forest products.

Breakbulk forest products handled at the Port have declined somewhat over the last five years. This is largely due to a shift in paper products into containers. The potential for containerization of forest products is high and increasing in all commodity types.

Plywood imports from China have recently increased at the Port. Additionally, for the first time the Port is handling wood pulp imports from South America. Further containerization of forest products is anticipated with the exception of the aforementioned wood pulp.

Forest products are expected to continue to move through the Port in containers. Paper exports that arrive at the Port as breakbulk cargo are now being stuffed into containers for shipment overseas.

Even as containerized cargo increases, forest products will continue to require breakbulk terminal capacity once the container is grounded and is either stripped or stuffed. Despite the fact that this cargo may not show up in cargo statistics as breakbulk, it still must be accommodated at the Port as breakbulk cargo.

Refrigerated Cargo

The Board's refrigerated cargo facility has experienced a boom in its international business segments over the last six years. The primary export commodity at this facility is frozen poultry.

From 2000 to 2005 shipments of frozen poultry increased from 127,000 tons to more than 300,000 tons. This last volume generated revenues to the Port of more than \$1.5 million dollars that year.



Port of New Orleans Photo: Donn Young

Cargo volumes for breakbulk frozen poultry (shown above) have grown substantially in the last six years.

As with virtually all breakbulk commodities, the shift into containers is a real possibility. This could have a particularly damaging impact on shipments through New Orleans, as other freezer operations are located in port cities (Houston and Charleston) with more frequent and extensive container services than New Orleans. On the positive side, however, it appears the breakbulk shipment of frozen poultry will continue at its present levels at the Port of New Orleans for the next 10 to 15 years.

2. CONTAINER CARGO

After enjoying steady growth in containerized cargo tonnage and TEUs (20-foot equivalent units) between 2002 and 2004, the Port experienced a decline in the number of containers handled largely due to the adverse impacts of Hurricane Katrina in August 2005. These impacts included the near cessation of operations at the Port's dedicated container terminals for the last quarter of 2005 and the loss of container terminal capacity at France Road Terminal Berth 1. It should be noted that tonnage and TEU totals cited do not include empty containers. Empties increase TEU counts by approximately 25 percent.

In 2002, the Port handled 2.8 million tons (241,854 TEUs). By 2004, container tonnage had grown to nearly 3.2 million tons (258,448 TEUs). The Port's container tonnage declined to less than 2.6 million tons (203,411 TEUs)



Port of New Orleans Photo: Donn Young

Containerized cargo currently makes up more than 70 percent of the value of sea-borne trade, according to Drewry Shipping Consultant Ltd.

in 2005 and approximately 2.3 million tons (175,905 TEUs) in 2006.

The continuing decline in containerized cargo experienced in 2006 reflects the loss of a container liner service that had called at France Road Terminal. Vessels belonging to this service resumed calls at the Board's Napoleon Avenue Container Terminal in late 2006. However, it remains unclear whether this service will continue to call at the Port or relocate to a competing Gulf port in the not-too-distant future.

Despite the Katrina-related short term decline in container volumes, the outlook for growth opportunities in containerized cargo is strong. This assessment is based on projected growth in the global, North American and United States Gulf container markets as well as other factors related to United States port capacity constraints and industry trends.

The main factors identified as contributing to container traffic growth are:

- World trade growth;
- Growth of containerized cargo as a percentage of world trade;

- Manufacturing relocation to Northeast Asia (China);

- Regional and intraregional demand growth; and

- The provision of necessary container terminal capacity and related infrastructure at East Coast ports.

Growth in Global Container Trade

Drewry Shipping Consultant Ltd. estimates that containerized cargo

currently makes up more than 70 percent of the value of seaborne trade. In 2006, that resulted in about 346,000 container shipments daily. By 2014, daily container shipments will increase by over 75 percent to 600,000 container shipments daily. Growth in world trade is closely correlated to economic growth. Between 1995 and 2005, global trade grew at almost twice the rate of the world economy and this trend is expected to continue.

Growth in container shipping not only exceeds global economic growth but also is growing at a faster pace than merchandise exports. This occurs not simply because container transport is the preferred shipping option for international trade but also because of the continued conversion of breakbulk cargo to containers, a greater percentage of movement of high value cargo by container and free trade initiatives which facilitates the global sourcing of goods.

Drewry/Global Insight estimates that world container traffic will grow steadily from more than 100 million TEUs (loaded containers shipped internationally) in 2005 to well over 150 million TEUs by 2010. By 2015, container traffic will exceed 230 million TEUs and, by 2020, it will surpass 300 million TEUs.

Asia, specifically China, has a vast pool of



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low cost labor. As China opened its economy during the past 20 years, numerous United States and international firms have relocated their manufacturing facilities to China to take advantage of low cost labor. Even manufacturing capacity that had been previously relocated to Mexico and Latin America because of their low labor costs is now relocating to Asia.

As a result of this economic transformation, global trading patterns have been altered. East Asian trade is the major factor in the global container market growth. The *Economist* reports that worldwide global merchandise trade is growing at about 15 percent annually and exports from China at nearly twice that rate.

Trade between China, India, Europe and the United States makes up 65 percent of the more than 250 million containers (including empties) moved globally a year. The China trade is anticipated to moderate in coming years, but note that the trend is toward slower growth, not decline.

China is taking major steps to expand and improve its transportation infrastructure to enhance the flow of exports. China is planning and constructing port terminal capacity to accommodate 130 million TEUs by 2020, and is midway through completion of a 55,000 mile highway system linking inland and coastal regions. China has also entered to an agreement with the Burlington Northern Santa Fe Railroad to assist in improving intermodal rail service.

Growth in the North American Container Trade

Significant short and long term growth is also anticipated in the North American container market. Between 2005 and 2015, container volumes are expected to grow at a rate of 8.5 percent annually from 46.3 million to 85.7 million loaded TEUs. The annual growth rate is projected to decline slightly to 6.4 percent from 2015 to 2020, reaching 112.3 million loaded TEUs.

Trade with Asia, particularly China, is the driving force in the United States container trade. As a measure of the rapid growth of this

trade between 1997 and 2003, the Journal of Commerce/PIERS reports that United States containerized imports on the Northeast Asian trade route grew by 108 percent from 3.76 million TEUs to 7.83 million TEUs. China now accounts for about 63 percent of the trans-Pacific market, accounting for some 7.4 million TEUs in 2005.

Growth in the United States Gulf Container Trade

Growth is also anticipated in the United States Gulf container market, although not at the rate projected for North America. This is largely due to the predominance of the Asian trade in the North American market. United States Gulf container volumes are projected to grow from 2.3 million TEUs in 2006 to 3.6 million TEUs in 2020.

Container Market Trends

While anticipated growth in container traffic supports the need for expanded container terminal capacity nationally, other important factors bolster expansion in specific port ranges, particularly the East Atlantic and Gulf Coast. Sustained growth in Asian trade has severely taxed both the port and inland transportation infrastructure on the West Coast.

The potential for future labor problems, such as the 2002 strike by the International Longshore and Warehouse Union (ILWU) that paralyzed West Coast port operations, also cause shippers concern regarding port reliability. Both costs and cargo transit times have increased at West Coast ports, and, as a result, East and Gulf coasts have become more competitive for Asian containerized cargo being shipped to Eastern and Midwestern markets.

Asian cargo has shifted as shippers focus on port reliability and the availability of adequate transportation infrastructure. This assessment is born out by the fact that although cargo volumes have continued to grow at West Coast ports, their market share of Asian cargo has declined. Furthermore, major retailers, who depend on the timely delivery of low-cost Chinese imports, have invested in significant distribution-center capacity adjacent to East

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Coast and Gulf Coast ports along with existing or planned container terminal capacity.

In response to these developments, container liner services and their affiliated terminal operating companies as well as other major port holding companies have sought to either lock up container terminal capacity or develop their own terminals to assure available capacity for their customers.

A combination of advantages, including provision of container terminal capacity; deep water harbor access; significant distribution center development; adequate and low cost inland market access; and the availability of all-water liner service to Asia, has resulted in phenomenal growth in container volumes handled at major ports on the East Coast.

Similar trends are starting to play out on the Gulf Coast as well. Houston, which benefits from its major population base, has provided significant container terminal capacity and has experienced expansion of container liner services and distribution center development. New players in the Gulf container market like Mobile and Tampa are emerging as well. With new container terminal capacity and all-water Asian liner service, these ports are poised to both take advantage of container market growth opportunities and threaten the Port of New Orleans' existing cargo base.

Another important factor affecting the rate of growth of Asian cargo in the Gulf is the planned expansion of the Panama Canal. Shippers value all-water service over land-bridge service because of its reliability and lower cost. The canal's existing dimensions prevent vessels with 5,000 TEU capacity or greater from using the facility and limit the availability of all-water service to the Gulf from Asia.



Photo Courtesy of the Panama Canal Authority

The Panama Canal, part of which is shown above, is operating at 93 percent capacity and an expansion project is being planned.

According to the World Shipping Council, in 1999, vessels of more than 5,000 TEUs comprised about 2% of a global fleet of 2,449 vessels providing a total capacity of 4 million TEUs. By 2006, the larger vessels represent 10 percent of the 3,641-ship fleet providing 8 million TEUs of capacity.

The increased use of larger vessels allowed container carriers to double capacity even though the number of vessels only increased by 50 percent. The Council estimates that by 2011, more than 50 percent of the capacity of the global fleet will be made up of vessels that cannot transit the canal.

Apart from size constraints, the Panama Canal is operating at a reported 93 percent capacity, which also serves to limit opportunities for increased container traffic. Over the past ten years, the canal completed a \$1 billion improvement program that increased capacity by 20 percent.

Despite these improvements, the canal will reach its maximum sustainable capacity between 2009 and 2012. Once it reaches capacity it will be unable to meet demand growth and service quality will deteriorate.

The purpose of the expansion project is to assure available capacity to handle continuous



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growth in the number of vessel transits and vessels size. In recent years, the container ship segment has supplanted the dry bulk segment to become the canal's primary income generator and the main driving force of canal traffic growth. In 2005, this segment accounted for 98 million Panama Canal tons (a unit of measure used to establish tolls), 35 percent of the total tonnage transiting the canal. Trade between Northeast Asia and the United States East Coast accounts for 50 percent of the containerized cargo segment, and is anticipated to be the key driver of canal cargo growth.

Between 1999 and 2004, the Panama Canal's share of the Northeast Asia/United States East Coast container trade grew from 11 percent to 38 percent. The canal's major competitor for this trade is the United States intermodal system. At 61 percent, the intermodal system has a higher share of the trade. It offers shorter transit times, but higher costs and variability of service dependability. Also, the intermodal system enables container carriers to take advantage of the economies of scale offered by the use of larger post-Panamax vessels.

Growth in the canal's share of Asian trade is attributed to a reduction in canal transit times, reduction in intermodal system reliability due to congestion problems and an increase in distribution centers for Asian imports located close to United States East Coast ports and end-consumer areas.

The Suez Canal also competes for this trade and has a one percent share of cargo. Despite longer transit times, the Suez route's advantages are that it avoids West Coast congestion and allows the employment of post-Panamax vessels.

Panama Canal Authority (PCA) marketing studies indicate that under the most probable demand scenario the canal's tonnage will almost double during the next 20 years, increasing at an average rate of 3 percent per year. Canal containerized cargo will grow at an average annual rate of 5.6 percent from 98 million Panama Canal tons in 2005 to nearly 296 million tons in 2025.

The \$5.25 billion Panama Canal expansion will create a new lane of traffic with construction

of a third set of locks and other navigation improvements, and will be able to handle post-Panamax container vessels. The PCA says that the expansion project will double canal capacity to more than 600 million Panama Canal Tons, providing sufficient capacity to accommodate anticipated "booming" demand for the next 20 years. The project is expected to be completed by 2014 and is not anticipated to interrupt current canal operations.

Although the PCA's market assessment focuses on the United States East Coast range, port authorities, terminal operators and carriers anticipate that completion of canal improvements as well as anticipated overall growth in container traffic and the other market trends discussed above provide significant opportunities for growth in container volumes for the Gulf Coast port range too. Both opportunities and threats exist regarding the ability of the Port of New Orleans to participate in container market growth. To a large extent, the past and current local market trends are irrelevant because of the rapidly evolving global marketplace.

Ports in the Gulf and South Atlantic ranges that compete with New Orleans for containerized cargos are investing heavily in new container terminal and infrastructure capacity to support distribution center development and are actively courting carriers and terminal operators.

A discussion of the ongoing congestion problems at West Coast ports and a survey of the development issues and actions of major competing ports follows. This survey demonstrates how container market trends are playing out in the port industry and clearly indicates that, in order to capitalize on these trends, the Port of New Orleans must aggressively respond to marketplace challenges by providing needed capacity, addressing transportation infrastructure needs and marketing for all-water Asian liner service.

West Coast Port Congestion

As noted earlier, the North American container market is dominated by growing trade with Asia, particularly China.



Approximately 97 percent of United States trade with China is containerized. West Coast ports are strategically positioned to capture the majority of Asian trade and currently account for approximately 52 percent of total United States containerized trade. The ports of Los Angeles and Long Beach handle an excess of 7.4 million TEUs annually.

Despite the West Coast's geographical advantage and market dominance of this trade, opportunities may arise for the Port of New Orleans to capture some of this trade. This is particularly true for containers destined for Midwestern markets because of rising costs and transit times related to port and inland transportation congestion and capacity constraints as well as uncertain labor conditions.

West Coast ports are experiencing longer container transit times and, as a result, rising costs due to terminal capacity constraints and heavily congested road and rail networks. The imbalance in trade with China means that large numbers of empty containers also clog ports. Costs per container are forecasted to increase by 11.1 percent by 2008 due to increased transit times resulting from port congestion.

Despite the diminishing availability of land suitable for terminal expansion, major West Coast Ports can forestall capacity overload in the short term through improved productivity and capacity utilization. However, such improvements do not address the rising concerns of area residents with regard to congested transportation networks nor the limitations imposed by the fundamental lack of space for expansion. Notably, with the exception of the Port of Prince Rupert in Northwestern Canada, no new significant terminal capacity expansion is currently planned on the West Coast.

Recent labor problems have also raised serious concerns related to the ongoing reliability of West Coast ports. In 2002, the ILWU went on strike and effectively halted the flow of goods from these ports. Following the strike, shippers, sensitive to supply chain disruptions and increasingly frustrated by congestion and rising costs, have sought

alternative entry points to reduce risk and dependence on West Coast ports and cut overall transportation costs.

The current labor contract with the ILWU expires in 2008. In anticipation of a repeat of the work stoppages that occurred in 2002, carriers and terminal operators are actively seeking to lock up spare terminal capacity.

Northwest Pacific Coast ports, such as Oakland, Seattle, Tacoma and Vancouver, are also well positioned to serve the Asian trade and have absorbed container traffic from over-burdened southwest Pacific Coast Ports. These ports currently have sufficient existing terminal capacity and planned incremental terminal expansions to accommodate projected cargo growth for the foreseeable future.

However, the continued diversion of cargo from southwest Pacific Coast ports will alter this scenario and result in terminal as well as inland transportation congestion problems. Northwest Pacific Coast ports also operate under West Coast labor agreements and are subject to potential throughput disruptions resulting from contract disputes.

Although overall cargo volumes through West Coast ports continued to increase in the aftermath of the 2002 strike, their market share of containerized Chinese exports to the United States dropped by more than nine percent between 2000 and 2003. East Coast Ports were the immediate beneficiary of supply chain restructuring, experiencing an eight percent increase in containerized Chinese exports. Gulf ports market share increased from 0.8 percent to 2.2 percent during the same period.

Shippers have and continue to explore a variety of port options in response to the problems experienced at West Coast ports. Shippers have found that the total cost of routing Asian cargo to East Coast ports via the Suez Canal is competitive, especially for cargo destined for eastern United States markets.

Asian cargo is currently shipped to Gulf ports via the Panama Canal; however, the canal's size limits participation in the container market because it prevents transit



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**Table 4
Comparative Analysis of Capital Improvement Plans for Competing Ports**

Port	Description	Cost Estimate	Subtotal by Port
Virginia Port Authority (VPA)	291 acre container terminal	\$450,000,000	\$701,000,000
	Rail corridor linking railways, raising tunnel and bridge clearances	\$251,000,000	
Savannah & Charleston	Bi-state authority 1,800 acre container terminal	\$500,000,000	\$500,000,000
Charleston	Harbor deepening (completed)	\$148,000,000	\$857,000,000
	New container stacking equipment, cranes and other enhancements	\$159,000,000	
	280 acre container terminal	\$550,000,000	
Savannah	New berths, cranes and additional container capacity	\$100,000,000	\$100,000,000
Wilmington	Container Terminal Expansion	\$143,000,000	\$143,000,000
Jacksonville	Capital improvements over last decade	\$200,000,000	\$200,000,000
Port Everglades	Capital improvements	\$572,400,000	\$572,400,000
Miami	Infrastructure improvements designed for post Panamax vessels	\$250,000,000	\$254,500,000
Houston	Cargo enhancement, vehicle safety and mobility	\$655,000,000	\$4,655,000,000
	Long range plans for corridor development and improvements to freight rail	\$4,000,000,000	
Gulfport	Long range plans for hurricane recovery including mixed use development and shipping facilities	\$300,000,000	\$300,000,000
Mobile	New dedicated container terminal with an intermodal rail facility and distribution complex	\$300,000,000	\$300,000,000
Tampa	Expanded and dedicated container facility	\$40,000,000	\$1,663,700,000
	Short term portwide capital improvements	\$362,000,000	
	Phase I new container terminal & distribution warehouse center	\$130,700,000	
	Phase 2 container terminal	\$600,000,000	
	Harbor deepening for phase 2 container terminal	\$530,000,000	
Total for All Ports			\$10,246,600,000



by the larger containerships commonly used in today's trade. Expansion of the canal locks to accommodate post-Panamax vessels is in the planning stages and is projected to be completed by 2014.

Another possibility is routing containers through Pacific Coast Mexican ports and creating a Mexican land bridge. Mexican ports may be well-positioned to serve the Southern Californian market; however, inland transport limitations, including insufficient rail clearance and an inadequate roadway network, render this approach too costly to serve Midwestern and Eastern United States markets unless significant investments in infrastructure improvements are made.

Despite the problems facing West Coast ports, they will remain the preferred option for shippers and are expected to continue to dominate the Asian container trade. These ports have significant resources that should allow them to address near-term capacity constraints through improved technology and efficiency, enabling them to handle larger volumes of cargo before they reach a complete saturation point.

Nevertheless, with customer trust and expectation on the line, port reliability is one of the highest priorities for shippers and ocean carriers. The need to assure the availability of adequate port capacity, a dependable labor force and lower costs prevents shippers from "putting all their eggs in one basket" on the West Coast. Shippers will seek out competitively priced shipping options and secure efficient terminal capacity, where available, to ensure that alternatives are in place.

East Coast Container Terminal Capacity Expansion

As noted, East Coast ports have been the primary beneficiary of shifts in Asian cargo and are eager to attract more. East Coast ports are also beginning to experience landside access problems and congested terminals; however, not to the same extent as West Coast ports.

Some analysts have pointed out that because the East Coast is highly developed and populated, the provision of sufficient

inland transportation capacity will become increasingly problematic and costly. Expansion of container terminal capacity has become a number one priority for most East Coast ports.

East Coast ports have also benefited from development of distribution centers and the availability of all-water liner service to Asia. South Atlantic ports, primarily Norfolk/Hampton Roads, Charleston, Savannah, Jacksonville, Port Everglades and Miami are better positioned to compete for the container trade in markets that could be served by New Orleans.

Competing Ports

Table 4 on the preceding page presents a comparative analysis of long and short-term capital improvements plans from twelve ports located on the East and Gulf Coasts. Of the twelve ports, Houston and Tampa are planning the highest dollar amounts in investments for capital improvements. The cost for capital improvements for all twelve ports total \$10.2 billion, with the average cost being \$858 million.

Surveys of Competing Ports

Following are surveys of the ongoing container-related development initiatives that are thoroughly examined for each port listed in the summary table on the preceding page:

EAST COAST PORTS CONTAINER TERMINAL CAPACITY EXPANSION

Virginia Port Authority

The Virginia Port Authority's (VPA) plans for expansion of container terminal capacity and transportation infrastructure will ensure that it continues to be a major player in both the Midwest and Eastern container markets. VPA container terminals handled 2.05 million TEUs in 2006.

Virginia ports enjoy the advantage of deepwater port access enabling calls by the largest container ships. The dredging of Hampton Roads/Portsmouth's 50-foot channel



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to 56-feet was completed last year.

The A. P. Moller-Maersk Group (APM) is developing a \$450 million, 291-acre container terminal at Hampton Roads, effectively doubling the port's container terminal capacity. The 2.1 million TEU capacity terminal is slated to open in mid-2007 and will have 3,200-feet of berthing capacity (the terminal will have 4,000 feet of berthing capacity at full build out), six new container cranes and on-dock rail service. Construction of the new terminal will also free up 70 acres of container terminal capacity at the VPA's existing Hampton Roads terminal.

APM terminal development has been cited as the major factor in locating distribution facilities for Lowes, Home Depot, Wal-Mart and Target near the port. Significant distribution center development is also occurring at Front Royal, Virginia's inland port that serves the Ohio Valley and Northeastern markets.

The VPA, which operates terminals at Norfolk, Newport News and Portsmouth (Hampton Roads), is expanding container terminal capacity by 50 percent at the Norfolk International Terminal. Additionally, the VPA is planning to construct a new major container terminal at a former dredge disposal site acquired from the Corps of Engineers across the Elizabeth River from Norfolk. The first phase of the Craney Island facility is expected to be completed in approximately 10 years with six cranes and two berths. When full build-out is complete in 2032, the terminal will feature 22 cranes and berthing for eight container vessels.

Virginia ports will also benefit from the federal government's Heartland Corridor Project. A joint venture with the Norfolk Southern Railroad, this project will reduce rail distance to Midwestern markets by 250 miles by linking railways and raising tunnel and bridge clearances in three states (Virginia, West Virginia and Ohio) to enable double stack trains to move more quickly to the heartland. The state of Virginia is contributing \$22 million toward the \$251 million project, which should be completed within five years.

Georgia and North Carolina

Container traffic has grown phenomenally

at Charleston and, especially, Savannah in recent years largely due to increased container volumes exported from India and China via the Suez and Panama Canals. Traffic at Savannah has grown by double digits during the past five years. In 2006, Savannah handled 2.2 million containers, surpassing Charleston as the East Coast's second largest container port after New York/New Jersey.

Despite expansions and technological improvements, both Savannah and Charleston are expected to reach maximum capacity in about 15 years. On March 12, 2007, the governors of South Carolina and Georgia together announced creation of a bi-state authority that will develop a \$500 million, 1,800-acre container terminal on property owned by the state of Georgia and located on the Savannah River in South Carolina (12 miles closer to the sea than the Port of Savannah).

Officials do not anticipate that development of the new terminal will adversely impact investments in the existing ports of Savannah and Charleston because of anticipated containerized cargo growth. No date was given for completion of the proposed Jasper County Maritime Terminal. It should be noted that this project still has numerous political, legal and environmental hurdles to be overcome before it becomes a reality.

Charleston

The Port of Charleston handled 1.97 million TEUs of containerized cargo in 2006. Charleston has also completed or will undertake a number of projects to enhance its participation in the container market. These include: a \$148 million harbor deepening and widening project providing 45-foot access to all container terminals (completed May 2004); a two-year \$159 million capital improvement program that provides new container stacking equipment, container cranes and other enhancements that translate into 400,000 TEUs of additional capacity; and development of a new \$550 million, three-berth, 280-acre container terminal at the former Charleston Naval Complex that will provide an additional 1.3 million TEUs of container terminal capacity.



Photo Courtesy of the South Carolina Ports Authority



Charleston recently completed a \$150-million harbor deepening project and in May 2007 broke ground on a new \$550-million container terminal at the former Navy Base (pictured).

Charleston has hit some snags in the development of the new terminal. The final Environmental Impact Statement has been delayed due to concerns about whale breeding grounds. Separately, the State Department of Health has decided to revisit its permit for a connector road linking the proposed terminal with I-26 based on a complaint by a property developer and community concerns regarding congestion on I-26.

The South Carolina Ports Authority will have great difficulty raising funds for the terminal until road issues are resolved and the road is fully funded. Opponents want the ports authority to abandon this site and focus on the Jasper County facility.

The state of South Carolina has also taken action to attract more distribution center development through an international trade incentive program. The program provides a pool of \$8 million for state income tax credits for companies that meet a base cargo volume requirement and increase volume by a minimum of 5 percent annually.

Savannah

At the Port of Savannah, 65 percent of all imports and exports are from Asia. The port's dedicated container terminal, the 1200-acre Garden City Terminal provides 1.3 million square feet of covered storage. The terminal has 15 cranes (11 post-Panamax and four super post-Panamax)

Savannah recently completed the initial phase of Container Berth 8 terminal development which provides an additional 1,100 feet of berthing and 30 acres of paved marshaling area. The container capacity at the Garden City Terminal

is 2.5 million TEUs.

The Georgia Ports Authority is currently implementing a \$100 million capital improvements program that will add berths and cranes and enhance container terminal capacity and density improvements including the acquisition of four super post-Panamax Cranes, rubber tire gantry cranes and other improvements required to accommodate a projected 9.1 percent annual growth in container volumes.

The port's strategic planning calls for increasing terminal capacity to 4.37 million TEUs by 2015 and almost 6 million TEUs by 2020 to accommodate a projected 6 percent to 8 percent annual growth in containerized cargo over the next 15 years.

Burgeoning trade with Asia and port infrastructure improvements have also attracted new distribution center development. The state of Georgia has also been successful using state tax credits to lure distribution center development. Target, Ikea and Pier One distribution centers are coming online with 2 million square feet of storage capacity each.



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Port officials report that there is enough prime real estate in the Savannah area to support the construction of 2.5 million square feet of distribution center space each year for the next ten years. Savannah area distribution centers cover more than 14.7 million square feet and generate more than 300,000 TEUs annually.

Wilmington

A \$143 million container terminal expansion program is underway in Wilmington, N.C., that will double the Port's handling capacity to 400,000 TEUs per year. The terminal infrastructure upgrade includes acquisition of four new container cranes.

In anticipation of continued growth in container volumes during the next 10 to 15 years, the North Carolina State Port Authority has engaged an engineering design firm to manage the planning process for development of the proposed NC International Port, a 600-acre terminal site located on the west bank of the Cape Fear River.

Jacksonville

Jacksonville derives a major portion of its cargo from trade with Puerto Rico. It is a hub for Crowley and Horizon Lines, which are both active in the Puerto Rican trade. In recent years, the port has experienced increased trade with Asia. The port is undertaking significant improvements to capitalize on growth in the Asian trade.

During the past decade, Jacksonville has expended more than \$200 million on improvements to its three terminals and harbor, much of it targeted to accommodate increasing containerized cargo volumes. Container volumes have grown from 683,836 TEUs in 2002 to 768,239 TEUs in 2006.

In March 2007, the Jacksonville Port Authority entered into an agreement to begin construction of the new Dames Point or Trans Pacific Container Service Corporation (TraPac) Terminal. The 130-acre terminal will have 2,400 feet of berthing capacity and six container cranes. It is slated to commence operations in late 2008. It is a single-user

facility that will be used by Mitsui O.S.K. Lines (MOL) for vessels engaged in the Asian trade.

The terminal will be operated by TraPac, MOL's terminal operating partner. The initial capacity of the terminal will be 250,000 TEUs, comprised mainly of Asian cargo. MOL expects throughput to reach 800,000 TEUs per year, doubling Jacksonville's annual container throughput. An additional 70 acres are available for terminal expansion.

The Dames Point Terminal has proved to be an important bargaining chip in attracting distribution center development. Projects currently being developed at the terminal include a 300,000 square foot southeast regional distribution center for the craft giant Michael's Stores Inc., and a 400,000 square foot distribution center for Laney & Duke Warehouse Terminal Company.

Jacksonville's other principal terminals include the 173-acre Talleyrand Terminal with a recently constructed 553,000 square foot warehouse and the 730-acre Blount Island Marine Terminal (automobiles). Jacksonville has set aside 100 acres adjacent to Talleyrand Terminal for future container terminal development.

The St. Johns River deepening project increased a 14-mile stretch of the river to 40 feet. Due to increased vessel sizes, the port also plans to deepen the channel from the Dames Point Terminal to the Talleyrand Terminal to 41 feet.

Port Everglades

Port Everglades, Fla., is emerging as an important player in the South Atlantic Coast container market. The port ranks 12th in the U.S. in the volume of containerized cargo. Port Everglades does not publish portwide TEU data but reports that container tonnage grew from 4.09 million tons in 2000 to 5.07 million tons in 2005. Much of Port Everglades' trade is with Central and South America, but it too has experienced growth in Asian cargoes.

Chiquita operates a 13.1 acre container terminal and 52,000 square foot warehouse that handles approximately 30,000 containers



annually. In December 2004, a 39-acre container terminal at Southport was opened. The facility was leased to Mediterranean Shipping Co. and its terminal management company, Port Everglades Terminals. The terminal handles approximately one million tons of containerized cargo annually.

Florida International Terminals commenced container operations at the port in July 2005 with a throughput of 70,000 TEUs. APM (Maersk) operates a 44-acre terminal that handled 90,234 TEUs in 2005. In June 2006, COSCO/Evergreen inaugurated an all water service to the Far East that is expected to generate 300,000 tons or 38,500 containers in its first year of operation. Maersk initiated its new NASA service linking the east coasts of North and South America in October 2006. It is projected to move about 26,000 TEUs through the APM terminal per year.

In 2005, Port Everglades proposed a \$572.4 million capital improvements program that includes \$140 million in improvements for cargo facilities. Information on specific projects is currently unavailable.

Miami

Miami is the largest container port in Florida, handling more than 1 million TEUs in 2006. Because of its geographical position and cultural connections, Miami has always been a strong competitor for Latin American cargo. Although Latin America accounts for more than half of the cargo handled at Miami, the Far East is the fastest growing region for the Port due to increased Asian trade.

Miami has just completed \$250 million in infrastructure improvements, including improvements designed to accommodate post-Panamax vessels. The addition of 1,145 feet of berthing space brought the total wharf length to 6,120 feet. The port acquired two super post-Panamax cranes and is refurbishing and upgrading its original 10 gantry cranes. Miami intends to purchase additional super post-Panamax cranes by 2010.

Phase II of the Port of Miami Harbor Dredging Project was completed in 2005 providing a channel and turning basin depth

of 42 feet. Prior to completion the port had only two cargo berths for larger container vessels. The deepening project provided four additional berths capable of handling deeper draft vessels. Miami is now conducting a study with the Corps of Engineers to deepen its channel to 50 feet, enabling it to accommodate the largest container vessels.

To improve landside access, the Florida Department of Transportation, Miami-Dade County, the Port of Miami and the City of Miami will undertake construction of a tunnel connecting the port with the Interstate system. The project will be procured as a public-private partnership meaning that the concessionaire will finance the project based on the expectation of earning “availability payments” contingent upon actual lane availability and service quality. The local partners will share 50 percent of the capital cost of the project. Selection of a bidder is anticipated in April 2007, and the tunnel could be operational by 2013.

During the past 10 years, the Port of Miami Terminal Operating Company (POMTOC) reports averaging 10 percent annual growth. This growth trend is expected to continue due to the increase of Asian cargo through the Panama and Suez Canals. In March 2007, POMTOC broke ground for a new \$4.5 million state-of-the-art 16-lane gate system to improve gate transactions and reduce delays.

Miami’s trade with Asia is also bolstered by the availability of numerous all water service to the Far East, including two new services initiated in 2006: Evergreen/COSCO’s China express service (calls at Panama, Miami and Savannah), CKYH alliance (also calls at Savannah, Charleston and Norfolk).

GULF PORTS CONTAINER TERMINAL CAPACITY EXPANSION

Although the volume of containerized cargo from China has grown at Gulf ports, market share growth has been slight. Nevertheless, significant container cargo growth is anticipated in the Gulf. The Texas Transportation Institutes estimates container volumes in the Gulf to grow at an annual rate of 13 percent over the next 10 years. Supporting this anticipated growth,



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shippers are investigating the option of calling at Gulf ports and carriers are locking down container terminal capacity. In response, Gulf ports have brought or are planning to bring new container terminal capacity online.

Prior to Hurricane Katrina, the three major Gulf ports participating in the container market were Houston, New Orleans and Gulfport. Factors such as new container terminal development and expansion as well as the near term impacts of the storm may ultimately change this ranking. Houston's domination of the Gulf's container trade and container trade with Asian markets does not appear to be threatened; however, competition for containerized cargo entering the Gulf and not bound for the Houston market is intensifying.

There are two new players in the Gulf container market: Mobile and Tampa. Mobile is in the process of opening up a new container terminal and offers the strongest competition for the Port. Tampa is expanding container terminal capacity and receiving increasing amounts of Asian cargo.

Anticipated containerized cargo growth in the Gulf, increased competition, and opportunities to provide alternatives to a relatively congested Houston for service to inland markets necessitates that New Orleans take steps to assure the availability of adequate terminal capacity to maintain its second place ranking.

Houston

The Port of Houston handles about 64 percent of the Gulf's containerized cargo and approximately 80 percent of the Gulf's trade with China. Houston enjoyed continuous and sustained growth in container volumes during the past 10 years. In 2006, Houston handled 1.6 million TEUs, up from 797,000 TEUs in 1996. By 2005, the port's Fentress Bracewell Barbour's Cut Container Terminal was operating at 150 percent capacity and experiencing congestion problems.

In February 2006, the first phase of the Bayport Container Terminal opened with six

berths (6,000 feet of continuous quay), 230 acres of container marshaling area and 12 wharf cranes. When completed in approximately 15 years, the terminal will have a total of seven container berths, a 378-acre marshaling yard and a 123-acre intermodal facility with the capacity to handle 2.3 million TEUs annually.

Although additional capacity has eliminated terminal congestion problems, terminal expansion coupled with the opening of a new Wal-Mart distribution facility anticipated to bring one-quarter to one-half million TEUs to Houston annually have contributed to growing rail and roadway congestion problems. The Houston freight rail system is plagued with numerous at-grade crossings resulting in roadway and rail line congestion.

Harris County, the Port of Houston Authority and the City of Houston have developed a plan including short and long range solutions involving elimination of 900 at-grade crossings and developing consolidated rail corridors to divert through train traffic. State funding totaling \$655 million is being sought to implement short range plans to enhance cargo flow from the port and improve vehicle safety and mobility.

An additional \$4 billion will be needed to implement long range plans, including corridor development and removal of freight rail movements to the outer reaches of the metro area. Additional dollars are being sought to fund needed port access roadway improvements.

Much of the container traffic entering Houston is destined for retail distribution facilities scattered throughout the metropolitan area and it is unclear whether short term planned improvements will be totally effective in eliminating congestion. Moreover, the type of improvements under discussion will take many years to develop.

Inasmuch as funding is not in place for major improvements, no definite timetable for construction is available at this time. Inland transportation congestion and associated higher costs translate into an opportunity for



New Orleans to more efficiently serve markets outside of the Houston metro area, including Dallas and Kansas City.

Gulfport

Gulfport has ranked as the third busiest container port on the Gulf. Gulfport was severely impacted by Hurricane Katrina, 700,000 square feet of shed space, including a 100,000 square foot freezer facility with 3,000 square feet of blast freeze capacity, and rail connections within the port were destroyed. The port is reported to be back up to about 60 percent capacity.

In March 2007, it completed construction of a 105,000 square foot warehouse with 805 feet of docking space, rail access and the capacity to store 7,000 tons of paper and other commodities. The port expects to add 60,000 square feet of storage capacity by November 2007 and another 230,000 square feet of warehouse by mid-2008.

Gulfport's container activity is attributable to two niche services: Chiquita and Dole banana imports and Crowley's Ro/Ro Gulf/Central America service. The port does not have dedicated container facilities. Dole/Chiquita containers are loaded/discharged using ship's gear. In 2005 (2006 data is not available), Gulfport handled 187,384 TEUs of containerized cargo, down from 213,102 TEUs in 2004. As of August 2006, import tonnage was reported to be 41 percent of pre-Katrina level and exports were down 18 percent.

Both Dole/Chiquita and Crowley were able to resume service in the months following the storm. Banana imports are by far the largest commodity handled at Gulfport. In 2005, the port handled 642,561 tons of bananas out of some 2 millions tons of total cargo. Prior to Katrina, Chiquita had expressed the desire to relocate its service to another port. As of this date, no decision has been announced.

The loss of refrigerated warehouse capacity has wiped out Gulfport's frozen poultry exports. In 2005, Gulfport handled 116,961 tons of containerized frozen cargo (down from 140,818 tons in 2004). Poultry exports had been in decline prior to Katrina largely due to

outdated facilities.

Since the storm, poultry exports have shifted to New Orleans, Mobile, Jacksonville and Houston. Although officials at the Mississippi State Port Authority have indicated that state-of-the-art freezer facilities will be constructed, as of this writing no plans or timeline have been provided.

As noted, the container business at Gulfport is highly specialized. Nevertheless, Gulfport has enjoyed success in its niche businesses. The port's ability to participate as a major player in the container industry is constrained by both spatial and transportation-related limitations. The port's size, 184 acres with 15 acres used for casino-related purposes, and location effectively prohibits significant container terminal development. Additionally, rail and roadway capacity constraints hamper terminal operations.

In the 90s, state transportation officials floated the idea of constructing an elevated interstate quality roadway linking the port and downtown Gulfport with I-10. The proposal met with significant public opposition. The roadway was to be built in two phases. The second phase, a 7,000-foot elevated road crossing the downtown area, has been postponed indefinitely.

The Mississippi Department of Transportation cited the changing nature of the port and downtown Gulfport post-Katrina as well as the possible relocation of the CSX railway as reasons for delaying the project.

The future of Gulfport in the aftermath of Katrina remains unclear. Even before the storm there was ongoing debate about the port's direction and speculation regarding redevelopment of the port as a recreation facility or for cruise and casino operations. To date, there have been no official announcements.

Port officials insist that they are not phasing out their shipping business and are in the process of preparing a long term master plan (required to get \$300 million in recovery money from the federal government) that will include gaming, condominiums, a cruise terminal and shipping facilities (including new freezer capacity). In March 2007, Gulfport



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awarded a \$29.5 million contract for repairs to the hurricane-ravaged Pier One and Pier Two facilities.

Mobile

In 2002, the Alabama State Port Authority (ASPA) hired an engineering firm to conduct a market feasibility and engineering study for development of the Choctaw Point Terminal. The study concluded that Mobile has the potential to become a world class container port because of its deep water access, rail and interstate connections, availability of land for expansion, and strong community, state and federal support. The study also recommended development of an intermodal facility and a warehouse/distribution facility served by a dedicated roadway and overpass.

The study defined Mobile's potential existing market as the area where the port had a minimal marginal advantage over competing ports. The market size was determined to be 451,000 TEUs or more than 23 percent of the total Gulf North/South market. The study projected growth in container traffic based on a fifty percent capture of all growth in container traffic where Mobile has a transportation cost advantage.

Based on these findings, the study projects that Mobile will have container volumes totaling 45,811 TEUs in 2005, 290,810 TEUs in 2010, 364,140 TEUs by 2015, 613,900 by 2020 and 863,659 by 2025 (includes empties). Under this market scenario, a terminal development program is proposed in three phases to accommodate growth through 2025.

The ASPA will open the initial phase of its first dedicated container terminal sometime in the second half of 2007. At full build out of the 135-acre \$300 million Choctaw Point Container Terminal, which will include a separate intermodal rail facility and modern distribution complex, will have 6,000 feet of berthing space with 45-foot draft alongside berth, a 45-foot draft main channel and an 800,000 TEU capacity.

The terminal will have excellent access to Interstates 10 (immediate) and 65 (three miles) and access to five Class I railroads

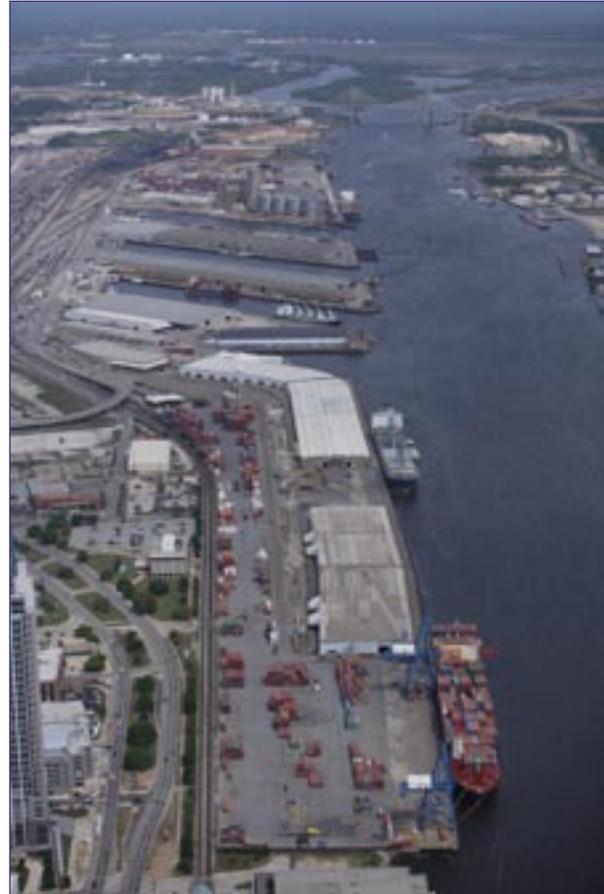


Photo Courtesy of the Alabama State Port Authority

A study commissioned for the Alabama State Port Authority recommended the development of an intermodal facility and a distribution center served by a dedicated roadway and overpass.

(direct access for CSXT and CN and access via the ASPA Terminal Railroad for NS, BNSF and KCS). The first phase will occupy 95 acres and have a 350,000 TEU capacity.

The ASPA entered into a concession agreement with Mobile Container Terminal LLC to develop the terminal. Mobile Container Terminal is a joint venture between APM Terminals North America (80 percent), a subsidiary of Maersk Inc. and Terminal Link S.A. (20 percent), a division of CMA CGM. APM Terminals is a major container terminal owner and operator with operations at more than 35 terminals worldwide. Maersk and CMA CGM are both leading global container shipping lines. ASPA and Mobile Container will jointly invest in terminal infrastructure with Mobile Container Terminal providing all buildings and equipment.

During the past decade, Alabama has experienced accelerated growth in the automobile manufacturing and supplier industry. Alabama is the home of more than 350 automotive-related manufacturers. Mercedes Benz, Honda and Hyundai have located auto assembly plants facilities in Alabama, and Toyota and International Diesel operate engine plants in the state. In 2005, more than 760,000 vehicles were produced in Alabama.

Mobile will also be well-positioned to serve the new Toyota auto assembly plant being constructed in Tupelo, Miss. Serving this burgeoning industry is cited as one of the driving forces in the development of Choctaw Point. It is estimated that Hyundai alone will generate 40,000 TEUs annually for the terminal.

With regard to the Asian trade, Mobile has benefited from being a port of call on Zim's Asia - Gulf Express Service (AGX). This all water biweekly service employs seven new 3,000 TEU Panamax container ships. It has a 32-day transit and also calls at Houston and Tampa.

Mobile is poised to be a major competitor with New Orleans for Gulf container cargo. Along with container terminal development, the port has the potential to develop a strong captive cargo base because of the state's significant and growing industrial base.

Tampa

The Port of Tampa is a relatively new presence in the Gulf container market. Tampa opened its expanded and dedicated container facility, the Hooker's Point Container Terminal, in January 2006. The facility features 1,750 feet of berthing space with 43-foot water depth, three gantry cranes and 24 acres of paved storage representing a \$40 million investment.

Tampa's entry into the container market was based on its under-served regional market.

The port estimated that the local container market (metro Tampa) consisted of more than 250,000 containers, most of which were being trucked at considerable cost to South Florida ports or Savannah.

Tampa is also emerging as a major distribution center gateway for the central Florida region. Rooms-To-Go, Pepsico, Lowes, Wal-Mart and Haverty's have opened distribution centers in Tampa in recent years.

In 2006, an estimated 30,000 TEUs moved through Tampa. The new container facility attracted new liner services, which accounts for the increased number of TEUs moving through the terminal.

In August, 2006, Zim added Tampa to its weekly all water China Express service that also calls at Mobile and Houston. The liner handles about 500 containers a week out of Tampa. Emirates Shipping Line also offers service to Asia. Much of the containerized cargo consists of furniture imports from China.

The facility was initially operated by SSA. In May 2006, Tampa entered into a long-term agreement with P&O Ports (now Ports America) to operate the terminal. The agreement included a 50-50 split on future terminal expansion costs.

Tampa proposed a 10-year, phased, market-driven expansion plan for Hooker's Point which



Photo Courtesy of the Port of Tampa

The Port of Tampa opened an expanded and dedicated container facility in January 2006. The Hooker's Point Container Terminal features 1,750 feet of berthing space and represents a \$40 million investment.



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included development of an adjacent 50 acres of port property. The port tentatively planned for \$362 million in portwide capital improvements between 2007 and 2011 including container terminal infrastructure improvements.

Ongoing developments in the global container market; Panama Canal expansion; steady regional population and economic growth; and the potential for Tampa to serve as a load center for the large Central Florida region caused port officials to take a much harder look at the future of the port. In 2006, the Tampa Port Authority engaged a team of consultants to conduct a \$1 million plus strategic planning and master plan for the Port. The plan is expected to be completed in 2007.

Initial data released shows the anticipated container growth rate for Florida at 10.15 percent through 2010, declining to 9.08 percent by 2015 and leveling off at 7.8 percent in 2020 to 2025. The retail consumption container market for the central Florida region is anticipated to grow from 546,000 TEUs in 2005 to 2.9 million TEUs by 2025. Tampa asserts that it is the closest port to the Panama Canal in terms of travel time (3.89 days) and that it is well-positioned to benefit from the projected growth in container traffic moving through the canal.

The study will present various alternatives for container terminal development that will substantially increase container capacity as well as other improvements, including deepening the port's channel from 42 feet to 50 feet, constructing distribution center warehouse capacity and providing intermodal rail improvements.

Recommendations include the expansion of TEU capacity at the port to 600,000 TEUs in the short term and long term development of new terminal facilities with up to a 4 million TEU capacity. Cost estimates range from \$130.7 million for full build-out of the Hooker's Point Terminal to maximum capacity of 800,000 TEUs to more than \$600 million for a 4 million TEU capacity terminal. Harbor deepening costs range from \$463 million to \$530 million depending on terminal location.

Container Growth

The findings presented in the above survey of competing South Atlantic and Gulf ports supports the expectation of growth in container traffic for all U.S. coastal ranges and corroborates the industry trends discussed earlier.

- Strategic and master planning for competing ports affirms continuing growth in the volume of containerized cargo in the North American market through 2025. Although peak growth rates of 8 percent - 10 percent may only be sustained in the near term (through 2015), a significant 6 percent annual growth rate is anticipated through the first quarter of the century.

Growth in the U.S. Gulf container trade can be expected to echo this trend based on increasing market share of Asian cargo and the expansion of Panama Canal capacity by 2014. Projected growth rates support the provision of expanded container terminal capacity on the East and Gulf Coast and, as reported, competing ports are responding to this increasing demand.

- A major factor in port selection is inland transportation costs. Rising rail costs at West Coast ports, coupled with port congestion and lengthy transit times, are causing shippers to seek cost-effective alternatives. As a result, the market share of Asian cargo has dramatically increased on the East and Gulf Coasts and ports are expanding terminal capacity and improving the inland transportation infrastructure in response.

The Port of New Orleans can provide less expensive inland transportation and faster transit times than Houston, which continues to experience inland congestion because of its large local market to the north and west, including Dallas and Kansas City.

- Labor issues also affect the reliability of West Coast ports. The ILWU contract with West Coast ports expires in 2008.

Shippers and carriers are seeking to have terminal capacity in place to hedge against possible future labor disruptions.

- Carriers and their affiliated terminal operating companies are investing in the development of their own terminals or jointly investing and obtaining long term leases for exclusive operation of port-owned facilities. The development of the new terminal owned and operated by APM/Maersk at Hampton Roads, MOL/TraPac's lease of the new Dames Point Terminal at Jacksonville and Maersk/CMA CGM's joint investment and leasing of Mobile's Choctaw Point Terminal all are examples of carriers seeking to lock down terminal capacity to address future terminal capacity shortfalls and provide greater control over cargo movements. These trends afford the Port of New Orleans the opportunity to work with carriers to supply needed capacity. Of particular interest would be to work with a carrier who can provide the Port with all water service to Asia.

The above factors support efforts by the Port of New Orleans to expand container terminal capacity and indicate opportunities to capitalize on projected growth in container traffic. Based on the survey, the Port's competitors are clearly making major investments in terminal capacity to take advantage of market growth.

Market conditions can and do change rapidly. For the Port of New Orleans to be able to respond to opportunities as they arise, additional terminal capacity must be in place either to accommodate projected growth or provide exclusive space to a carrier seeking a reliable, cost-effective alternative and greater control over its container traffic.

Port of New Orleans Photo: Donn Young



Princess Lines tested the waters in New Orleans in December 2006 when the Golden Princess made several calls to the Poland Avenue Wharf. The Port has funding to convert a cargo shed at Poland Avenue into a cruise facility.

3. Cruise Industry

The cruise industry retains the title of the fastest growing segment of the leisure market at an average of 7.6 percent per year. The North American market comprises 143 ships, more than half of the 282 cruise ship fleet. Within the next three years, another 26 ships are to be delivered, 20 of these ships to those cruise lines targeted by New Orleans as new partners. The majority of those new ships will go into the Caribbean trade, which remains the number one destination for passengers.

Cruise passenger occupancy on ships homeported in New Orleans in 2004 was 104 percent the same as the industry average. However, the per diem rates in the Caribbean in 2005/06 declined due to concerns about weather, inflation and terrorism, and a perceived over-saturation of ships in the Caribbean caused the occupancies to decline accordingly. After 9/11, the cruise lines returned many ships to the North American market, but now they are starting to move the ships overseas where the per diems currently are higher.

Additionally, the potentially lucrative Asian market is starting to expand, and cruise companies (such as Royal Caribbean Cruise Lines) are testing the waters there. Although the industry is currently expanding its fleet, it is also expanding its territory to spread the risk of a continuing inflationary market.



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Port of New Orleans Photo: Donn Young

The *Norwegian Sun* became the first homeported cruise vessel to resume regular sailings to the Port of New Orleans after Hurricane Katrina. During its homeport visit on October 15, 2006, it was the first vessel to use the Erato Street Cruise Terminal and Parking Garage.

The cruise industry in New Orleans is closely tied to tourism in the City of New Orleans. As the tourism base recovers from Hurricane Katrina, so will the cruise industry. The number of cruise passengers was growing steadily at the Port of New Orleans prior to Hurricane Katrina, and the Port is aggressively reacting to ensure that it will again share in the phenomenal growth that it once enjoyed. Of particular interest to the Port is the expansion of the cruise fleet.

Despite the effects on the infrastructure and the tourism base from Hurricane Katrina, New Orleans as a cruise port experienced its busiest month ever during December 2006. Including the regular calls of the three homeported ships of Carnival, Norwegian and Royal Caribbean, the Port hosted three very successful embarkation calls for Princess Cruise Lines and port calls from four other ships. Over the month, the Port processed 21 ship calls and over 95,000 passengers.

As new cruise ships are added to a line, it allows the cruise lines the ability to consider more homeports for its ships, including the Port of New Orleans. As the cruise industry matures at the Port and it expands and improves its terminal areas, the potential for new ships to be assigned to New Orleans increases.

The Port is currently marketing itself to eight of the most influential cruise lines in the world. Five of these lines are either now successfully operating cruise ships in the Port or have successfully operated from New Orleans in the past. The criteria used to select the lines to market include: the size of the cruise line and its ability to expand into new horizons; the cruise product it produces (the length of cruise and whether it is seasonal, year round, or itinerant schedules); and its target passenger market. All of the targeted cruise lines, which collectively are adding 20 new ships by 2010, operate ships in the 4-, 5-, 7-, and 10-day market, utilize the same home port either seasonally or year round, and cater



to an upwardly mobile clientele.

Port Call Market

There is a potential for lucrative port call business during the middle of the week with a number of lines including P&O, Cunard, Hapag-Lloyd, Crystal, Swan Hellenic, Silver Seas and Seabourn. Traditional cruising days occur during the weekend. These ships, which may stay in port one to three days, are full of passengers that especially want to visit New Orleans as a port of call, and they spend their time and money freely while the ship is in port. The economic impact of this segment of the market to the local economy is tremendous, and it fills the cruise terminal on days not utilized by the homeported ships.

Marketing Techniques

The Port has developed a two-pronged attack in order to interest cruise lines and to increase public awareness of the successful cruise product from New Orleans. The first line of attack is a campaign geared to educate cruise executives on facilities available to handle cruise ships in New Orleans, including terminals, wharf space, location, parking facilities and the potential for selling New Orleans as a home port and port of call to its passenger base, utilizing the theme, "Two Vacations in One." This is the original method of marketing and has proved to be effective.

Since Hurricane Katrina, another facet of marketing has been added: marketing the "Two Vacations in One" theme directly to the traveling public and potential cruise passengers by educating travelers about the New Orleans cruise product. Few cruise terminals have the advantage of being located within walking distance of a significant historic district like the New Orleans French Quarter. A passenger survey taken in 2004 indicated that more than twice the industry average of cruise passengers enjoyed either a pre- or post-cruise stay in New Orleans, spending on average \$150 per day on tourism-related products and services in the city.

The tools utilized to make the cruise executives aware of the product offered at the Port of New Orleans are the tried and true

methods of advertising used throughout the industry:

- Magazine advertising- placing ads in periodicals that are widely circulated and in association published newsletters.
- Industry functions- The Port attends industry functions such as the SeaTrade Convention, the American Association of Port Authorities cruise workshop, and the Florida Caribbean Cruise Association conventions and workshops, all of which are frequented by the cruise executives.
- Meetings- The Port engages in personal, one-on-one meetings to discuss industry concerns and their visions, and to sell the virtues and economics of homeporting a cruise ship in New Orleans.

What has been added to traditional marketing is a campaign for passenger awareness that includes:

- Direct advertising to the sailing public through brochures developed by the Port of New Orleans and distributed to travel agents within the eight state area through the Cruise Lines International Association (CLIA), the travel agency branch of the cruise industry.
- Partnering with the cruise lines to create specific advertising for its product in New Orleans and distribution of that product to 25,000 cruise travel agents in North America.
- Partnering with the New Orleans Metropolitan Convention & Tourism Board, the State Department of Tourism (Lieutenant Governor's Office) and the New Orleans Marketing Corporation (City of New Orleans) to produce effective videos and to assist in distribution.
- Producing a video that highlights New Orleans as a cruise port which will include tourism information about New Orleans, information on how to embark and disembark a cruise ship at the terminals in New Orleans (a clear selling point) and the destinations available from New Orleans.



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- Engaging in a new venture to partner with western Caribbean islands that are ports of call on the itineraries of the ships home-ported in New Orleans to create a comprehensive marketing tool for the cruise product out of New Orleans.

B. Capacity and Utilization Analysis

The Market Analysis above suggests an overall growth trend for future portwide breakbulk cargo growth over the next 10-20 years. This overall growth is likely to be in the 2 percent - 3 percent range with periods of occasional “spikes” and “troughs” in cargo activity. Fluctuations in cargo must be anticipated in the planning of capital improvements for adequate facilities that can accommodate peaks while maintaining service at regular cargo levels.

Except at the Alabo Street Wharf, berthing space does not appear to be a constraining capacity issue. Over the last several years there has been no congestion at general cargo berths and none is expected in the foreseeable future.

However, the expected growth in the number of vessels servicing the Port and the elimination of the Poland Avenue Terminal as a general cargo berth and its conversion to a third cruise terminal may eventually impact berthing capacities and will be closely monitored.

Post-Katrina, breakbulk conditions have changed dramatically. Because of damage to transit sheds and storm siltation of the MRGO, refrigerated breakbulk facilities must shift from the IHNC to the riverfront, warranting additional breakbulk capacity on the Mississippi River.

The redevelopment of obsolete cargo facilities in selected areas of the Mississippi Riverfront into non-maritime commercial uses also displaces breakbulk facilities at the Port. This commercial riverfront redevelopment is part of a grand master plan for the downtown New Orleans Riverfront and is detailed in the chapter on Strategic Issues. The conversion of these facilities

elevates the need for additional breakbulk capacity.

As indicated in the market assessment, two major commodity groups -- forest products and natural rubber -- are expected to move toward containerization. While the Port will continue to see some shift to containers, other commodity groups such as steel will continue to move as breakbulk cargo.

The cruise industry at the Port of New Orleans is an emerging sector and heavily dependent on the New Orleans tourism market. The Port presently has two cruise terminals and is constructing a third facility to be completed in 2009.

The following is a discussion of capacity and throughput for breakbulk, container and cruise facilities at the Port of New Orleans, how effectively each facility is being utilized, and if there is additional capacity to handle growth opportunities.

Alabo Street Terminal

The Alabo Street Terminal, and to a lesser extent, the Nashville Avenue Terminal, have very high transit shed utilization rates of 153% and 89%. Likewise, their marshalling yard utilization rates are well over 100%.

Although at times these facilities are somewhat congested, each appears to have capacity remaining to accommodate growth. In fact, the Board is lengthening the Alabo Street Wharf by 300 feet to provide additional berthing capacity and a corresponding additional cargo throughput capacity.

The Alabo Street facility is somewhat limited in handling additional volumes with only one terminal. Terminal operators at Alabo have relied on the Poland Avenue and Governor Nicholls facilities to provide “flex-lease” or as needed space when necessary.

The terminal operator at Alabo has been very successful in maintaining a high utilization rate at Poland Avenue and is optimistic about its ability to continue to do so. The terminal operator’s handling of predominantly dense steel and metals contributes to their ability

to exceed theoretical capacity limits.

Growth rate at Alabo Street has been significant over the last several years and the focus on these two markets in particular suggest that this trend should be maintained.

Henry Clay & Nashville Avenue Terminals

The terminal operator that occupies several of the Board's Mississippi Riverfront facilities in Henry Clay Avenue and Nashville Avenue "A", "B" and "C" Terminals has the ability to accommodate breakbulk cargoes at any one of four terminals and marshalling yards. This flexibility makes its high theoretical utilization rates somewhat misleading.

Oftentimes, the sheer volume of its storage capacity contributes to the fluidity in operations and its ability to handle multiple cargo types in several locations simultaneously. This is significant given the dwell times associated with rubber and forest products and its tendency to create occasional peak utilization periods.

The terminal operator expects breakbulk cargo volumes to be steady and is forecasting a slight overall increase as world market conditions improve.

It is significant to note the prominence of coffee imports and coffee processing at the Port of New Orleans. The Silocaf facility, located on the landside of the Nashville Avenue Terminal, is the number one coffee processing plant in the U.S offering state-of-the-art bulk coffee processing and blending services. Silocaf commenced operations in New Orleans in 1993 as an adaptive reuse in converted silos of an 80-year-old former public grain elevator.

Beginning in the 1990s, the movement of coffee imports shifted from breakbulk to containers. Silocaf played a pioneering role in the processing of bulk coffee in the United States and helped to advance the containerization of coffee imports. The availability of Silocaf, coupled with the significant number of coffee roasting facilities

located in New Orleans, has enabled the Port to retain its coffee imports and ranking as the number two coffee port in the U.S.

Both Thailand and Vietnam are growing markets for Robusta coffee beans and are served by West Coast ports. New Orleans is well-positioned to service Central and South American coffee markets, and the full impact of Asian coffee on imports through the Port is yet to be determined.

Louisiana Avenue, Harmony & Seventh Street Terminals

The terminal operator at the Louisiana, Harmony and Seventh Street facilities has adequate capacity, both inside and outside, to sustain significant growth.

First Street Terminal

The terminal operator at the First Street Terminal has struggled in recent years to meet the minimum revenue guarantee specified in its lease with the Board. There is currently no expectation of a capacity constraint at First Street with the existing lessee.

Perry Street Terminal

For the last several years, the Perry Street Wharf has been leased as a non-cargo handling facility to two separate companies. One operation is a topside ship repair service and the other provides primarily rubber



Port of New Orleans Photo: Donn Young

The Perry Street Wharf on the West Bank of Jefferson Parish would require rail service improvements to make it a general cargo dock.



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storage and ancillary services. Both leases expired in 2007. The viability of relocating the two existing Perry Street Wharf tenants is important for creating new cargo capacity available for maritime use.

The Perry Street Wharf is located in Jefferson Parish on the West Bank of the Mississippi River and south of the historic footprint of the Port of New Orleans. Rail service improvements would be required for the Perry Street Wharf to be able to accommodate general cargo.

If capacity demands dictate, the Perry Street Wharf would be a viable alternative for adding breakbulk capacity and should be strongly considered as an alternative to costly new construction.



Port of New Orleans Photo: Donn Young

The Board is in discussions with industry leaders about expanding the Napoleon Avenue Container Terminal. The expansion would add 20 acres of marshalling yard space and two ship berths.

Napoleon Avenue Container Terminal

The Napoleon Avenue Container Terminal is one of the more technologically proficient container terminals in the world. Its relatively small size, 60 acres overall, including a 48-acre marshalling yard, is designed to handle over 360,000 twenty-foot containers annually. The Board's two tenants at the Napoleon Avenue Container Terminal enjoy excellent stevedoring productivity and utilize a state-of-the-art gatehouse processing system that can efficiently handle over 1,000 truck moves per day.

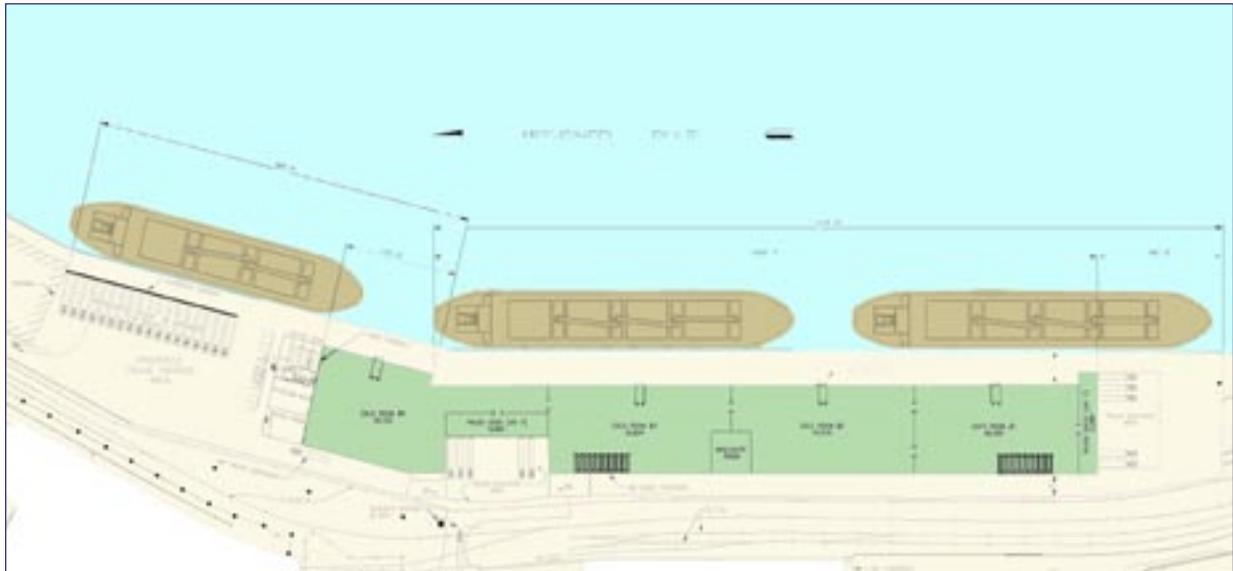
The worldwide container market continues to grow at a rapid pace, and the Napoleon Avenue Container Terminal is particularly well-positioned to participate in this growth. While the aftermath of Hurricanes Katrina and Rita disrupted container volumes for a period of time in 2005 and early 2006, the Port of New Orleans quickly rebounded. Some of the Board's largest container carriers -- Mediterranean Shipping Company, Hapag-Lloyd and Maersk -- are all formulating expansion plans which will significantly increase their ship call and container throughput volumes past pre-Katrina and Rita levels.

The Board is currently in discussions with one of its major ocean carriers and terminal operators about the next phased expansion of the Napoleon Avenue Container Terminal. This expansion will add nearly 20 acres of container marshalling yard, two ship berths and three container cranes.

Additionally, preliminary plans for future expansion have been developed which provide for 25 acres of container marshalling capacity at the former CNIC rail yard site behind the Milan Street Wharf. Included in this development is an intermodal container transfer facility capable of handling several intermodal unit trains daily. This capacity will connect the Napoleon Avenue Container Terminal with the six Class I railroads serving New Orleans, thereby reaching container customers throughout mid-America and into Canada.



Figure 7
Relocating Cold Storage Facilities



With funding from the legislature in hand, the Port of New Orleans is planning to move its on-dock cold storage facility from the Jourdan Road Terminal to the Governor Nicholls Street Wharf (preliminary design above). The move will help New Orleans stay competitive in the exportation of frozen poultry.

Jourdan Road Terminal

The Port of New Orleans has recently become the leading frozen poultry export port in the United States. Tonnage at the refrigerated cargo facility located at the Jourdan Road Terminal (JRT) grew 141 percent from 127,212 tons of frozen poultry handled in 2000 to more than 310,000 tons in 2005. In 2005, the cold storage facility was responsible for a total of 1,537 jobs and \$76 million in economic benefits.

Hurricane Katrina caused considerable damage to the JRT, severely impacting refrigerated operations. The siltation of the MRGO due to the hurricane and suspension of dredging thereafter further exacerbated cargo movements at this facility.

The resulting lack of deep water navigation requires frozen commodities to be trucked to deep draft facilities available on the Mississippi River. The annual transportation costs associated with moving product from the MRGO to the river is \$1.6 million.

In order to preserve frozen poultry as a major commodity at the Port, the relocation of this

refrigerated facility from the MRGO to a location on the Mississippi River is urgently required.

Several feasible sites for relocation of the Port's refrigerated facility are currently under consideration. The existing business has an opportunity to double its volume of cargo shipped through New Orleans if a new deepwater facility can be constructed to coincide with a new production facility slated for completion in 2008.

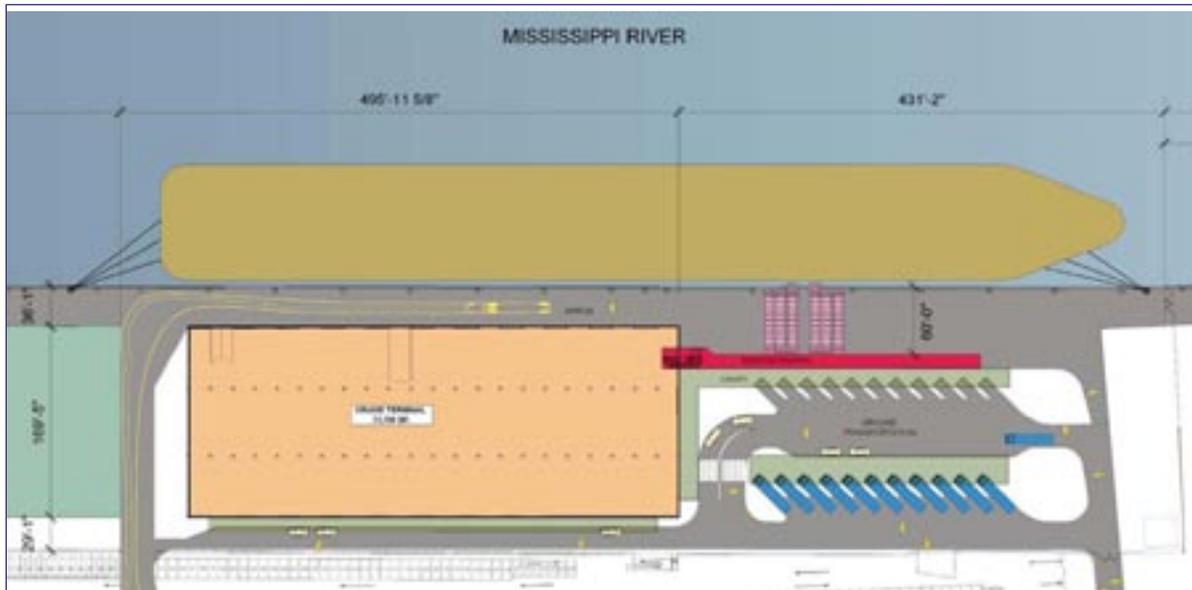
Cost estimates for the new refrigerated facility are included in short term projects recommended in Chapter V, Capital Improvements Plan.

Erato Street Cruise Terminal

The Erato Street Cruise Terminal and Parking Garage opened on October 15, 2006. The \$37 million project was designed to handle the largest of cruise ships -- those carrying in excess of 4,000 passengers. The design of the Erato Street Cruise Terminal was intended to accommodate the needs of larger cruise vessels including more space for passenger check-in, luggage handling, access roadways and parking.



Figure 8.
Poland Avenue Cruise Terminal Plans



The conversion of the Poland Avenue Wharf from a cargo facility to a cruise facility will utilize the existing cargo shed. The additional berthing spaces will provide additional weekend slots that the Port can use to lure additional cruise lines to New Orleans.

To date, the design seems to have adequately addressed all three areas, with over 25,000 square feet of luggage lay down area and 40,000 square feet of passenger check-in and waiting area, two extra lanes for approach with better drop off areas, and a 1,006 vehicle parking garage within the same complex. Since its opening, the Port has successfully handled weekly ship calls at the Erato Street Terminal.

Julia Street Cruise Terminal

The Julia Street Cruise Terminal Complex is comprised of two terminals. The first of which was constructed in 1991, with three additions increasing its size through 2002; and the second of which was completed in 1994.

The Julia Street Cruise Terminal Complex, which is located in the 1984 World's Fair International Pavilion Building, originally consisted of one terminal (Julia 1) that was sized to handle a 750-passenger vessel.

To respond to the increasingly larger ships as the Port became more successful, Julia 1

was expanded three times, the last in 2002 to accommodate a 3,700-passenger vessel. In 1994, Julia II was constructed adjacent to Julia 1 to accommodate another cruise line.

However, with the size of the vessels now and the berthing requirements of a ship at Erato Street, the Port is only able to berth one ship at a time, either at Julia I or Julia II but not both. This limits options, and, because of the way in which a vessel conforms to the wharf, Julia II is the terminal that is used, making Julia I obsolete. Renovations to Julia I are direly needed and outlined in Chapter V, Capital Improvement Plan.

Poland Avenue Cruise Terminal

The Poland Avenue Cruise Facility is currently under engineering and planning and is scheduled for completion in early 2009.

The Port has recently entered into an agreement with the Maritime Administration (MARAD) to permit the transfer of ownership of this area to allow for the construction of the new terminal.

Figure 9.
Downtown Cruise Map



The process began prior to Hurricane Katrina, and most of the planning and engineering has been completed.

It was anticipated that construction would be complete in time to host four homeport calls in December 2006. However, after the hurricane, the State diverted the construction funds set aside for the Poland Avenue Cruise Terminal. The Port successfully improvised with a make-shift cruise terminal consisting of a series of tents for the December 2006 sailings.

In order to succeed in further expanding the cruise business in New Orleans, it is vital that the Port have an additional permanent cruise terminal to market. Cost estimates for the Poland Avenue Cruise Terminal are included in Chapter V, Capital Improvement Plan.

Presently, the Port effectively has two working cruise terminals, Erato Street and Julia Street. The Port can moor two ships at once alongside the 2,600 linear feet of dock space.

The cruise lines want to turn around the

seven-day product (the most popular cruise length) on the weekends to accommodate the needs of its passengers. This weekend preference translates into a capacity of four cruise ships per week. However, the introduction of the four and five day cruises into the marketplace has proved successful, and that opens up more days for homeport turnarounds, which increases the capacity to five ships per week.

The cruise industry also measures capacity on how many passengers it thinks a port may attract. In pre-Katrina New Orleans, the allure of the City and its tourism appeal far outpaced the physical capacity of the Port to handle the ships, and the Port's expansion of capacity was only hindered by its lack of facilities.

In post-Katrina New Orleans, the recovery of tourism and the cruise industry are closely related. As tourism rebounds in the City, cruising at the Port of New Orleans increases.

The Port will be proactive with the capital improvements necessary to meet demand from the cruise industry. Eventually, the tourism allure of the City of New Orleans will return, and the Port should react now in order to be ahead of the curve and be able to respond to the returning increase in demand. With improved facilities and the eventual return of tourism, the Port of New Orleans can easily handle seven cruise ships per week:

- Three at Erato (one 7-day, two 4/5 day)
- Two at Julia Street (both 7-day) and
- Two at Poland Avenue (both 7-day)

Planned capital improvements to the two existing cruise terminals and creation of a new third terminal in the immediate future will help the Board successfully anticipate the needs of the burgeoning cruise industry in New Orleans and assist in the regional recovery from Hurricane Katrina.



2020 Master Plan: Charting the Future of the Port of New Orleans

**Table 5.
Capital Improvement Plan Summary**

Project Type	Project	Cost Estimate 2008 Dollars
Short Term (2008-2012)	Napoleon Container Terminal Complex	\$237,580,000
	<i>Container Terminal (Phase 2)</i>	\$172,425,000
	<i>Additional Container Cranes</i>	\$40,155,000
	<i>Intermodal Rail Facility</i>	\$25,000,000
	Refrigerated Facility	\$30,500,000
	Cruise Terminals	\$22,500,000
	<i>Poland Avenue Cruise Terminal</i>	\$6,500,000
	<i>Cruise Terminal Enclosed Gangways</i>	\$16,000,000
	Breakbulk Facility	\$75,000,000
	Hurricane Recovery Projects	\$149,000,000
	River Terminal Improvements	\$34,503,000
	<i>Louisiana Terminal Paving Improvements</i>	\$8,000,000
	<i>Alabo St. Terminal</i>	\$7,500,000
	<i>Deep Dredge & Wharf Bracing - Nash C, & Nap A</i>	\$3,200,000
	<i>Major Maintenance</i>	\$15,803,000
	IHNC Improvements	\$11,000,000
	<i>FRT Berth 1 Improvements</i>	\$6,000,000
	<i>IHNC Misc. Improvements</i>	\$5,000,000
	Bridge Major Maintenance	\$5,500,000
	Other Projects	\$8,800,000
	<i>Dredge Replacement</i>	\$5,500,000
	<i>Port Security</i>	\$1,500,000
	<i>Tchoupitoulas Corridor Drainage Improvements</i>	\$1,800,000
Total	\$574,383,000	
Long Term 2013-2020	Napoleon Container Terminal Complex (Phase 3)	\$240,000,000
	Future Cruise Terminal	\$40,000,000
	River Terminal Improvements	\$60,400,000
	<i>New Shed to Connect Harmony & Seventh</i>	\$4,000,000
	<i>Pave Henry Clay Yard</i>	\$4,000,000
	<i>Conversion of Timber Fender Piles to Composite</i>	\$24,000,000
	<i>Deep Dredge & Wharf Bracing - Nash B</i>	\$3,400,000
	<i>Major Maintenance</i>	\$25,000,000
	IHNC Improvements	\$36,300,000
	<i>France Road Terminal</i>	\$22,000,000
	<i>France Road Terminal Floodwall</i>	\$4,300,000
	<i>Port Share of IHNC Lock Replacement</i>	\$5,000,000
	<i>Industrial Properties</i>	\$5,000,000
	Bridges	\$54,000,000
	<i>Port Share of New Almonaster Bridge</i>	\$14,000,000
	<i>Seabrook Bridge Replacement</i>	\$40,000,000
	Other Projects	\$34,400,000
	<i>Ship Repair/ Lay Berth Facility</i>	\$12,000,000
<i>Environmental Projects</i>	\$10,000,000	
<i>Third St. Wharf - HPD Berth</i>	\$7,500,000	
<i>CHT Roadway & Drainage Improvements</i>	\$1,200,000	
<i>Port of New Orleans Place Roadway Improvements</i>	\$200,000	
<i>Portwide Monitored Fire Alarm System</i>	\$1,500,000	
<i>Third St. Wharf Bank Stabilization</i>	\$2,000,000	
Total	\$465,100,000	
Grand Total	\$1,039,483,000	



V. CAPITAL IMPROVEMENT PLAN

The Capital Improvement Plan (CIP) contained in this chapter is based on the strategic issues and market assessment presented in preceding chapters. The CIP articulates a vision for growth that will successfully carry the Port of New Orleans into the future over the next twelve years. Goals and objectives have been formulated to define this vision for growth as follows:

- Nurture historic “niche” breakbulk cargoes such as steel, metal, plywood, and rubber, etc.
- Create new container terminal capacity to position the Port to capture its share of double-digit growth presently occurring in the worldwide container market.
- Nurture recovery of cruise business and add more terminal capacity.
- Complete relocation from the MRGO and consolidation of deep draft terminals on the Mississippi River.
- Create new breakbulk cargo capacity beyond the traditional riverfront footprint of the Port.
- Continue the major maintenance program of all Port facilities.

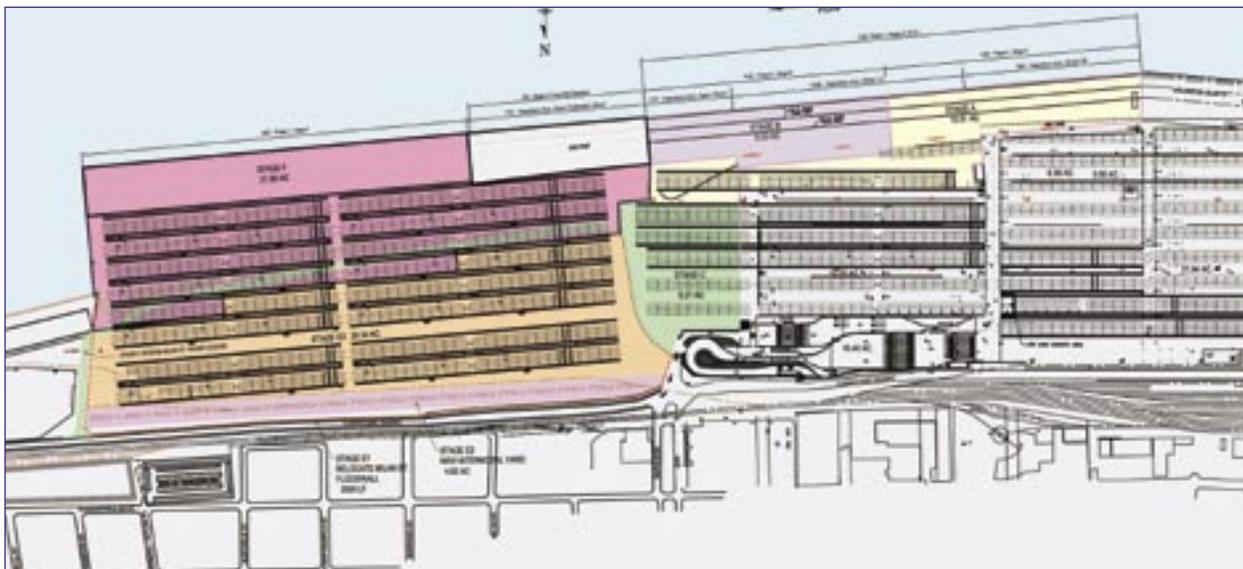
- Continue to extract maximum revenue from industrial properties that are leased to private companies.

The methodology employed in project selection for the CIP began with identification of projects that would help bring the Port’s vision for the future to fruition. A feasibility study for each project was then conducted, followed by a site analysis identifying potential sites available for the project within the jurisdiction of the Board. A preliminary cost estimate was developed for each project.

The projects were then prioritized in order of importance and divided into two categories: short-term and long-term projects. Short-term projects will answer immediate needs critical to the Port over the next five years from 2008 through 2012. Long-term projects, covering 2013 through 2020, will serve to guide the future development of maritime related businesses and the replacement or repair of aging high-maintenance facilities.

A third level of projects of regional and national significance is also presented in this chapter. These projects serve as major intermodal transportation links and require federal funding. The regional and national projects include only the Port’s estimated share of participation (self-generated funds) in the summary table of cost estimates (Table 5) and are

Figure 10
Napoleon Ave. Container Terminal Expansion



This color coded drawing represents the phases of development of the expansion of the Napoleon Avenue Container Terminal.



2020 Master Plan: Charting the Future of the Port of New Orleans

discussed at the end of the chapter. Project costs are estimated based on 2008 pricing.

The short and long-term CIP projects are summarized in the Table 5. The short-term projects total \$574.4 million. The long-term projects total \$465.1 million. The grand total for both short and long-term projects included in the 2020 Master Plan is approximately \$1 billion including all engineering, construction, project administration, and other ancillary project costs.

Of the short-term projects, six have identified funding sources that require some Port funding:

- The *Alabo Street Terminal Rehabilitation* is being funded by the Louisiana Port Development and Construction Priority Program.
- The *Dredge Replacement* is being funded by the Louisiana Port Development and Construction Priority Program.
- The *Poland Avenue Cruise Terminal* is being funded by the Louisiana Capital Outlay Program.
- The *Refrigerated Facility* is being funded by the Louisiana Capital Outlay Program.
- The *Hurricane Recovery Projects* are being funded by the Federal Emergency Management Agency (FEMA) Federal Highway Administration (FHWA), insurance and other sources.
- The *France Road Terminal Berth 1* Improvements has applied for funding from the Louisiana Port Development and Construction Priority Program.

A brief description of each of the projects follows. A schematic illustrating potential sites for the CIP projects appears at the end of the chapter.

A. Short Term Projects

Napoleon Container Terminal Complex (Phase 2) - \$237,580,000

This Phase 2 of the Napoleon Avenue Container Terminal involves three projects:

- One project is the creation of additional, new container handling facilities through the redevelopment of the Napoleon Avenue Wharves “B” and “C” sites and adjacent marshalling yards.

Existing wharves will be demolished and new, higher capacity wharves will be built to handle container cranes. Backup areas will be developed into new marshalling yard space. This will enable the Port to have wharves with direct, linear access to the container yards. A second aspect of this project is redevelopment of a former rail yard into additional marshalling yard space.

- A second project is the purchase and installation of three new container cranes and related improvements to be placed at Port container facilities on the Mississippi River.
- A third project is the development of an intermodal rail facility to support the container operations at the Port. The proposed site is on property adjacent to the Clarence Henry Truckway and next to a former rail yard. The project will include reconfiguration of the existing rail tracks and paving to provide an efficient intermodal operation close to dock operations.

Refrigerated Facility - \$30,500,000 Port Share of Funding- \$10,000

This project includes the construction of a new refrigerated facility with access on the Mississippi River. The new refrigerated terminal will be constructed on the Governor Nicholls Street Wharf and the Esplanade Street Wharf. The project includes demolition of two existing sheds and replacement with a new, 150,000 square foot refrigerated area with blast freezing capability, a new marshalling yard and truck parking area, and additional site improvements, utilities, and ancillary operations buildings. Louisiana Capital Outlay Program funds are allocated for this project.

Cruise Terminals - \$22,500,000

Cruise Terminal development includes two projects:

Poland Avenue Cruise Terminal - \$6,500,000
Port Share of Funding: \$10,000 - The development of a new cruise terminal will take place within the confines of the Poland Avenue Wharf and Shed. Conceptual design work has been completed and a trial use of the facility with temporary structures has taken place. The new facility will use the existing upriver end of the shed with a retrofit to take place inside. Louisiana Capital Outlay Program funds are

2020 Master Plan:

Capital Improvement Plan



allocated for this project.

Cruise Terminal Enclosed Gangways - \$16,000,000 - Provide enclosed gangways at the Poland Avenue and Julia Street Cruise Terminals. Louisiana Capital Outlay Program funds have been applied for in 2008.

Breakbulk Facility - \$75,000,000

This project is for the development of a new facility to expand breakbulk capacity outside of the traditional footprint of the Port, possibly on the West Bank of the Mississippi River. The project includes creation of a one or two deep draft wharf berths, new warehouse space, paved marshalling yards, and related infrastructure improvements.

Hurricane Recovery Projects - \$149,000,000

These projects are a variety of the remaining repairs and remediation of port facilities damaged by Hurricane Katrina. Work is being done as funds are made available by FEMA, FHWA, insurance, and other sources.

River Terminal Improvements - \$34,503,000

This is a program to make improvements at various terminals along the Mississippi River.

Louisiana Terminal Paving Improvements - \$8,000,000 - The marshalling yards at the Louisiana Terminal were originally designed for lighter weight operations. This project will improve the paving to allow for newer heavier loads and equipment now in operation.

Alabo Street Terminal Improvements - \$7,500,000 Port Share of Funding: \$2,803,617 - The goal of improvements to the Alabo Street Terminal is to increase cargo-handling capability. The existing terminal operator frequently receives requests for more ship calls that can be accommodated under present conditions at the terminal. Improvements to this facility include demolition of a wharf and shed that were taken out of service in 1991, an upriver and downriver wharf extension to provide an additional 418 linear feet of berthing, rail rehabilitation, and replacement of shed siding, skylights, overhead doors, and signage. Louisiana Capital Outlay Program funds are allocated for this project.

Deep Dredge & Wharf Bracing - Nashville C and Napoleon A Wharves - \$3,200,000 - This will allow the Port to increase design depths at

these wharves. Work includes pile bracing, removal of submerged debris, and dredging to a 45- foot depth.

Major Maintenance - \$15,803,000 - This is a continuing program aimed at keeping port facilities efficient and providing for reliable operations including fire protection rehabilitation at Louisiana Avenue Terminal, replacing the Nashville Avenue Shed "A" roof, portwide roadway repairs, portwide wharf substructure coating, etc.

IHNC Improvements - \$11,000,000

FRT Berth 1 Improvements - \$6,000,000 - Improvements to Berth 1 including new high mast lighting and re-paving the marshalling yard. Louisiana Capital Outlay Program funds have been applied for in 2008.

IHNC Misc. Improvements - \$5,000,000 - The improvements include a variety of general projects in common areas such as roadwork, demolitions, building repairs, signalization, and grade crossings.

Bridge Major Maintenance - \$5,500,000

This is a continuing program to keep the four Port owned bridges reliable and operational. Work includes mechanical, electrical, and structural projects. This work will extend the life of the oldest bridges up to 2015.

Other Projects - \$8,800,000

Dredge Replacement - \$5,500,000 Port Share of Funding: \$500,000 - The existing port dredge is 33 years old. Breakdowns of the dredge have proportionately increased with age and increased with demand for the dredging of more wharves at greater depths. Maintenance has become more frequent and costly, making replacement of this dredge necessary. Funds from the Louisiana Port Development and Construction Priority Program are in place for this project.

Portwide Security - \$1,500,000 - Security related projects include computer hardware and software to complete a wireless communication system linking the cruise terminals, the Port administration building, Harbor Police, and the facility access stations, additional fencing portwide in order to secure port facilities as needed, and other security related items.



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Tchoupitoulas Corridor Drainage

Improvements - \$1,800,000 - This is the final phase of the Tchoupitoulas Corridor/Clarence Henry Truckway construction project started in the 1990's completing drainage improvements for this area. The drainage improvements will complete the Port's drainage into the New Orleans Sewerage and Water Board system.

B. Long-Term Projects

Napoleon Container Terminal Complex (Phase 3) - \$240,000,000

This final phase of construction will complete the Napoleon Avenue Container Terminal with a new wharf downriver of the Milan Street Wharf, marshalling yard, and a terminal gatehouse necessary to meet future growth in the container business.

Future Cruise Terminal - \$40,000,000

The project calls for the ultimate development of a fourth cruise terminal into full service. This will be necessary as the cruise business demand increases at the Port in the future. The terminals currently in operation address only the immediate needs of the Port. The combined capacity of four terminals will create a critical mass necessary to capture a portion of the growing global cruise trade. Included in the cost of the project is specific site selection.

River Terminal Improvements - \$60,400,000

Various projects at terminals along the Mississippi River including:

New Shed to Connect Harmony and Seventh Street Sheds - \$4,000,000 - This will increase indoor breakbulk storage capacity at the Louisiana Terminal Complex

Pave Henry Clay Yard - \$4,000,000 - This yard is an older unpaved yard. Paving will increase marshalling yard capacity at this site.

Conversion of Timber Fender Piles to Composite - \$24,000,000 - This project provides for the conversion of timber fender piles at all wharves along the Mississippi River to plastic composite piles. The composite piles are more resistant to damage and will decrease annual maintenance costs

Deep Dredge and Wharf Bracing - Nashville B
- \$3,400,000 - This will allow the Port to increase

design depths at this wharf. Work includes pile bracing, removal of submerged debris, and dredging to a 45foot depth.

Major Maintenance - \$25,000,000 - There is a continuing need for work to be performed on various wharves on the Mississippi River as part of a long-term major maintenance program. Work included is substructure rehabilitation, portwide roadway repairs, utility rehabilitations, and shed maintenance.

IHNC Improvements - \$31,300,000

France Road Terminal Improvements - \$22,000,000 - France Road Terminal is in need of various improvements to continue to function as a workable shallow draft facility. Areas to be improved are paving, lighting, consolidation of sheds, gatehouses, and the wharves.

France Road Terminal (FRT) Floodwall
- \$4,300,000 - Most of the FRT is currently outside the Lake Pontchartrain Hurricane Protection system floodwall and is thus subject to flooding from tidal and storm surges in the IHNC, Intracoastal Waterway, and the MRGO. A continuous floodwall along the eastbank of the IHNC at FRT would bring all the FRT properties within a levee providing flood protection to approximately 15 feet above sea level. The completion of the floodwall would assure that all operations at FRT will be protected from flooding from minor hurricane storm surges.

Industrial Properties - \$5,000,000 - Port owned industrial properties are in need of improvements including drainage, fencing, roadwork, etc.

Other Projects - \$34,400,000

Ship Repair/Lay Berth - \$12,000,000 - The Port has a continuing need for maritime support activities such as ship repair and lay berthing facilities. These normally would include a pier and dolphins to tie up ship and barges in need of repair. Sites are available on both the east and west banks of the Mississippi River.

Environmental Projects - \$10,000,000 - Various environmental projects are being identified throughout the port including site surveys, environmental remediations, and improvements



to assist in becoming a greener operation.

Third Street Wharf – HPD Berth - \$7,500,000
– This project is to provide a new wharf to berth Harbor Police fire and patrol boats, the dredge, piledriver, and other Port owned vessels.

CHT Roadway and Drainage Improvements
- \$1,200,000 – Improvements include striping, signalization, roadway repairs, drainage along the CHT, etc.

Port of New Orleans Place Roadway Improvements - \$200,000 – Improvements include striping and pavement repairs.

Portwide Monitored Fire Alarm System - \$1,500,000 – Monitor those facilities not presently on a monitoring system.

Third Street Wharf Bank Stabilization - \$2,000,000 – Permanent repairs to stabilize the bank at Third Street by Harbor Police Headquarters building.

C. Regional/National Projects

The last three projects discussed are of regional significance. The first two regional/national projects involve bridge replacements. The Almonaster and Seabrook bridges are two of four vehicular/rail bridges across the IH-NC owned, operated and maintained by the Board. These bridges were constructed in 1920 following construction of the IH-NC. The costs for the Almonaster Bridge Replacement and the Seabrook Bridge Replacement/Rehabilitation are preliminary estimates.

Almonaster Bridge Replacement- \$70,000,000
Port Share of Funding-\$14,000,000

The Almonaster Bridge is a bascule type bridge with two railroad tracks and one vehicular lane located over the IHNC. This bridge is part of a national, intermodal connector route and services several railroads. Maintenance costs for the 80-plus year-old bridge are rising and are proportionate to its age. Preliminary designs for a new bridge at this location have already been funded through a joint agreement between the Port, the Regional Planning Commission (RPC) and the City of New Orleans. The Almonaster Bridge Replacement is contained in the long-range plans of the RPC. The RPC is currently attempting to identify additional funding sources for the Almonaster Bridge Replacement.

Seabrook Bridge Replacement/Rehabilitation- \$40,000,000

The Seabrook Bridge is another port bridge of 80 plus years serving as a rail crossing for the Norfolk-Southern railroad. At some point in the future, the bridge will require replacement in order to meet federal railway regulations. Funding sources for the project have not been identified to date.

IH-NC Lock Replacement- \$764,000,000
Port Share \$5,000,000

Replacement of the federal IHNC Lock was originally authorized in 1956. The new lock will provide an efficient, modern facility to handle projected marine traffic and oceangoing vessels with 36 feet of draft and includes replacement of the antiquated St. Claude Avenue Bridge, which is structurally a part of the lock. As the local sponsor of the lock replacement project, the Board has already provided about \$17 million in property and facilities and will contribute additional funding for the project.

In the Post-Katrina landscape, the expected closure of the MR-GO would leave the 83-year-old lock as the only route for Gulf Intercoastal Waterway (GIWW) traffic. A failure of the existing lock would cause a navigational logjam, leading to shortages of petroleum, feed stocks and jet fuel that are of national significance.

Project construction began in 2000, but has been hamstrung by severely reduced levels of federal appropriations that have hampered the award of additional construction contracts. Severe reductions in federal budgets for the lock replacement and waterway projects in general over the last several years represent a serious threat to the ultimate completion of the new lock. The 2008 federal budget proposed no new spending on the project, which is stalled by a court order requiring the U. S. Army Corps of Engineers to conduct an updated environmental impact statement.

Public opposition to the project continues to threaten its completion. Neighborhood residents in the vicinity of the lock, residents of the Lower Ninth Ward and St. Bernard Parish and environmental interests continue to oppose the project because of perceived adverse impacts on the neighborhood, on vehicular traffic and on the environment.



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Figure 11.
Port of New Orleans Capital Improvement Program

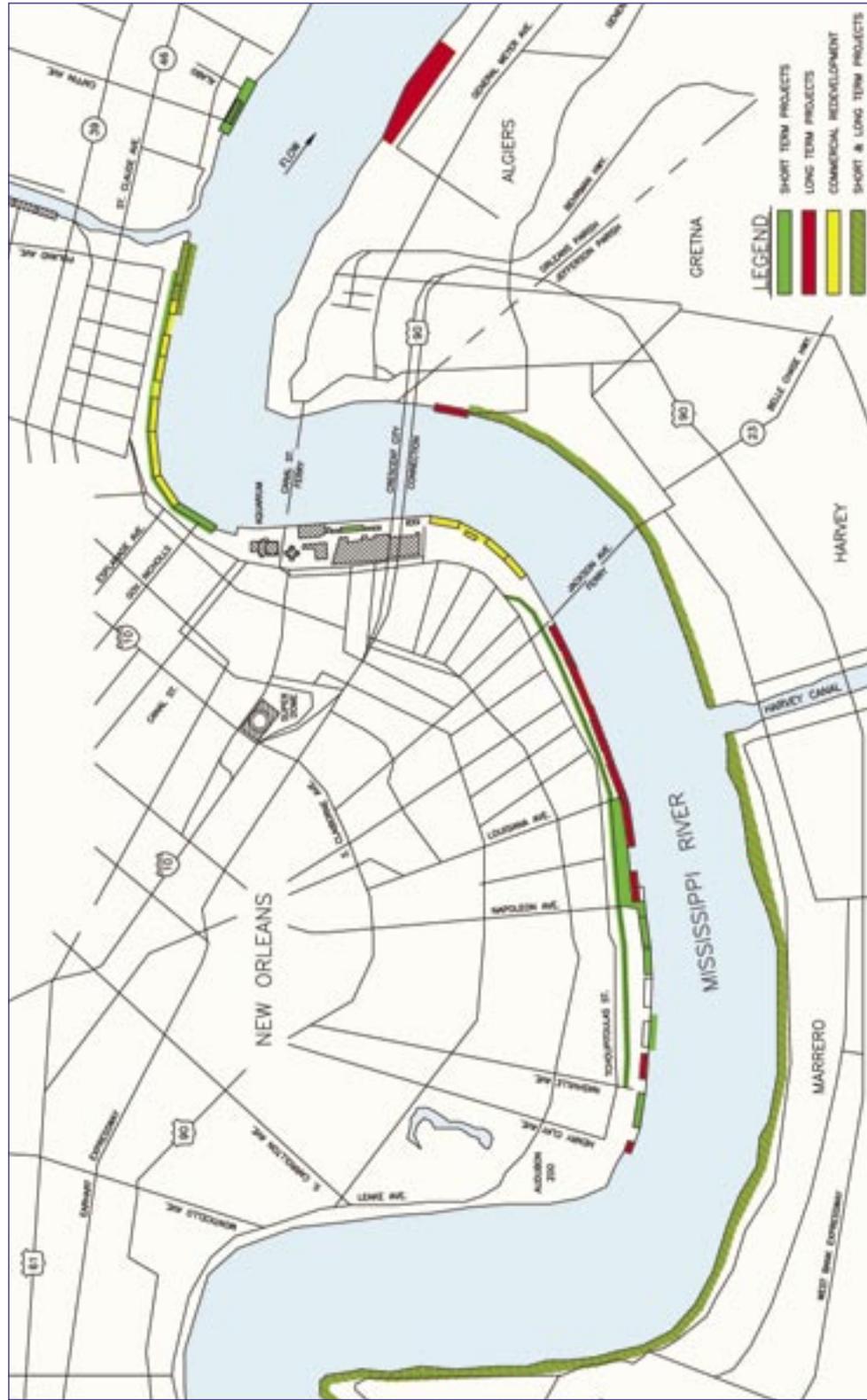




Figure 12
Capital Improvement Program- IHNC Facilities



Figure 11
Capital Improvement Program- River Facilities





VI. FINANCING OPPORTUNITIES

A. Current Debt

Currently the Board has outstanding fixed rate senior bonded debt of \$89.2 million issued in 2001 (20 year maturity), 2002, and 2003, (both thirty year maturities). Further, bonded debt subordinate to these borrowings was issued in 2005 and the current outstanding balance on this variable rate debt is \$19.4 million. Debt related to capital leases totals \$6.8 million outstanding.

In the aftermath of Hurricane Katrina, the Board took advantage of one federal and one state program to assist with the recovery. The first was the Federal Emergency Management Agency (FEMA) Community Disaster Loan program. This program provided governmental entities assistance with operating expenses. The amount of the loan to the Board was \$7.5 million with a required payback in five to ten years.

The Louisiana State program was a deferral of two years of debt service on the Board's bonded debt. The deferral was for five years, interest free, and amortization of the estimated \$14.4 million begins thereafter with a payout over 15 years.

The total of the above mentioned outstanding debt is \$125.0 million.

B. Financing Opportunities

Financing opportunities for a major construction project need to be viewed in conjunction with the Board's potential for generating excess funds to support the expenditures and its ability to attract alternative funding sources.

Due to Hurricane Katrina, the Board experienced a dip in revenues for fiscal year 2006 which continues into 2007. A ten-year projection of cash flows after debt service, including a minimum amount for minor capital projects, indicates cash available over this period in the total cumulative amount of \$72.1 million. Therefore, the average excess annual cash available for major capital projects is \$7.2 million.

The excess annual cash available could be utilized to fund further bonded debt. The

average excess cash available could fund up to approximately \$65 million in additional debt. Based on the ten year projections and covenants on current outstanding debt, the most significant portion of the borrowings could not occur until after the fiscal year end in 2009. At that point, again based on projections, borrowings in the range of \$55 million could be accomplished with the maximum of approximately \$65 million attained in Fiscal Year 2013.

The potential exists for funding of major projects through public/private partnerships. There are opportunities for providing significant funding for capital projects. The Board must be willing to share a portion of future revenue with the private sector participant who provides the funding.

The Board previously explored this possibility in the completion of the Erato Street Cruise Terminal and a cruise terminal at Poland Avenue. Although the private sector had significant interest in the cruise terminal development, the Board chose to finance the Erato Street project on its own and seek assistance from the State on the Poland Avenue project.

However, enthusiasm for private investment in port facilities remains strong, mainly driven by trade growth outlook and capacity constraints. The Gulf of Mexico region is of particular interest to investors with the growth of South American trade and the future expansion of the Panama Canal.

With this type of interest in port facilities, the Board should be able to structure transactions and financing to suit specific needs. A public/private joint venture is a very viable option for the Board to obtain financing for major revenue-producing projects with the realization that the future revenue of the project will be shared with the private capital investor.

The availability of the Gulf Opportunity Zone (GO Zone) program presents a good incentive for development. The Gulf Opportunity Zone Act of 2005 (H.R. 4440 passed by Congress on Dec. 16, 2005, and signed by President Bush on Dec. 21, 2005) establishes tax incentives and bond provisions to rebuild the local and regional economies devastated by hurricanes Katrina and Rita.

Charting the Future of the Port of New Orleans: Master Plan 2020 was published in February 2008 by the Port of New Orleans. It was produced by the Port of New Orleans staff with the assistance of Jemison & Partners, Inc, port planners.

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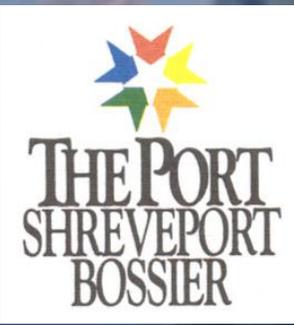


Ports

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Louisiana

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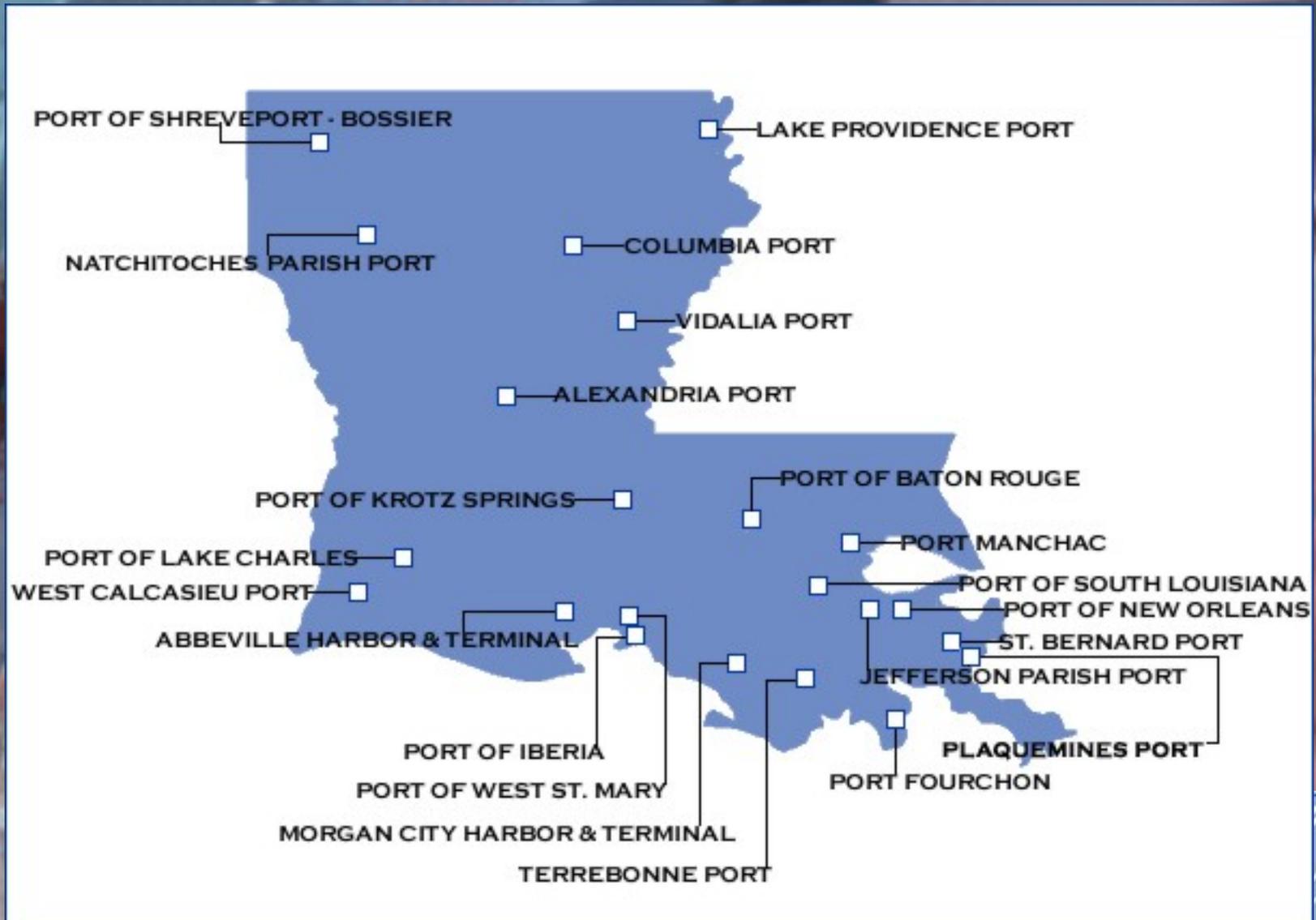


Louisiana Ports Deliver...

The Issue

**Will Louisiana's Ports Be
Able To Deliver Economic
Value, Jobs and Tax Revenue
In The Future?**

Louisiana Ports



Louisiana Port Industry

Port Services – Navigation, Loading, Fuel, Supplies, Financial

Port Users – Manufacturing, Warehousing, Importers, Exporters

Governmental Services – Customs, Agriculture, Corps of Engineers

Transportation Services – Inland Trucking, Rail, Barge

Repair Services – Emergency and Planned



Louisiana Ports Deliver...

The Issue

Future Economic and Job Growth Challenges

- **Competing effectively on price and facilities**
- **Adding infrastructure for increased volume and specialized cargoes**
- **Efficiently connecting to transportation systems**
- **Enhancing systems which protect national security**

Louisiana Ports Deliver... To National and Global Markets

LA is the crossroad for MS River and Intracoastal Waterway carrying 97% of US tonnage

Exports from Canada and 28 states move down the Mississippi

Imports of steel, coffee, rubber, timber & containerized cargo come from Latin America, Europe, Asia and Africa

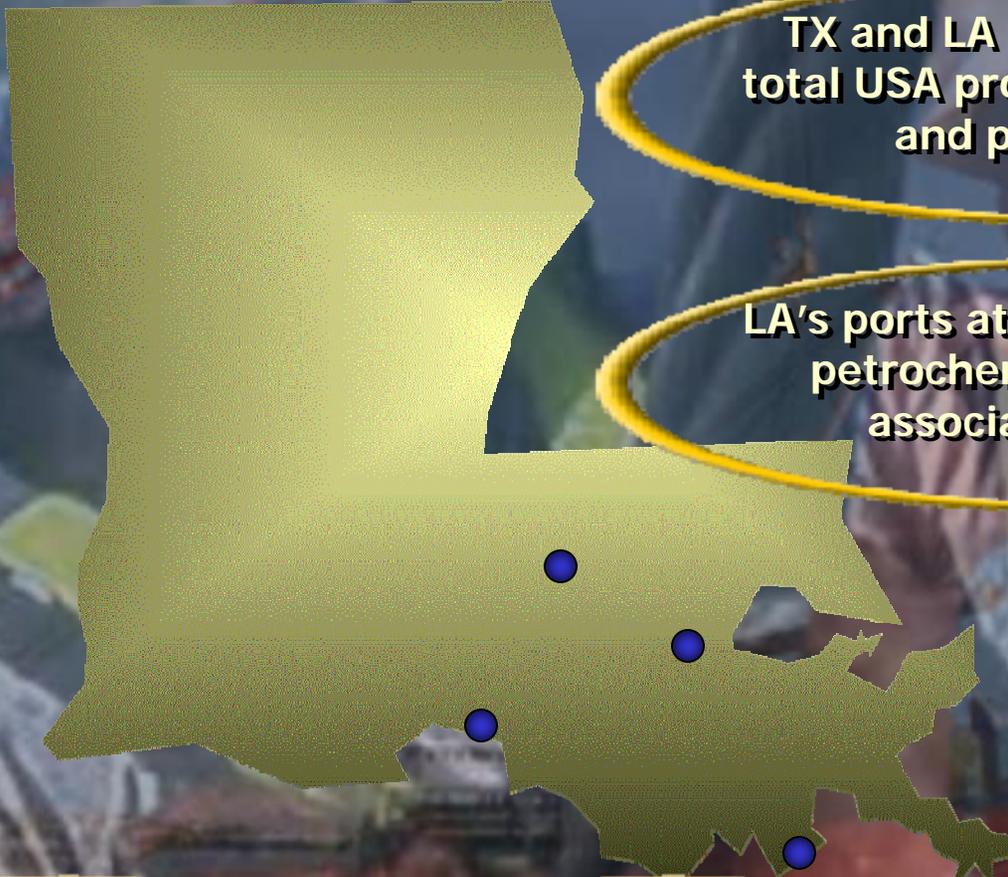
56% of US grain exports travel through LA ports

Each year 1.2 M trucks call on LA ports

Shallow draft ports function as industrial parks attracting business and jobs to local areas

Louisiana Ports...

Heart of the Petrochemical Industry



TX and LA account for 80% of total USA production of chemicals and petrochemicals

LA's ports attract and support the petrochemical industry and associated businesses

Fourchon-largest supply base for offshore oil and gas industry

Iberia and Morgan City specialize in fabrication and supply industry

South LA and Baton Rouge support 9 major chemical manufacturing plants

Louisiana Ports... Developing an Intermodal System

Major Railroads, Interstates and Airports Provide Transportation



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Prepared by OFFICE OF PLANNING & PROGRAMMING - Data Collection & Analysis Section
March/Center/2002



Louisiana Ports...

Goals for the Future

**Preserve
the
industry's
positive
impacts**

**Position the
industry for
future
opportunities**

**Provide a
solid
funding
base**

Preserve Positive Annual Impacts

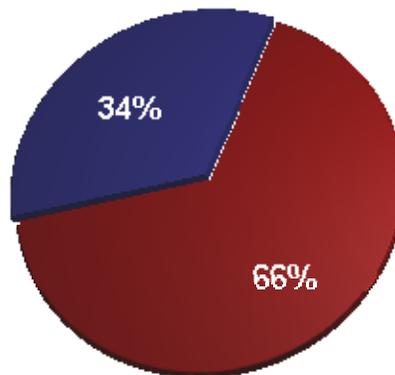
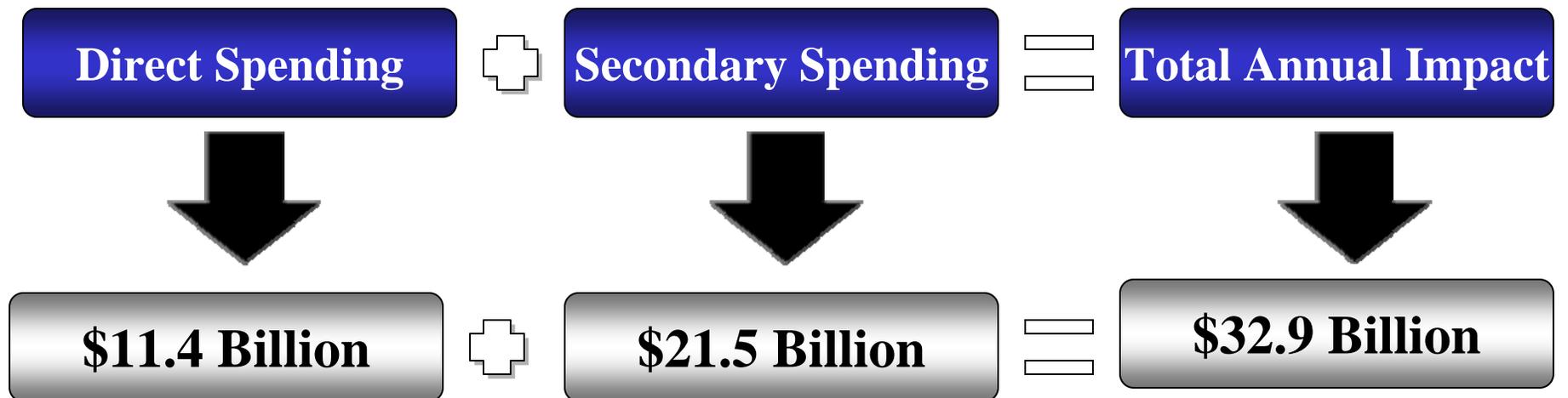
Economic	
Total Impact	\$32.9 Billion
Jobs Impact	\$5.66 Billion
Recurring Tax Revenue	\$467 Million
Industry Impact	22.5% of Gross State Product
Employment	
Permanent Jobs	270,000
	<i>One in Eight Jobs</i>
Environment	
Reduces Air Pollution and	2 Barge Tow=300 Trucks
Is Fuel Efficient	<i>Note: "Ports" includes the Maritime industry</i>



Louisiana Ports Deliver...

Economic Impacts

Total Spending \$32.9 Billion

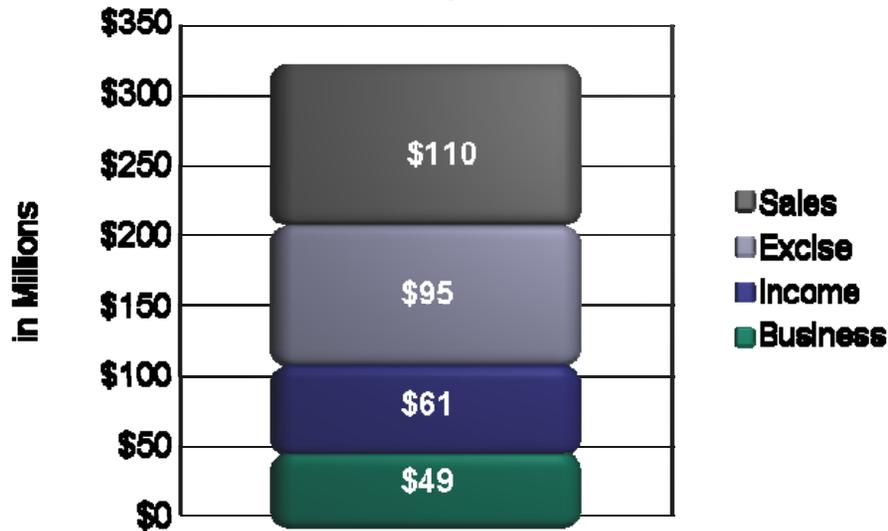


■ Port Users
■ Port Industry

Louisiana Ports Deliver... Tax Revenues

Total - \$467 Million

State Taxes - \$315 Million



Local Taxes - \$152 Million



Louisiana Ports Deliver... Tax Revenues

**Fuel Taxes Paid to Transportation Trust Fund
Total - \$32.8 Million****



** Broken Out of Total Tax Revenue

(c) 2002 MMA

Dr. Tim Ryan, UNO, August, 2002

Position for Future Opportunities

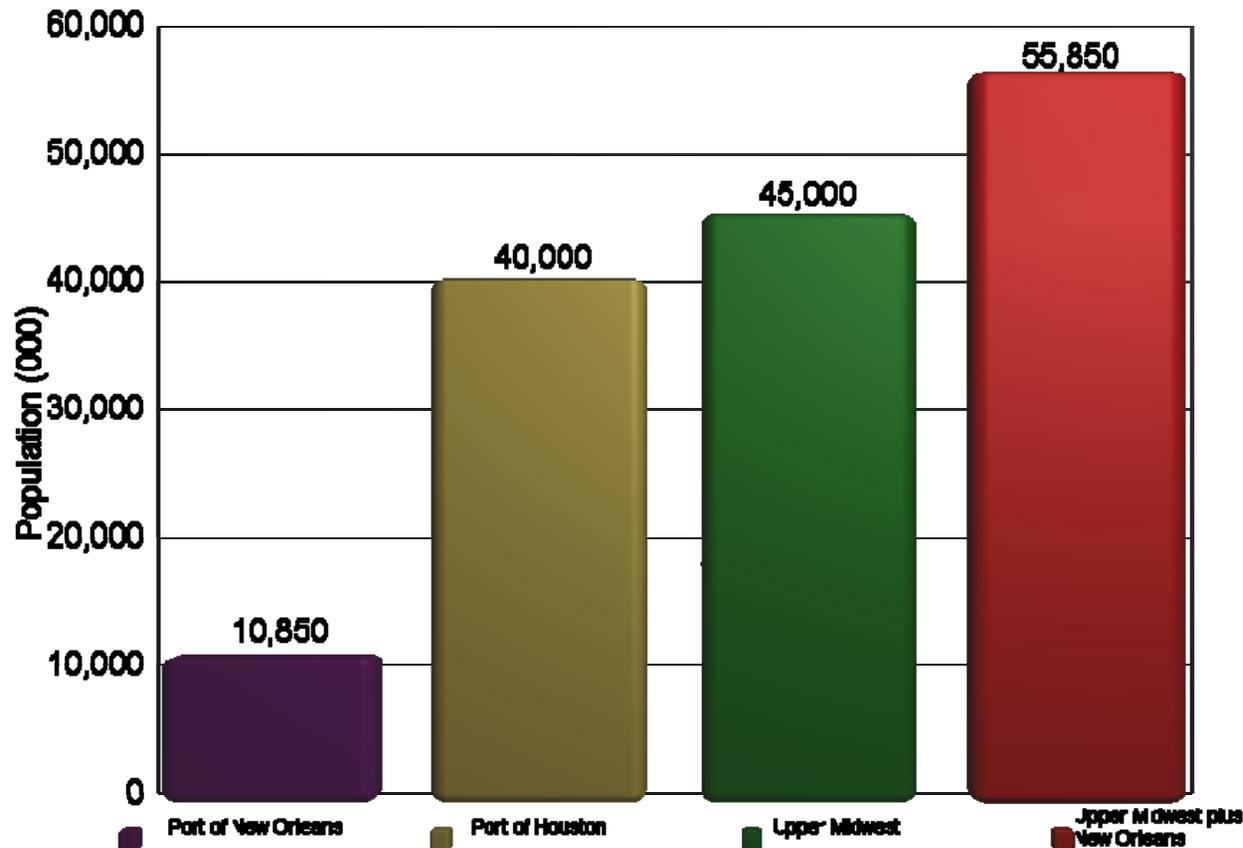
Maximize Our Competitive Position

- **Petrochemical industry**
- **Export grain and agriculture products**
 - 42% estimated increase by 2020
- **Cruise industry**
 - 500,000 passengers embark in New Orleans
 - Five Million people cruise annually
 - Retired “baby boomers” will grow demand

Position for Future Opportunities

Capitalize on Inland Market Potential

Comparative Market Size



Source: Millennium Post Symposium, 2002



Position for Future Opportunities

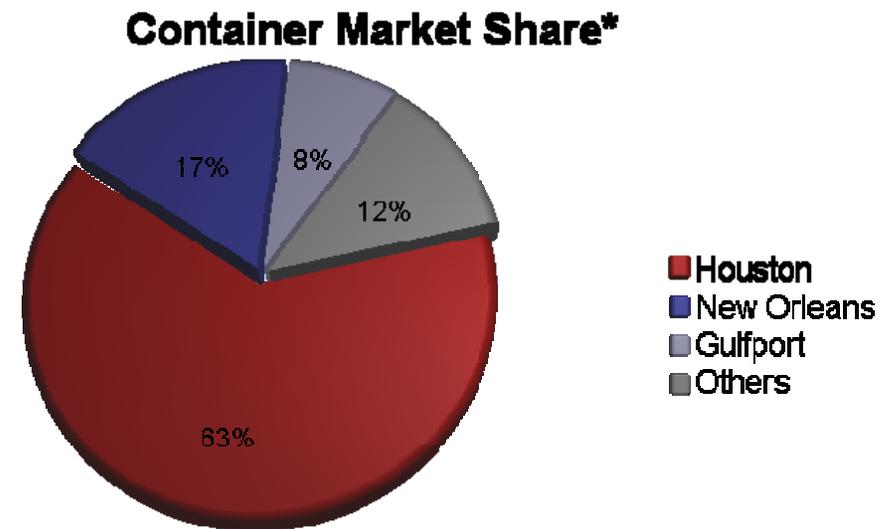
Increase Trade with Latin America

- **Significant potential when economy recovers**
- **Natural trading partner for Louisiana**
- **NAFTA has increased trade from the region**
- **70% of Latin American goods are from U.S.**

Position for Future Opportunities

Increase General and Containerized Cargo Business

- Need efficient, state of the art facilities
- Strong intermodal transportation system
- Must compete effectively for the business



**Source: Latin America Trade and Transportation Study, 2002*

Provide Solid Funding Base

Current State Funding

- **State provides funding through the Port Priority Program**
- **Projects are selected by experts from UNO and DOTD**
- **Local Boards are accountable for the funds**
- **Current annual funding is \$20 M for 26 ports**
- **Return on \$250 M invested was \$1.8+ billion, 7,200 jobs**
- **Publicly funded projects attract private investment**

Source: Dept. of Transportation and Development



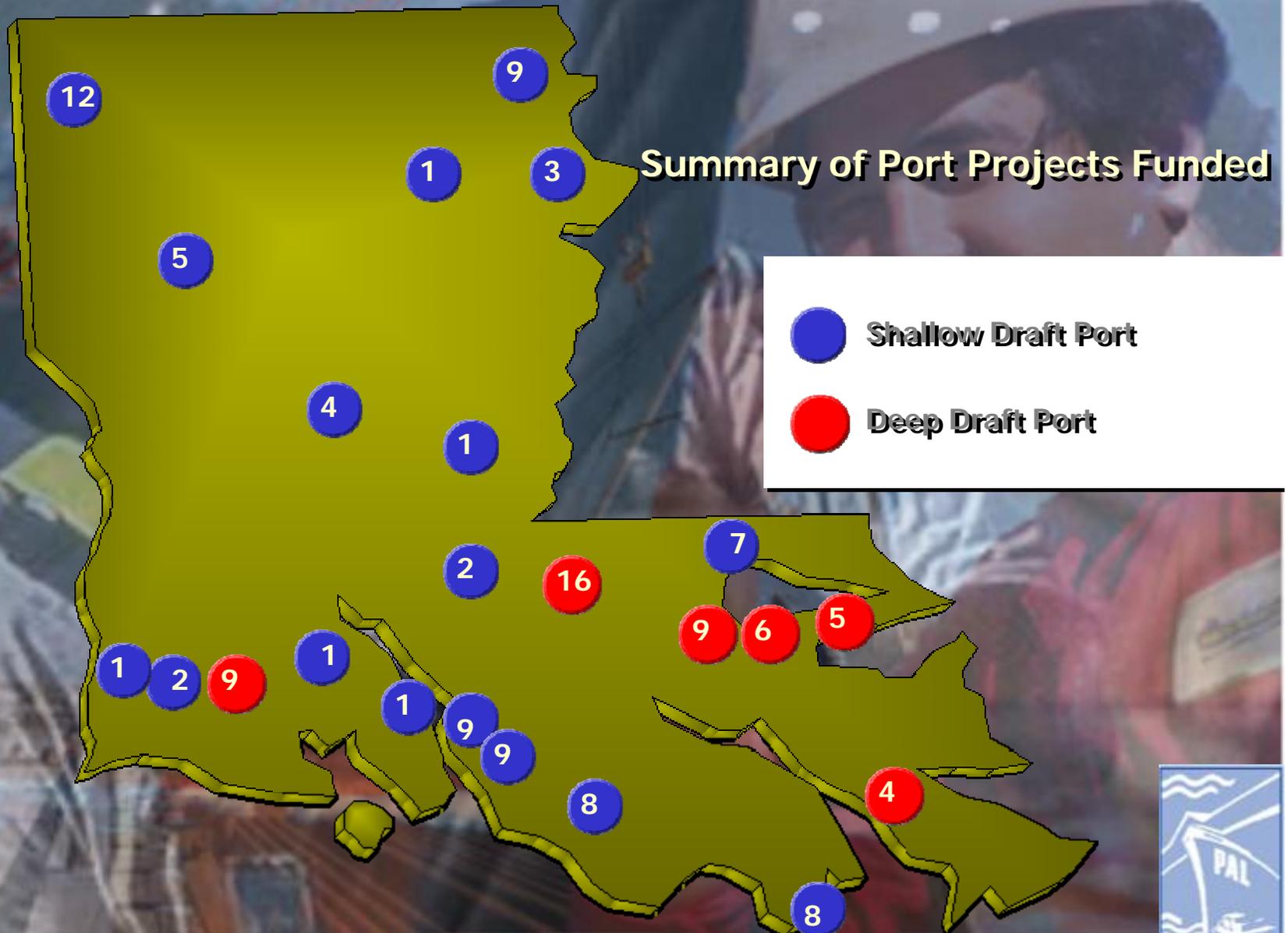
Provide Solid Funding Base

Project Ranking Criteria			
Feasibility Measure	Feasibility Indicator	Maximum Points	Scoring Method
Technical Feasibility	Capable of being built	45	To qualify must score a minimum of 15 points
Economic Feasibility	Benefit-cost ratio	100	Project with the highest B-C score 100, others are prorated
Economic Impacts	# of jobs created or saved	20	Project with highest job potential score 20, others prorated
Environmental Impacts	No adverse impacts or enhance environment	15	Project with no adverse impacts score 10, if it enhances the environment, 15
Management of Port	Return on Investment	20	Port with highest ROI for the last five years scores 20, others prorated
Total Points Possible		200	

Source: Port Priority Program

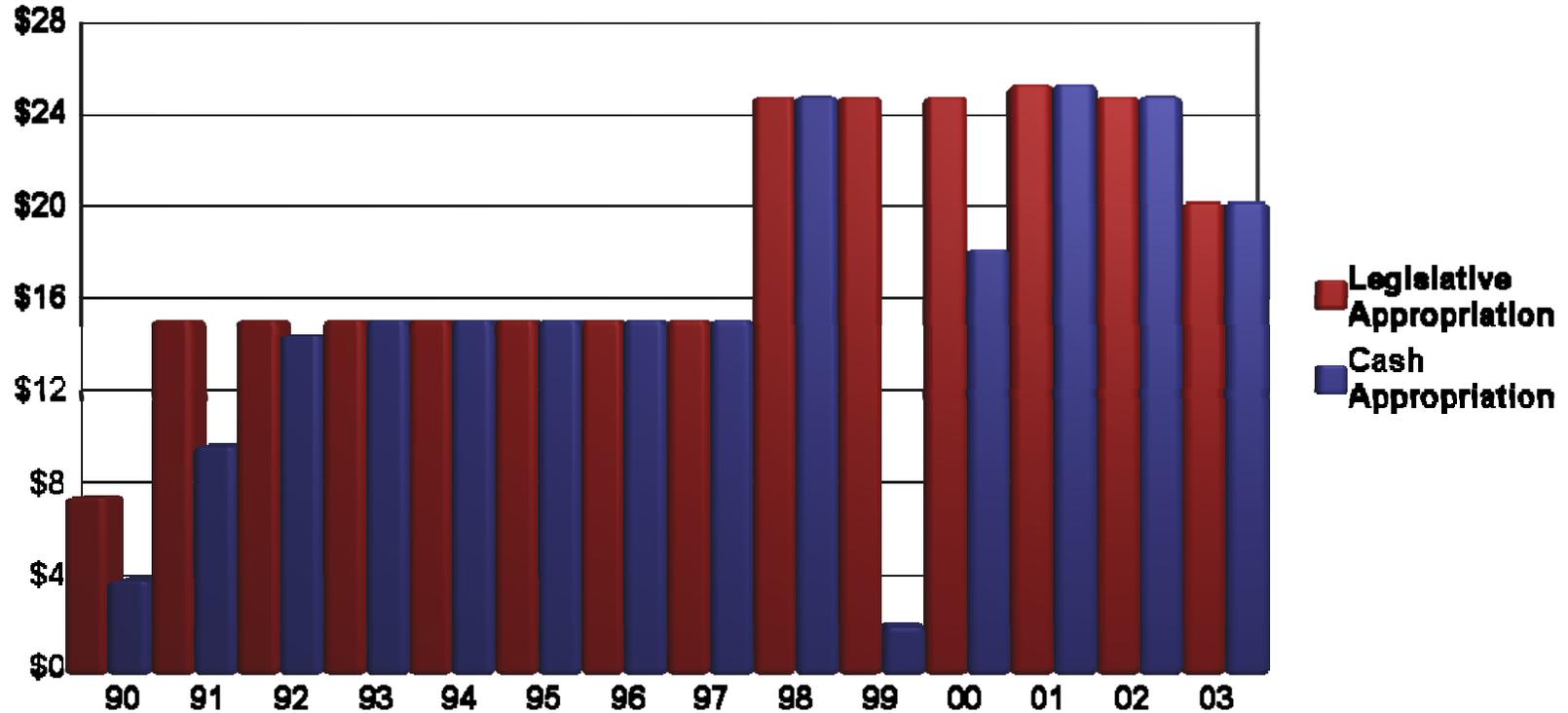


Provide Solid Funding Base



Provide Solid Funding Base

Port Construction and Development Priority Program
Dollars In Millions



Source: LA Dept of Transportation and Development

Provide Solid Funding Base...

State Comparisons

Mississippi

Legislature funds specific projects i.e., \$20 M in state bond funds for channel and harbor improvements at Pascagoula. Gulfport has a \$500 M Development Program and receives \$9 M annually in Casino leasing fees.

Alabama

State supports its ports with a \$100 M in Port Revitalization Plan, approved by voters in November 2000

Texas — Texas ports are empowered to fund capital projects with property tax levies. Harris County recently invested \$387 M from property taxes in the Houston Port producing 28,000 permanent jobs and \$633 M in economic impact .

Florida

State funds port transportation projects through the Florida Seaport Transportation and Economic Development Program. Program is a 50-50 matching program. Miami currently has \$170 M in projects for the Cruise Industry.

Provide Solid Funding Base...

Estimated Investment Needs

Source of Funds	Year 2002		Year 2007	
	\$000s	Share	\$000s	Share
Port Priority Program	\$24.5	7%	\$50.0	9%
Capital Outlay Program	\$17.0	5%	\$17.0	3%
Self Generated Funds	\$91.0	24%	\$127.0	24%
Subtotal	<u>\$132.5</u>	<u>35%</u>	<u>\$194.0</u>	<u>36%</u>
Private Investments	\$244.0	65%	\$341.0	64%
Total	<u>\$376.5</u>	<u>100%</u>	<u>\$535.0</u>	<u>100%</u>

Amounts in millions

Source: Statewide Transportation Plan Update, Oct. 2002



Invest in Louisiana's Future Economic Development

- **Establish Port Priority funding at \$50 M Annually**
- **Support funds for connecting roads and bridges**

A photograph of three construction workers at a port. They are wearing hard hats and safety harnesses, working with large metal chains and pulleys. The background is slightly blurred, showing more of the industrial setting.

Louisiana Ports Can Deliver Economic Growth and Jobs in the Future

\$32.9 Billion Annual Spending Impact

\$5.66 Billion Annual Income

270,000 Permanent Jobs

\$467 Million in Annual Recurring Tax Revenue

Environmentally Clean Industry

A background image of a blue and white boat on the water, spraying three large jets of water: a blue one on the left, a white one in the center, and a red one on the right. In the distance, a large cathedral with multiple spires is visible against a blue sky with light clouds.

Ensure the Future of Louisiana's Ports

**Invest in the Industry that
Delivers Results**

**Support Effective State
Funding of Our Ports**



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