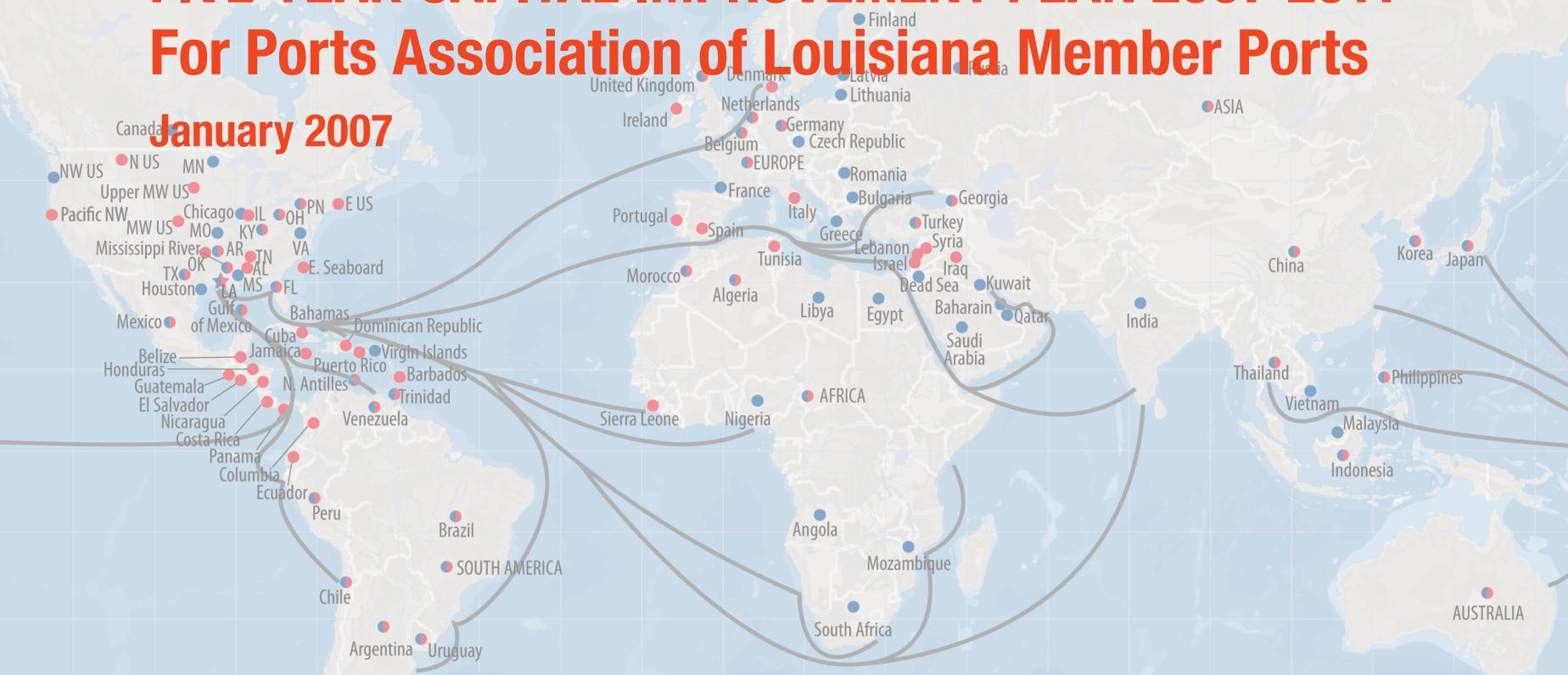


FIVE-YEAR CAPITAL IMPROVEMENT PLAN 2007-2011 For Ports Association of Louisiana Member Ports

January 2007

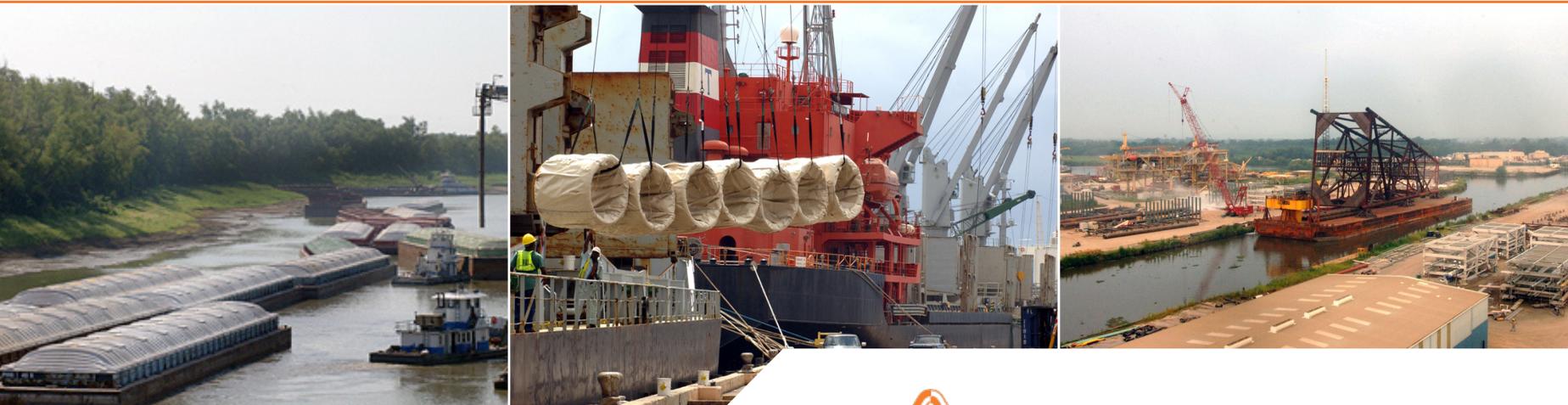


Prepared for:
The Ports Association of Louisiana
3055 East Lakeshore Dr.
Baton Rouge, LA 70808



Prepared by:
Shaw Environmental and Infrastructure, Inc.
4171 Essen Lane
Baton Rouge, LA 70809

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
3055 East Lakeshore Drive
Baton Rouge, LA 70808**

Joe Accardo Jr., Executive Director
Dot McConnell, Association Manager

Executive Committee:

Dr. Robert J. Scafidel, President
Roy A. Pontiff, Vice President
Patrick J. Gallwey, Treasurer
Adam McBride, Secretary
Wyly Gilfoil, Immediate Past President

Prepared by

Shaw Environmental and Infrastructure, Inc.
4171 Essen Lane
Baton Rouge, LA 70809
Shaw Project Number: 121368

January 2007

Table of Contents

Preface	
Executive Summary	ES-1
1.0 Introduction, Approach, and Methodology	1-1
1.1 Introduction.....	1-1
1.2 Site Visits.....	1-3
1.3 Review of Web Sites, Master Plans, and Port Profiles	1-3
2.0 Economic Impact of Louisiana Ports.....	2-1
3.0 Domestic and International Marketplace.....	3-1
4.0 Capital Improvement Plans	4-1
4.1 Potential Capital Improvement Projects.....	4-1
4.2 Listing of Projects and Procedural Methodology in Project Evaluation	4-2
4.3 Evaluation and Consideration of "Unique Projects"	4-3
4.4 PAL's Five-Year Capital Improvement Plan	4-4
4.5 Analysis of PAL Member Port Capital Improvement Plans.....	4-8
5.0 Funding Evaluation	5-1
5.1 Traditional Funding Sources.....	5-1
5.2 Historical Funding Sources	5-3
5.3 Funding Mechanisms in Neighboring Gulf of Mexico States.....	5-5
6.0 Conclusions	6-1
7.0 Works Cited	7-1

List of Exhibits

Exhibit 1 Ports of Louisiana and Vicinity..... 1-2
Exhibit 2 Availability of Port Master Plans 1-4
Exhibit 3 USACE Tonnage Rankings (2004)..... 2-2
Exhibit 4 Dr. Ryan's Summary of Key Economic Data (2002)..... 2-3
Exhibit 5 The Domestic and International Marketplace of PAL Member Ports 3-2
Exhibit 6 Summary of Inbound Cargo Activity 3-3
Exhibit 7 Summary of Outbound Cargo Activity 3-6
Exhibit 8 Project Concept-to-Development Continuum 4-1
Exhibit 9 Projected Cost of PAL CIP by Year 4-4
Exhibit 10 Financial Needs Assessment by Port 4-5
Exhibit 11 Financial Summary of Capital Improvement Plans 4-7
Exhibit 12 Project Justification by Project Type 4-8
Exhibit 13 Projected Cost of New Revenue Creation/Economic Development Projects 4-9
Exhibit 14 Projected Cost of Revenue Maintenance/Preservation of System Projects 4-10
Exhibit 15 Financial Needs Assessment According to Project Justification..... 4-11
Exhibit 16 Estimated Investment Needs..... 5-2
Exhibit 17 Historical Analysis of Port Construction Projects 5-3
Exhibit 18 Percent of Financial Contribution..... 5-4
Exhibit 19 Ports of the Gulf of Mexico 5-6
Exhibit 20 Texas Ports Source of Funds Summary 5-7

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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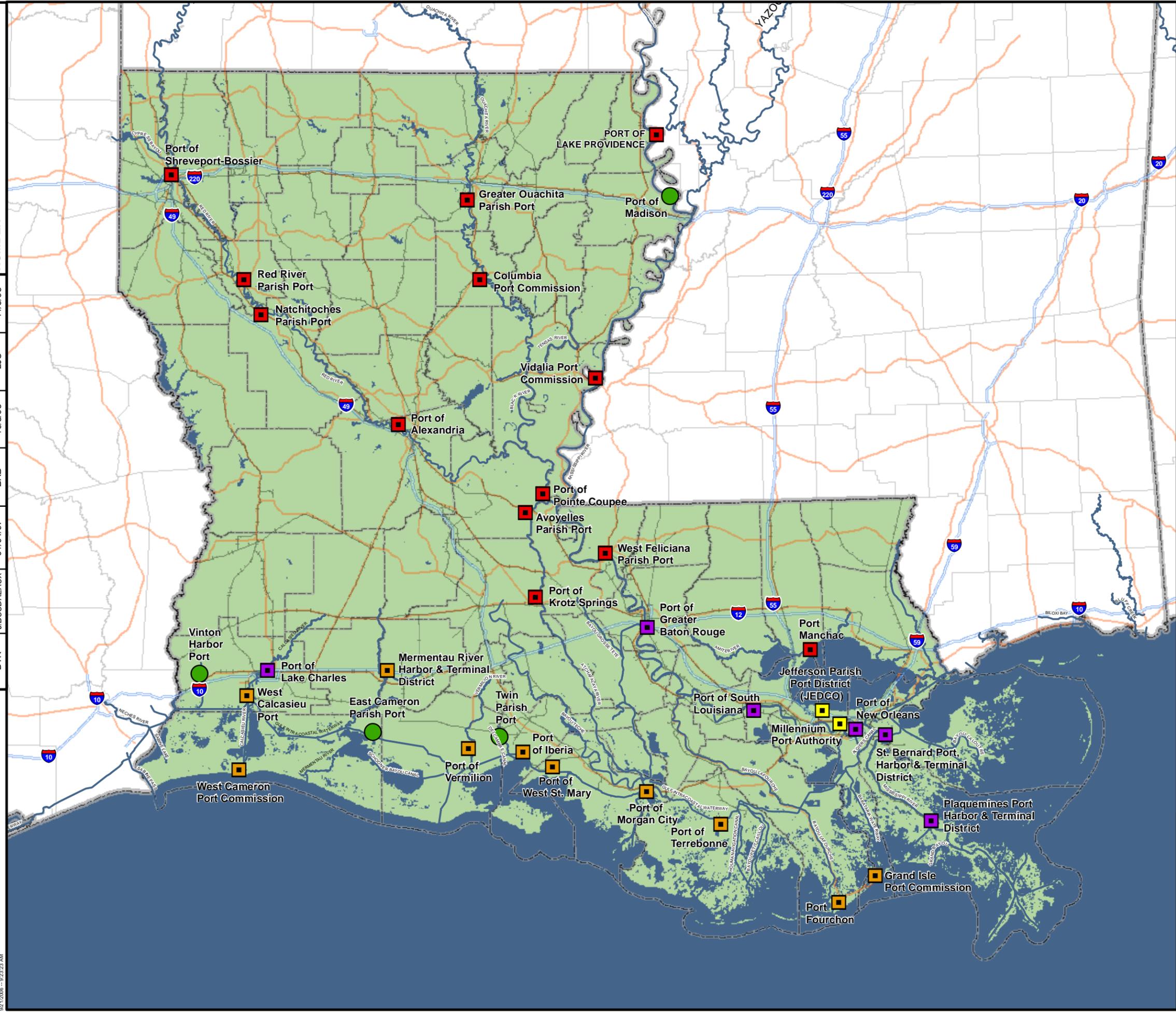
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CHECKED BY BKB 10/5/06

DRAWN BY J.BOUDREAUX 01/04/07

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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

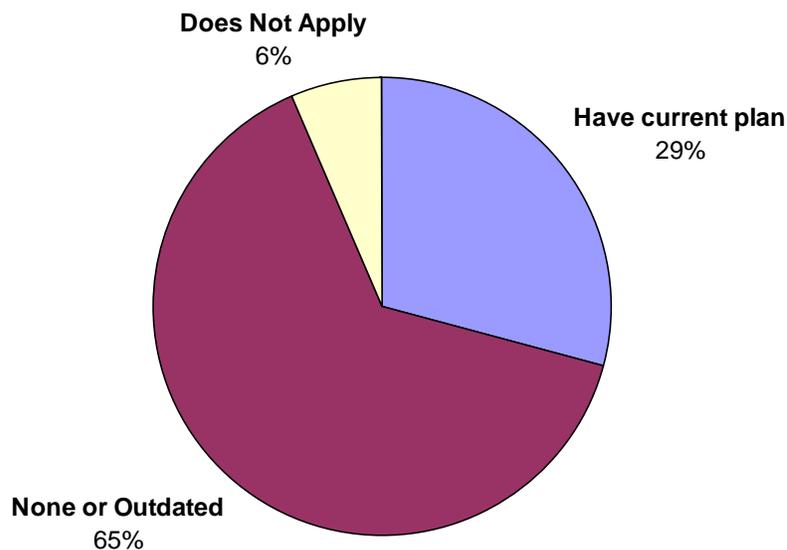
During May and June 2006, PAL member ports were visited to (a) inventory each site, (b) visit port staff, (c) become familiar with the port facilities, and (d) collect relevant data supporting the CIP. When possible, the port director or his designee was interviewed. Interviews included discussions regarding 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)

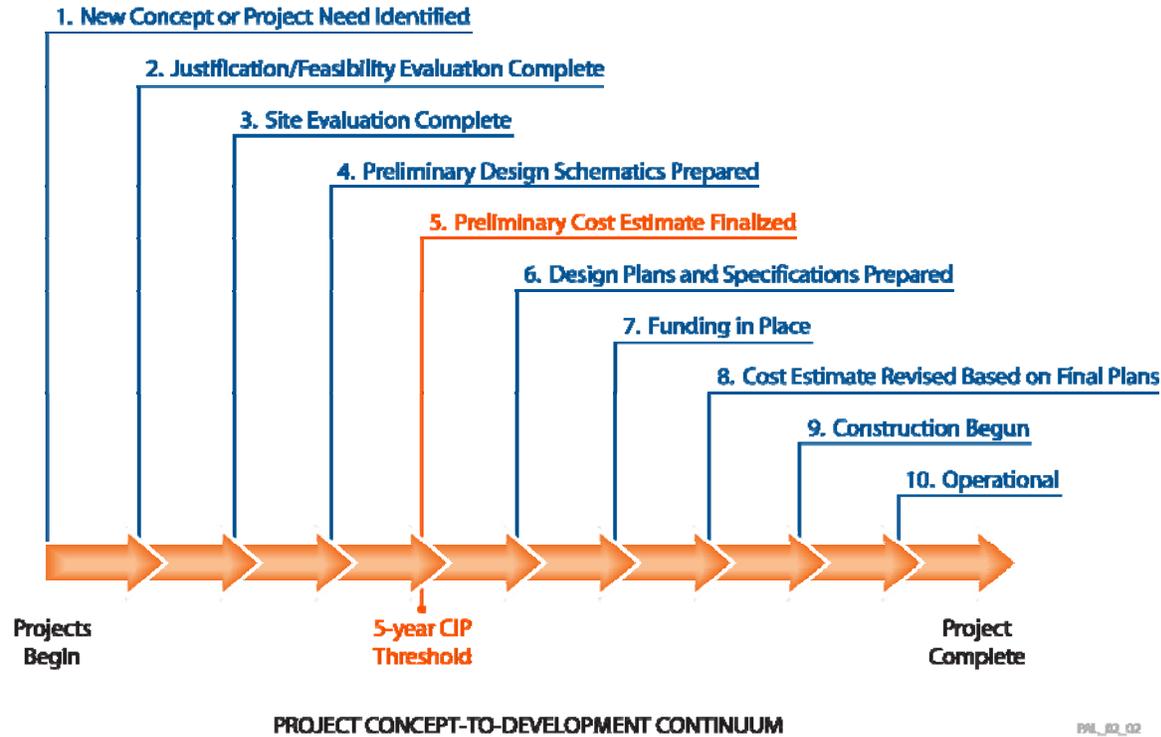
Port Name	Business Activity	Outbound Cargo Activity	
		Cargo Summary	Destination
South Louisiana, Port of (Cont'd)	Bulk, Break Bulk, Containers	Wheat	Morocco, Egypt, Mexico, Colombia, Dominican Republic, Jamaica, Spain, Guatemala, El Salvador, Costa Rica, Cuba, Venezuela, Ecuador, Panama, Puerto Rico, 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.

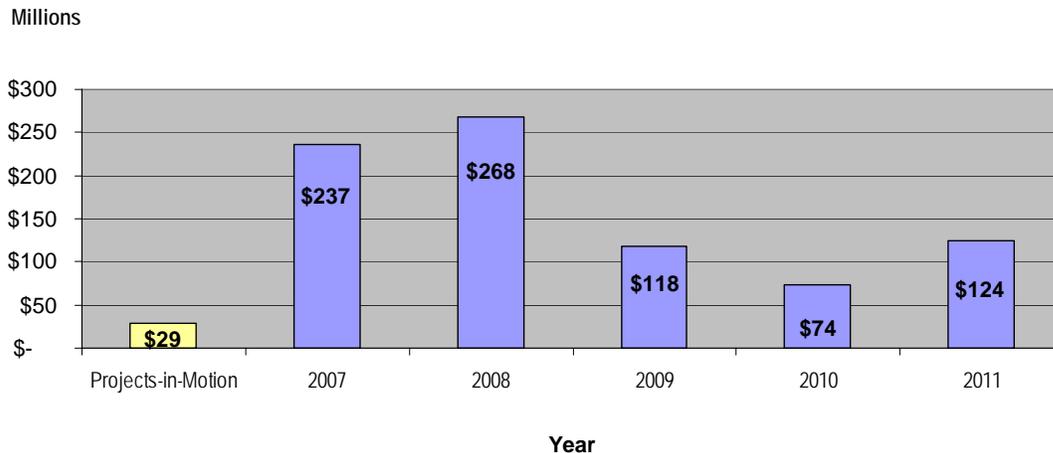
Port of Morgan City—Atchafalaya Dredging Project (approx. cost: \$160 million)

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

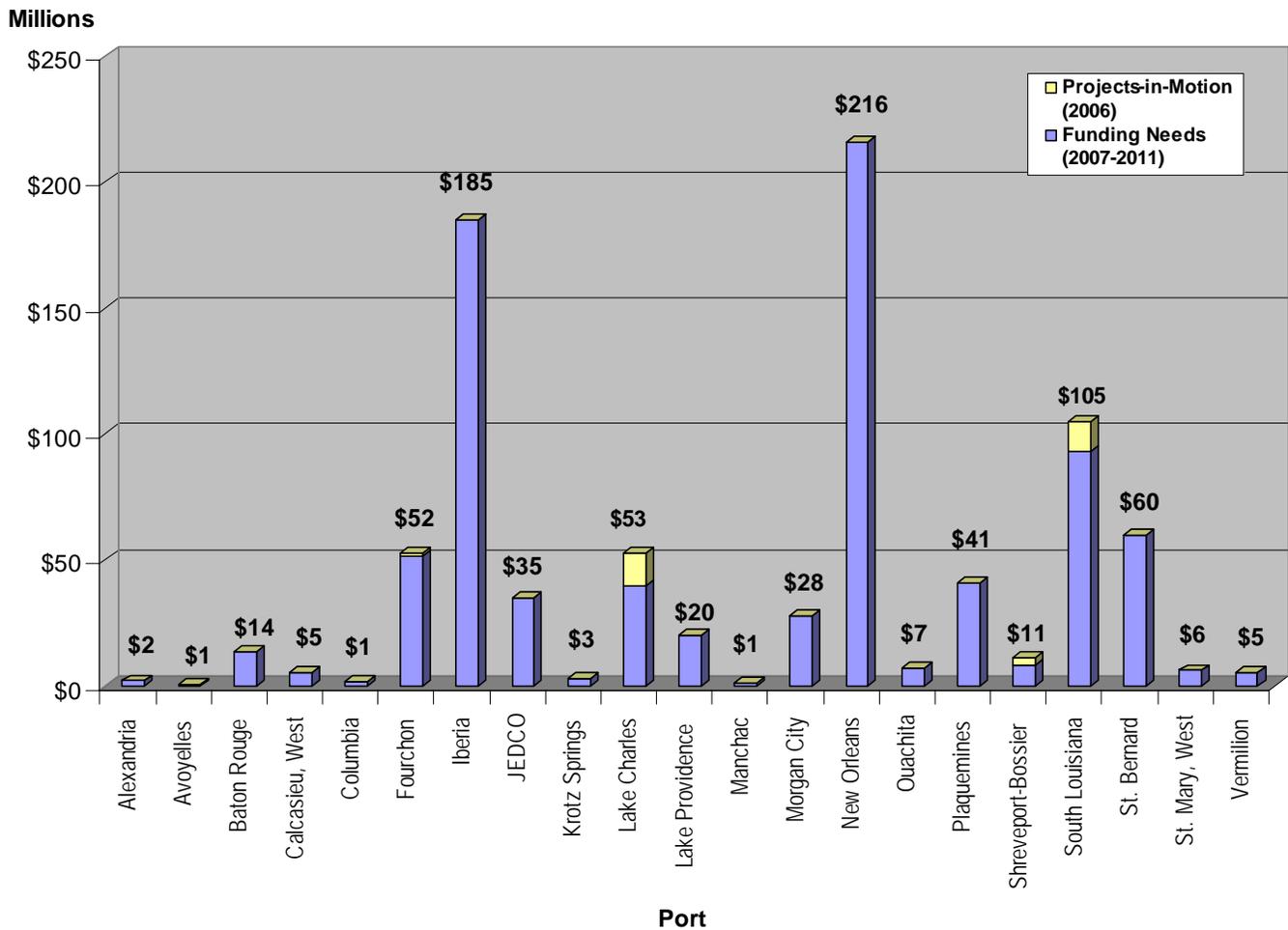
Following the complete evaluation of all projects, including the adjustment affected by the unique projects highlighted above, a final funding projection of projects included in the five-year CIP was prepared. The list includes 104 projects at 21 PAL member ports with a total estimated cost of \$849 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.

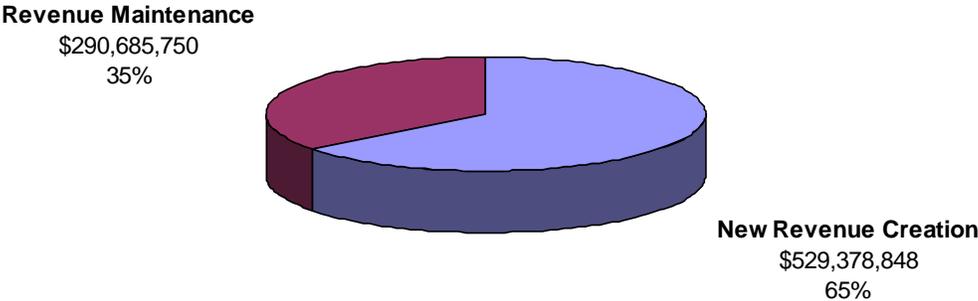
Exhibit 11
Financial Summary of Capital Improvement Plans
PAL Member Ports
2006 through 2011

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.

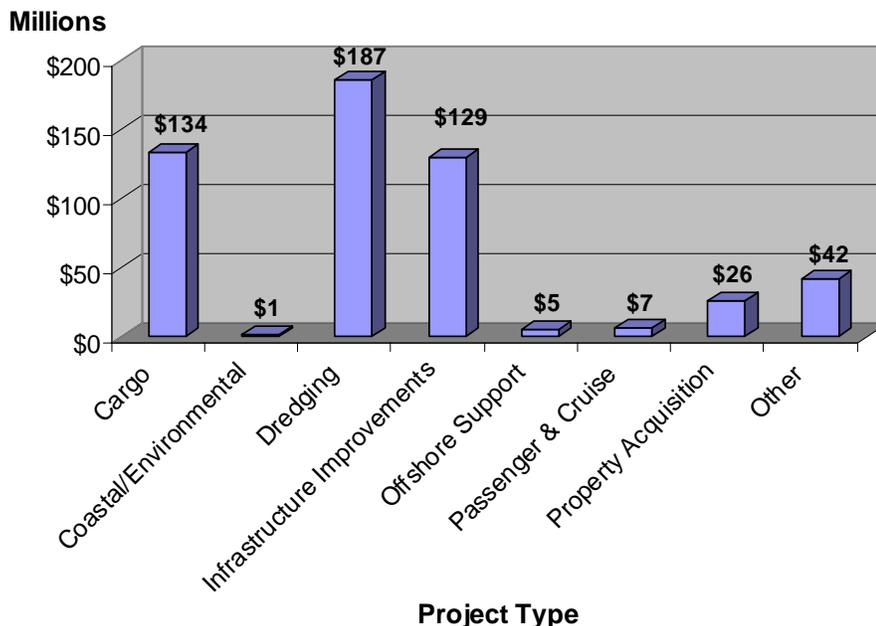
- | | |
|------------------------------|-----------------------|
| -Cargo | -Offshore Support |
| -Coastal/Environmental | -Passenger & Cruise |
| -Dredging | -Property Acquisition |
| -Infrastructure Improvements | -Security |
| -MRGO Related Re-locations | -Other |

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.

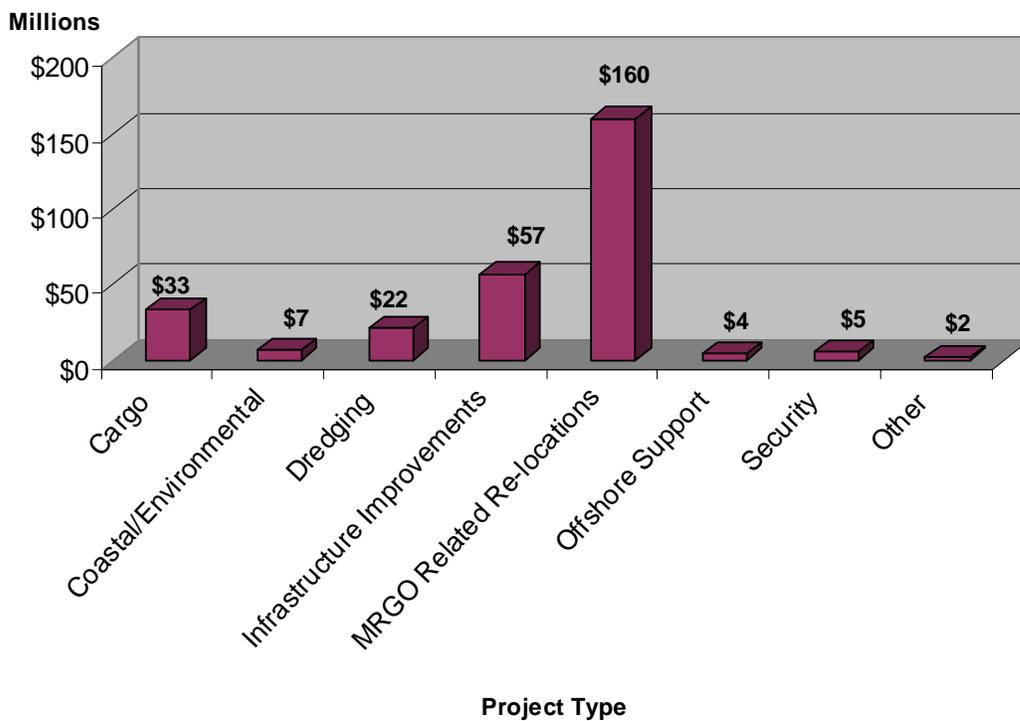
While eight of the ten project types were represented as New Revenue Creation, greater than 85% of the total projected costs for this project class was represented by three project types: cargo (\$134 million), dredging (\$187 million), and infrastructure improvements (\$129 million). Additional detail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

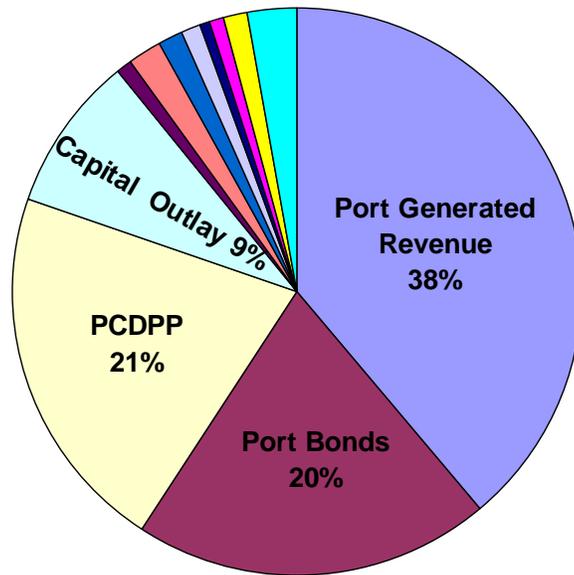
Notes:

(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

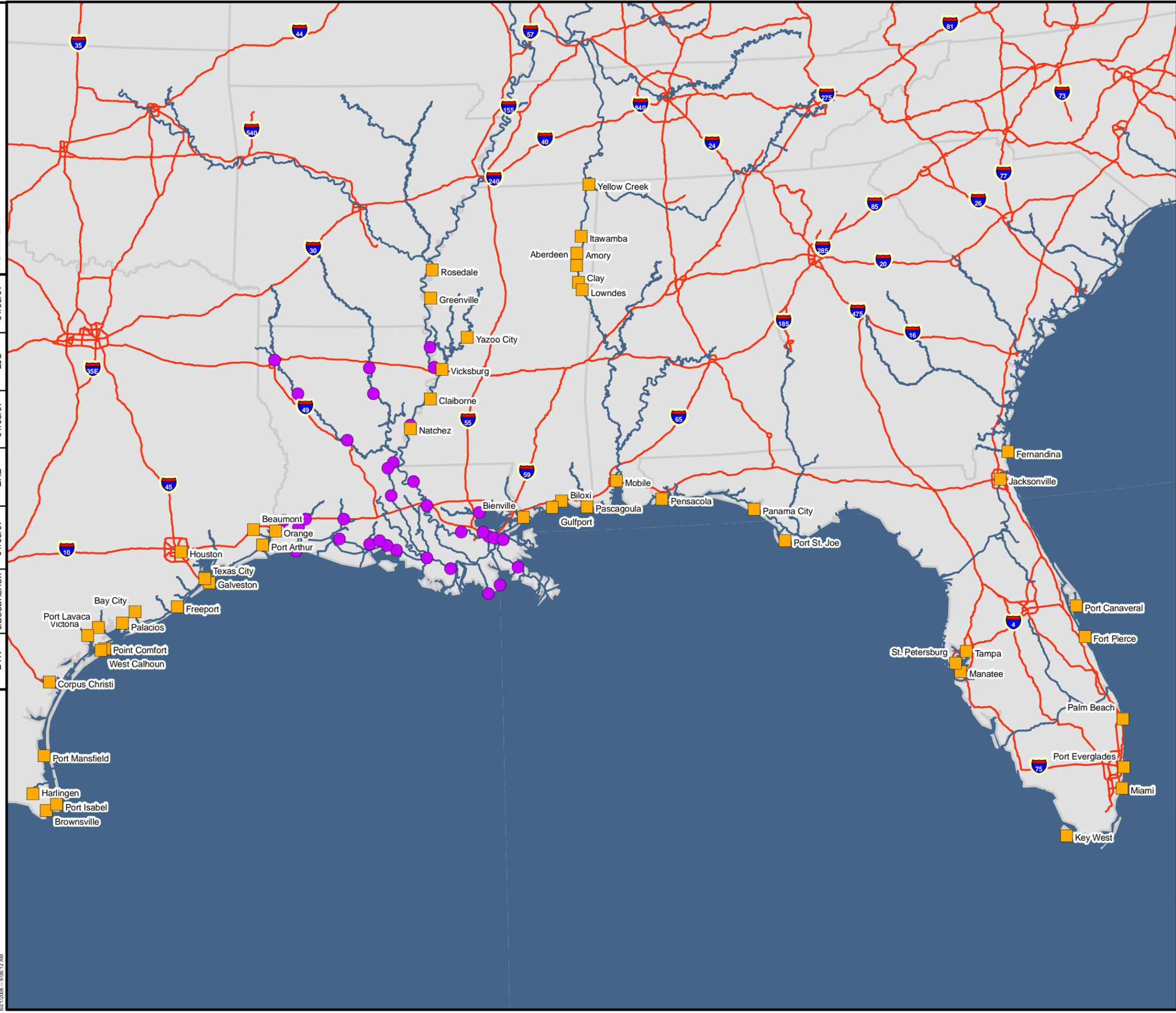
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1 inch equals 95 miles

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
Ports Association of Louisiana
Member Directory

**PORTS ASSOCIATION OF LOUISIANA
CORPORATE MEMBERS**

**ABBEVILLE HARBOR & TERMINAL
DISTRICT**

Mr. Jay Campbell, Executive Director
P.O. Box 1410
Abbeville LA 70511-1410
337.893.9465
337.898.0751 (fax)
ahtd2@bellsouth.net

**ALEXANDRIA REGIONAL PORT
AUTHORITY**

Mr. John Marzullo, Executive Director
P.O. Box 628
Alexandria LA 71309
318.473.1848
318.473.8183 (fax)
jmarzullo@portofalexla.com
www.portofalexla.com

COLUMBIA PORT COMMISSION

Mr. Greg Richardson, Port Manager
P.O. Box 367
Columbia LA 71418
318.649.0203
318.649.0101 business center
318.649.0105
318.649.0203 b c fax

**GREATER KROTZ SPRINGS PORT
COMMISSION**

Mr. Gary Soileau, Executive Director
P.O. Box 155
Krotz Springs LA 70750
337.566.8867
337.566.8889 (fax)
portofks@bellsouth.net.
www.wtc-no.org/transport/ip-triks.htm

**GREATER LAFOURCHE PORT
COMMISSION**

Mr. Ted Falgout, Executive Director
P.O. Drawer 490
Galliano LA 70354
985.632.6701
985.632.6703 (fax)
tedf@portfourchon.com
www.portfourchon.com

**JEFFERSON PARISH PORT DISTRICT
(JEDCO)**

Mr. Peter Chocheles, Director of Port &
Public Affairs
3445 N Causeway Boulevard, Suite 300
Metairie LA 70002
504.833.1881
504.833.7676
pchocheles@jedco.org
www.jedco.org

**LAKE CHARLES HARBOR &
TERMINAL DISTRICT**

Mr. Adam McBride, Executive Director
P.O. Box 3753
Lake Charles LA 70602
337.493.3501
337.493.3523 (fax)
amcbride@portlc.com
www.portlc.com

**LAKE PROVIDENCE PORT
COMMISSION**

Mr. Wyly Gilfoil, Executive Director
409 Port Road
Lake Providence LA 71254
318.559.2365
318.559.3688 (fax)
wyly_gilfoil@msn.com
www.wtc-no.org/transport/ip-trilp.htm

**MORGAN CITY HARBOR AND
TERMINAL DISTRICT**

Mr. Jerry Hoffpauir, Port Director
P.O. Box 1460
Morgan City LA 70381
985.384.0850
985.385.1931 (fax)
jerry@portofmc.com
www.portofmc.com

**NATCHITOCHE PARISH PORT
COMMISSION**

Mr. Robert Breedlove, Executive Director
P.O. Box 2215
Natchitoches LA 71457
318.356.9686
318.354.2622 (fax)
nat-port@cp-tel.net

**PORTS ASSOCIATION OF LOUISIANA
CORPORATE MEMBERS**

**PLAQUEMINES PORT, HARBOR &
TERMINAL DISTRICT**

Mr. Urban Treuil, Port Manager
124 Edna LaFrance Road
Braithwaite LA 70040
504.389.0163
504.389.7302
540.394.6102 (fax)
PLAQUEMINES_PORT@yahoo.com
plaqport@bellsouth.net

POINTE COUPEE PARISH PORT

Mr. Owen J. (Jimmy) Bello, Parish
Administrator
P. O. Box 290
New Roads, LA 70760
225.638.9556
225.638.5555 (fax)
jbello@pcpolicejury.org

PORT OF GREATER BATON ROUGE

Mr. Jay Hardman, P. E., Executive Director
P.O. Box 380
Port Allen LA 70767
225.342.1660
225.342.1666 (fax)
hardmanj@portgbr.com
www.portgbr.com

PORT OF IBERIA DISTRICT

Mr. Roy A. Pontiff, Executive Director
P.O. Box 9986
New Iberia LA 70562-9986
337.364.1065
337.364.3136 (fax)
royp@portofiberia.com
www.portofiberia.com

PORT OF NEW ORLEANS

Mr. Gary LaGrange, Executive
Director/CEO
Mr. Pat Gallwey, Chief Operating Officer
P.O. Box 60046
New Orleans LA 70160
504.528.3211
504.528.3397 (fax)
glagrange@portno.com
pgallwey@portno.com
www.portno.com

PORT OF SHREVEPORT-BOSSIER

Mr. Eric England, Executive Director
P.O. Box 52071
Shreveport LA 71135
318.524.2272
318.524.2273 (fax)
port@portsb.com
www.portsb.com

PORT OF SOUTH LOUISIANA

Mr. Joel Chaisson, Executive Director
P.O. Box 909
LaPlace LA 70069
985.652.9278
504.568.6270 (fax)
jchaisson@portsl.com
www.portsl.com

PORT OF WEST ST. MARY

Mr. A. Philip Prejean, Executive Director
P.O. Box 601
Franklin LA 70538-0601
337.828.3410
337.828.3411 (fax)
portofwsm@cox-internet.com
www.portofwsm.com

**RED RIVER PARISH PORT
COMMISSION**

Mr. Joe Dill, President
P. O. Box 1270
Coushatta, LA 71019
318.797.9079
bossman349@aol.com

**ST. BERNARD PORT, HARBOR
AND TERMINAL DISTRICT**

Dr. Robert Scafidel, Executive Director
P.O. Box 1331
Chalmette LA 70044
504.277.8418
504.277.8471 (fax)
rscafidel@stbernardport.com
www.stbernardport.com

**PORTS ASSOCIATION OF LOUISIANA
CORPORATE MEMBERS**

**SOUTH TANGIPAHOA PARISH PORT
COMMISSION**

Patrick Dufresne, Executive Director
163 West Hickory Street
Ponchatoula LA 70454
985.386.9309
985.386.9389 (fax)
portmanchac@i-55.com
www.portmanchac.org

TERREBONNE PORT COMMISSION

David Rabalais, Port Director
P.O. Box 6097
Houma LA 70361
985.873.6428
985.873.6795 (fax)
drabalais@tpcg.org
www.tpcg.org

VIDALIA PORT COMMISSION

Mr. Hiram Copeland, Mayor, City of
Vidalia
P.O. Box 2010
Vidalia LA 71373
318.336.5206
318.336.6253 (fax)
Attn: Teresa Dennis
318.336.9089
601.431.9080 cell
411 Georgia St.
Vidalia, LA 71373
318.757.9404
318.336.9089 (fax)
mtdennis@yahoo.com

**WEST CALCASIEU PORT, HARBOR
AND TERMINAL DISTRICT**

Lynn Hohensee
514 West Napoleon
Sulphur LA 70663
337.855.4554
337.794.4809 (fax)
lhohensee@netcommander.com

**EMERGING PORT
MEMBERS**

**AVOUELLES PARISH PORT
COMMISSION**

Mr. Tommy Maddie, Chairman
P. O. Box 127
Simmesport, LA 71369
318.359.2958
318.941.2868 (fax)
tommymaddie@yahoo.com

GRAND ISLE PORT COMMISSION

Mr. Wayne Keller
Post Office Box 500
Grand Isle, LA 70358
985.787.2229
985.787.2229
waynek@grandisleport.com

**GREATER OUACHITA PORT
COMMISSION**

Mr. Paul Trichel
101 Valley Road
West Monroe, LA 71292
318.322.8400
318.322.2154 (fax)
318.998.1271 ext. 228
318.361.1257 (fax)
ptrichel@ouachitaterminals.com

**MERMENTAU RIVER HARBOR &
TERMINAL DISTRICT**

Mr. Stephen Broussard
Post Office Box 292
Estherwood, LA 70534
337.721.4100
337.581.3369 (cell)
337.721.4104 (fax)
E-mail: stbroussard@la.gov

**PORTS ASSOCIATION OF LOUISIANA
CORPORATE MEMBERS**

**WEST CAMERON PORT
COMMISSION**

Mr. Cliff Cabell
P. O. Box 1280
110 Smith Circle
Cameron, LA 70631
Attn: Tina Horn
337.775.5718 ext. 115
337.775.5567
cppjury@camtel.net
www.cameronparish.net

**WEST FELICIANA PARISH PORT
COMMISSION**

Mr. Roger Richard, Port Director
P.O. Box 3044
St. Francisville, LA 70775
1222 Jackson Road
St. Francisville, LA 70775
225.635.6767
225.635.6885 (fax)
rogerrichard@cox.net