2008

Port of Morgan City
Strategic Plan

Prepared for the Morgan City Harbor Terminal District Board of Commissioners

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Acknowledgements

This strategic plan is the culmination of an effort to revitalize the Port of Morgan City as an economic development catalyst in St. Mary Parish.
The document has been developed in consultation with a wide range of stakeholders who have knowledge and interest in the Port of Morgan City as well as the economic base in the area. We would like to acknowledge the many individuals who provided valuable information and their active participation in this process.

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Executive Summary

Port of Morgan City Strategic Business Plan

Prepared by UNO Transportation Center, the National Ports and Waterways Institute and Raphael Duplechain, Freight Rail Advisor

Project Overview:

In September 2007, the consultant team was retained by the Board of Commissioners of the Port of Morgan City Harbor and Terminal District to undertake a comprehensive analysis of the port's existing condition and prepare a long-range Strategic Plan for its development and operation. The team employed a multi-faceted approach to this project.

1. **Relevant past studies and data bases were reviewed to establish a working base of knowledge for both the port and the overall region (Louisiana's Energy Coast, St. Mary Parish and its adjoining parishes).**
2. **On-site investigations and key-person interviews were conducted with relevant stakeholders in both the public and private sector.**
3. **At both the macro and micro scale, assessments were made of the maritime industry (national and international), the oil and gas supply and service sector, general OCS trends affecting Louisiana's Energy Coast, and specific cargo types prevalent in the region (drilling mud and additives).**
4. **Similar shipping operations servicing shallow draft ports were also profiled.**

The geographic and market context of the Port of Morgan City was initially reviewed. The PMC has distinct advantages given its central Gulf Coast location, its relative safe harbor status in extreme weather events, and its overall transportation connectivity by multiple modes: maritime (ship and barge); freight rail; highway; aviation. The general Morgan City region also plays an ever-important role in the oil and gas industry (which remains very robust), in OG/OCS supply services, shipbuilding and vessel repair, as well as OG / OCS fabrication. Although the industrial base for oil-field support remains strong, particularly for deep-drilling exploration and production, several industry leaders indicated that their investment decisions (either out-of-state or foreign-based locales) are being driven, in large part, by the limited drafts (less than 16') in the adjoining waterways. This has been and continues to be a major problem for both the PMC and OG / OCS industries in the region. Furthermore, there is no clear consensus on a solution. In fact, a variety of opinions have been made relative to this issue ranging from "Go with what we've got" to "We need and deserve a 35' channel". A definitive resolution seems to remain elusive at this time. Both public and private sector leaders continue to strongly advocate for

a long-term solution to this problem; specifically through the on-going efforts of the Atchafalaya River Coalition and regular dialogue with their Congressional delegation.

At the western edge of the parish, the Port of West St. Mary operates another shallow draft port primarily providing maritime services to vessels and cargoes using the GIWW. This port, in a remote location, affords ample development opportunities with large amounts of available property but few with water frontage. These two ports, although both located within St. Mary Parish, co-exist as complementary assets, each serving distinctly different markets and not competitors.

As we are all aware, the oil and gas industry is experiencing a renewed renaissance, in part driven by our nation's desire for greater independence from foreign energy sources. This is having a direct impact on Louisiana's Energy Coast. Surrounding ports, including Port Fourchon, the Port of Terrebonne, and the Port of Iberia are all expanding to meet the demands of the industry. Investment incentives are being provided at both the federal and state levels, with obvious results. The recent announcement by Governor Jindal regarding financing for LaShips at the Port of Terrebonne is just one indication of the current market condition. More recently, the MMS reported that the March 19, 2007 lease bid for Gulf drilling was the highest on record ($3.67B). The effects these will have on the PMC are yet unknown, but for the general economy of St. Mary Parish and the surrounding region, the economic indicators are very strong.

At the micro level, especially as it relates directly to the PMC and its immediate environs, several recent announcements have significance for the short and mid-term time frame. First, CENAC Offshore L.L.C., a Houma-based company, successfully negotiated a 5 year lease with the Board of Commissioners of the PMC to serve as its terminal operator. In turn, the Board and CENAC, on March 10, 2008 announced a strategic alliance with a Progresso, Mexico based shipping company to launch an international liner service between the two ports. This new initiative is being strongly supported by both the State of Louisiana and the State of the Yucatan, as evidenced by the recent visit by its Governor, Ivonne Ortego Pacheco and her administrative delegation. This service may well define the short and mid-term projects undertaken at the PMC. Scheduled to start operation in the 4th quarter of 2008 with its first vessel sailing, specific physical infrastructure improvements are envisioned by CENAC and its international associates to address specific market demands. As well, the BNSF railroad, one of only six Class 1 rail systems in the US, has begun a reassessment of their entire Gulf Coast operation (New Orleans to Corpus Christi) to address existing conditions and future opportunities: service level enhancements; marketing initiatives; facility improvements; new physical plant construction. This is significant to the PMC specifically because of its existing service agreement with BNSF, its access tracks, and the potential for the development of a BNSF supported premier transload facility adjacent to the PMC's current property. Finally, the

PMC has on-going lease agreements with both Baker-Hughes and Veolia for the use of existing facilities that will continue under the new operating structure.

PMC Strengths:

The PMC (28.6 acres) is located roughly 20 miles inland of the Gulf of Mexico in a portion of the Atchafalaya Basin that is in fact growing wetlands/marsh, a unique natural phenomenon along the Louisiana coast. This semi-land buffer, affording a natural barrier to storm surge, creates a "safe harbor" condition at the PMC and various waterways within St. Mary Parish for maritime assets at risk during hurricane events. The PMC also is located midway along the Louisiana coast offering a central location for maritime vessels working the Gulf. These two assets proved significant during Hurricanes Katrina and Rita as the PMC served as a vital refueling center for vessels involved in the recovery (search and rescue, navigational aid restoration, post-storm assessment and inventory, etc.) and a refuge for off-shore personnel and equipment during and after the storms.

The port lies midway between two major population centers: New Orleans and Houston. The PMC is connected by various transportation modes to other portions of the Gulf Coast as well as the hinterland of the US by a variety of transportation modes: waterway services (GIWW connecting in both east and west directions, Atchafalaya River Basin via Port Allen to the Mississippi River, and the GIWW to the Mississippi River via the Algiers Lock); BNSF and UP Class 1 railroads; US 90 built to Interstate standards (future I-49); and both public and private airfields / heliports. Consequently, the PMC can offer multiple modes of transportation to virtually all parts of North America.

The port is a relatively new facility offering an 800 foot dock; a concrete wharf apron for cargo storage; a 20,000 gsf food-grade warehouse; direct rail access to the BNSF mainline track via 1 team track; an office building with several out buildings; and portions of property yet developed. At its western boundary, an open water reservoir (ditch) abuts an abandoned rail ROW. A rarely used municipal baseball field also abuts the western property line north of Youngs Road. Roughly 2/3 of the property is flood protected by a USACOE floodwall. Adjacent undeveloped property is also available for future development immediately south of the PMC property north of Youngs Road.

In December 2007, the Board of Commissioners of the Morgan City Harbor and Terminal District signed a 5 year lease with CENAC Offshore, L.L.C. to serve as the terminal operator. This provides the Board with a steady income stream and removes them from day-to-day management responsibilities. This quasi public-private partnership offers each party unique benefits and responsibilities. CENAC has outlined an aggressive development schedule for their new international liner service and is currently making interim improvements to PMC assets (moveable equipment, rail infrastructure).

PMC Weaknesses:

The PMC exists within a unique environment where most potential port users have built and utilize their own private terminals or docks. This substantially reduces the potential market for cargoes using the PMC. In addition, the port is relatively small and somewhat constrained with limited expansion options. Furthermore, it competes with other Gulf Coast ports with substantial lands available for development: Port Fourchon, Port of West St. Mary, Port of Iberia, and the Port of Terrebonne. Given this situation, it is imperative that the PMC identify and establish a niche market that complements existing public and private terminals within the region and not position themselves as competitors.

The PMC also suffers from a byproduct of the Atchafalaya's natural sedimentation process: fluff and fluid mud limit the operational draft of the Bar Channel to a depth significantly less than the congressionally authorized 20'. This is a recurring problem for all marine users of the PMC as well as the region's industries. It also creates real operational and economic consequences. Vessels and their tows, on many occasions, are limited by the draft or must operate at slower speeds with diminished navigational controls. These constraints have recently caused several regional industries to make significant capital investments outside of the Morgan City region: Conrad Industries has just made substantial investments at their Orange, TX. Facility ($27M) while J. Ray McDermott is moving some of their investments off-shore: specifically to Altamira, Mexico. In discussions with senior executives at both of these industries, this out-migration may become the norm for the region if the channel draft / fluff / fluid mud problem isn't addressed. Various solutions to the fluff / fluid mud condition are currently being investigated by the USCOE, including the construction of a test jetty adjacent to the Bar Channel.

A past weakness at the PMC involved defining its primary role within the regional economy. In its early years, the Board chose to serve as a terminal operator, providing basic port services and functions. For a variety of reasons, this was not successful. It then pursued alternative agreements with vessel service operators with an emphasis on International cargo services. Again, but for different reasons, this option was terminated. In early 2006, a used vehicle export service to Central America was launched. The duration of the service was approximately 18 months, with a planned vessel call every two weeks. The scheduled service became more irregular due to vessel operational and mechanical problems. When fully loaded, the vessels could carry upwards of 100 cars with a draft of 15 -16 ft. The service was ultimately terminated due to a vessel – rig collision that went unreported. However the lessons learned from this experience demonstrates success can be found in providing maritime services to Central America markets.

Recently, the Board has determined that it will assume a landlord position relative to port operations. This new role was originally taken in 2005 with the selection of the Shaw Group

as the terminal operator. At that time, Shaw envisioned the PMC serving as a major transshipment point for Katrina-related reconstruction materials. However, this niche market did not materialize and the agreement was terminated in the fall of 2007. However, during the course of the lease, the Shaw Group provided the Board with a significant and steady revenue stream. On December 1st, 2007 a new port terminal operator was selected by the Board. CENAC Offshore L.L.C. signed a 5 year lease to provide traditional operating services to the PMC. They currently are developing and implementing a new international liner service with a Progresso, Mexico based shipping entity. The envisioned service will concentrate on small producers seeking a North American marketing and distribution system. Hopefully, the new port terminal operator will be successful, despite the limitations imposed upon it by both physical and market conditions.

Recommendations:

Short term strategies for the Board and CENAC to consider include both project and program elements. The following is a breakdown:

1. Based upon market demand, conduct preliminary engineering for the construction of a concrete box culvert to replace the existing open water reservoir ditch currently located at the western edge of the PMC site. If constructed, the resultant footprint could be paved to provide additional lay down areas for cargo.
2. Upon completion of the box culvert, the existing rail spur adjacent to its western boundary should be expanded across Young's road and mitigation measures taken to shield this area from adjoining properties. This would provide the PMC / CENAC with additional rail car storage track on-site.
3. If additional acreage is deemed necessary, the PMC should enter into negotiations with the City to acquire or secure a long-term lease for the municipal baseball field adjoining the Port's western boundary north of Young's road. This additional acreage could be used for lay-down / storage area or provide a site for new construction (relocated PMC headquarters, distribution sheds, etc.).
4. Enter into negotiations with the BNSF railroad for the development of a premier transload service facility. Conduct an initial feasibility study for the facility (preliminary engineering, construction cost estimate, market assessment, user survey, financial performance evaluation). Simultaneously, conduct preliminary discussions for property acquisition or a long-term lease with representatives of the Young Foundation.
5. Investigate alternatives for channel dredging. This recommendation is made with some reservations, but given the past performance of the USACOE on this most important regional issue, a method must be devised to assure the region that an operational depth of 20' can and will be maintained 24-7 365 days a year. Options to consider include entering into a private contract for dredging services; have the PMC acquire and operate equipment necessary for maintaining the 20' draft;

investigate the feasibility of forming a special taxing district to pay for the above referenced services or alternative long-term financing.

Mid-term recommendations include the following:

1. **Finalize negotiations with the Young Foundation on property required for PMC expansion if warranted by market conditions created by CENAC's international liner service.**
2. **Conduct final engineering and the construction of additional rail sidings / switches to create an on-site / near-site premier transload facility for regionally bound cargo (i.e. steel) in cooperation with the BNSF. Investigate financing options.**
3. **Determine market demand for dock / wharf expansion. If deemed necessary, prepare documentation for formal application to the Port Priority Program for partial funding.**
4. **Based upon market demand, conduct preliminary / final design and engineering for a food-grade warehouse / distribution center. Investigate financing options including the Port Priority Program or funds provided by foreign sources.**
5. **As mentioned earlier, it may be advantageous for the PMC to consider the construction of a new office building and ancillary support structures so that its present site can be considered for alternative uses. We propose this new structure be constructed on the existing baseball field in conjunction with a decorative water retention pond tied to the box culvert reservoir.**

Long-term, the PMC and CENAC may wish to consider additional waterfront property acquisition to serve additional markets that may develop in the region. Options include the Avoca Island proposal, as stated previously.

The above projects and initiatives are primarily physical improvements to the PMC. The following represent institutional strategies to be undertaken by both the Board and CENAC.

1. **As the PMC is actively engaged with a number of transportation modes, they should seek active participation in the transportation committees of the regional Metropolitan Planning Organizations in both Lafayette and Houma-Terrebonne. This gives the PMC "a seat at the table" when major infrastructure improvements are being planned and programmed at the local, regional, state and national level. It may become necessary to formally join one of these MPOs in the future.**
2. **Inter-governmental agreements should be investigated between the PMC and the Port of West St. Mary (with an emphasis on joint marketing opportunities) as well as the municipal airport, if air freight becomes a market niche for CENAC in the future.**
3. **Investigate the tax structure of the existing PMC, the PWSM as well as the airport. Currently, the PMC receives 4.59 mils (roughly $800,000 annually) on the property**

tax within their jurisdiction. By statute, they are legally able to collect up to 7 mils. The PWSM receives roughly $320,000 in annual tax revenues from the Parish of St. Mary. Various funding sources from airport users and fuel taxes amount to $85,000 in annual contributions which become part of the General Fund. The Parish pays $282,000 for maintenance and general upkeep of the airport property. Relative to recurring financing, both ports within St. Mary Parish receive annual payments from the ad-valorem taxes; however certain areas of the Parish currently do not contribute monies to either port. This issue needs to be further investigated by representatives of the particular municipalities involved to determine the feasibility of expanding the taxing boundary for the PMC

4. **In the course of this study, it has become evident that certain projects or programs need special attention by members of the Board with specific areas of expertise. We suggest the Board form the following subcommittees:**

   Economic Development
   Facility Development / Property Acquisition
   Intergovernmental Affairs
   Tax / Finance / Jurisdictional Expansion

5. **Coastal restoration and hurricane protection systems are being considered at both the state and federal levels within St. Mary Parish and adjoining parishes along the LA coast. The PMC should engage with all parties involved in these projects as they relate to regional infrastructure projects and financing.**
6. **The PMC and LDED need to become active partners in all future decisions regarding international trade initiatives, particularly the new Progresso, Mexico service as envisioned by CENAC.**

In summary, the PMC faces a unique opportunity, given the general dynamics of international trade and the energy sector's growth and diversification. The PMC also faces daunting challenges: international liner services are a unique sub-niche within the overall shipping industry with particular challenges (see Appendix for liner company profiles); the natural characteristics of the existing site's water access way (shallow depth and narrow channel width); nature's on-going disposition of sediment and the resultant fluff and fluid mud prevalent in the existing Atchafalaya River Bar Channel pose both operational and economic hurdles. With bold leadership, a strong partnership with both national and international interests and on-going perseverance by civic, industry, and political leaders the PMC can have a bright and prosperous future.

1.0 Mandate, Scope and Approval

1.1 Legal Mandate

The Morgan City Harbor and Terminal District is a political subdivision of the State of Louisiana created by Act 530 of the State Legislature in 1952.

The Louisiana Constitution (Article 6, Section 44) defines a "political subdivision" of the state as follows:

> "Political subdivision means a parish, municipality, and any other unit of local government, including a school board and a special district, authorized by law to perform government functions."

Pursuant to Article 6, Sections 6, 19 and 20 of the Louisiana Constitution, "the district, acting through the board, has all of the rights, powers, privileges, and immunities granted to a political subdivision of the state for industrial, commercial, research, and economic development purposes. The District shall have the authority to "... regulate the commerce and traffic of said harbor and terminal district in such a manner as may in its judgment be best for the public interest".

1.2 Relevant powers of the Board of Commissioners

Enabling statutes, as revised in 2002, under section 3.2.3. "Powers of the Board; title to structure and facilities", the board has the power to perform the normal functions associated with a harbor and terminal district in the state of Louisiana.

Of significance to this strategic plan are unique powers as stated in Section 323 as follows: B(3) " Shall be empowered to own and have charge of, to administer, construct, operate, and maintain wharves, warehouses, landings, docks, sheds, belt and connecting railroads, shipways, canals, slips, basins, locks, elevators, and structures and facilities necessary and proper for the use and development of the business of such district,

including buildings and equipment for the accommodation of passengers and in the handling, storage, transportation, and delivery of freight, express, and mail. B(4) " May Dredge shipways, channels, slips, basins, and turning basins in the Atchafalaya River and other waters within the district."

It should also be noted that the board has the authority to enter into cooperative agreements pursuant to Section 323 E(1). As follows: (2)(a) "Cooperative Endeavor" means any form of economic development assistance between or among the district and the state, any local governmental subdivisions, political corporations, or public benefit corporations, the United States or its agencies, or any public or private association, corporation or individual. The term "cooperative endeavor" shall include but not limited to cooperative financing, cooperative development, or any other form of cooperative economic development activity."

(2)(b) "Cooperative financing" means any method of financing economic development between or among the district and the state, any of its local governmental subdivisions, political corporations, or public benefit corporations, the United States or its agencies, or any public or private association, corporation or individual. Such methods of financing shall include loans, loan guarantees, land write-downs, grants, lease guarantees, or any form of financial subsidy or incentive." (2)(c) "Cooperative Development" means any method of cooperative development between or among the district and the state, any of its local governmental subdivisions, political corporations, or public benefit corporations, the United States or its agencies or any public or private association, corporation, or individual. Such methods of cooperative development shall include but not be limited to any number of joint development agreements such as condominiums; cooperative ownership limited partnership, and investment syndicates. "

The enabling legislation offers the Port of Morgan City (PMC) broad powers that have been limited in past years primarily to the construction of physical facilities and lease agreements with various private sector interests.

1.3 Statement of Purpose and Vision

The "2007-2011" Strategic Plan of the Morgan City Harbor and Terminal District shall encompass all business activities that are in compliance and consistent with the District's legal mandates. As discerned from discussions with various industry and political leaders, the primary purpose of the port should be to reinforce and complement the existing regional industries as well as attract new economic development. It should not act as a competitor with existing business and industry. The vision of the port should define where the organization wants to be in the future and reflect their optimistic goals and objectives for the long term. It should be purposefully articulated to bridge from the present to the future and to position the PMC as a critical change agent for the region. The PMC Board of Commissioners should develop a vision statement that encapsulates these points.

One potential statement could be: *"Our vision is to develop an expanded port facility that maximizes the value of its available natural resources, geographical proximity and multimodal transportation assets for Morgan City, St. Mary Parish, and the surrounding region"*

1.4 Adoption of a Mission Statement

The port commission should also adopt a mission statement that can be used as a marketing tool for rebranding the port name while further defining its goals and objectives. The mission statement should also focus the commission on how the port can provide economic benefit to the community. This would be in the form of the retention and attraction of businesses and jobs through the port's marine operations and industrial development activities. The port should be viewed as a leader, steward and partner by the community and industries in the surrounding area. The formulation of a mission statement also provides the opportunity to get public input and gain public support for the port's strategic plan.

One suggested mission statement could be: *"The Port of Morgan City shall strive to serve as a regional economic catalyst through proactive leadership, stewardship and partnership in the development of marine, industrial and transportation infrastructure."*

1.5 Millage Structure; Fees

Under section Statute 323.1.C: "Notwithstanding any other laws to the contrary and in addition to R.S. 34:331, the board shall have full power and authority to levy an ad valorem tax, not to exceed seven mills, on all taxable property within the district, provided that the board has received prior approval for the levy of the millage by a majority vote of the qualified electors within the district voting at an election called by the district for that purpose and conducted in accordance with applicable election laws".

According to the latest financial statement, for year ended June 30, 2007, 4.59 mills were authorized and dedicated to the District, amounting to a total of $788,161. See section 2.6.1 of the Financial Overview regarding a detailed discussion of port financing.

Tenants and users of PMC assets (i.e. the rail spurs, laydown storage yard, warehouse) paid fees in the amount of $1,282,758 for the financial year ending June 30, 2007.

1.5.1 **Existing Taxing District Boundaries for Port of Morgan City and Port of West St. Mary. Note: Portions of the Parish not shown in either map do not contribute funds to either port.**

Figure 1

2.0 Gulf Coast Louisiana

Post Hurricanes Katrina / Rita the coastal areas of Louisiana have been the focus of intense scrutiny relative to coastal erosion, loss of wetland, and the general deterioration of our natural environment. However, the Atchafalaya Basin and its immediate landforms offer a distinctly unique environment within the state that demonstrates an alternative future. By natural forces, the marshlands in this portion of Louisiana are in fact growing; not receding. This is in large part caused by the deposit of sediment carried from the Mississippi River thru the Atchafalaya Basin and finally being deposited on the coast of St. Mary Parish. However the lack of velocity in the main channel of the river causes a recurring and troublesome natural phenomenon related to this sediment: "fluff" and fluid mud contribute in large part to reducing the operating draft of the main channel. Currently the USACOE is building a test jetty to evaluate the potential of a manmade structure to mitigate this on-going issue. Fluff and fluid mud also cause additional problems for navigation and the efficient operation of marine vessels in the Atchafalaya River Bar Channel according to numerous sources within the public and private sector.

According to a Value Engineering (VE) Report conducted for the USACOE in November, 2003 "The Corps of Engineers has found that, after dredging, it takes approximately two weeks for fluff to begin returning or forming in the bar channel and an average of 6 to 8 weeks for fluff to build to a thickness of 8 to 10 feet with top of fluff estimated at 14 foot depths." (See Figure 2) This continues to cause significant impact, both operationally for mariners and economically for local industries. The Port (PMC) has stated "that some oil and gas related businesses have or will relocate if fluff in the bar channel is not reduced." According to an official at Conrad Industries, "the draft limitations of the channel are having a great impact on the company's expansion plans. The industry is going to larger barges and the delivery of these vessels requires a channel of 25' for the larger tows." In response, Conrad has plans to expand at its Orange Texas facility to build larger barges primarily due the deeper draft offered at this site. Conrad Industries Inc. specializes in the construction, conversion and repair of a wide variety of

marine vessel for commercial and governmental customers and the fabrication of modular components of offshore drilling rigs and floating, production, storage and offloading vessels.

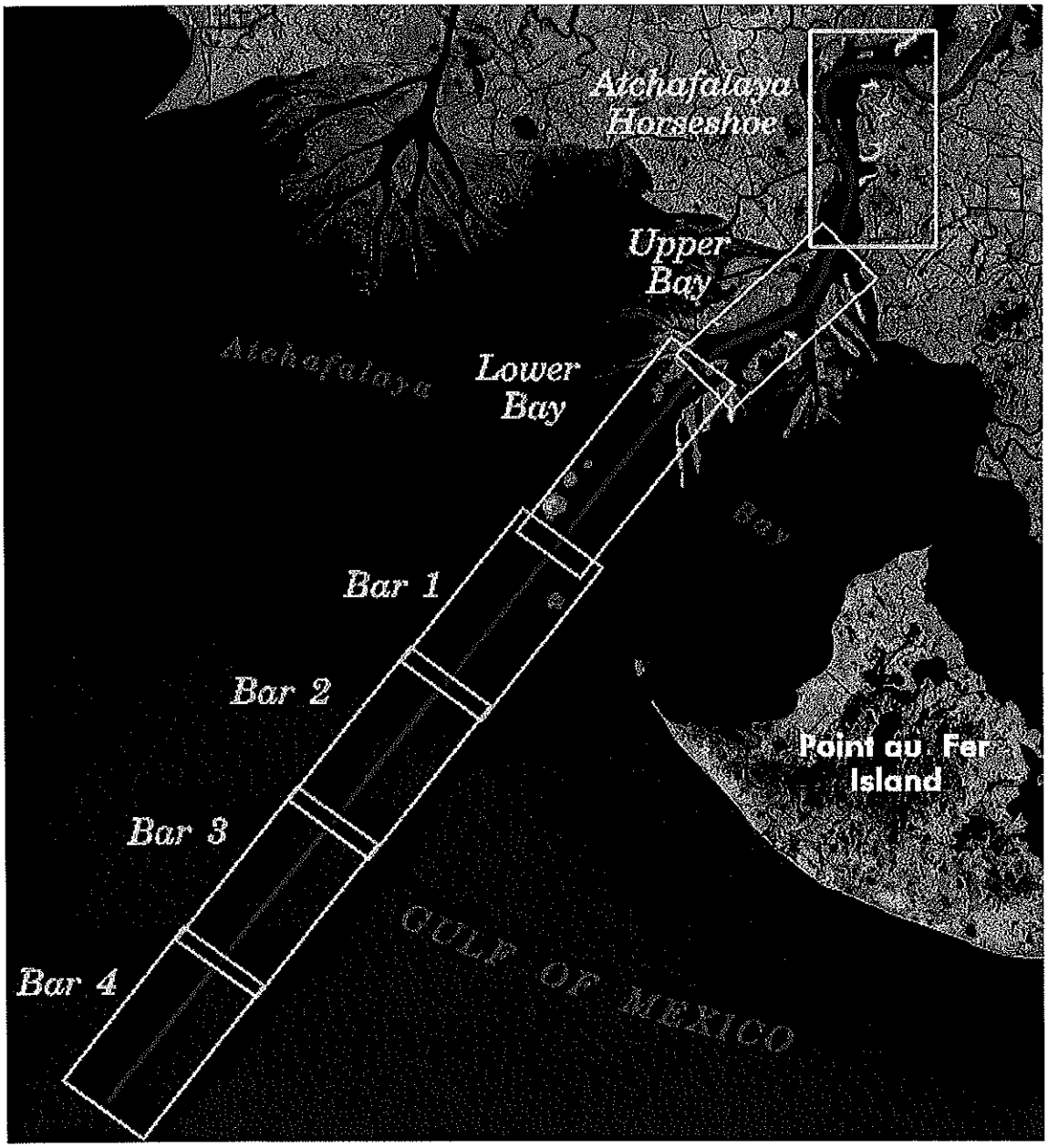
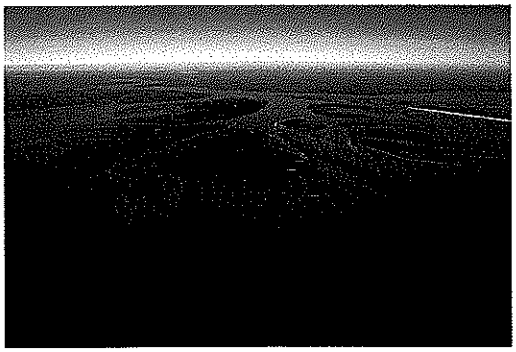
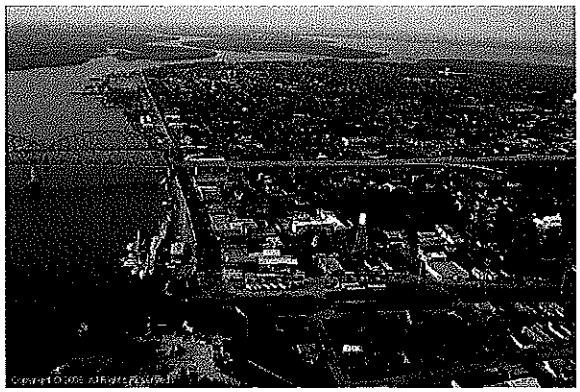


Figure 2

3.0 Louisiana's Energy Coast

According to an April 2005 white paper (SCI Project 2209) authored by Shaw Coastal Inc., the role of this section of Louisianan coast was characterized as the following: "The national significance of Louisiana's working coast includes both shallow-draft and deepwater navigation, the largest deepwater port in the Nation, extensive energy and petrochemical production, and 40% of the Nation's coastal wetlands that supports extensive commercial and recreational fisheries and wintering waterfowl wildlife." Operating within this unique natural and manmade environment is a series of port complexes that primarily serve these industries.





These ports are dependent upon an equally complex transportation infrastructure that includes various maritime assets (GIWW, Houma Navigational Canal, Atchafalaya River Basin, Mississippi River); highway systems (I-10, U.S. 90, LA.1); aviation components (PHI, South La Fourche Airport, Harry P. Williams Airport).

The rapid expansion of the OCS-OG industry in the Gulf of Mexico that started in the early 1990's revitalized Louisiana's offshore logistics system and support services. The opening of Federal lands in the OCS was welcome news to the oil and gas logistics / service industry. These industries were in the process of downsizing in response to weak demand from shallow water oil and gas operations that were struggling with general market conditions and dwindling in number.

A combination of economic and technological developments along with Federal investment incentives for energy exploration and production set off the rapid expansion in OCS activities. The OCS Lands Act administered by the U. S. Minerals Management Service started a program of OCS deepwater land lease sales to the private sector at fair market value for commercial exploration of oil and gas resources. Further, tax incentives were provided to lower investment risks, especially targeting deepwater exploration. This multi-billion dollar industry grew rapidly with capital investments led by major oil and gas companies including BP, ChevronTexaco, ExxonMobil and Shell. By 2006, the OCS sector of the Gulf of Mexico was responsible for the production of more than 20% of the nation's natural gas and about 30% of its oil production. According to the Houston Chronicle dated March 19, 2008, "Energy companies on Wednesday put down a record $3.67 billion in winning bids for the right to drill on federal leases off the coast of Louisiana, Mississippi, and Alabama." This represents the largest lease sale since 1983, when $3.49 billion was bid. From this same date in an article published by the New Orleans Time Picayune, Mike Lyons, Manager of Legal and Environmental Affairs of the Louisiana Mid-Continent Oil and Gas Association, "There has been successful activity in the deep water, people are going deeper into the Gulf."

These offshore operations are dependent on coastal ports for a variety of services: bases for the supply of materials and personnel; coordination of supplies transported by inland modes; warehousing and consolidation of cargo shipments; cargo transfer to vessels; crew transport by helicopters and ocean-going boats. In addition to the direct functions mentioned above, the ports are focal points for a much larger set of multiple indirect functions: building and refurbishing supply boats for various specialized functions;

fabrication of offshore structures and equipment; research and development of deepwater exploration; and other OG support and services. See Figure 3

The Role of Coastal Ports in the OCS Supply Network – Major Components

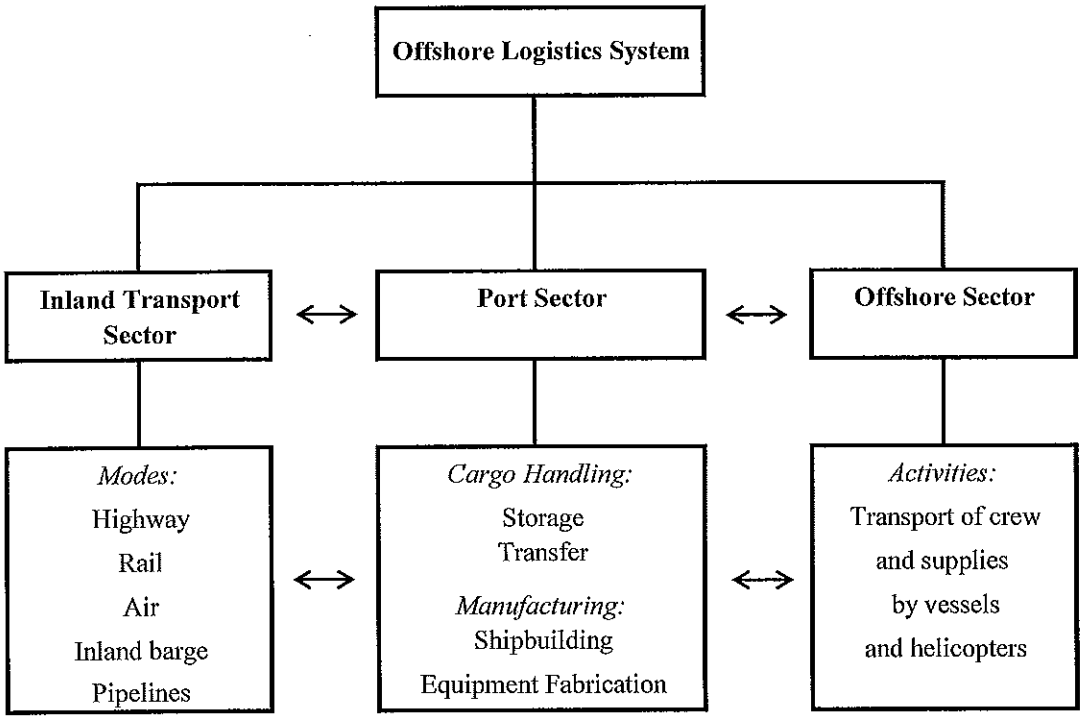


Figure 3

Louisiana coastal ports have a comparative advantage to other Gulf Coast ports in providing these services due to their proximity to offshore platforms and related infrastructure. According to the data maintained by the MMS, 40% of the OCS lease holders indicated a preference for Port Fourchon as their supply base and 19% specified Venice, Louisiana[1]. However, the survey takes into account only the direct links of the supply chain and does not include supporting activities such as shipbuilding, equipment fabrication and a host of other ancillary port services that are mainly concentrated in the Morgan City area.

[1] *Deepwater Gulf of Mexico 2002: America's Expending Frontier.* OCS Report, MMS 2002-021.

Several coastal ports that identified the potential demand for port services generated by new OCS activities adjusted their specific port development strategies in response to these industry dynamics and grew rapidly. Port Fourchon took advantage of its strategic location on the Gulf and developed as an energy support center offering daily supplies and services to the industry. Port Fourchon created many high-paying jobs in industries that require minimal land area; an obvious advantage based on the scarcity of developable land in its early years of development and operation. Port Fourchon also flourished in spite of its limited transportation connectivity. It has historically been served by flood prone LA 1, its sole service transportation linkage to inland Louisiana, which is only now being upgraded and raised.

The Port of Iberia, although located adjoining the GIWW with its limited draft (12ft), took advantage of the availability of developable land to expand port services. Currently the port provides facilities for OCS equipment fabricators and pipe coating companies. As a first step, the port implemented a series of projects in the 1990's providing basic amenities such as drainage, utilities and water services. This basic infrastructure was followed by the acquisition of additional land for port expansion. Both ports were able to maintain a high level of capital investment and expansion because each were yielding high returns.

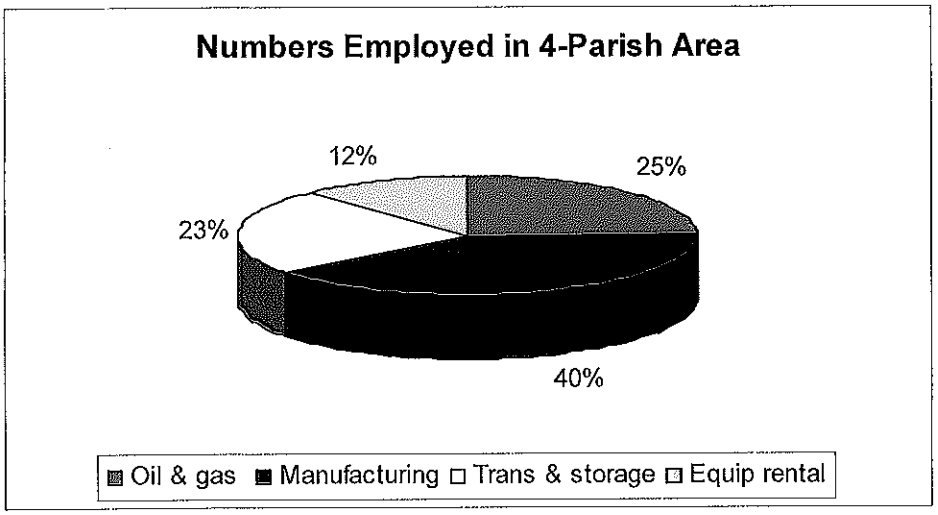
The Port of Terrebonne recently announced that Governor Jindal has committed 10 million dollars to the port to develop a new facility for LAShips, a subsidiary of Edison Chouest. This new shipyard will create 1000 high-skilled jobs paying an average of $54,000. It will join eight other large tenants at the 400 acre site situated along the Houma Navigation Canal. The Port of Terrebonne is currently developing a cooperative agreement with the Port of Fourchon to provide additional land and building options to meet Fourchon's expansion needs. See Figure 4

Facility	Primary Cargo / Activity	Draft	Developed Acres	# Tenants
Port of Iberia	Inbound: Pipe, Limestone, Barite, and ***Oil and Gas*** equipment Outbound: Pipe, Fabricated / Modules, Agriculture, ***Oil and Gas*** Service	13ft	2,000	100
Port Fourchon	Port Fourchon is the intermodal support base for over half of the domestic ***Oil and Gas*** activity in the Gulf of Mexico	23ft	600	250 +
Terrebone Parish Port	Tenants are ***Oil and Gas*** service companies	15ft	400	N/A

Figure 4

4.0 St. Mary Parish

St. Mary Parish is located in the mid-southern part of Louisiana along the Gulf of Mexico. The parish is 691 square miles in area and contains 660 miles of inland waterways. This waterway system continues to play a significant role in shaping the industrial dynamics of the area. Major industries include agriculture, sugar mills, carbon black plants, shipbuilding, OG supply and services, metal fabrication facilities, and seafood processing. Municipalities in the Parish include Baldwin, Berwick, Franklin, Morgan City, and Patterson. According to the 2000 Census, the total population for St. Mary Parish was 53,500. The parish has been historically divided into East St. Mary (heavy industry primarily oriented to OG and OCS) and West St. Mary (agricultural and mineral extraction) defined by the Calumet Cut, also known as the Wax Lake Outlet. Prior to the completion of U.S. 90 (future I-49 corridor), a strong relationship existed between St. Mary Parish and the greater Lafayette area, including the Port of Iberia. However, today, for a variety of reasons, including the recent PMC lease agreement with CENAC Offshore, headquartered in Houma, there is a general realization that an equal or greater alliance should be pursued with various regional entities (both economic and political) that exist in Terrebonne, Iberia and other adjoining southeastern LA parishes. See Figure 5



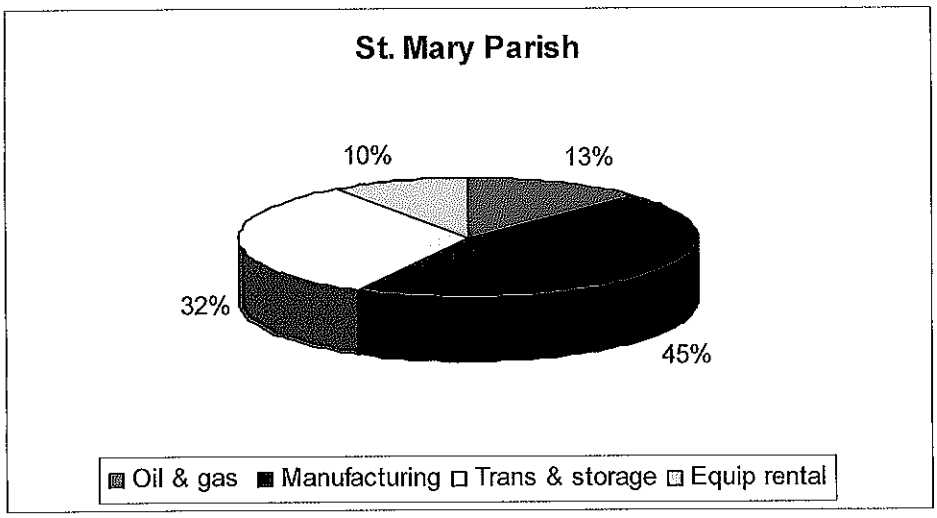


Figure 5

Source: Bureau of Labor Statistics, www.bls.gov.

4.1 St. Mary Parish Ports

At the eastern end of the Parish, with jurisdiction as far west as the Wax Lake Outlet, is the Port of Morgan City. Within the jurisdiction of the Morgan City Port Commission are over 20 miles of existing developed waterfront along Berwick Bay, Bayous Boeuf, Black and Chene; and the Gulf Intracoastal Waterway. The PMC terminal is a small in-town facility which features an 800 foot dock and concrete wharf, a 20,000 gsf covered

warehouse, and on-site rail sidings. The PMC also serves as home port for the USCG Cutter AXE and its support equipment / navigational aids. An on-going constraint for the PMC is the limited draft of the Atchafalaya River Channel, authorized for 20', but effectively offering a 14' – 16' operating draft. Given its inland location, the PMC serves as a safe inland port and a haven for maritime assets (vessels, equipment, and personnel) during times of intense weather events. The port is located adjacent to both industrial and residential areas, a rarely used municipal baseball field, and is in close proximity to the UP and BNSF freight railroads main line track. Undeveloped or minimally developed acreage exists adjacent to the PMC north of Youngs Road and downriver of the existing port property. The lands in question are owned by the Young Foundation and leased to various entities.

Located at the western end of the Parish is the Port of West St. Mary, situated in a rather remote area, with its terminal located just off the Gulf Intracoastal Waterway and the intersection of LA 317. Its dock consists of steel bulk heading and a concrete wharf. In contrast to the public terminal at Morgan City, the Port of West St. Mary has an abundance of open land areas available for development. However, undeveloped land with water frontage is limited. Although the port can serve shallow draft vessel activities, it is more suitable to catering to business and industry that are not water dependant given its large land holdings along with its direct rail and highway access.

4.2 Economic Base of St. Mary Parish

The economic base of the St Mary Parish is the coastal zone of South Louisiana, the Outer Continental Shelf (OCS) and the significant oil and gas (OG) activities in the Gulf of Mexico. Although a few linkages may extend beyond this area, primary port business is anchored to this coastal zone; a 4-parish contiguous area covered by Iberia, Lafourche, St. Mary, and Terrebonne.

The structural characteristics of the local economy have been examined by using employment data of major industries. The results indicate that the relative role played by

maritime-related industries is more or less similar. In fact, St. Mary Parish, where the port's primary business is located, has a much stronger manufacturing, transportation and storage base than the surrounding parishes, which is beneficial to port development at the PMC.

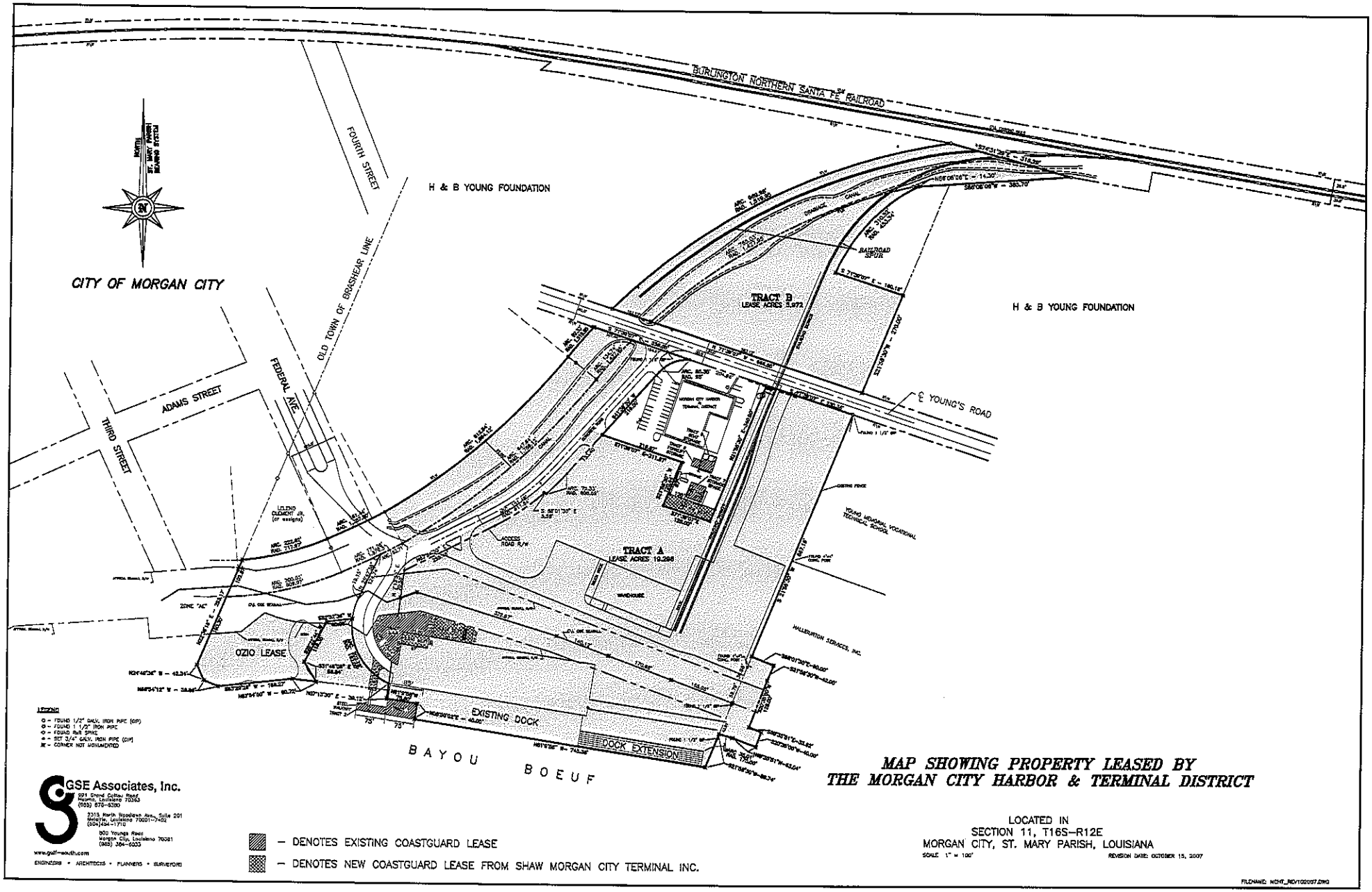
However, this generic analysis of industries does not adequately reflect the local demand for port services generated by the Offshore Oil and Gas (OCS-OG) activities in the Gulf of Mexico. For example, all ports (Ports of Iberia, Lafourche, Terrebonne and, West St. Mary) operating in the economic base area have identified OCS-OG as the main demand driver for port services. Further, with rapid expansion of the industry driven by annual leases of more OCS areas, and the shift of exploration to reserves in deeper waters, these trends will continue to expand the future demand for port services from this industry.

5.0 Port of Morgan City

5.1 Current Port Facilities

The PMC site currently has a total of 28.6 acres with 22.49 acres located inside the U.S. Corps of Engineers' floodwall and 6.11 acres located between the floodwall and Bayou Boeuf. Over the years, the port has been able to compete successfully for funding for infrastructure improvements through the Ports Priority CDP. Since 1990, the port has been awarded $9.75 million for eight projects. These projects have provided a dock (built in 2 phases), 1 covered 20,000 gsf warehouse, cargo-handling equipment, 1 active rail spur, and miscellaneous storage areas. The wharf area at the port has approximately 80,000 sq. ft. and is used exclusively for docking and loading/unloading cargo to and from vessels. With a dock length of 800 linear-ft and an authorized 20-ft draft channel, the port is geared to handle small to medium-sized cargo vessels. Specific port cargo handling equipment include: a dock side mobile crane capable of lifting a fully loaded (70,000 lb) 40 ft container; three forklifts: one 8,000 lb and one 10,000 lb for warehouse use, and one 15,000 lb for the yard; a 50-ton container crane with a 130-ft boom; a 35-ton cherry picker; and a 40-ton container handler. See Figure 6

COPY PMC LAYOUT



MAP SHOWING PROPERTY LEASED BY THE MORGAN CITY HARBOR & TERMINAL DISTRICT

LOCATED IN
SECTION 11, T16S–R12E
MORGAN CITY, ST. MARY PARISH, LOUISIANA

SCALE 1" = 100'

REVISION DATE: OCTOBER 15, 2007

FILENAME: MCHT_REV102007.DWG

Proposed Project	Year Funded	Estimated Project Cost ($)	Proposed Project Components
Bulk Head & Dock	1990	$800,000	Construct a 200 ft x 80ft wharf, fender piles and dolphin
Bulk Head & Dock Phase II	1992	$2,900,000	Dock Extension by 300ft x 80ft
Mobile crane & cargo handling equipment	1993	$1,462,500	Purchase mobile crane, forklifts, and misc. equipment
Transit shed & truck yard	1995	$1,410,000	Construct 20,000 sq. ft warehouse and paved yard
Railroad Spur & loading dock	1996	$874,800	3500 linear ft. rail spur and siding, and 20ft x 200 ft loading dock
Additional dockage	1998	$1,612,000	Dock Extension by 447ft x 27ft
Rail transfer and storage area	1999	$1,957,000	A concrete container yard and hard surface access roads
Total Investment		$11,016,300	

Source: Port Construction and Development Priority Program, Eight Annual Report, Louisiana Department of Transportation and Development, 2001

Figure 6

5.2 Physical Attributes and Limitations

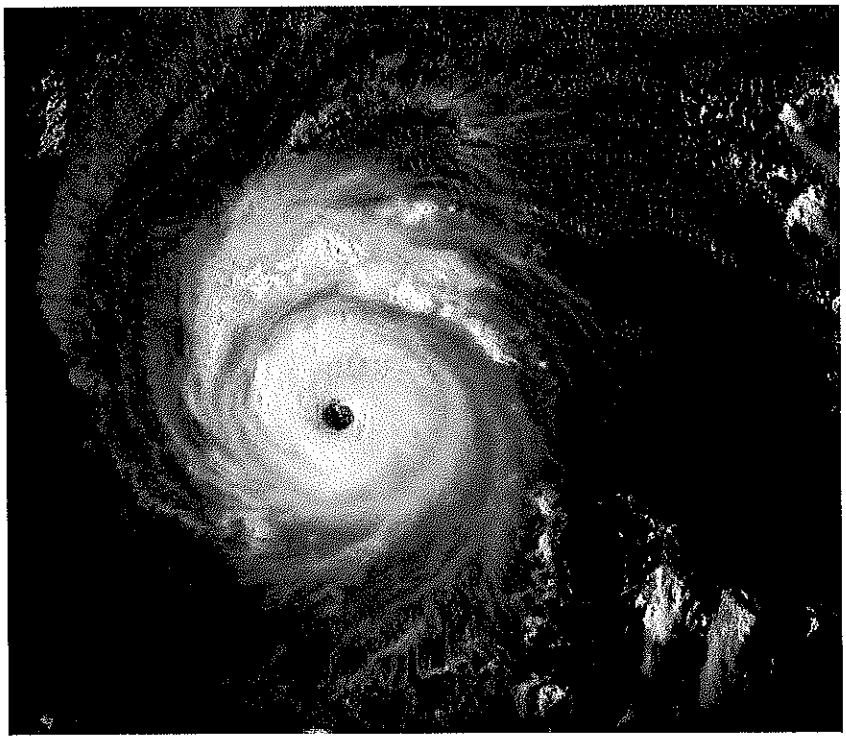
5.2.1 Location

The PMC is located on the north bank of Bayou Bouef approximately 2,000 feet east of its intersection with the lower Atchafalaya River. The site is located within the incorporated limits of Morgan City and is bisected by Young's Road. The port has benefited from its central location with close proximity to the Gulf of Mexico and several heavily traveled inland waterway segments. The port is well served by surface transportation systems. The site is located 1.1 mi from U.S. Highway 90: with Lafayette 71 mi to the West; New Orleans 68 mi to the East; Baton Rouge 71 mi to the North. The port is also served by the Burlington Northern – Santa Fe Railroad (BNSF) which provides railcar shunting services on a weekly basis.

OCS service providers in the general Morgan City area include the public port (the Morgan City Harbor and Terminal District) as well as private sector shipbuilders and large scale fabrication plants catering to the local, national and international energy markets. These facilities are located primarily along the Atchafalaya River and the Gulf Intracoastal Waterway in the communities of Franklin, Morgan City, Patterson, Bayou Vista, Berwick, Amelia, and Baldwin. In general, the area including the PMC and private offshore-oriented industrial operators located in the above communities has been identified as the Morgan City supply base.

5.2.2 **Safe Harbor**

The port is situated approximately 20 miles inland from the Gulf of Mexico and is buffered by vibrant offshore marshes providing storm surge protection during intense weather events. The last five major storms to impact South Louisiana have left the area relatively unscathed. Following the destructive hurricanes of 2005 (Katrina and Rita), the PMC served a vital refueling function for vessels in the central Gulf area. The area once again earned a reputation as a safe harbor providing refuge for fishing and oilfield supply vessels with operations in outlying areas. The surrounding area also offers other advantages during such events: proximity to New Orleans; reliable communication services; a diversified aviation infrastructure (public and private); as well as both road and rail access.



5.2.3 **Draft**

Although the operational draft of the Lower Atchafalaya River Bar Channel remains an on-going problem, manmade structures are currently being tested to address both "fluff" and fluid mud conditions, new dredging projects are being proposed or undertaken in the

region that should have positive impacts for various portions of the Gulf Coast. These projects were included in the recently enacted Water Resources Development Act (H.R. 1495). The bill includes channel deepening to a 20' draft for that portion of the GIWW between the Port of Iberia and the Port of West St. Mary Parish. It also calls for the maintenance of the PMC channel at 20'. Most recently, and as a direct result of legislation by Senator Mary Landrieu, Congressman Melancon introduced a bill that would authorize the dredging of Crewboat Cut in the lower reaches of the Atchafalaya River. Over $3 billion in federal funds are also included for hurricane protection and coastal restoration projects.

5.3 Port History Tied to a Specific Role

Traditionally, a port's role in a community is to serve as an intermodal transfer point for goods moving between water and land. As with smaller ports such as PMC, these goods are either consumed or produced within the local markets and industries or destined for the hinterland. Cargoes typically require water transportation as well as land-based transportation systems to reach their delivery point.

Morgan City's regional industrial growth is a direct result of its geographical proximity to the Gulf Intracoastal Waterway, the Atchafalaya River Basin and the Offshore Continental Shelf (OCS) petroleum activity in the Gulf of Mexico. The availability of waterfront property and access to the Gulf of Mexico OCS industry has attracted private sector support services such as equipment fabrication and repair, shipbuilding, and value-added processing activities to the area. The waterway system allows for the large output products, such as supply vessels, production platforms and structures, to be delivered to their final destination via water; however the channel's limited draft is a major growth constraint. The private marine terminals also allow for the input of raw materials, such as steel plate, pipes, and structures to be transported directly to the plant facility via barge thus bypassing the PMC. Thus, these plant facilities sites were planned and built with an on-site marine terminal as a key component to their operation. Consequently, the private sector operations in the area have put PMC at a distinct disadvantage to compete for a

variety of cargo types, unlike other similar Gulf Coast ports that provide logistical support to the oil and gas industry where on-site plant terminals are limited in number and coverage. One potential option for the PMC to explore would be the development of a premier freight rail transload facility located near-dock on Young Foundation property to create a new niche market. (similar to below BNSF facility)

5.3.1 Landlord versus Operator – Success and Failure

The PMC began terminal operations in the early to mid 1990's following the construction of the bulkhead, dock, warehouse and equipment purchases. From inception to 2005, the public port authority conducted its business as an operating port, providing basic port services and functions. The AAPA, a national ports organization, defines an operating port as follows: "The port authority builds the wharves, owns the cranes and cargo-handling equipment and hires the labor to move cargo in the sheds and yards. A stevedore hires labor to lift cargo between the ship and the dock, where the port's laborers pick it up and brings it to the storage site." According to interviews with port officials, the port has not been financially successful as an operating port. This fact was attributed to the lack of

expertise by port commission personnel in handling certain commodities in terms of equipment type, associated costs and insufficient tariff rate levels. An example would be the effort to handle PL480 rice shipments in the mid 1990s, where the handling costs exceeded the revenue generated from port tariffs. Equipment mismatch was also a contributing factor as well to the PMC's underperforming finances. Further, its inability to react to these acute business conditions resulted in a decision by the port to cease functioning as an operating entity and pursue other options.

Most recently, the Board of Commissioners has elected to assume the role of a landlord port. As a landlord (as defined by AAPA), the port authority builds the wharves, which it then rents or leases to a terminal operator (usually a stevedoring company). The operator invests in cargo-handling equipment (forklifts, cranes, etc), hires longshore laborers to operate such lift machinery and negotiates contracts with ocean carriers (steamship services) to handle the unloading and loading of ship cargoes. The port commission secured their first terminal operating lease with The Shaw Group in 2005. Although the lessee was unsuccessful in its business endeavor (to utilize the PMC as a major transit terminal for Post Katrina construction materials), it provided a significant revenue stream to the PMC for the duration of the lease. The lease arrangement was for an initial period of two years and was not renewed given the failure of this business sector to materialize. In the fall of 2007, after a prolonged period of negotiations on a lease renewal, The Shaw Group elected not to renew and vacated the property. Soon thereafter, the PMC entered into a sublease agreement of a portion of its premises with CENAC Offshore, L.L.C. The current lease calls for an initial term of sixty months, commencing on the 1st day of December, 2007 and expiring on November 30, 2012. The lessee will have ten (10) options to extend the lease for additional terms of one (1) year each. The lessee shall have the right to make capital improvements to the Premises as deemed appropriate, but first must get written approval from the lessor. "If it is in the Lessor's interest, Lessor may make reasonable capital improvements to the Premises requested by Lessee during the Term. If Lessor chooses not to make such capital improvements within the time period requested by Lessee, Lessee may make such capital improvements, provided written permission is received from the Lessor".

CENAC Offshore L.L.C., recently announced its intention of launching a new international liner service between the PMC and the Port of Progresso, Yucatan, Mexico. On March 10th , Ivonne Ortego Pacheco, Governor – State of Yucatan and members of her delegation representing economic development and international business, were hosted in Morgan City by representatives of CENAC Offshore L.L.C. and the board of commissioners of the PMC. Attending this event were political leaders from all levels of government as well as civic and industry leaders of the region. As stated by Senator "Butch" Gautreaux, "This represents a new era in international trade for the region and the state."

The PMC also serves as home base for the USCG Cutter AXE, which is primarily used for the deployment of surveillance, navigation, and monitoring equipment. This is a significant role requiring the storage, deployment and maintenance of roughly 1000 navigational aids. The USCG does not currently anticipate the deployment of a second cutter, nor does it require any additional facilities on site. However, they are desirous of utilizing an on-site safe for the storage of firearms and related security equipment.

6.0 Transportation Infrastructure

6.1 Navigable Waterways

The strategic location of the Port of Morgan at the intersection of busy navigable waterways has contributed to the development of shipbuilding and repair industries in the area. Each of the following waterway segments provides specific advantages to Morgan City and St. Mary Parish.

Atchafalaya River, Morgan City to the Gulf of Mexico

The PMC is located on the Lower Atchafalaya River 18 miles from the open waters of the Gulf of Mexico. The United States Corps of Engineers (USACOE) has been authorized to maintain the channel at a depth of 20 feet. Despite this authorization, the

USCE has maintained the navigational channel to an average depth of approximately 12 to 15 feet, according to port officials and frequent users of the waterway in the area.

Atchafalaya River, Old River Lock to Morgan City

This 123 mile segment of waterway provides easy access to the Mid-West via the Upper Mississippi as well as enabling barge access to the Atchafalaya and Red Rivers.

Gulf Intracoastal Waterway, Morgan City-Port Allen Route

This 62.4 mile waterway segment connects foreign and domestic commerce on the Mississippi River at Port Allen, across the river from Baton Rouge, LA at mile 228.1 above head of passes, to the Gulf Intracoastal Waterway at Morgan City.

Gulf Intracoastal Waterway, Mississippi River to Sabine River

This segment of the waterway coupled with the Atchafalaya provides a shorter route for cargo with origins and destinations in Texas and western Louisiana and the Midwest. For example, traffic between points in southeast Texas and the Upper Mississippi River Valley saves approximately 342 mi per round trip by using the Atchafalaya River rather than the alternate link of the Intracoastal via the Harvey Locks at New Orleans.

2005 Number of Vessel trips

Waterway Segment	Length (miles)	Avg. Depth (feet)	Freight Traffic (1,000 short tons)	Vessel Trips
Atchafalaya R. Morgan City to GOM	18	12 to 15	1,981	44,172
Atchafalaya R. Morgan City to Old R. Lock	123	12	10,734	26,285
GIWW - Morgan City - Port Allen Route	64	9	25,468	30,067
GIWW - Mississippi R. to Sabine R.	266	10 to 12	74,215	140,395

Source: U.S Corps of Engineers U.S. Waterway Data

Figure 7

According to "The Louisiana Marine Transportation System Plan" authored by Shaw Environmental and Infrastructure, Inc., the Atchafalaya River from Morgan City to the Gulf segment "generated 2.3 million tons in 2002, consisting of 43% petroleum and

petroleum products; 28% food and farm products (mainly sugar); and 15% soil, sand, rock, and gravel. In 2004, this segment showed a 5%increase to 2.4 million tons. Within the manufactured equipment, machinery, and products category, 200,000 tons were transported, the bulk of which were prefabricated structures for the offshore oil industry. Several major manufacturers and haulers (e.g., McDermott, Bollinger, Tidewater, etc.) use this waterway segment to haul large oversize structures." A significant weakness and institutional constraint, as pointed out in the Shaw study, is the lack of oil and gas and related services tonnage data in the current system.

6.1.1 **Berwick Bay Traffic Center (USCG)**

The Vessel Traffic Center Berwick Bay was established in 1973 after Congress enacted the Ports and Waterways Safety Act. The center is located at the Coast Guard Marine Safety Office in Morgan City, LA. VTS Berwick Bay manages vessel traffic on what is considered one of the most hazardous waterways in the United States due to strong currents and a series of bridges that must be negotiated by inland tows traveling between Houston, Baton Rouge and New Orleans. The VTS (Vessel Tracking System) is basically a 10 mile box within which all vessel movements are tracked and/or recorded via video cameras. This boxed area encompasses the junction of the Atchafalaya River, the Gulf Intracoastal Waterway, the Port Allen-Morgan City Alternate Route and several tributary bayous. Its specific area of responsibility encompasses Light 44 /Wax Lake; that portion of the Gulf Intracoastal Waterway between mile markers 90 and 101; and that portion of the Atchafalaya River between Miles markers 117 and 124. Narrow bridge openings and a swift river current require the VTS to maintain one-way traffic flow through the bridges. During seasonal high water periods, the VTS enforces towing regulations that require inland tows transiting the bridges to have a minimum amount of horsepower based on the length of tow. VTS Berwick Bay is unique among Coast Guard Vessel Traffic Services because it maintains direct control of vessel traffic. A new $1.1 million vessel Traffic Control Tower was recently completed at mile marker 99 of the Gulf Intracoastal Waterway adjacent to Jesse Fontenot Memorial Boat Landing in Berwick. This tower will provide additional vantage points looking westward along the Intracoastal

Waterway, southward along the Atchafalaya River and northward toward Berwick Bay. According to Coast Guard officials, cargo movements are generally 80% east / west and 20% north / south directions

6.2 Rail Connectivity

The southern route of the original transcontinental railroad ran from New Orleans, Louisiana through South Louisiana into Texas west of Lake Charles, Louisiana. New Orleans, 80 miles to the east of Morgan City was the terminus for the founding railroad, The New Orleans, Opelousas and Great Western, (NOOGW) established in 1852. Its tracks reached Brashear City (later renamed Morgan City) on Berwick Bay in 1857. This location served as the railroad's western terminus throughout the Civil War.

In 1869, steamship magnate Charles Morgan bought the NOOGW and renamed the railroad, Morgan's Louisiana, Texas and Steam Ship Company, MLTRR&SS. Mr. Morgan brought steamer service to Morgan City (Brashear was renamed in his honor) which stimulated the region to become a distribution point for both rail and water traffic. Service areas included Galveston and other Gulf Ports as well as locations on many of the rivers, bayous and other waterways along the Gulf Coast in Louisiana and Texas.

In the late 1890's the ownership of the railroad was transferred to the Southern Pacific Lines (SP). For decades the SP operated a robust passenger and freight railroad serving the entire Gulf Coast. However, after WWII, passenger traffic diminished and was ultimately transferred to AMTRAK in 1971. Freight rail experienced typical business cycles generally responding to national economic conditions, although the development of the OG offshore industry immediately after WWII added a new dimension to the freight rail industry. However, national trends in railroad company consolidation ultimately took its toll for this portion of the U.S. railroad system. In 1996, the SP merged with Union Pacific (UP) and became a joint ownership agreement between the UP and Burlington Northern Santa Fe (BNSF). This ownership agreement provided both railroads the opportunity to provide service to the area.

This part of Southern Louisiana was once a hub of railroad operations, acting as a terminal for local train operations between Morgan City, Lafayette and New Orleans. Freight rail service was provided to customers along the line six days per week with daily yard engines assigned to work the industries and the river front within the yard limits of Morgan City, (Berwick to the Highway 90 overpass).

Local train and yard engine services helped establish Morgan City as a hub in the early days of oil exploration and off shore activities (post-WWII). This rail service was substantially reduced as business, primarily related to the OCS industry, declined in the 1980's and into the 1990's due to the oil bust. This decline in rail traffic required action by the railroad to reduce costs: the end to yard assignments, elimination of station employees and daily train service. At present, materials used by offshore industries and those companies supporting these industries receive their supplies and materials by truck and/or barges; however some small quantities are still arriving by rail.

The railroad's cost of maintenance did not balance with the revenue generated and main track switches accessing spur tracks were removed when revenue, maintenance and safety were considered. The lack of traffic and resultant revenue loss caused railroad service to be drastically reduced; the cost/expenses did not balance out. The decision to remove main track switches followed, therefore severing service or the possibility of rail service to the majority of the former users. Switches remain on existing siding tracks in the vicinity of the PMC offering potential access for rail service.

Despite the decline in rail customers in the Morgan City area, the UP provides service six days a week and the BNSF has service on a tri-weekly basis. The BNSF could and would increase frequency to six days a week with an increase in carload business. The Louisiana and Delta Railroad (L & D) headquartered in New Iberia, provides crews for the BNSF service in the area.

In addition to present spurs for rail service at the PMC, there are two other spur tracks in close proximity of the port property. One is located near the ball field, currently on port

property in fair condition, and another spur track (in deteriorated condition) is located east of the port track between the mainline, Youngs Road and Patterson Truck Lines spur to the east of the Highway 90 overpass. There are other locations between Morgan City and Amelia where spur tracks once existed that have been abandoned but the road beds still exist and some rail is still in place. These areas have vacant properties adjacent to the track or in the near vicinity.

Future Opportunities: Premier Transload Service Facility – Multiple Products

At the request of the team, BNSF representatives of the Service Distribution and Design Group visited the area and toured the existing facilities and discussed the service requirements as they exist today. Initial findings indicate a need for a service that would supplement the existing service as opposed to direct competition. According to the BNSF representatives, the best option based on their observations of the area industries would be to create a "Premier Transload Service Facility" (PTSF) to promote rail traffic in the area.

A transload facility is a point where shipments are transferred from trucks to rail or from rail to trucks, thus making rail transportation available to customers not located on a rail line. A transload service combines the short-haul flexibility of trucking with the long haul economics of rail, which can be as much as 20% to 50% less than shipping over the road. Such a facility can be used as a catalyst for building a coalition with the major industries in the area, and reduce transportation costs for supplies and finished products. The PMC, as a stakeholder, could contract for handling traffic arriving/departing via rail and water. In order to maintain the agreement and harmony between the port and the local enterprises, the port and/or an appointed contractor would act as an agent for those enterprises using the facility.

It should be noted that of the seven Class I Railroads in the United States, Morgan City has two Class I railroads operating through the regions west of the Mississippi River. As

mentioned, this region is rich in products supporting the Gulf of Mexico Offshore Oil industry.

6.3 Road Access

The road access to the PMC is primarily via Youngs Rd at the northern portion of the property. The major highway artery to the port is U.S. Highway 90, the future corridor of I-49. The metropolitan cities of New Orleans, Baton Rouge and Lafayette are within a seventy-mile radius. Through these cities the port can access Interstates 49, 55, and 59 North and Interstate 10 East and West.

The future I-49 corridor plan is to bring stretches of U.S. Highway 90 up to interstate standards from New Orleans to Lafayette. Long-term plans call for I-49 to be extended from Lafayette to New Orleans, and northward from Shreveport to Kansas City, Missouri. Construction for the extension north is already underway in southwest Missouri, northern and southwestern Arkansas, and northern Louisiana. Currently, the construction of the Interstate 49 Connector from U.S. Highway 90 to Interstate 10 in Lafayette is in design phase. Implementation of the I-49 Connector would be the link through Lafayette to I-49 north as well as the freeway upgrade to the south and east to New Orleans.

6.4 Aviation

The aviation sector in St Mary Parish is comprised of public and privately operated facilities. Located in Patterson, LA, the Harry P. Williams Memorial Airport, is owned by the State of Louisiana, Department of Public Works. The facility is managed by Ken Perry of the Perry Flying Center. The center was formed in 1983, at a time when much of the oilfield-based economy in south Louisiana collapsed. As a result, the center diversified its operations with the construction of office space and bunkrooms in the main hangar for the use of independent helicopter operators. With the mid-1990s rebound of the oil industry, Perry once again made the airport a primary departure point for offshore workers. The airport has a 5400 ft concrete runway, handling all types of Jet, and Turbo-

prop aircraft up to 100,000 lbs gross weight as well as a 4500 ft seaway to accommodate seaplanes. There are numerous private heliport facilities in the Amelia and Morgan City areas serving the offshore oil industry as well; the Lake Palourde heliport, formally PHI, remains an active base for offshore support. For the fiscal year ending June 30, 2007, St. Mary Parish received roughly $85,000 in revenues generated by various taxes and fees collected from the Harry P. Williams Municipal Airport users. These monies comprised a portion of the general fund from which $282,000 was expended for airport related maintenance.

6.5 Conclusion on Transportation Connectivity

The PMC can access a wide range of transportation systems that provide local, regional, national and international connectivity. Infrastructure development at the port should be focused on maximizing the synergy between these transportation modes. Long distance delivery of products is most economic utilizing waterway or rail systems. Additional investigations could include: determining the role, if any, of the aviation sector in terms of air freight connected with port activities. The I-49 corridor could also provide the port with better roadway access to northern Louisiana upon the completion of the Lafayette connector. The demand analysis for rail services by area industries for the potential development of a premier transload service facility is currently being conducted, and should be further investigated if results are inconclusive in the short term.

7.0 Market Environment

7.1 Liner Market Summary

The potential does exist for PMC to attract and sustain a short sea service to the Caribbean Islands, Mexico, and Central America based on reviews from other foreign trade services in the Gulf. The two prerequisites for PMC to attract and sustain a short sea liner service are based on demand and supply factors. The demand factor can be defined as the ability to generate sufficient volumes of liner freight, while the supply factor can be defined as possessing the facilities that can efficiently handle this freight in terms of channel depth and width, terminal facilities and intermodal connectivity.

Liner freight is generated from either local or distant markets. Local markets can generate liner freight based on the consumption within the population or by the products produced by area industries. In the case of PMC, the local population or industrial area is not sufficient to support the liner freight levels needed to sustain a short sea service. The alternative market for PMC is hinterland traffic, which would rely on a scheduled unit train rail service to the port facility or via barge utilizing the Mississippi River - Port Allen route. Currently, neither of these transportation services are in place, creating a challenge in developing a competitive liner service.

The port facilities at PMC are sufficient to handle short sea services; the main obstacle is channel depth and width and limited shore side support. The rail and road infrastructure as well as additional warehousing can be enhanced should the demand for such improvements be demonstrated by the tenant.

7.1.1 Appendix A.) Market Overview – Liner Shipping

7.2 Service proposal by CENAC Offshore L.L.C.

In late 2007, PMC successfully negotiated a five year lease with CENAC Offshore L.L.C. who intends to begin operation of a short sea service initially to Progresso, Mexico and based on demand, expanding the service area to include other Mexican and Caribbean ports of call. CENAC has formed an alliance with a Mexican based logistics and shipping company to provide full service agency support to include logistics, crewing, vessel operations, documentation, and marketing.

The service is planned to commence in the fourth quarter of 2008, with the phasing in of three mini ships over a period of six months. The service will not be classified as a pure short sea liner service but more of a general cargo service.

The inbound containerized cargo base targets an identified market sector in Mexico consisting of a number of smaller producers with limited access to U.S. markets via

water. In large part, the identification of this niche market is the result of a strong relationship with various governmental entities in the State of Yucatan and CENAC officials.

U.S. distribution will rely on trucking to inland points within a 500 mile radius. It is anticipated that some inbound cargoes to the U.S. will require food grade warehousing (size to be determined) and potentially refrigerated storage as well. Outbound freight is anticipated to include oilfield supplies, construction materials and project cargoes.

8.0 Financial Overview

The financial overview presented in this section is based on the information derived from the audited financial statements of the port from 1996-2007. The general purpose of this analysis is to establish that adequate funds will be available for the implementation of various capital improvement projects recommended in the strategic business plan. The major revenue sources of the port are an ad-valorem property tax, intergovernmental revenue transfers, self-generated funds, and various other economic development grants from federal, state and local sources.

8.1 Ad Valorem Tax

The PMC has the legal mandate to levy taxes up to 7 mills of assessed property values within the District, and currently a 4.59 mills property tax is in effect. Property taxes accounted for 37% of the total revenues of the port in 2007 and was growing at the rate of about $34,000 a year. While the tax revenues remained very stable during the review period, the trend indicates it will reach $1 million by 2012. See Figure 8

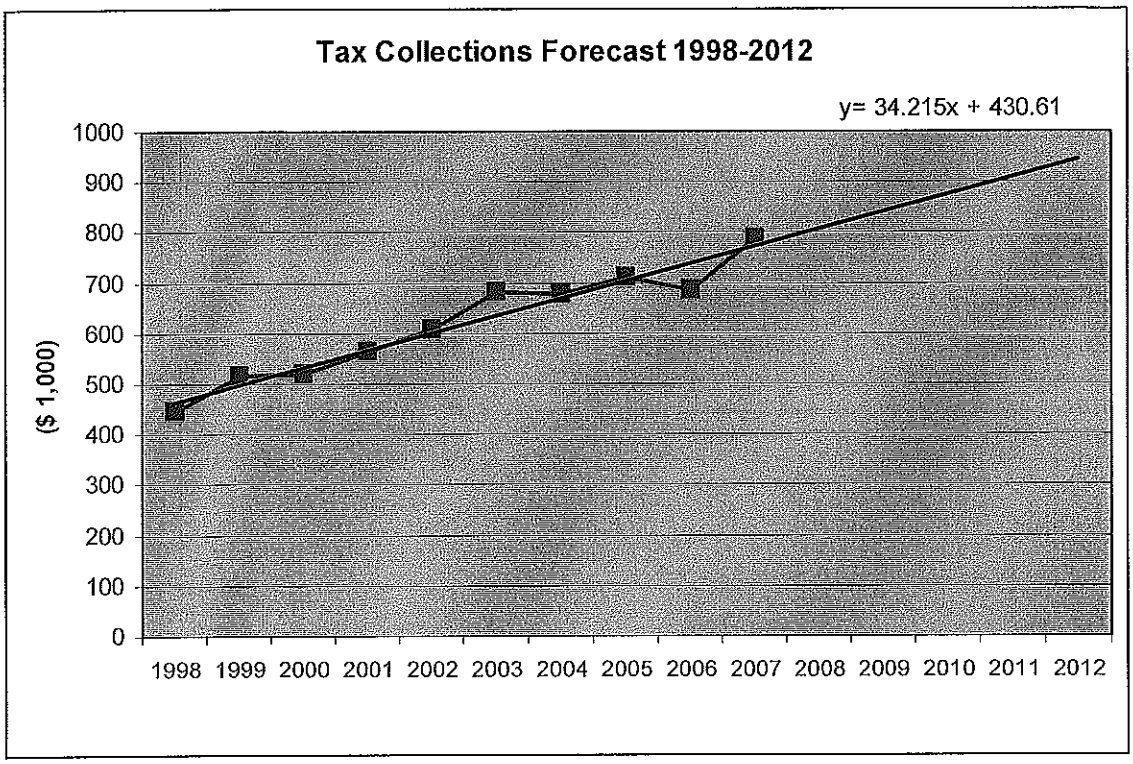


Figure 8

8.2 Inter Governmental Revenue

Two major components under this category are funds derived from the state as revenue-sharing, which is based on a predetermined formula and construction grants provided by the state based on a project proposal submitted by a public port. The state construction grants administered under the Louisiana Port Construction and Development Priority Program is the major funding source for port infrastructure development. The rapid increase in port assets from about $8 million to $16 million in a short span of four years (1996-2000) was largely due to the construction grants provided by the Port Priority Program for initial port development (Figure 9). In addition, the port has access to Capital Outlay funds of the state, special grants from economic development programs sponsored by the Louisiana Department of Economic Development and Federal funds from agencies such as the Economic Development Administration (EDA). During the

period under review the port has been successful in attracting substantial funds from these sources.

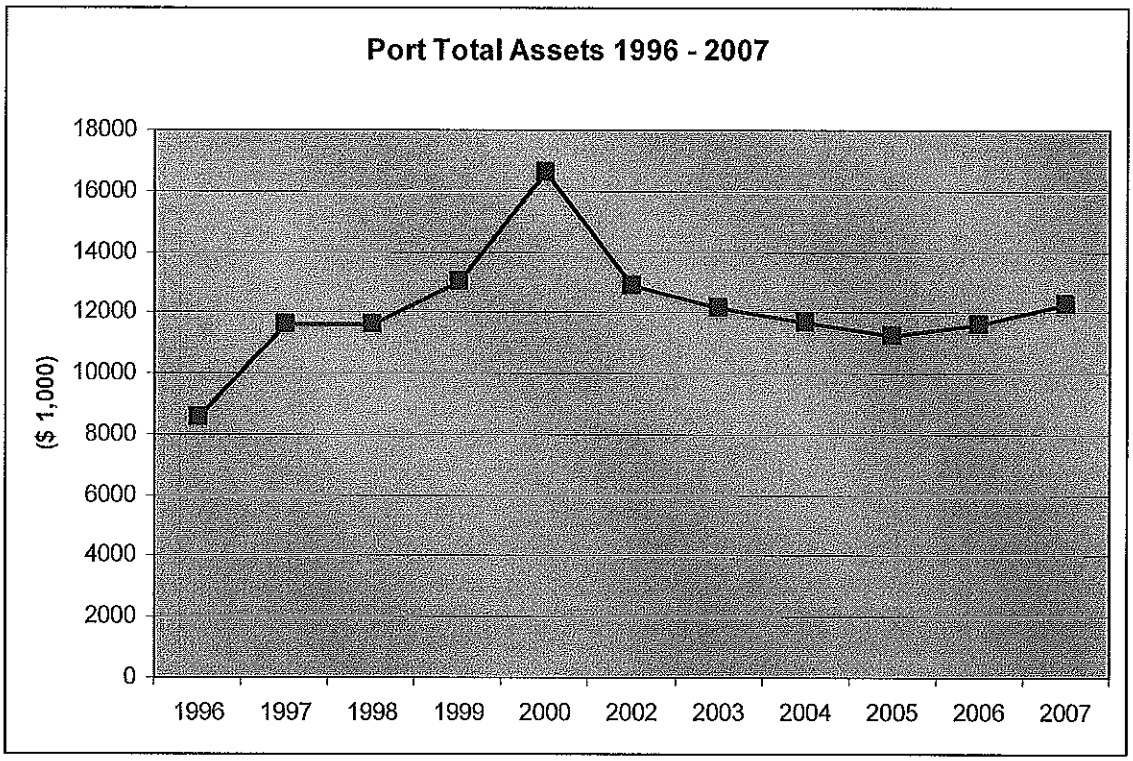


Figure 9

8.3 Self Generated Funds

Wide variations in self-generated funds are observable corresponding to three distinct phases of commercial port operations. The first phase from 1996-2000 that included heavy capital investments in developing basic port infrastructure followed an aggressive marketing effort to develop the port as a break-bulk and container cargo-handling terminal. The public port authority managed market development efforts as well as stevedoring services cargo-handling operations. The financial outcome of this experiment resulted in substantial losses in port net income (Figure 10). The main reason was a widening gap between operating revenues and operating expenditures. The second phase from 2001 to 2005 is associated with discontinuing some of the uneconomical operations and a period of low port activity in general. The third phase starting from 2005 indicates

a steep upward trend in net incomes which is directly related to PMC's decision to operate as a landlord port. The port has not operated under this framework for a sufficient period of time for a conclusive decision to be reached on its financial performance in this role. However, from a long-term financial performance perspective the institutional changes that were initiated in 2005 established the operational framework: assigning the supply of port services to the private sector and the infrastructure improvement and construction of port facilities to the public sector. Under this institutional set-up, it is possible for the port commission to broaden its scope and focus on regional economic development initiatives.

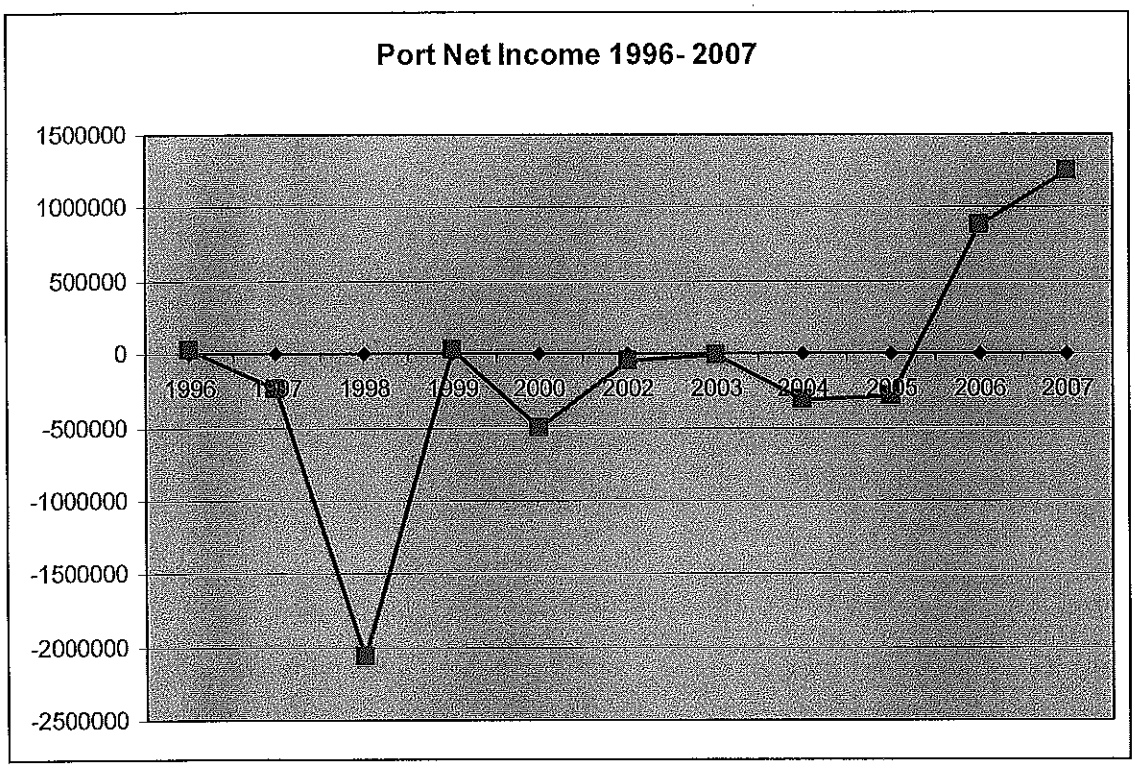


Figure 10

8.4 Port Financial Performance

Under the current institutional framework of the port, the public port can focus on traditional economic development objectives such as development of local infrastructure

facilities, attracting external funds for local development, and port improvements based on the demand for such facilities from the private sector tenants.

The review of historical records indicates that the financial position of the port was sound and strong throughout the period. However, high liquidity ratios, and very low debt ratios indicate that the port could have invested more of its funds on economically viable projects in partnership with the private sector. This conforms to the declared economic development mission of the port.

8.5 Port Financial Outlook

The property tax revenues and the lease revenues derived from CENAC are expected to generate about $1.5 million a year for the next five years. The final financial outcome will be determined based on maintenance and other overhead expenses incurred by the port. As construction costs are rising faster than the growth in these revenue sources, in real terms investment opportunities may shrink over time.

Substantial opportunities exist for the port to attract intergovernmental funding sources, especially from the state. While state revenue sharing procedures are constitutionally protected, and the current political and economic environment is favorable for larger allocations of state funds for port infrastructure improvements. Under the Port Priority Program, state funding is available for the construction of port facilities that conform to several financial requirements. In addition, numerous opportunities are open to the port to leverage its funds by issuing general obligation bonds, revenue bonds and using public funds to attract public–private joint investment projects.

The emergence of the port as a landlord port, and the clear definition of the role of the public port in local economic development have laid the foundation for planning long-term funding strategies. Considering the array of funding options available to the port, it is evident that the port has the financial capacity to embark an ambitious capital development program.

8.6 Financial Goals and Strategies

The financial management plan of the port pervades all aspects of port operations and development plans and will be guided by the following strategic considerations.

- Sponsor local economic development projects while protecting the long-term viability and financial strength of the port
- Leverage local funds to maximum levels by attracting external financing from public and private sources
- Use private sector commitments to pay user-fees as the main signal and risk-sharing mechanism in selecting projects for investment.

9.0 Physical Development Strategies

9.1 Short Term - Development of the existing port facility

9.1.1.1 Initiate engineering for a box culvert

Based upon market demand projections, the PMC should contract for a preliminary engineering assessment for the construction of a concrete box culvert to replace the existing open water reservoir ditch. This physical feature occupies and impacts a significant area of the western boundary of the PMC site. If constructed, the resultant usable surface area could be paved to provide additional laydown areas for cargo.

9.1.1.2 Increase existing laydown yard

Currently, there are significant areas of the site that are vacant and unimproved. Again, if demand warrants, paved laydown yards can be created for significant additional areas for cargo storage (covered or open) on both the north and south side of Youngs Road within the current PMC boundaries.

9.1.1.3 Extend existing spur

Upon completion of the box culvert, the existing rail spur adjacent to the port's western boundary should be expanded across Young's road and mitigation measures taken to shield this area from adjoining properties. This would provide the PMC / CENAC with additional rail car storage track on-site in conjunction with 9.1.1.2, increased laydown yards.

9.1.1.4 Investigate mitigation issues for adjoining properties for port expansion on former ball field

If additional acreage is deemed necessary, the PMC should enter into negotiations with the City to acquire or secure a long-term lease for the municipal baseball field adjoining the Port's western boundary north of Youngs Road. This additional acreage could be used for lay-down / storage area or provide a site for new construction of a relocated PMC headquarters, distribution sheds, etc. This

recommendation is based in large part on the age and location of the existing PMC office building.

9.1.1.5 BNSF Initiatives

In recent months, the BNSF railroad, which currently serves the PMC, has initiated a multi team effort to assess teir systems fiscal and operational characteristics with and emphasis on that portion located between New Olreans and Corpus Christi. These investigations have coincided with the current activities undertaken by the UNO team. Through industry contacts initiated by Mr. Duplechain, former operational manager for the SP railroad, and more recently the New Orleans Public Railroad, numerous representatives of the BNSF have been given on site tours with stake holders in order to fully understand the market dynamics of the region. An obvious emphasis of their investigations has concentrated on the specific dynamics of the OG – OCS industries. Upon initial inspection and industry insight, BNSF representatives suggested a potential addition to the region's economic profile could be the development of a PTSF serving multiple industrial users in the area. Most recently, as of March 25, 2008, a series of meetings were conducted with numerous leaders of the primary industry sectors to discuss the concept and their potential interest. At the conclusion of the last meeting, the UNO-BNSF team learned that a similar transload facility is currently operational within Morgan City, with a cooperative agreement between a steel processing facility and a local multimodal steel supply yard. This confirms our initial concept and leads us to suggest that an in-depth feasibility study for the development of PTSF at or near the PMC. Various financing and operational scenarios should be investigated within the scope of this proposed study.

9.1.1.6 Investigate Channel Dredging Options

Investigate alternatives for channel dredging. This recommendation is made with some reservations, but given the past performance of the USACOE on this most important regional issue, a method must be devised to assure the region that an operational depth of 20' can and will be maintained 24-7 / 365 days a year. Options to consider include entering into a private contract for dredging services; have the PMC acquire and operate equipment necessary for maintaining the 20' draft; investigate the feasibility of forming a special taxing district to pay for the above referenced services or establish an alternative long-term financing mechanism.

9.2 Medium Term – Port expansion capabilities with annexing land north of Youngs Road

9.2.1.1 Additional new rail spurs using existing mainline switches and abandoned track ROW

9.2.1.1.1 Property expansion issues

If the initial feasibility study for the proposed Premier Transload Facility supports the development of this regional asset, sufficient property will need to identified, negotiations undertaken and acquired. Simultaneously, more detailed physical design options need to investigated as well as legal actions that may need to be taken in order for the project to proceed.

9.2.1.1.2 Eminent domain

Preliminary investigations have identified former rail infrastructure (abandoned or derelict rail ROW) in close proximity to existing residential units, vacant structures, surface parking lots, and undeveloped property that will most likely be used in conjunction with the Premier Transload Facility. Various legal mechanisms may be required to obtain the necessary property. These may include the use of expropriation or eminent domain.

9.2.1.2 Expansion of existing dock based on market demands of tenant services

Determine market demand for dock / wharf expansion. If deemed necessary, prepare documentation for formal application to the Port Priority Program for partial funding or other financial mechanisms available to the port, tenant and trading partners.

9.2.1.3 New warehousing

Based upon market demand, conduct preliminary / final design and engineering for a food-grade warehouse / distribution center. Investigate financing options including the Port Priority Program or funds provided by foreign sources.
As mentioned earlier, it may be advantageous for the PMC to consider the construction of a new office building and ancillary support structures so that its present site can be considered for alternative uses.

9.3 Long Term – Site development of new locations for port expansion

9.3.1.1 Future market driven expansions

Long-term, the PMC and CENAC may wish to consider additional waterfront property acquisition to serve additional markets that may develop in the region. This very well may require property acquisitions within the existing PMC jurisdiction or beyond its current boundaries. Options include waterfront portions the Avoca Island property or other non contiguous property of the PMC.

10.0 Institutional Development Strategies

10.1 Metropolitan Planning Organization

10.1.1 St. Mary Parish MPO affiliation

A metropolitan planning organization (MPO) is a transportation policy-making organization made up of representatives from local government and transportation authorities. In the early 1970s, the United States Congress passed legislation that required the formation of an MPO for any Urbanized Area with a population greater than 50,000. Given current conditions, and the recent lease agreement with a Houma based company, St. Mary Parish should determine which regional MPO

is most suitable to address their needs: specifically, regarding regional transportation infrastructure investments and finance; workforce development and training; hurricane protection and coastal restoration.

As the PMC is actively engaged with a number of transportation modes, they should seek active participation in the transportation committees in both the Lafayette and Houma-Terrebonne MPOs. This gives the PMC "a seat at the table" when major infrastructure improvements are being planned and programmed at the local, regional, state and national level.

10.1.2 PMC taxing Jurisdiction expansion to mid parish area (Patterson et al) Investigate the tax structure of the existing PMC, the PWSM as well as the airport. This issue needs to be addressed with representatives of the particular municipalities involved to determine the feasibility of expanding the taxing boundary for the PMC if deemed appropriate.

10.2 Committees

In the course of this study, it has become evident that certain projects or programs need special attention by members of the Board with specific areas of expertise. We suggest the Board form the following subcommittees to address in greater detail the specifics of projects, programs, or policies regarding the following:

Economic Development
Facility Development / Property Acquisition
Intergovernmental Affairs
Tax / Finance / Jurisdictional Expansion

Coastal restoration and hurricane protection systems are being considered at both the state and federal levels within St. Mary Parish and other parishes along the LA coast. The PMC should engage with all parties involved in these projects.

The PMC and LDED need to become active partners in all future decisions regarding international trade initiatives, particularly the new Progresso, Mexico service as envisioned by CENAC.

11.0 Appendices

Appendix A

Market Overview – Liner Shipping

Objective

The following is a brief review of the main trends and factors that have been shaping liner, container shipping in the past and, especially, those expected to shape it the future. The topic included here is wide-ranged and the review included in this section does not attempt to encompass it. The purpose of this review is limited: providing the necessary background for the more detailed discussion included in section 3.2.2.2 on the prospects of PMC to attract short-sea, liner services to its present facilities.

Relevant Trends

In line with the statement regarding the limited nature of this review, this section only discusses three trends; two relate to worldwide developments and one is more specific to the US Gulf Coast ports. The trends in liner shipping discussed in this introductory section include:

- Growth in Ship Size
- Consolidation and Concentration
- Panama Canal Expansion

Growth in Containership Size

Since the emergence of the first specialized containership in 1956, there has been a continuous growth in the size of containerships[2]. This size reached 1,700 TEU in 1965; 3,200 TEU in 1985; 4,500 TEU in 1986; 8,000 TEU in 1998 and 14,500 in 2006. The dimensions of the 14,500 TEU ships, of which a series of 8 is soon to be completed (Maersk's E-Class) are 1,305 x 185 x 51 ft (LOA x beam x draft). There no plans announced to construct larger containership than 14,500 TEU, although past plans included ships of 18,000 TEU (Malacca-Max).

[2] Size of containerships is commonly measured in their capacity to carry containers, with the latter expressed in TEU, the abbreviation for Twenty Foot Unit.

The larger ships are employed on deep-sea services and hence are not of interest in this study focused on short-sea services. For example, Maersk's E-Class ships are deployed in the Asia – Europe trade, which recently overtook the Asia – North America as the largest trade worldwide. However, there is a direct relationship between ships deployed on deep-sea services and those on short-sea. One application of short sea services is to serve as feeders to deep sea services, also defined as mainline services. In this setting, deep-sea, mainline services carry the containers to a small number of large ports that serve for them as a "hub" port, whereby they are transshipped to feeder services providing the connection to smaller regional ports, sometimes called feeder ports. Our study attempts to evaluate the prospects of PMC to become such a feeder port.

There is a parallel growth in the size of feeder and mainline ships. As noted above there has been a steady increase in the size of mainline ships; there also has been a steady increase in the size of feeder ships, some have been reaching 1,500 TEU. The dimensions of these feeder ships are way beyond those allowed at PMC. Consequently, it can be assumed that PMC can serve as a feeder port only to a small segment of this market, if any.

Consolidation and Concentration

In most transport-related industries, consolidation (horizontal integration) involves both scale and scope economies. That is, the interest of two shipping lines to merge is guided not only by the ability to increase traffic on existing trade lanes allowing the deployment of larger and more cost-effective ships, but the ability to add to the number of trade lanes served by their merged operations. This provides for new networking options and related savings. More importantly, it allows the merged line to offer worldwide carriage contracts, which is key to serving large shippers.

Accordingly, following many years of consolidations, the liner shipping industry is presently controlled by 3 "super" lines (Maersk, MSC and CMA CGM) and 3 alliances (CKYH, Grand Alliance and New World Alliance), along with several smaller independent lines (Evergreen, Zim, Hamburg Sud, etc.). All of the above lines and

alliances can be defined as "global" carriers due to the wide spread of their service network.

Still, there are much smaller "specialist" lines that survive by offering superior services in one or two trade lanes. Most of these specialist are short sea and, hence, of interest to the PMC. In fact, there is a continuous competition between global carriers and specialists in short sea trades. The common outcome is for global carriers either to overtake these trades or, simply, to buy out the smaller specialist lines. In both cases, the short sea trades are incorporated with other services, usually in the form of longer feeder services. As the short-sea and feeder traffic is added, larger and more cost-effective ships are deployed. The result is that the number of short-sea lines, the potential customers of PMC, has been and will continue to dwindle.[3]

Panama Canal Expansion

The trade of the US with Asia, especially China, is by far the US's largest. In 2007, 75.2% of this trade was handled through US West Coast ports, with about half of it destined to far-away hinterland regions in the Midwest and Atlantic Coast. This portion was carried by intermodal rail services, and hence defined as "intermodal traffic". This intermodal traffic can also be served by so-called All Water services that cross through Panama Canal and use either Gulf or East Coast ports. However, in 2007 the USEC ports handled only 23.2% of the Asian trade and the USGC handled a mere 1.6%.

One of the reasons for the limited market share of USEC and USGC ports is the Panama Canal's limitations in both ship size and number of ship crossings. The locks of the present Canal limit the size of Panamax ships (the maximum that can fit within the existing locks) to about 5,000 TEU. This is much smaller than the size of the large containerships employed on trade lanes not constrained by the Canal, such as those

[3] A case in point is the Maersk's New Orleans feeder service. In the past, Maersk's mainline only called Houston, from which it was shipped to New Orleans using Osprey Line's barge feeder services. Presently, the feeder traffic is combined with short sea traffic, using a service that calls both Houston and New Orleans with a rotation that includes Central American ports as well as the hub in Manzanillo, Panama. The service employs ships of 1,100 TEU, which are way too large for PMC.

deployed to the USWC. The present Canal also has 2 traffic lanes that limit the number of scheduled services to about 24 per day, with almost all this capacity already taken.

The Panama Canal expansion program, due to be completed in 2015, will introduce a third lane with larger locks. The New Panamax (NPX) will have capacity for 12,500-TEU ships, 2.5 times the existing 5,000-TEU Panamax vessels. The expected impact of the expansion is a diversion of intermodal traffic to All-Water service at the expense of intermodal services. This, in turn, may result in a substantial increase in Asian services to the Gulf Coast. The shift to all water is not only the result of the Panama Canal expansion; it will also be impacted by the growing congestion at West Coast ports and by the dramatic increase in the cost of land transportation (rising fuel costs).

The increase in Asian direct services to the Gulf Coast will provide a boost to Gulf ports, including New Orleans. It may also provide a boost to feeder services in the Gulf Coast, though it is not clear that the ship size of these services can be serviced by the PMC.

Potential Liner Services

Objective and Methodology

Objective

This objective of this chapter is the assessment of the prospects of the Port of Morgan City (PMC) to attract liner services to its existing facilities. Liner services are defined as shipping services where ships follow the same itinerary (also called rotation), arriving at each port at a fixed frequency. Most liner services have weekly frequency; smaller service may have different frequencies such as every 10 days, 2 weeks and even monthly. The cargo handled by liner services is containers; sometimes the containers are handled in combination with rolling cargoes, project cargoes and even general cargoes.

Methodology

The methodology undertaken here to assess the potential of PMC to attract liner service is straightforward; it is based on a parallel analysis and examination of the demand and supply of PMC situation. The demand side relates to the capability of PMC to attract or "generate" freight; and the supply side refers to the suitability of the PMC's present facilities to handle this freight, especially regarding ships typically employed by liner services. The supply and demand analysis draws heavily on liner services presently serving containerized freight in the Gulf and nearby regions and the ports that handle them. It also relates to the experience of past services and those due to begin in the near future.

Section Organization and Sources of Information

The chapter begins with a brief review of existing liner services, focusing on those that could theoretically call at PMC. For each service, the review includes services, routes, freight, ship characteristics and the port system. Based on this review, analyses of the variables of supply and demand factors are conducted to determine whether the PMC is a suitable facility that can generate freight to attract these lines.

The main source of the information included here is a series of in-depth interviews with shipping lines' representatives. Secondary sources include review of professional journals and lines' websites.

Short Sea and Feeder Services

Liner services are commonly divided into deep-sea and short-sea based on the distance of service. As noted, the focus here is on short-sea liner services, since these lines usually employ smaller ships that can be accommodated at PMC, given its relative shallow draft and facility layout.

Short-sea services are further divided into two main categories:

- ***Short Sea*** – Independent services that service relatively short trade routes
- ***Feeder*** – Dependent services or services that serve as a continuation of other mainline services.

Sometimes, independent short sea lines also serve as feeders to other lines.

Both the independent and feeder short sea services operate small containerships and can be considered potential customers of PMC. However, they are driven by different considerations in making their port decision and therefore analyzed separately.

Short Sea Services

Intra-US versus Caribbean Trades

The term "short sea" usually relates to relatively short routes, either along a coast (coastal) or across sea to nearby islands. Under the provisions of the Jones Act , services between two or more US ports must employ US-flag ships, and services between US and foreign ports are free to employ any type of ship. The difference stems from the fact that the cost of construction and operations of US-flag ships is two to three times higher than foreign-flag ships. Because of the high-cost of US-flag ships, short-sea coastal services between to U.S. ports struggle to be competitive with land transportation systems. Consequently, there are no short-

sea coastal services presently operating in the US with the exception of services between the US mainland and Puerto Rico, where there is no competition from land transportation.

A series of studies by NPWI addressed the prospects for coastal short sea in the US. Appendix A provides a short summary of these studies.

It seems, preliminarily, that in the case of the Port of Morgan City, there is a more promising potential for short sea services involving foreign trades. Such service could include itineraries involving the Caribbean Islands, Mexico, and Central America and, perhaps, the North Coast of South America. Accordingly, this study will begin with a review of the foreign trade services of Linea Peninsular, Caja Logistics, Antillean Line and Bermuth Line.[4] The review also includes a former coastal service (Osprey Line) and a planned one (SeaBridge).

Linea Peninsular

Services and Rotations

Linea Peninsular (LP) operates a single service between Panama City, FL and Progresso, Yucatan, Mexico. The home port for LP prior to hurricane Katrina was Port Bienville, MS. The service frequency is daily (5 times per week) and the transit time is 2.5 days based on an average speed of 10k. As will be seen below, although these vessels can reach a top speed 13 k, a slower speed is maintained to maximize fuel efficiency.

Freight

It is estimated that the service handles a total annual throughput of about 50,000 - 60,000 TEU. The LP marketing strategy provides "full intermodal service", which includes the entire chain of transportation from inland points in the Yucatan Peninsula in Mexico to a wide range of US points. The service includes container stuffing/destuffing as well as trucking with a mixture of LP owned and

[4] There are two additional short sea services: Hybur, between Port Everglades and Morelos (near Cancun); Radiance, between Port Manatee and Progresso, Mexico. Hybur service is limited and Radiance is temporarily out of service. Hence, no discussion is devoted to them in this study.

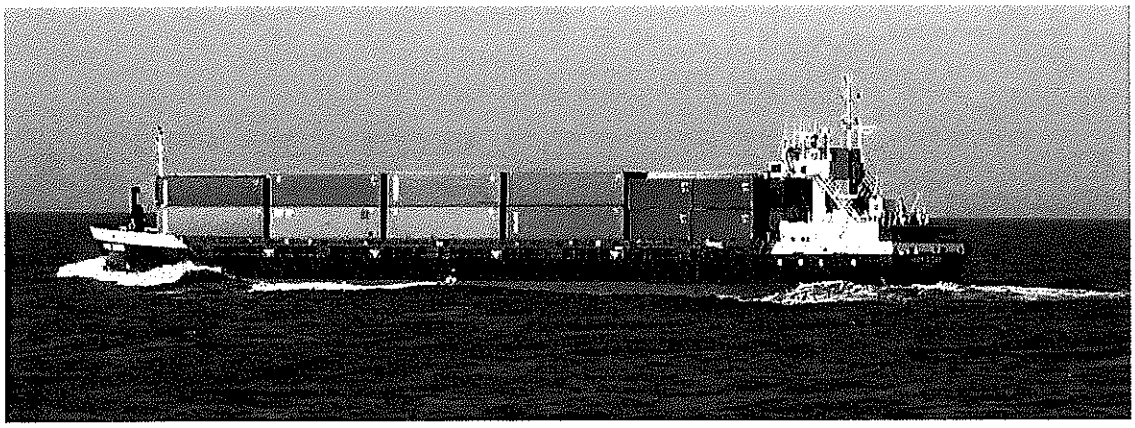
leased trucks, resulting in a door-to-door transit time of 4.5 days for most US points. LP conducts its own ship and terminal handling (LP has a stevedoring license) consequently controlling all aspects of the logistics chain.
About 90% of the imported containers are pre-cleared so they can be delivered immediately upon arrival. It should be noted that LP serves a wide hinterland in the US, from Texas in the west to North Carolina in the east with only a small fraction of LP freight being generated in or destined to Louisiana markets. Their main customer base is located in North Carolina.

To ensure reliable service, full control of the shipping service, the ports and, most importantly, trucking at both ends is required. In order to maintain schedule integrity, LP only keeps five of its ships in operation while the sixth is placed on stand-by. Reliable service, fast transit time and daily frequency is essential for the so-called maquiladora trade. This trade involves Mexican factories that receive goods (cloth) from US factories, assemble them and send the semi-finished and finished clothing back to the US. As a result of this fast and frequent service, LP, which has been in operation since 1984, maintains a dominant position in this market. Currently, virtually all of the Yucatan Peninsula's maquiladora freight is handled by LP, which accounts for the largest trade between the two countries. In addition, there is fresh and frozen cargo moving northbound and newsprint and linerboard moving southbound.

Ship Characteristics

Linea Peninsular owns and operates six 150-TEU ships. The latest vessel, built by Damen, has a nominal capacity of 158 TEU, with dimensions of 290 x 40 x 14.5 ft (LOA x beam x draft) and 3,000 dwt. It is powered by a single 2,000 hp engine, allowing for a speed of 13 k. Since the main cargo carried is clothing, the actual ship loading is about 1,200 dwt. The resulting sailing draft is only 11 ft, which explains how LP used the shallow draft of Port Bienville in the past (the port's channel had only 12 ft draft).

Figure 1 presents a picture of a containership employed by Linea Peninsular.



Port Infrastructure (past and present)

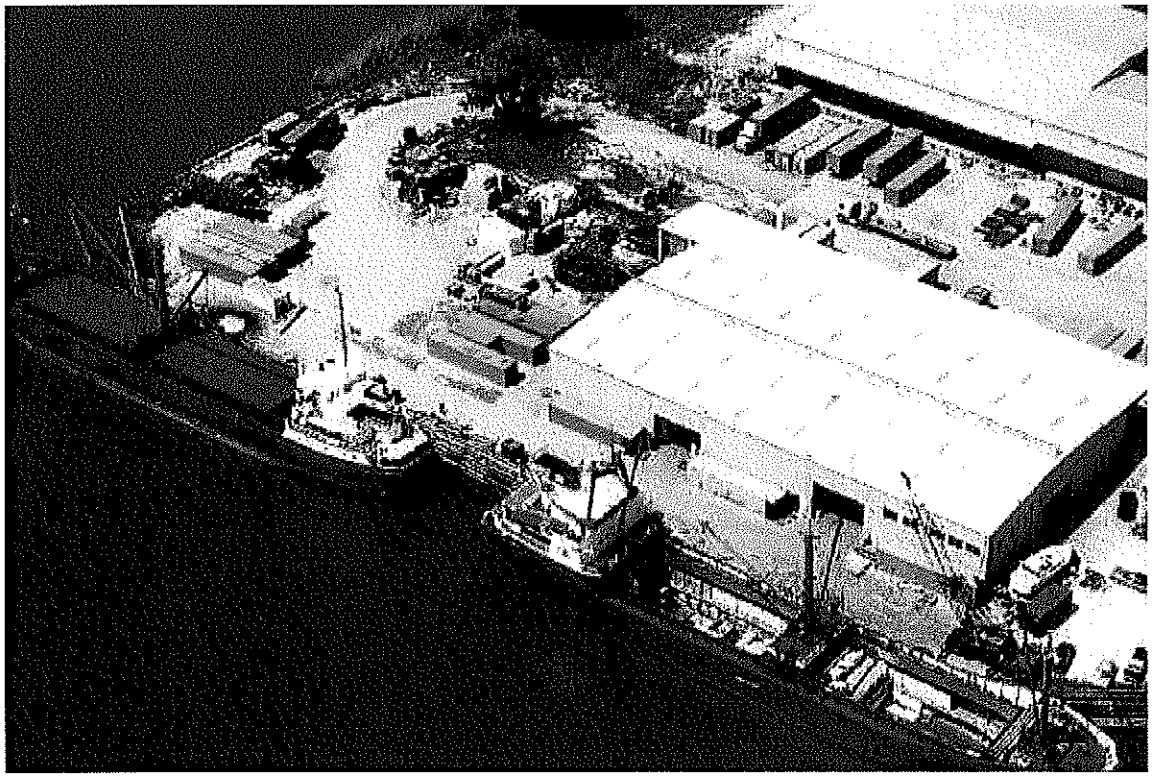
Presently, LP operates out of the Port of Panama City, Florida. The port has a 36-ft deep channel and a 1,400-ft dock equipped with 2 mobile harbor cranes, including a newer Gottwald and older American Crane. LP also has its shed at this terminal, which it uses for destuffing, stuffing and transloading.

Altogether, the Port of Panama City has 4,200 ft of berths, four transit sheds totaling 260,000 sq ft and a 200-acre Intermodal Distribution Center with Foreign Trade Zone designation. Other liner services operating out of Panama City include: (a) Seaboard marine with a twice monthly rotation serving Chile and Peru and carrying inbound cargoes of copper and steel coils; and (b) Caribbean Forest Carriers serving Panama, Costa Rica and the Dominican Republic with outbound cargoes of linerboard and paper rolls.

LP relocated to Panama City in 2005 because of the damage caused by Katrina to its terminal in Bienville, MS, where it was located for many years. Bienville is a small port, connected to the Intra-Coastal Waterway and the Mississippi Sound via a 12-ft channel maintained by the port (not a Federal channel). While the channel is shallower than PMC's, the terminal facilities used for LP are similar in size, consisting of a 600-ft concrete apron and a 20,000 sq ft transit shed. However, the overall port site is much larger, with a total of 800-acres of

waterfront land, part of which is occupied by an industrial park. The port operates a short-line railroad connected to the CSXT.

Appendix B provides a short description of this port taken from a study done for the State of Mississippi. Figure 2 presents a picture of the port.



Port Bienville remotely located from any concentration of population and/or industrial activity that can generate ocean freight. LP started operations out this port carrying dynamite exports, which has since relocated to Brazil. The move from Bienville to Panama City was advantageous to LP, since most of its US cargo is much closer to Panama City than Bienville and the ocean distance is essentially the same. It should be noted that LP conducts its own ship and terminal handling (LP has a stevedoring license). consequently, controlling all aspects of the logistics chain.

Caja Logistics

Services and Rotations

Caja Logistics, based in Brunswick, GA is relatively new; beginning operations in June 2007, with the chartering of four small containerships and launching four single-vessel services. Presently, Caja Logistics has service rotations as follows: (a) Houston, TX – Progresso, Mexico; (b) Savannah, GA – Progresso, Mexico; (c) Progresso, Mexico – Jamaica / Dominican Republic; and (d) Buenos Aires, Argentina – Montevideo, Uruguay – Rio Grande, Brazil. The first two are considered short sea services; while the other two are common feeders.

Caja's service relevant to PMC is that between US Gulf Coast and Mexico. The port rotation includes Houston, TX, Progresso, and Veracruz, Mexico in a weekly frequency. However, from discussions with the line it was determined that all services, except for the Buenos Aires feeder, have been temporarily suspended. Some sources claim that this service suspension is primarily due to insufficient freight volumes.

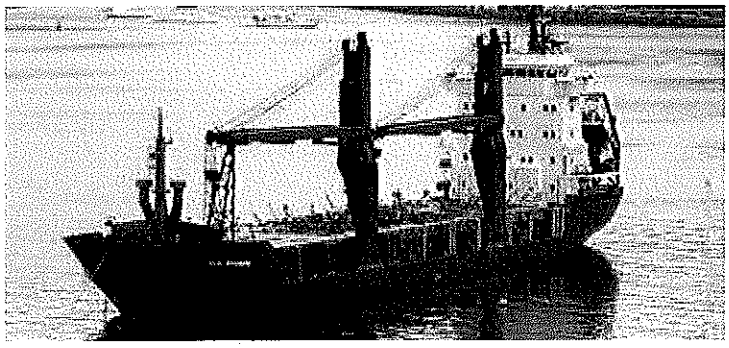
Freight

Caja Logistics, as attested by its name and website, intends to provide a "full logistic service", including cargo consolidation, warehousing, trucking, terminal handling and shipping. The Progresso service, which is of interest here, is understood to have targeted mainly outbound containers of consumer goods from the Houston area to Mexico. In addition, the service also targeted general cargoes; mainly re-bar steel coils and drilling pipes.

Ship Characteristics

The Houston – Progresso service is provided by a single ship, the Daja Duches with dimensions of 300 x 54 x 20 ft (LOA x beam x draft), 5,000 dwt, a capacity of 366 TEU, (including 50 reefer plugs), and two 40-ton cranes. The 3,400-hp engines provides for **a** relatively high speed of 15.5 k. These ships may have problems with PMC channel even when partially loaded.

Figure 3 presents the Caja Dulce, employed in the Houston – Progresso service.



Port Support System

Caja's ships are equipped with two cranes that can lift containers and therefore do not need support from shore cranes. However, cargo handling at Houston and Progresso utilized shore-based gantry cranes.

SeaBridge Freight

Services and Rotation

SeaBridge is not an active line; but has announced that it will begin operations in April of 2008. The planned service is between Port Manatee, FL and Brownsville, TX, on a ten day frequency, utilizing a deck barge equipped to carry containers. The company intends to add a second barge to the service within one year, increasing the service frequency to 5 days. SeaBridge service follows a similar itinerary of a past service provided by Osprey Line, but was terminated after Hurricane Katrina in 2005 (see below).

The SeaBridge website indicates a future possibility of extending the service into Monterrey, Mexico, where there is a large concentration of steel manufacturing. Another possibility, based on information obtained during discussions with company representatives, is that the service will add an en-route port to its rotation. The likely ports to be added would either be Mobile, AL or Pensacola, FL, given that both ports are considered to have a promising potential for local freight coupled with distant freight movements by rail. Both ports were described as having good rail connections, which is critical to the type of cargoes being targeted (see below).

Freight

SeaBridge intends to focus on freight such as steel coils, tile, automobiles, car tires, auto batteries, consumer goods, aluminum ingots, resins, heavy equipment and manufacturing assemblies. It seems, however, that the service will be attractive to overweight cargoes that do not suit trucks, hence the focus on rail connections at its selected ports of call. Also, most of these cargoes are low-value and therefore not deterred by the long, four-day transit time (plus time to/from the port) and the ten-day frequency of the barge service.

The line does not intend to market its service directly to shippers, a common practice for liner services. Instead, the line will market its service to freight forwarders, third-party logistics providers, truckers and intermodal rail providers. This also is the common marketing strategy adopted by US railroads in selling intermodal services. Accordingly, logistic providers will be able to put together intermodal itineraries combining rail, barge and truck.

All containers intended for this service are 53-ft domestic. These units are becoming the most common unit for transportation within the US, due to compatibility with both trucks and double-stack trains. It is interesting to note that other short-sea carriers, including Osprey Line, use marine ISO boxes with lengths of 20 or 40-ft.[5]

Ship Characteristics

The service is based on tug and barge, with the tug pulling the barge (not Integrated Tug Barge). The barge is an ocean-going deck barge with dimensions of 330 x 86 x 10 ft with a capacity for 600 TEU. The barge is pulled by a 4,200-hp tug providing the tug/barge combination a speed of about 8 knots. All cargo carried on the barge is expected to be containerized.

[5] Another line that uses 53-ft domestic boxes is Trailer Bridge, operating a short-sea service between Jacksonville, FL and San Juan, Puerto Rico.

Port System

SeaBridge plans to begin operations using a mobile crane carried on the barge and, hence, providing a self-sustained system, though, both Port Manatee and Brownsville have modern mobile harbor cranes. The reason given by the line for using its own crane is the need to assure availability of a crane upon barge arrival, and the concern that port-supplied cranes would be handling other cargoes.

This may change later on, when a second barge is introduced into service, and the line obtains its own shore-based cranes. Figure 4 presents SeaBridge's barge with the on-board crane.

Osprey Line

Services and Rotations

Osprey Line operated as a fully-owned subsidiary of Kirby Line, a large US tank-barge operator. Osprey Line provided short-sea service covering the ports of Tampa and Houston on a weekly basis. New Orleans also was included in Osprey's rotation, but only on an inducement basis, indicating the irregular

availability of freight in the region. This service terminated in 2005 following one year of operation.

Another Osprey Line container service is mentioned in the section on feeders.

Ship Characteristics

The service was provided by a US-flag former tug/supply ship with expanded deck area, the Sea Trader. The expanded ship had dimensions of 286 x 62 x 18 ft (LOA x beam x draft) with a capacity of 248 TEU (2,500 dwt). Another Osprey Line container service was based on an ocean-going deck barge, between Houston and New Orleans serving mainly as a feeder for Maersk Line. The vessel is powered by two Alco 16-251F turbo-charged diesels for a total of 6,480 BHP capable of providing service speeds of 11 – 13 k.

Freight

The service handled both international cargoes and domestic cargoes stuffed in marine ISO containers. Domestic cargoes included building supplies, cotton, lumber, resins, building materials and other heavy and/or time insensitive commodities. In addition, Osprey Lines handled empty containers for repositioning.

Port System

The Sea Trader is a gearless vessel requiring shore cranes for cargo handling.

Antillean Marine Shipping Corp.

Services and Rotations

Antillean Marine is a family-owned shipping line, specializing in services to the Dominican Republic and Haiti. The published schedules for March include two weekly departures to Dominican Republic, calling at Puerto Plata, Rio Haina and Boca Chica; and two weekly departures to Haiti, calling at Port-au-Prince. The Haiti service has an extension to Panama, calling at Manzanillo, at the Atlantic entrance to the Panama Canal.

Ship Characteristics

Antillean operates a fleet of six small, gearless containerships of about 200 TEU, and up to 30 reefer plugs.

Freight

The trade between the US and Dominican Republic and Haiti is mainly southbound, handling the island's supply from the Miami area, including consumer goods, food stuff, construction materials, etc.

Port System

Antillean Marine has its own terminal located in the Miami River, where it has operated since 1963. The terminal includes 2,000 ft of dock, twenty acres of open space and 50,000 sq ft of warehouse space. The ships are handled by a shore-based crawler crane.

The Miami River has been the base of operations for several short sea lines and therefore is of special interest to the PMC. The River has a narrow 5.5 mile-long channel with a width of 150-ft at the mouth and 90-ft upriver. The channel has an authorized depth of 15 ft, but only 11 – 12 ft of actual depth. Because of the narrow width, there is no turning basin at the river and ships are pulled in by tugs. There is an ongoing, and still unsuccessful, campaign by Miami River tenants to dredge the river to its authorized depth

Antillean has been the largest line located in the Miami River and has most recently decided to shift a majority of its activities to Port Everglades. The main reason quoted is the need to operate larger ships, moving from the current 200-TEU range to the 600-TEU range.

Bernuth Line

Services and Rotations

Bernuth Line has similar services to Antillean Line, except that its services focus on the Bahamas, and to a lesser extent on Nicaragua, Leeward and the Windward Islands.

Ships Characteristics

The line operates 12 geared and gearless vessels, with capacities varying between 100 – 500 TEU. The larger, 500-TEU ships have dimensions of 330 x 60 x 20 ft.

Port System

Bernuth Line began its operation with its own terminal located on the Miami River, and the second largest operation on the River behind Antillean Line. In 2001, after nearly 30 years on the Miami River, Bernuth moved to a private, deep-water terminal opposite the Port of Miami's Lummus Island allowing for the operation of larger ships.

Gulf Feeders

Zim's Gulf of Mexico Feeder

Until recently, the ports of the US Gulf did not have direct Asia services and relied on feeder services via Caribbean hub ports. Presently, most of the Asian trade is handled by feeder services, mainly from Kingston, Jamaica; Manzanillo, Panama; and Freeport, Bahamas. However, feeder services handling Asian (and other) trade call at well established ports such as Houston and New Orleans. The case of Zim's feeder is of special interest here because it involves the Port of Tampa, which, prior to this service, did not handle containers.

As noted above, until 2003, the Port of Tampa did not have any regular containerized service with all regional containers handled by the ports of Miami and Everglades, each handling about 1 million TEU. A study by the Port of Tampa in the early 2000's indicated that there were about 100,000 TEU annually destined for delivery within 1 hour drive of Tampa. Following an intensive marketing campaign, Zim Line, a global carrier, started a Gulf of Mexico feeder, based on three 1,100 TEU containerships, with a rotation of: Kingston, Jamaica; Tampa, FL; Mobile, AL; and Houston, TX. Prior to Katrina the service also included New Orleans in its rotation. The additional call at Tampa was justified based on a forecasted loading of approximately 200 TEU per week.

Following the beginning of Zim's service, in 2004, the Port of Tampa began an expansion plan, including the rehabilitation of a 1,000-ft berth on the southeast end of Hooker's Point for about $10 million, the purchase of two used gantry cranes for $3.5 million and hired SSA, the largest US-based container port operator. In 2006, SSA was replaced by Port America (then P&O Ports North America), the same operator of New Orleans' Napoleon Ave terminal. Meanwhile, the terminal has added a 3rd gantry and completed a 24-acre container yard and terminal.

In response to the growing trade and improved facilities, the feeder service was replaced in 2006 by a joint, mainline service between Zim Lines and Emirates Shipping Line, another global carrier. The weekly service, named the Asia-Gulf Express (AGX), employs nine 3,000-TEU Panamax vessels. The service rotation includes: Shanghai and Ningbo, China; Busan, South Korea; Colon, Panama; Kingston, Jamaica; Tampa; Mobile, Ala.; Houston; and back to Kingston, Colon and Shanghai. New Orleans is not included in this line's rotation.

Columbia Coastal Transport

Columbia Coastal Transport operates a network of feeder services along the East Coast, utilizing barges varying from 300 x 72 x 12 ft and a capacity of 540 TEU, to 350 x 90 x 14 ft barges with a capacity of 900 TEU. The line does not offer feeder services in the Gulf.

Osprey Line

Osprey has a weekly service, based on an ocean-going deck barge, between Houston and New Orleans. This service was started in 1995 by SeaLand, a major deep-sea US line acquired by Maersk Line and was launched to feeder containers of mainline services calling Houston to New Orleans. The service was terminated when Maersk began an inter-line relay service to these ports via its mainline port call at Manzanillo, Panama.

Analysis and Observations

Demand and Supply Factors

There are two basic prerequisites for PMC to be able to attract liner services:

- ***Demand*** – Generate sufficient volume of liner freight; and
- ***Supply*** – Possess facilities that can efficiently handle this freight in terms of channel, terminal and land connectivity.

Both the demand and supply factors are related to short-sea services; the liner services that typically call at smaller ports.

Demand – Foreign Trade

Locally Generated Freight

The above-reviewed short sea services for foreign trade handle two types of freight: freight generated locally or in distant markets, with the latter commonly defined as hinterland. Local demand, evaluated first, is usually created either by a large concentration of population which consumes liner-shipping cargoes (i.e. Houston), or by local industry, which generated such cargo. The ability to generate sufficient container volume was critical for attracting Zim's feeder as noted in Section III.1.

Unfortunately, there is no large concentration of population or industrial area of production in the vicinity of the PMC. Therefore, there is a limited availability of local cargo for the PMC.

The only local industries in the vicinity of the PMC are ship building and off-shore supply services, both generate some containerized cargo, but in limited volumes, since steel plates, drill pipes and drill mud are usually not containerized. Moreover, there are two neighboring ports, Port Fourchon and the Port of Iberia, which have similar but much larger industries and therefore may generate much larger volumes of liner cargoes. However, if these ports had sufficient volumes to support a liner service, lines would probably have called there directly.

Hinterland Freight

Many US container ports are geared to serving non-local, hinterland cargoes, usually via rail. A good example is the Port of New Orleans where, according to some estimates, up to 70% of the imports and exports are to/from out-of-state points, mainly the Midwest.[6] Another example is Linea Peninsular, whereby a substantial portion of its cargo is destined for North Carolina. Theoretically, PMC also could attract hinterland traffic carried by rail, using an on-site or near-site Premier Transload Facility terminal serviced by BNSF. Alternatively, this traffic could be carried by barges, taking advantage of the shorter route via Port Allen. In fact, in the past, hinterland cargo was responsible for most of the containerized and breakbulk cargo handled in PMC.

Unfortunately, the nature of intermodal rail transportation of containers has changed in recent years. Most of the containers are presently moving via unit-trains of 100+ boxes; the trains are composed of double-stack, articulated railcars of 300-ft each, with a total length of some exceeding one mile. PMC neither has the traffic nor the rail-handling facilities to become an intermodal hub port. Providing for such trains is difficult; as is the case with the Port of New Orleans. Although the port has direct connection to the Midwest via CN, an on-dock intermodal yard and an annual traffic of 300,000 TEU it is finding it difficult to sustain this service.[7]

Demand – Intra-US Trades

Another hinterland type of traffic that may be attracted to PMC is heavy and low-cost cargoes that move domestically in non-containerized forms such as lumber on center-beam cars, steel and pipes on flatcar, and wood pulp and linerboard in box cars. This freight, indeed, is targeted by SeaBridge (Section II.4.2). However these cargoes can be transported to any Gulf port, including those closer to the

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[6] See NPWI / MRCI "A Comparative Analysis of Intermodal Ship-to-Rail Connection at Louisiana Deep-water Ports", ...

[7] New Orleans intermodal connectivity is discussed in details at the NPWI/MRCI report. See footnote...

points where these cargoes are produced and/or consumed, or those better equipped to handle them in terms of rail connectivity and storage facilities.

Ship Characteristics

The PMC channel has an authorized depth of 20 ft but in reality it is typically 17 ft. or less given the accumulation of sediment. Assuming 1 – 2 ft for an under-keel safety margin, the draft of the largest ships that can navigate the channel is around 15 ft maximum (about 4.5 m). The capacity of containerships with this draft usually ranges between 150 – 200 TEU. As seen in the above review of short-sea services, most of them are moving toward ships in the 300+TEU range. One exception is Linea Peninsular, which operates ships of 150 TEU; and forced to this small size due to the 12-ft access draft at Port Bienville. It is logical to assume that since Linea Peninsular moved to a deeper port, its future ships will be larger.[8] Another exception is the tug/barge systems that usually draw 10 – 12 ft. However, tug/barge system are considerably slower than ships and are only operated on Jones Act trade routes whereby US flag ships are too expensive as is the case with SeaBridge.

Another potential problem at the port is the authorized width of the channel of 400 ft, and actually probably much less. It is common to require ports to have a turning basin of at least 1.5 times the ship length. Ships of 300-TEU capacity have a length of about 330 ft (100 m) and, hence, would have difficulty turning around.

The channel limitation is even a larger obstacle for feeder services. In the introductory section on market overview it was noted that there is a tendency for global lines to buy smaller, regional, short-sea lines and integrate them with their feeder services. This may result in larger ships, way beyond the 150 – 200 TEU range. In fact, as seen in the case of Zim's feeder, even pure feeder services tend to employ ships in excess of this range.

[8] Larger ships are more cost effective. Increase ship size from 150 to 300 TEU may result in saving of 30 – 40% per ship slot.

Port Facilities

PMC facilities, except for the channel, can handle short sea services. The berth length of 800 ft is sufficient for berthing two small ships; the adjacent staging area on a concrete pad is sufficient for the storage of boxes and the 20,000 sq ft transit shed is sufficient for handling stuffing/destuffing operations. Likewise, the availability of a shore crane, although old, is an advantage for handling gearless ships.

Summary Observation

It seems that the main obstacle for attracting short sea to the PMC is the lack of local freight and the difficulty of attracting non-local hinterland freight for short-sea and feeder liner services.

Another obstacle is the PMC channel, in terms of both depth and width. The present channel allows ships drawing 15 ft, which limits their size to 150 – 200 TEU. The channel is inadequate to some of the ships employed by present short sea services and, probably, almost all them in the future, when they reach 300+TEU for feeder services. It could well be that even the authorized depth of 20 ft is not sufficient for future short sea services.

In conclusion, it seems that PMC is at a distinct disadvantage vis-à-vis other Gulf ports in the competition to attract short sea liner services both in terms of freight generation and facilities.

Appendix B

Market Assessment by Cargo Type

While the market outlook of all ports providing offshore services remained upbeat during the last decade, sufficient data is available on Port Fourchon and the Port of Iberia to make some quantitative estimates (unclear statement: do you suggest future difficulties in supply?). The following are some highlights of the combined performance of the two ports for the period 2002-2006:

- Total combined assets of the two ports increased by 46% indicating the rate of expansion in physical facilities and the extent of external financing from state, federal, and the private sector.
- The operating revenues increased progressively each year and registering an increase by 65% for the four-year period.
- Net income of the two ports increased by 58% indicating significant scale economies characteristic to landlord ports.

From a long-term planning perspective, OCS activities will continue to be a key industry shaping the demand for port services (for the two ports above or all the 5 ports mentioned at the outset?). According to MMS estimates (2006) 60% of the nation's undiscovered oil and 40% of natural gas resources, amounting to 86 billion barrels of oil and 420 trillion cubic feet of gas, are in yet-to-be-discovered fields on the OCS. The MMS New Orleans Office has planned annual OCS oil and gas lease sales in the Central and Eastern Gulf of Mexico region under the current 5-year program. Accordingly, the plausible market strategy for area ports should be geared toward providing OCS oil and gas logistical services.

General and Containerized Cargo

The market assessment made in the previous section does not preclude other market opportunities at the port. As the economic base of the port does not have a large consumer base to support large scale imports or export industries in the area to ensure adequate cargo volumes on a regular basis, the port has limited

opportunities in this area. The supplies of iron and steel, pipes and other inputs to the ship building industry and large scale metal fabricators may generate some activities, especially with the rail facilities available at the port. However, to generate adequate volumes closer coordination between users and the port will be necessary, including consolidated shipments, central storage, etc. This will be further addressed under rail facilities. Altogether it seems that the limited local market does not support a dedicated port facility to handle break-bulk and container cargo.

Bulk Cargo

The location of the port and investigations of future market opportunities indicate that the port may be able to successfully operate a bulk cargo handling terminal to handle commodities such as limestone and aggregates, rock, sand, barite and cement, etc. Although it is premature to comment on the feasibility of such a project, several strong market indications merit strong consideration of such a facility.

- Bulk commodities are usually basic or intermediate products that require additional processing after transport in order to be useful. Therefore, even though the amount of employment created at the port may be limited, the total impact in the community will be substantial.
- Morgan City infrastructure consisting of inland barge services, rail and a network of highways for inland supply and distribution of bulk materials and access to imported supplies are possible using mid-size bulk vessels.
- The major determinant of demand for construction materials is the level of public funding for construction and improvement of public infrastructure facilities (e.g., land stabilization and road construction requiring crushed stone, sand and gravel, limestone, etc.). Several developments such as the signing of the $285.5 billion SAFETEA bill for transportation infrastructure improvements, the planned investments for Louisiana Coastal Restoration work, increased Federal funding under

WRDA Act 2007 and the new initiatives under the OCS royalty revenue sharing formulas ensure a several-fold increase in demand for construction materials.

- If correctly organized, bulk materials trade could be a cornerstone for the development of relationships with Mexican ports. Mexico is a major supplier of bauxite and alumina, fluorspar, graphite, gypsum, salt, and limestone to the United States.[9] Exports and imports of scrap iron and steel, used automobiles and used clothing are other important items that can be added to this list.
- Barite is the main bulk commodity handled in the region. More than 2.7 million tons of barite was consumed in the U.S. in 2005, 82% of which was imported as crude barite, mostly from China and India. Processing of barite for industrial use could be one of the important activities at the bulk facility.
- Unlike break-bulk and container cargo ("foot-loose cargo"), the bulk cargo activities are more sensitive to distances creating a competitive advantage for Morgan City to engage in these activities. Further, largely mechanized operations are easy to manage and the profit margins are higher than for break-bulk cargo.

The most notable bulk cargo operations in the area is located at the Port of Lake Charles, handling bulk grains, limestone imports, large quantities petroleum coke and calcined coke at dedicated terminals. The financial performance at bulk terminals, managed directly by the public port is much more profitable, contributing more than 75% of the operating revenue of this port. The mechanized operations using large capacity equipment (e.g., ship loaders/unloaders, stackers and reclaimers and matching conveyor systems) is capital intensive, but the operating margins are significantly higher than handling general cargo.

[9] U.S. Geological Survey database

Current commodities at the Port of Morgan City

Barite

Barite ore is currently being imported from China to the Baker Hughes grinding plant located on Bayou Boeuf adjacent to the Port of Morgan City . The ore is transferred from vessels to barges for a two-day trip from New Orleans via the Gulf Intracoastal Waterway West.

The rock is crushed at the Morgan City facility and the finished product is shipped out in bulk to Gulf and Inland Oil and Gas (OG) drilling facilities. Baker Hughes also uses the Port of Morgan City as a distribution hub for drilling mud products such as Bentonite, Lignite, Caustic Soda and Polymers. Bentonite is the primary commodity, which originates from Wyoming and moves via the BNSF to the Port of Morgan City. The palletized bagged material is offloaded from box cars, shrink-wrapped and stored in the open area and marshalling yard adjacent to the PMC warehouse. These products are also distributed to Gulf and Inland OG drilling facilities. According to Baker Hughes, the tonnage breakdown for these products for year 2006 and 2007 is as follows:

Barite		
Year	2006	2007
Bulk Tonnage	188,000	244,000

Bentonite		
Year	2006	2007
Super Sacks Tonnage	6461	9849
Bulk Tonnage	5278	4004
Total	11739	13853

Barite Market Outlook

The principal use for barite is a "weighting agent" in oil and natural gas drilling and accounts for 90% of its consumption. The barite is crushed and mixed with water and other materials. It is then pumped into the drill hole. The weight of this mixture counteracts the force of the oil and gas when it is released from the

ground. This allows the oil and gas rig operators to prevent the explosive release of the oil and gas from the ground. Currently, the majority of barite consumption in the United States is for this drilling application. However, the consumption in drilling "mud" fluctuates from year to year, as it is dependent on the amount of exploration drilling for oil and gas, which in turn depends on oil and gas prices. As the price of crude oil increases, normally there is activity in the search for new oil fields. With the price of crude oil reaching close to $100 per barrel along with the need to replace declining oil reserves, there has been a dramatic increase in domestic exploration. This increase in drilling activity has increased the demand for imported crude and ground barite by 67% from 2002 through 2006. According to the U.S. Geological Survey Yearbook – 2006, the demand for barite will remain strong as oil and gas exploration increases in response to higher prices. Through the third quarter of 2007, the U.S. rig count continued to rise and averaged 1,760 rigs per month, an increase of about 7% compared with the 2006 monthly average of 1,649 (Baker Hughes Incorporated, 2007)

According to the U.S. Geological Survey Yearbook – 2006, there were 14 facilities on the coast of the Gulf of Mexico (6 in Louisiana and 8 in Texas) that produced Barite to American Petroleum Institute specifications. These stand alone grinding plants primarily processed imported crude barite from China and India and ground for the oil and gas drilling market. In 2006, there were two grinding plants in Amelia/Morgan City area, one in Houma, one near Lake Charles/Westlake, one in New Iberia and one near New Orleans. In 2006, sales by grinding plants in Louisiana increased by 16% to 1.36 Metric Tons, and in Texas by 8% to 1.01 Metric Tons. (See below Tables)

CRUSHED AND GROUND BARITE SOLD OR USED BY PROCESSORS IN THE UNITED STATES, BY STATE[1, 2]						
	2005			2006		
State	Number of plants	Quantity (thousand metric tons)	Value (thousands)	Number of plants	Quantity (thousand metric tons)	Value (thousands)
Louisiana	6	1,180	$106,000	6	1,360	$132,000
Texas	8	934	80,100	8	1,010	87,300
Other[3]	10	612	51,800	9	665	69,400
Total	24	2,720	238,000	23	3,040	289,000

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes imports.
[3]Includes California, Georgia, Illinois, Missouri, Nevada, and Tennessee.

Source: U.S. Geological Survey Minerals Yearbook

U.S. IMPORTS FOR CONSUMPTION OF BARITE, BY COUNTRY[1]				
	2005		2006	
Country	Quantity (metric tons)	Value[2] (thousands)	Quantity (metric tons)	Value[2] (thousands)
Crude:				
China	2,280,000	$120,000	2,360,000	$133,000
India	276,000	16,500	139,000	10,500
Mexico	90	6	3,340	94
Morocco	19,800	1,280	20,200	1,010
Total	2,570,000	137,000	2,530,000	145,000
Ground:				
Canada	--	--	15	2
China	14,400	1,520	--	--
India	44,500	4,230	--	--
Japan	214	32	102	15
Mexico	280	30	698	122
Morocco	24,600	2,440	--	--
Total	84,000	8,250	815	139
Other sulfates of:				
Belgium	210	119	--	--
Canada	106	38	17	6
China	13,700	3,550	6,620	1,890
Finland	1	32	9	43
France	20	12	45	28
Germany	9,900	8,570	10,300	9,050
Italy	3,910	2,410	4,670	2,850
Japan	509	1,070	529	1,140
Korea, Republic of	--	--	42	99
Mexico	108	61	--	--
Spain	148	169	177	153
Switzerland	9	6	16	10
Total	28,600	16,000	22,400	15,300

-- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Cost, insurance, and freight value.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

SALIENT BARITE STATISTICS[1]

(Thousand metric tons and thousand dollars)

	2002	2003	2004	2005	2006
United States:					
Barite, primary:					
Sold or used by producers:					
Quantity	420	468	532	489	589
Value	12,200	13,900	18,700	17,600	23,500
Exports:					
Quantity	47	44	70	93	72
Value	4,230	4,620	6,400	9,930	11,900
Imports for consumption:[2]					
Quantity	1,540	1,650	2,000	2,690	2,550
Value	81,300	85,500	109,000	162,000	160,000
Consumption, apparent[3]	1,920	2,080	2,460	3,080	3,070
Crushed and ground, sold or used by processors:[4]					
Quantity	1,980	2,230	2,440	2,720	3,040
Value	151,000	165,000	208,000	238,000	289,000
World, production	6,160 r	6,780 r	7,760 r	8,110 r	7,960 e

eEstimated. rRevised.

[1]Data are rounded to no more than three significant digits.

[2]Includes crude, ground, and other barite imports.

[3]Sold or used plus imports minus exports.

[4]Includes imports.

Source: U.S. Geological Survey Minerals Yearbook