

3 Economic Development

Introductions

Economic development at the Parish-level centers on promoting resources, policies, and programs that maintain and grow the area's employer and jobs base. In order to maintain a healthy economy and tax base and to attract and retain residents, it is important that the strengths and potential growth areas of the economy be considered in conjunction with local and national industry trends.

Plaquemines Parish is taking an active role in maintaining and growing its economy. The Parish has three economic development staff that work with local, regional, state, and federal public and private partners to facilitate economic development and sustain a compatible environment for existing industries. In addition to historic trends, targeted growth sectors, and economic forecasts, these resources and partnerships are discussed in this section. Because economies largely operate at a regional scale, the economic development resources and trends discussed herein often consider the regional context and its influence.

The data collected for this section comes from a variety of sources. Local, state, and federal sources include Plaquemines Parish Department of Economic Development, the Louisiana Workforce Commission, the U.S. Census, the New Orleans Naval Air Station Joint Reserve Base and the New Orleans Regional Planning Commission. Data is also collected from Greater New Orleans, Inc., private companies, and existing reports and studies among other resources. Details of individual companies are often considered confidential and not available, as such specific subarea data is not provided. In addition, economies operate at larger scales, and it is most valuable to consider the Parish-wide and regional context in which employment and industry decisions are made.

3.1 Economic Base

Plaquemines Parish provides important contributions to the regional and national economies. Presentations given in 2010 by Plaquemines Parish representatives and its regional partners have included the following key facts:

- Plaquemines Parish is the point of entry/exit for 500 million tons of cargo annually transported on the Mississippi River - 14,500 mile mid-America inland waterway system.
- Plaquemines Parish Port, Harbor and Terminal District is the 12th largest port in the United States. Over 53 million tons of cargo moved through the Port last year.
- The Parish annually produces 17 million barrels of oil and 105 million cubic ft. of gas and accounts for approximately 25 percent of the annual state severance revenues (\$100 million) and annual royalty revenues (\$140 million).
- Plaquemines is home to the largest commercial fishing fleet in the lower 48 states and accounts for 70 percent of Louisiana's seafood industry's total commercial landings (shrimp, oysters, crab, and fish).

- The Naval Air Station/Joint Reserve Base (NAS-JRB) in Belle Chasse currently maintains a civilian and military staff of 7,100, with expected employment to increase to 9,550 by 2011, contributed over \$600 million dollars to local economy.
- Plaquemines is home to the two largest coal terminals in the United State: United Bulk Terminal and International Marine Terminals.

These economic engines heavily depend on the natural resources unique to the Mississippi Delta and the oil-rich Gulf of Mexico.

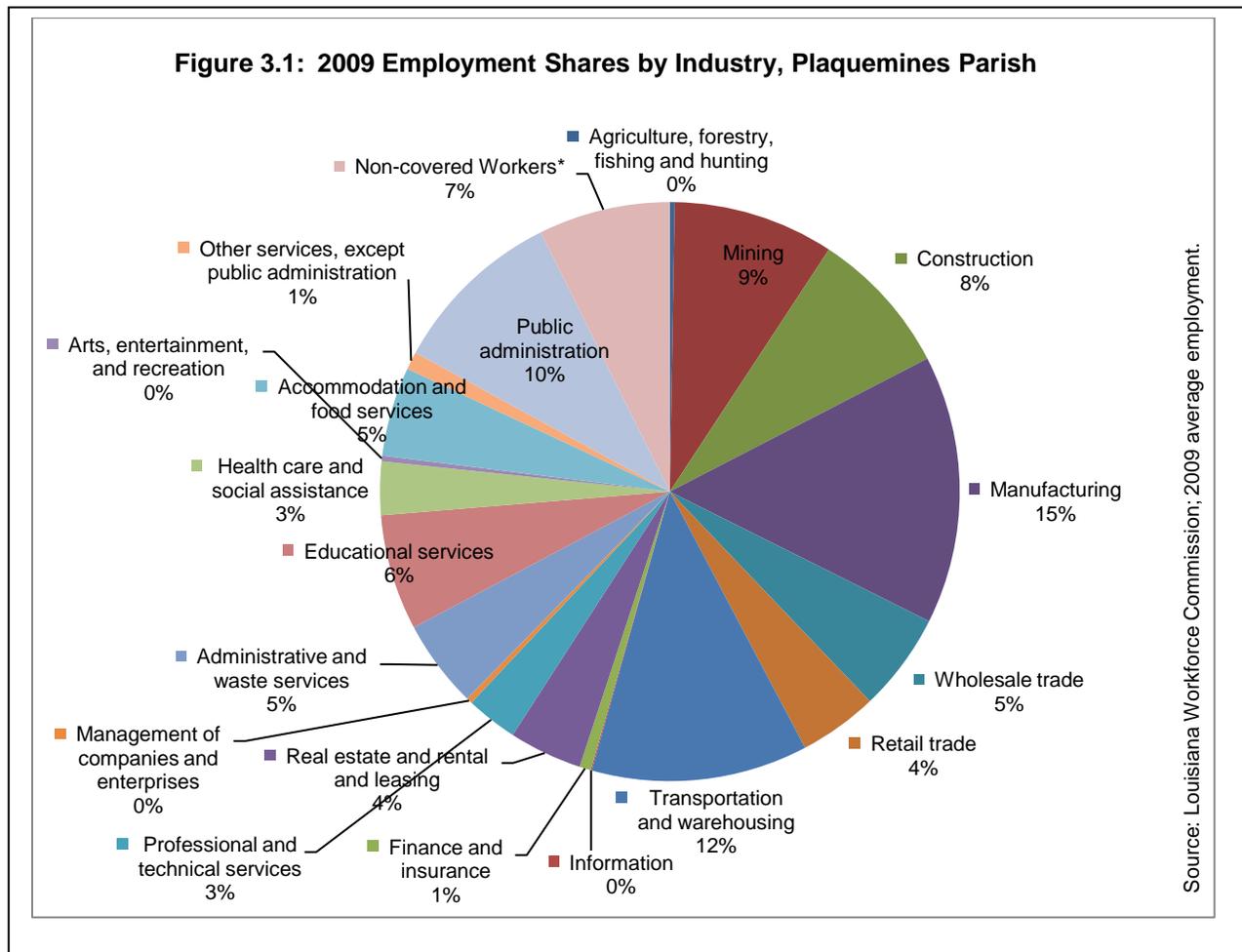
Employment

Manufacturing, transportation and warehousing, and public administration provided the highest number of non-military jobs within the Parish in 2009, 16 percent, 12.9 percent, and 10.4 percent respectively (**Table 3.1**). Similarly, these three sectors provided the highest payroll numbers for the Parish. Manufacturing had the most significant impact, contributing \$145 million dollar payroll, which is equivalent to 24 percent of the total industry payroll for the Parish. Construction was another important part of the economic base in 2009, providing 8.7 percent of jobs in Plaquemines Parish, likely reflecting the rebuilding efforts in the Parish following the 2005 storms. Many other sectors of the local economy are fueled by these primary industries, including health and human services and retail. They play critical roles in meeting the day-to-day needs of Parish residents.

It is estimated in 2010 that the NAS JRB is the fifth largest employer in Louisiana, employing approximately 7,100 people.¹ The NAS JRB employment data is not reported as a part of the Louisiana Workforce Commission employment numbers shown in **Figure 3.1**.

The agriculture, forestry, fishing, and hunting employment data provided by the Louisiana Workforce Commission is likely under reported. Local sources indicate that some commercial fishing operations are undocumented. In addition, activities related to seafood product preparation and packaging are recorded as a component of the manufacturing sector rather than as a part of the agriculture, forestry, fishing, and hunting industry. The role of the commercial fishing, aquaculture, and agriculture in the Plaquemines economy is discussed in more detail under the dominant industry sectors section discussion on the following pages.

¹ Moody's Economy.com. March 2010.



Location Quotient Analysis

Location Quotient Analysis (**Table 3.1**) indicates Plaquemines Parish’s economic strengths compared to the Regional Labor Market Area. Anything with a location quotient greater than 1.25 is general accepted as a basic industry – or one that exports its services from Plaquemines Parish to areas outside the Parish. These industries are important to the growth of the local economy because they generate an inflow of income and serve as the area’s export base. Mining and agriculture, forestry, fishing, and hunting are particularly strong industries for Plaquemines. This reflects the area’s dominance in oil and gas industry and commercial fishing/citrus production.

Other key industries in Plaquemines, compared to the region, are:

- Real estate and rental and leasing
- Warehousing
- Manufacturing
- Public Administration

Of these key industries, real estate and rental and leasing, warehousing, and manufacturing complement and support the mining industry. Public administration provides services to workers that reside in the Parish. As such, fluctuations in the mining industry will have notable impacts on other important aspects of the Parish economy.

**Table 3.1: 2009 Non-Military Employment* and Location Quotient Analysis
Plaquemines Parish Compared to Regional Labor Market Area**

Industry	Employment				LQ
	Plaquemines	% of Total	RLMA	% of Total	
Total	14,285		505,237		
Agriculture, forestry, fishing and hunting ²	41	0.3%	462	0.1%	3.14
Mining	1,373	9.6%	7,802	1.5%	6.22
Utilities	**	***	4,332	0.9%	***
Construction	1,247	8.7%	33,138	6.6%	1.33
Manufacturing ³	2,291	16.0%	36,914	7.3%	2.20
Wholesale trade	840	5.9%	22,330	4.4%	1.33
Retail trade	672	4.7%	58,162	11.5%	0.41
Transportation and warehousing	1,845	12.9%	24,011	4.8%	2.72
Information	9	0.1%	6,838	1.4%	0.05
Finance and insurance	98	0.7%	16,890	3.3%	0.21
Real estate and rental and leasing	624	4.4%	8,016	1.6%	2.75
Professional and technical services	440	3.1%	29,625	5.9%	0.53
Management of companies and enterprises	50	0.4%	8,261	1.6%	0.21
Administrative and waste services	750	5.3%	28,783	5.7%	0.92
Educational services	988	6.9%	40,568	8.0%	0.86
Health care and social assistance	455	3.2%	69,042	13.7%	0.23
Arts, entertainment, and recreation	48	0.3%	11,730	2.3%	0.14
Accommodation and food services	763	5.3%	57,503	11.4%	0.47
Other services, except public administration	151	1.1%	13,351	2.6%	0.40
Public administration	1,482	10.4%	26,204	5.2%	2.00

Source: Employment data, 3rd Quarter monthly employment average. 2009 Louisiana Workforce Commission. LQ Calculations, JJG.

**Employment reflects jobs covered by the Louisiana Employment and Security Law; **Data Non-publishable;

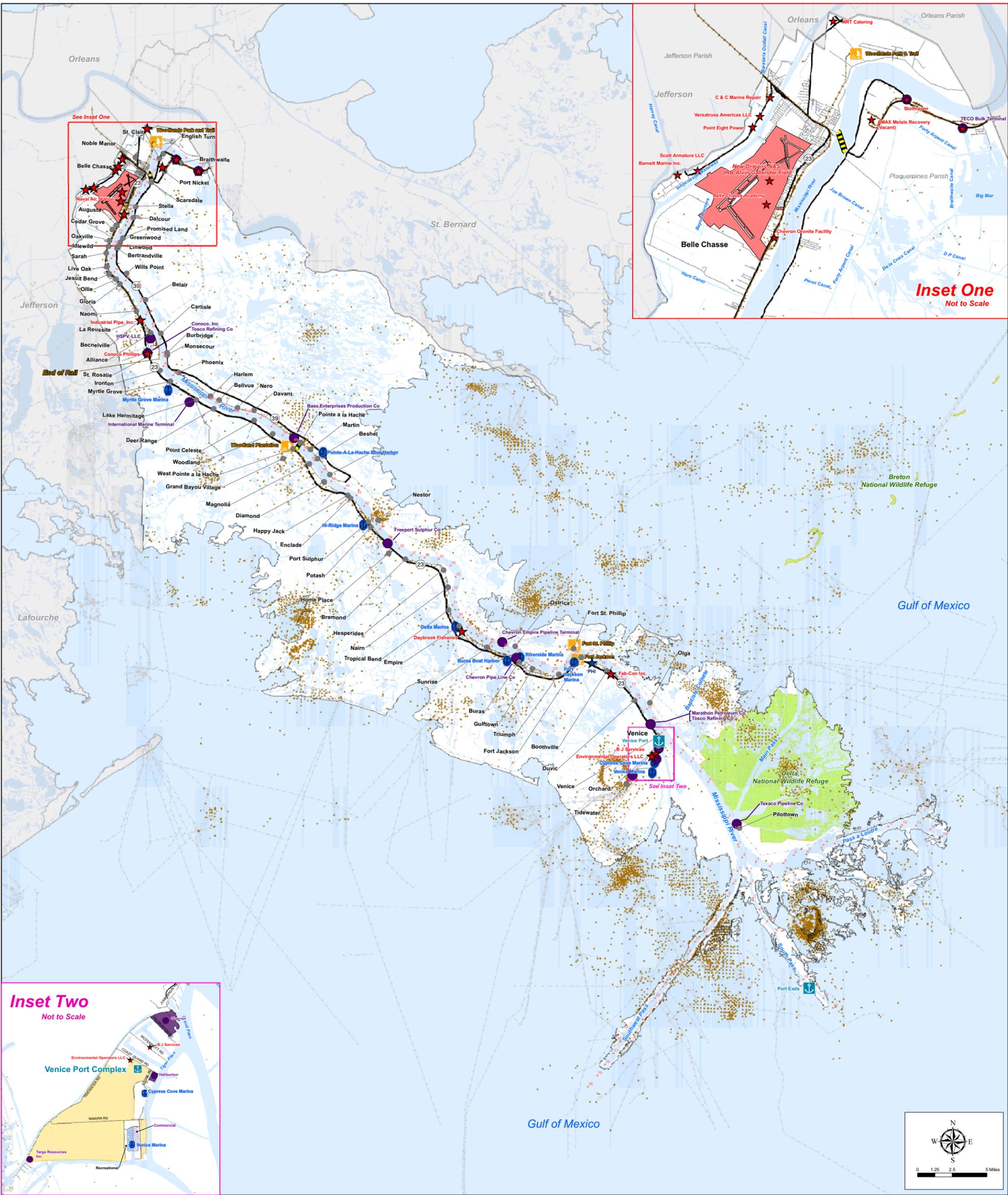
***Calculation not possible due to data limitations

RLMA includes Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, & St. Tammany Parishes.

² This sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats as categorized by North American Industry Classification System (NAICS).

³ This category includes seafood product preparation and packaging.

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Comprehensive Master Plan
Plaquemines Parish,
Louisiana
Current Economic Resources Map
 January 13, 2011

Legend (Shoreline of Map is Pre-Katrina)

- State Highway
- Local Road
- Railroad
- Existing Ferry Crossing
- Communities
- Major Employer
- Growing Employer
- Major Terminal
- Marina
- Port
- Tourist Attraction
- River Mile Marker
- Oil & Gas Well
- Oil & Gas Pipeline
- Naval Air Station
- National Wildlife Refuge

represents back of map

Largest Employers⁴

Below is a list of Plaquemines' largest employers. The locations of these facilities are included on **Map 3.0: Current Economic Resources**⁵.

- A R T Catering – major oil field catering and housekeeping service company
- Barnett Marine Inc. – owns and operates two shipyards for the repair, conversion and new construction of barges
- Belle Chasse Academy – formed in 2002 as a Louisiana Type II charter school to educate military-dependent children; serves over 900 students per year
- BJ Services Co. – oil and gas equipment and services company that provides pressure pumping and oilfield services for the petroleum industry
- C & C Services – Consists of three divisions, Marine & Repair, Boat Works, & Other Services; provides barge and boat building and repair services with a primary office on Engineers Rd. in Belle Chasse
- Chevron Oronite Co. – produces high-quality blended fuels and lubricant additives
- Conoco Phillips Co. – refinery that processes mainly light, low sulfur crude oil – particularly gasoline, diesel fuel, and jet fuel
- Daybrook Fisheries - produces and distributes menhaden fish meal and fish oil as an important source of omega-3 fatty acids, proteins and essential minerals for high quality feed formulations in Agriculture, Aquaculture and Petfood
- Environmental Operators, LLC - provides comprehensive solid waste collection, management, and disposal to a wide variety of industries, businesses and municipalities
- Fab-Con Inc. – offers services to the international oil and gas industry in the following areas: Electrical, Instrumentation, Automation, Telecoms, Sub-sea, Project Control, Project Completion, Commissioning, and Decommissioning
- Industrial Pipe, Inc. – metals and minerals wholesalers
- Naval Air Station – located in Belle Chasse; includes multiple military operations
- Point Eight Power – provides electrical-control and distribution-system services
- Scott Armature LLC – provides electric motor repair services, including control panels, switch gear, phase convertors generators, pumps, voltage regulators, transformers
- Stolthaven - bulk liquid storage terminal located off Hwy 39 at mile marker 80 on the Mississippi River; it is Stolt's newest state-of-the-art owners berth. The terminal acts as both a domestic facility and as an international distribution hub. Products stored include petroleum products, vegetable oils, and chemicals.

⁴ Greater New Orleans, Inc. Plaquemines Parish Profile. Accessed July 2010.

⁵ Inset maps of the Belle Chasse and Port of Venice areas are provided in Maps 3.1 and 3.2.

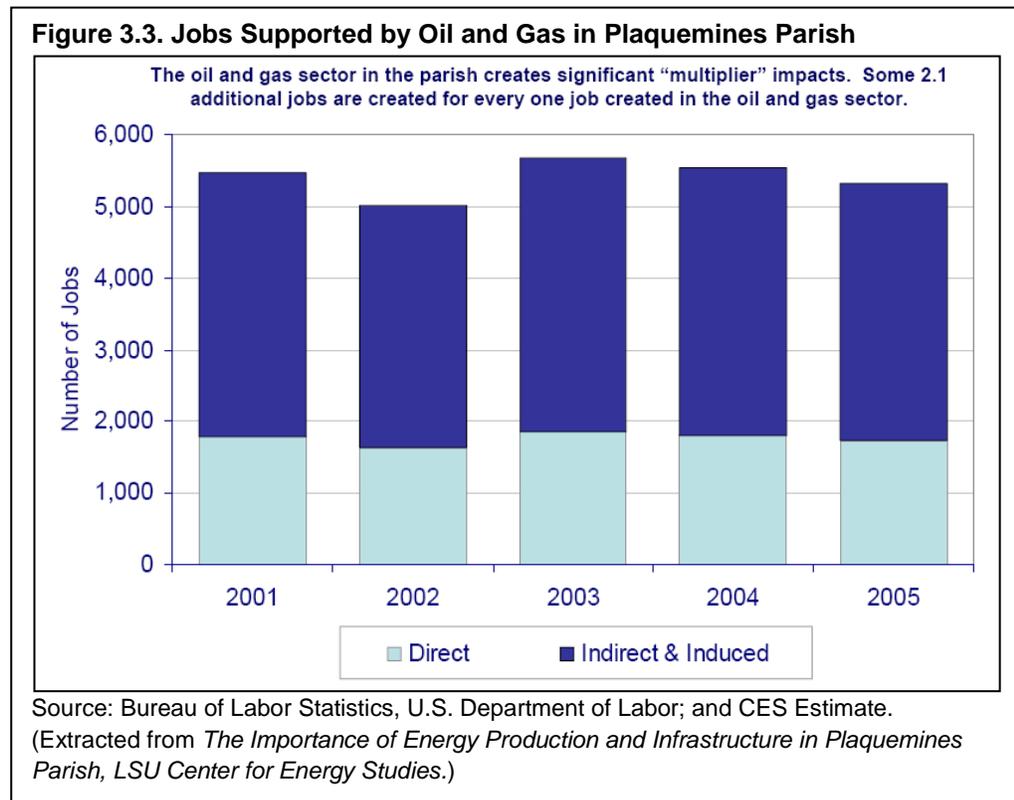
- Teco Bulk Terminal – energy provider, managing gas, electric, and coal power services
- Versatruss Americas LLC - heavy lift systems offers deepwater/shallow draft and access to remote locations for offshore oil and gas production facilities installation and decommissioning

In addition to those listed above, Petroleum Helicopters, Inc. (PHI) has been identified as a growing employer in Plaquemines. PHI, in partnership with Shell Oil Company, is building a category 8 landing facility with a 2300 foot runway at its Boothville operations. This expansion will facilitate PHI’s growth as a larger employer.

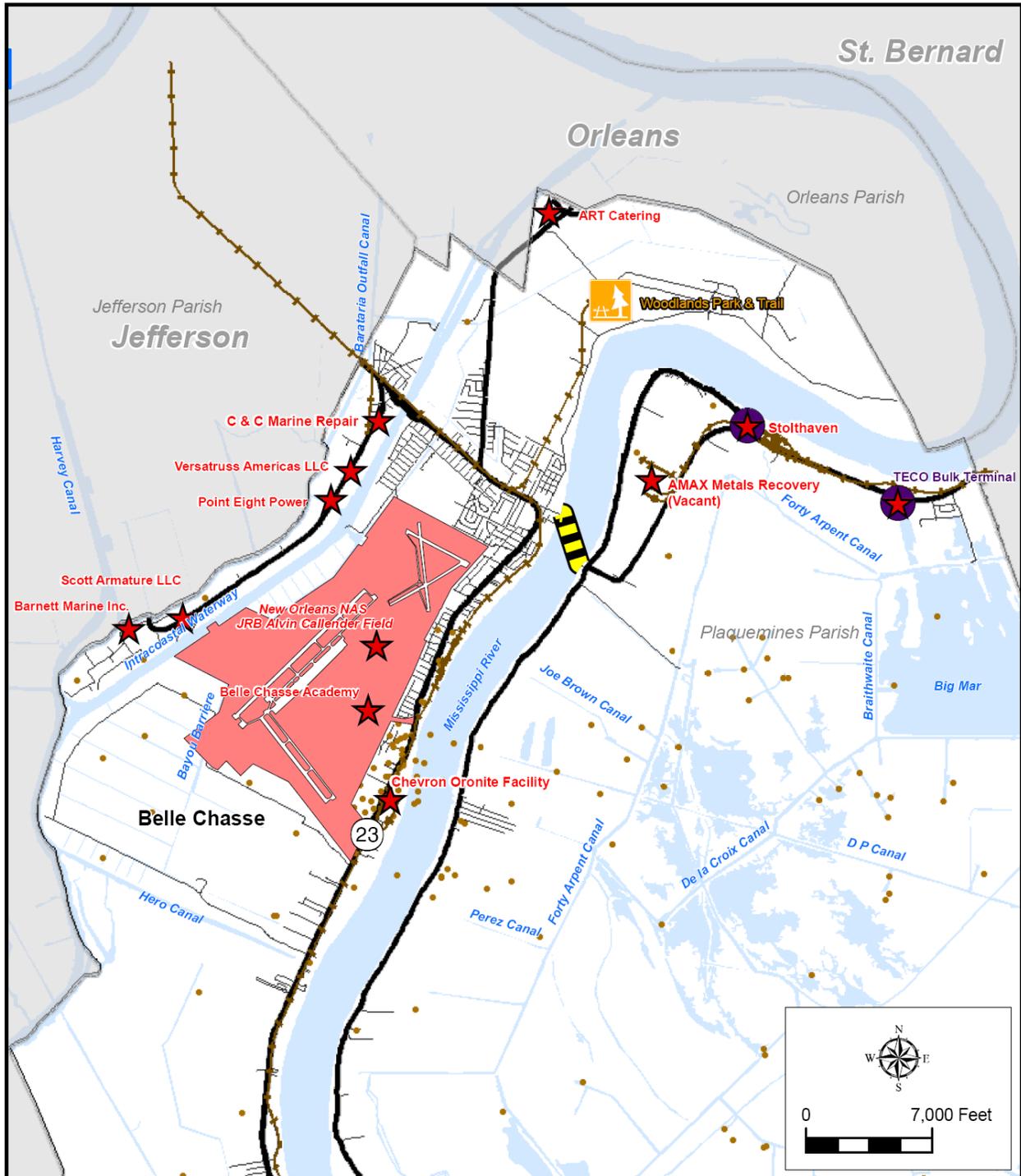
Dominant Industry Sectors

Energy

The Plaquemines Parish economy relies heavily on oil and natural gas extraction and refining. These industry sectors provide a significant number of direct and indirect jobs for Parish residents and revenue for the community. The LSU Center for Energy Studies estimates that in 2006 the energy industry produced over 8,000 direct, indirect, and induced employment opportunities in Plaquemines Parish. See **Figure 3.3**. Direct jobs are those provided directly by oil and gas drilling and production. Indirect jobs are those created by additional economic activity associated with drilling and production, such as support services for transport, storage, etc. Induced jobs are those that result from the additional disposable income available as a result of oil and gas production and drilling.

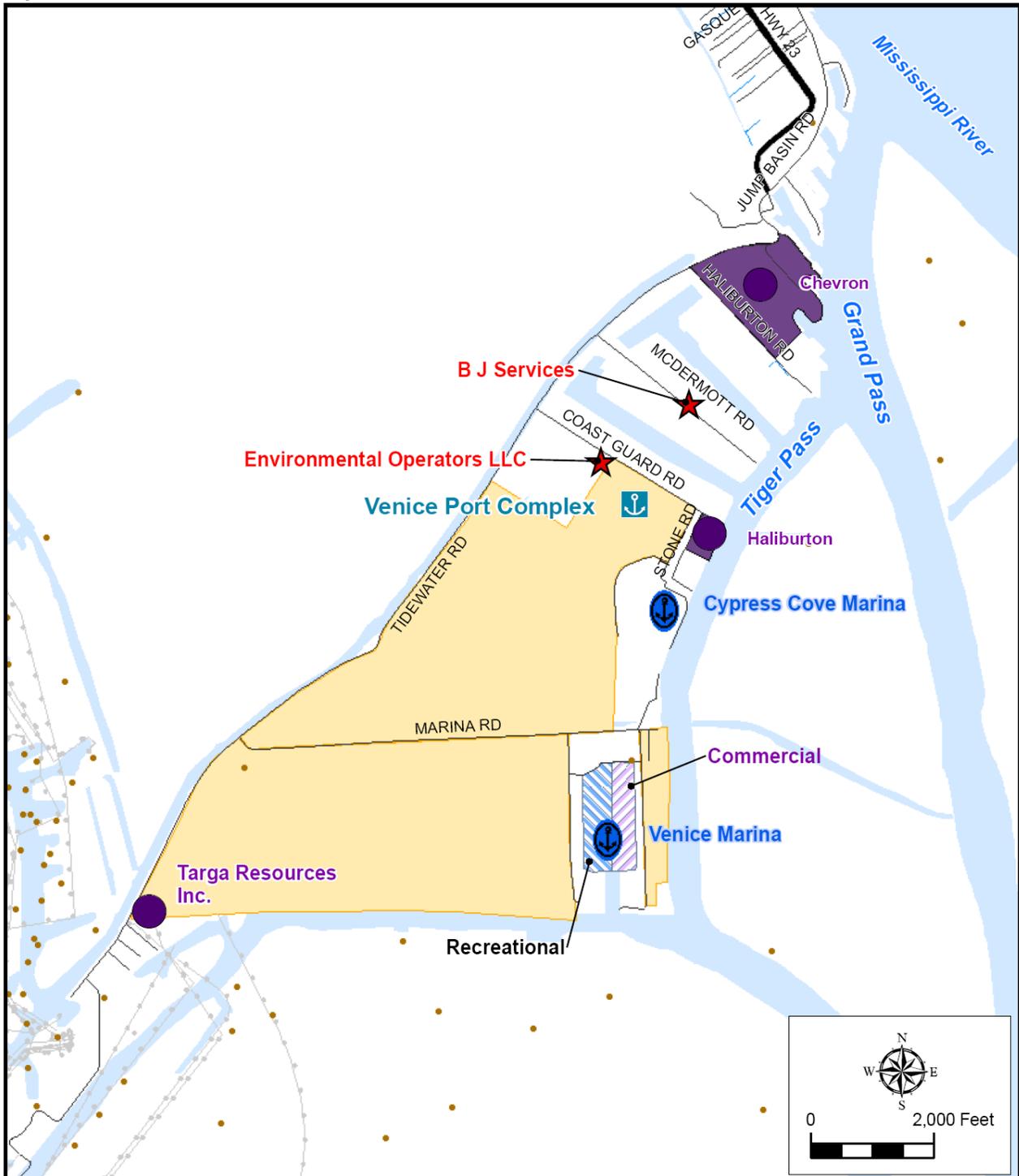


Map 3.1



		<p>Comprehensive Master Plan Plaquemines Parish, Louisiana</p> <p>Current Economic Resources Map Belle Chasse January 14, 2011</p>	<p>Legend</p> <ul style="list-style-type: none"> State Highway Local Road Oil & Gas Well Oil & Gas Pipeline Tourist Attraction Major Employer Major Terminal Marina Existing Ferry Crossing Naval Air Station <p><i>(Shoreline of Map is Pre-Katrina)</i></p>
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Map 3.2



Comprehensive Master Plan
Plaquemines Parish,
Louisiana

Current Economic Resources Map
Venice Port Complex

January 14, 2011

Legend

- State Highway
- Local Road
- Oil & Gas Well
- Oil & Gas Pipeline
- ★ Major Employer
- Major Terminal
- ⚓ Marina
- ⚓ Port

(Shoreline of Map is Pre-Katrina)

Oil and natural gas production has been declining over the last several years; however, Plaquemines Parish's share of Louisiana's overall oil and gas production has remained constant. Plaquemines Parish had over 11,000 active gas and oil producing wells in 2006. **Map 3.0 Current Economic Resources** above illustrates the location of these resources within the Parish and in offshore areas. Plaquemines Parish is also a hub for natural gas and crude oil pipelines in the Gulf of Mexico. To mitigate risks, these resources must be managed closely to ensure that they do not interfere with or pose threats to other industries.

The State of Louisiana and affected local governments receive notable revenue from oil and gas activities. Aside from the employment stimulated by oil and gas activities, a significant amount of royalties (monies paid to lease land for drilling and extraction) and severance payments (taxes charged for the extraction of natural resource from the land) are significant. In a typical year, the State of Louisiana and its local governments collect \$274 million in royalties and \$88 million in severance taxes plus additional revenue from taxes and fees, bonuses, and rentals associated with oil and gas production and extraction.⁶

Plaquemines Parish controls most of the leases for mineral rights within the Parish due to the deeding process led by the State of Louisiana, beginning in the 1930s. Most new leases are for three years and automatically renew if the well is producing. If the well is not producing, when the lease expires it reverts back to the Parish. The State takes ownership of any wells in submerged lands, which has been an area of dispute between Plaquemines and the State. Additional information on revenues from oil and gas leases is provided in the Government Organization sections of the Community Assessment and Community Agenda.

Two of the most important oil and gas operations in Plaquemines are the ConocoPhillips Alliance Refinery and the Chevron Oronite Oak Point Plant. Along with the Naval Air Station Joint Reserve Base, they are the top employers in Plaquemines Parish.

- *ConocoPhillips Company* - ConocoPhillips's Alliance Refinery is an important employer and economic engine in the Plaquemines. The refinery has a capacity of 247 MBD and processes mainly light, low sulfur crude oil, particularly gasoline, diesel fuel, and jet fuel. The refinery receives crude oil from West Africa and the Gulf of Mexico. The core markets for these products are the southeastern and eastern United States. ConocoPhillips receives domestic crude oil by pipeline and international crudes via the Louisiana Offshore Oil Port. The ConocoPhillips facility is one of six refineries located in the Greater New Orleans Region.
- *Chevron Oronite Oak Point Plant* – The Chevron Oronite Plant employs over 400 employees and occupies 100 acres in Belle Chasse. The Plant produces high-quality blended fuel and lubricant additives.

⁶ LSU Center for Energy Studies, prepared for the Louisiana Office of Mineral Resources. Analysis of the Economic Impact Associated with Oil and Gas Activity on State Leases.

Offshore Oil and Gas Production

Offshore oil and gas production has had increasing importance to the Parish over recent years. The parish serves as an operational center for the offshore oil and gas industry. In total, 88 percent of U.S. offshore oil rigs are located in Louisiana's Outer Continental Shelf (Greater New Orleans Inc.) Several of Plaquemines' major employers service these offshore facilities. The Port of Venice plays a critical role in offshore oil and gas operations. See Section 3.3 Economic Development Resources below for more information on the Port of Venice.

Naval Air Station/Joint Reserve Base

For 52 years, Plaquemines Parish has been home to the New Orleans Naval Air Station/Joint Reserve Base (NAS JRB) in Belle Chasse. The military installment has grown over time and continues to fuel the local community and contributes to the Parish's identity as a community of national significance. The military site provides Navy, Air Force Reserve, and Air National Guard units. The NAS JRB plays an important role in the Plaquemines Parish community, and currently, NAS JRB is the fifth largest employer in Louisiana, employing approximately 7,100 people.⁷ The annual economic impact from the salary/pay portion of the NAS JRB is estimated at \$402,784,000.⁸ This figure includes active and reserve military, civilian, and contractor pay.

NAS JRB Expansion

The NAS JRB is undergoing expansion. Some current naval support activity occurring in Algiers will be moving to the Belle Chasse site when the operation closes in 2011. Louisiana National Guard activities and over sixty aircraft will be moving to Plaquemines from the Algiers site. The expansion is expected to increase the NAS JRB employment to approximately 9,550. Expansion of the site will increase traffic along Belle Chasse Highway and Barrier Rd., which will in turn impact transportation movements of local businesses. Growth in the Belle Chasse area will need to take into account anticipated addition of new noise impacts at the NAS JRB. Plaquemines Parish Government and NAS JRB recently purchased property adjacent to the northern portion side of the base to ensure compatible land uses between the Base and neighboring communities.

Joint Land Use Study

A Joint Land Use Study is currently being led by the military and is being coordinated with the Jefferson and Plaquemines Parishes and the Comprehensive Master Plan to ensure compatible land use policies are developed to meet Base growth needs, Parish growth goals, and protect the public health, safety, and welfare. In communities where growth has encroached too closely on military installments, bases have had to shut down due to health and safety issues as well as adverse impacts on the military installment. The coordination of the JLUS and Master Plan are fundamental to ensuring the long-term symbiotic relationship between the military base and the Parish. Sufficient buffers to prevent noise encroachment and ensure safety are among top priorities along with ensuring that adjacent development is compatible with the NAS JRB.

⁷ Moody's Economy.com. March 2010.

⁸ Plaquemines Parish Government. 2010. *Plaquemines Parish Gateway to America Report*.

Commercial Fishing, Aquaculture, and Agriculture

Commercial fisheries and agricultural production, most notably citrus products, are also considered an important part of the local economy largely due to their deep-rooted connection to the area’s unique geography, culture and the elements that make Plaquemines Parish a unique tourism destination.

Plaquemines Parish makes a significant contribution to the State’s overall commercial fishing production. Most notably, Plaquemines produces 60 percent of the Louisiana’s menhaden, 33 percent of Louisiana’s oysters, and 20 percent of Louisiana’s shrimp.⁹

Table 3.2 shows the number of potential producers (individuals) associated with commercial fishing in the Parish and state along with the associated gross farm value in 2008. These numbers indicate the high level of interest in commercial fishing in the Parish – particularly in proportion to the state. These tables provide a different perspective from the data provided in **Table 3.1** in that the table below indicates individuals that have a commercial fishing license rather than those that are engaged in the activity as a full or part time job. (**Table 3.1** above lists people engaged in the activity as a full or part time job as recorded by the federal government.) In addition, individuals pursuing multiple fisheries or wildlife enterprises will have multiple licenses and be counted more than once as a producer. The gross farm value reflects the economic significance of landings (catching and reporting of fish for commercial purposes).

The commercial fishing industry includes the wild catching of finfish, shellfish, and other marine products from their natural habitat. Fish collected through farming practices fall into the aquaculture, rather than commercial fishing sector. In Louisiana, these two groups are commonly referenced in the same sentence. Seafood processing and distribution are also covered under different industry profiles.

Table 3.2: 2008 Select Commercial Fishing Data, Plaquemines Parish & State of Louisiana

Item	# of Producers		Gross Farm Value		Plaquemines Share (LA)
	Plaquemines	State	Plaquemines	State	
Total All Fisheries & Wildlife Enterprises			\$68,539,188	\$525,865,205	13.0%
Oysters	243	782	\$11,386,348	\$34,229,962	33.3%
Marine Fisheries			\$56,971,016	\$226,074,713	25.2%
Shrimp	500	4,651	\$26,923,198	\$132,223,257	20.4%
Menhaden	422	473	\$29,277,558	\$48,806,719	60.0%
Crabs	137	2,871	\$770,259	\$33,876,659	2.3%

Source: LSU AgCenter. 2009 Louisiana Summary of Agriculture & Natural Resources. Accessed at <<http://www.lsuagcenter.com>>

** The marine, freshwater and oyster data presented here are for the year 2008 rather than 2009. Release of Fisheries' landings data by the collecting agencies occurs 4-5 months after the fact.

⁹Production percentages are calculated by dividing the total gross farm value recorded for Plaquemines divided by the total gross farm value recorded for the State of Louisiana.

Shrimping, oyster farming and finfish collecting have traditionally been carried out in specific areas of Plaquemines Parish and offshore. Although commercial fishing and aquaculture are important industries to Plaquemines, limited processing facilities are present in the Parish. At the time of this report, the commercial fishing and aquaculture sectors have largely been closed due to the Deepwater Horizon Disaster. Over recent years, Plaquemines Parish and other domestic producers of shrimp have faced increasing competition from imports.

Citrus and Other Agricultural Production

Citrus fruits are a significant agricultural product for the Parish. Although 80 percent of citrus orchards were destroyed during Hurricane Katrina, most plants have been repopulated and are ready for harvesting when not adversely affected by seasonal conflicts such as frost.¹⁰

Plaquemines has a notable impact on the State's citrus industry, providing 62 percent of the State's total citrus produce. Navels account for the highest overall percentage of agricultural production. Plaquemines Parish also has a \$3.6 million tomato industry, producing 25 percent of the State's tomato crop.

Table 3.3: 2009 Citrus Production, Plaquemines Parish & State of Louisiana

Item	Gross Farm Value		Plaquemines Share
	Plaquemines	Louisiana	
Citrus	\$5,612,500	\$9,020,465	62.2%
Navels	\$3,250,000	\$4,170,075	77.9%
Satsumas	\$2,187,500	\$4,584,450	47.7%
Other Citrus	\$175,000	\$265,940	65.8%

Source: LSU AgCenter. 2009 Louisiana Summary of Agriculture & Natural Resources. Accessed at <<http://www.lsuagcenter.com/mcms/webtools/viewExternal.aspx?url=http://www2.lsuagcenter.com/agsummary/>> April 2010.

Public Administration

Plaquemines Parish Government, along with other area agencies, provides a significant number of jobs to area residents. According to the Louisiana Workforce Commission, approximately 1500 people were employed in public administration roles in 2009 in Plaquemines Parish. In 2010, Plaquemines Parish employed 648 employees.

Tourism

Tourism is an important industry in Louisiana, with particular importance in the metropolitan New Orleans area. Domestic travel in Louisiana accounted for 4.7 percent of total non-agricultural employment in Louisiana in 2006. Plaquemines Parish ranked 31st out of 64 parishes in 2006 in the number of traveler induced expenditures (\$17.4 million). Orleans Parish accounted for over one-third of traveler induced expenditures in the State in 2006. These figures suggest that there is room for Plaquemines Parish to capture some of the tourism

¹⁰ Louisiana Speaks. Plaquemines Parish-Disaster Impact and Needs Assessment Section. <<http://www.louisianaspeaks-parishplans.org/IndParishHomepage.cfm?EntID=12>> Accessed March 2010.

spin-off from Orleans Parish.

Table 3.4: 2006 Impact of Domestic Travel on Louisiana & Plaquemines Parish

	Expenditures	Payroll	Employment	State Tax Receipts	Local Tax Receipts
LA State Totals	\$6,425,020,000	\$1,529,270,000	86,600	\$269,590,000	\$148,138,000
Plaquemines Parish	\$17,400,000	\$2,960,000	160	\$840,000	\$1,240,000
% of State Total	0.27%	0.19%	0.18%	0.31%	0.84%

Source: Travel Industry Association. 2006. The Economic Impact of Travel on Louisiana Parishes.

Hotels & Lodging Facilities

Plaquemines Parish has eight basic hotels/motels that provide lodging to visitors. In addition, the Woodland Plantation offers a bed and breakfast environment for visitors staying overnight in the Parish. It also provides additional facilities for special events such as weddings and business meetings. The Parish is in the process of planning more hotels.

Recreational Fishing

Plaquemines Parish currently has a limited yet specialized tourism industry that centers upon the recreational fishing industry. In 2009, 4,944 recreational fishing licenses were issued in Plaquemines Parish. Of that, approximately 26 percent (1,266 licenses) were non-resident recreational licenses, with the remainder (and grand majority) being issued to residents of Plaquemines Parish.¹¹

The Parish has nine marinas and four boat harbors: Wilson’s Marina, Myrtle Grove Marina, Delta Marina, Joshua’s Marina, Lloyd’s Riverside, Yellow Cotton Bay Marina, Beshel Boat Launch, Venice Marina, Cypress Cove Marina, Empire Boat Harbor, Buras Boat Harbor, Venice Boat Harbor, and Pointe a la Hache Boat Harbor. Plaquemines Parish also recently received a grant to build recreational fishing piers around the Parish. In addition, visitors to Plaquemines Parish have the option of taking deep sea fishing tours into the Gulf of Mexico with private providers.

Ecotourism

Plaquemines Parish is home to the Delta National Wildlife Refuge and Breton National Wildlife Refuge, which along with other unique natural characteristics of the Parish, can be credited with fuelling other aspects of the ecotourism industry. The Breton National Wildlife Refuge is located in the offshore Breton Islands and Chandeleur Islands and is the second oldest refuge in the National Wildlife Refuge System. The Delta National Wildlife Refuge is located 10 miles south of Venice adjacent to the Mississippi River and offers diverse species of fish, birds, and other marshland animals and plants. Bird watchers interested in the diverse ecosystem come to the delta area to observe unique species occupying the wildlife refuges and other areas of the Parish.

¹¹ Testimony of Billy Nungesser, Plaquemines Parish President, Before the Subcommittee on State, Local, and Private Sector Preparedness and Integration. June 10 2010. Oil Spill Impact on Plaquemines parish, Louisiana.

The Plaquemines Parish Government has also dedicated land for a proposed Wetlands Discovery Center. This resource would educate visitors about the unique characteristics, structure, and value of wetlands to the broader ecosystem and facilitate the maturation of the Parish's ecotourism sector. Visitors will learn about the vital connection between the Mississippi River and its delta.

The Woodlands Trail and Park is another ecotourism attraction in Plaquemines Parish. It offers visitors an opportunity to see one of Southeastern Louisiana's remaining coastal hardwood forests. Plans for the Woodlands Trail and Park include an equestrian facility and trails, bike and walking paths, and a Proposed Interpretive Center and River Pavilion. Trails will physically join Plaquemines and Orleans Parishes.

Festivals

Plaquemines Parish also holds multiple festivals each year that promote tourism. Most of the festivals feature the unique traditions and culture of the Parish, a sampling of these festivals includes:

- Plaquemines Parish Seafood Festival (Memorial Day Weekend)
- Orange Festival (December)
- Empire South Pass Fishing Rodeo (August)
- Buras Fire Department Boil-off
- Our Lady of Perpetual Help Fair

Historic Sites

Plaquemines Parish has multiple historic sites, which offer an opportunity for tourism sector development in the future. These resources are listed in Section 3.3.

Fort Jackson and Fort St. Philip

Plaquemines Parish is also home to two important forts: Fort Jackson and Fort St. Philip. These resources are located diagonally from each other across the east and west banks of the Mississippi River, respectively. At this time, neither is a significant tourism generator. Fort Jackson is run by Plaquemines Parish and has been closed since the 2005 due to impacts from the hurricanes. The fort is anticipated to reopen in December 2010. Fort St. Philip is privately owned and only accessible by boat.

Future use and management of the Forts is uncertain. As of September 2009, there were two bills pending in Congress calling for a study by the Department of the Interior to consider transforming both parks into a national park. The Parish estimates that turning these two sites into national parks would produce a notable spike in visitors to the Parish and consequential tourism dollars. There is also local discussion of leaving the forts under existing (Parish and private) operation due to concern over what activities can be conducted at the sites. Historically, Fort Jackson has hosted high school football games, the annual Orange Festival, and other community events. In 2004, the Army Corps of Engineers completed a Master Plan for Fort Jackson, which included design concepts for the Fort's long-term

preservation. This Plan has not been updated to reflect the impacts of the 2005 hurricanes.

3.2 Labor Force

Table 3.5 represents industry of employment for working residents of Plaquemines Parish and neighboring parishes in 2000, as reported by the U.S. Census Bureau. Education, health, and human services sectors provided jobs for 15 percent of the labor force. Approximately 12 percent of the Plaquemines Parish labor force (1,211 people) worked in agriculture, forestry, fishing and hunting, and mining. Retail trade and manufacturing account for the next most common sectors of employment: 11 percent and 9 percent of the Parish's labor force, respectively.

Plaquemines Parish enjoys a relatively low unemployment rate compared to the New Orleans MSA and the nation. From April to May 2010, the unemployment rate was estimated at 6.2, 5.4, and 6.0 percent, respectively. Comparatively, in May 2010, the estimated unemployment rates for the New Orleans MSA, the State of Louisiana, and the U.S. was 7.0, 7.1, and 9.3 percent, respectively. It is important to note that at the time these numbers were calculated, the impacts of the Deepwater Horizon Disaster had not been absorbed into the local economy.

A high percentage of Plaquemines Parish residents fill jobs in the region's agricultural, mining, and transportation and warehousing industries. Residents of neighboring parishes have a higher presence in other industries, including healthcare and social assistance and accommodation and food services.

As discussed in the Population and Demographics sections of the Community Assessment and Community Agenda, the percentage of residents having a bachelor's degree and some or a completed master's degree is rising. This shift in demographics may make Plaquemines Parish a more desirable location for new employers in the future.

Commuting Patterns

In 2000, 64 percent of Plaquemines Parish resident labor force worked in Plaquemines Parish (**Table 3.6**). This figure is consistent with Jefferson County work/live patterns. A much greater percentage of St. Bernard's labor force, nearly 60 percent, worked in a different parish, whereas the Orleans Parish retained nearly 78 percent of its labor force as workers in jobs within its boundary.

Jobs-Housing Balance

Communities should strive towards providing a strong live/work connection – where people have minimal commutes times and can work where they live. Well planned communities are generally encouraged to have a slightly higher than one to one ratio of jobs to housing. Jobs-housing ratios are generally considered acceptable between 1.3 and 1.7. Theoretically, this balance ensures that people that live in a community can also work in the community, reducing their travel time and improving their quality of life and the negative impacts of travel

on the environment. The higher presence of jobs also provides for a healthy tax base. The jobs-housing balance is one measure of whether a community has developed in a healthy way.

Plaquemines Parish has an estimated jobs housing ratio of 1.63, falling in the healthy range of jobs to residents. As the characteristics of Plaquemines residents change, particularly skills base, education, and age profile, job opportunities should be evaluated to determine if they meet local employment needs and meet a healthy jobs-housing ratio.

Jobs/Housing Units = Jobs-Housing Ratio

14,245/8,701 = 1.63

Source: Employment data from Louisiana Workforce Commission (3rd Quarter monthly average 2009) and housing data from (2006-2008 American Community Survey).

Table 3.5: Labor Force by Industry, 2000

	Plaquemines Parish	%	Jefferson County	%	Orleans Parish	%	St. Bernard Parish	%
Total	9,960		212,477		191,739		29,303	
Agriculture, forestry, fishing and hunting, and mining:	1,211	12.2%	4,059	1.9%	1,996	1.0%	563	1.9%
Agriculture, forestry, fishing and hunting	516	5.2%	1,005	0.5%	358	0.2%	334	1.1%
Mining	695	7.0%	3,054	1.4%	1,638	0.9%	229	0.8%
Construction	715	7.2%	16,353	7.7%	9,478	4.9%	2,700	9.2%
Manufacturing	899	9.0%	17,663	8.3%	9,925	5.2%	3,165	10.8%
Wholesale trade	368	3.7%	9,910	4.7%	4,885	2.5%	1,350	4.6%
Retail trade	1,051	10.6%	25,713	12.1%	18,864	9.8%	3,632	12.4%
Transportation and warehousing, and utilities:	869	8.7%	12,595	5.9%	11,237	5.9%	2,037	7.0%
Transportation and warehousing	674	6.8%	10,244	4.8%	9,392	4.9%	1,702	5.8%
Utilities	195	2.0%	2,351	1.1%	1,845	1.0%	335	1.1%
Information	59	0.6%	4,601	2.2%	4,596	2.4%	468	1.6%
Finance, insurance, real estate and rental and leasing:	409	4.1%	14,636	6.9%	10,677	5.6%	1,989	6.8%
Finance and insurance	273	2.7%	10,323	4.9%	6,417	3.3%	1,565	5.3%
Real estate and rental and leasing	136	1.4%	4,313	2.0%	4,260	2.2%	424	1.4%
Professional, scientific, management, administrative, and waste management services:	809	8.1%	21,668	10.2%	18,911	9.9%	2,368	8.1%
Professional, scientific, and technical services	518	5.2%	13,407	6.3%	11,161	5.8%	1,450	4.9%
Management of companies and enterprises	5	0.1%	116	0.1%	67	0.0%	0	0.0%
Administrative and support and waste management services	286	2.9%	8,145	3.8%	7,683	4.0%	918	3.1%
Educational, health and social services:	1,508	15.1%	41,221	19.4%	49,315	25.7%	4,982	17.0%
Educational services	756	7.6%	16,259	7.7%	22,626	11.8%	1,921	6.6%
Health care and social assistance	752	7.6%	24,962	11.7%	26,689	13.9%	3,061	10.4%
Arts, entertainment, recreation, accommodation and food services:	812	8.2%	21,705	10.2%	29,299	15.3%	2,843	9.7%
Arts, entertainment, and recreation	215	2.2%	5,602	2.6%	6,080	3.2%	753	2.6%
Accommodation and food services	597	6.0%	16,103	7.6%	23,219	12.1%	2,090	7.1%
Other services (except public administration)	460	4.6%	11,654	5.5%	10,190	5.3%	1,445	4.9%
Public administration	790	7.9%	10,699	5.0%	12,366	6.4%	1,761	6.0%

Source: U.S. Census Bureau, Census 2000.

Table 3.6: Place of Work for Labor Force, Plaquemines Parish & Neighboring Parishes 2000*

	Plaquemines Parish	%	Jefferson Parish	%	Orleans Parish	%	St. Bernard Parish	%
Total:	10,074		209,611		188,703		28,739	
Worked in state of residence:	9,988	99.1%	207,889	99.2%	187,046	99.1%	28,552	99.3%
Worked in county of residence	6,406	63.6%	135,776	64.8%	147,492	78.2%	11,871	41.3%
Worked outside county of residence	3,582	35.6%	72,113	34.4%	39,554	21.0%	16,681	58.0%
Worked outside state of residence	86	0.9%	1,722	0.8%	1,657	0.9%	187	0.7%

Source: U.S. Census Bureau, Census 2000; SF 3

*Workers 16 years and over.

3.3 Economic Development Resources

Plaquemines Parish has several economic development resources at its disposal. These resources include facilities and infrastructure, organizations, Parish staff, and regional, state or federal partners that work to promote the economy of Plaquemines Parish and the greater New Orleans area. The Parish also has five economic development areas, which it uses to categorize available land and to attract industry to the area. The Parish’s Economic Development maintains a corresponding catalogue that enumerates the characteristics of available sites.

Facilities and Infrastructure

Transportation¹²

Plaquemines Parish offers a multimodal transportation network including ferries, state highways, heliports for offshore support, rail lines, and port facilities managed by the Plaquemines Port, Harbor and Terminal District. New Orleans International Airport is within close proximity of Plaquemines Parish, making long-distance travel into the Parish convenient. Transportation and warehousing are an important component of the Plaquemines economy, and as such, maintenance and improvements to the Parish’s transportation infrastructure are critical to its future.

Congestion Mitigation and Railroad Improvements

Roadway improvements and expansions to mitigate traffic congestion in Belle Chasse area and improved rail service to lower Plaquemines Parish are two important investments needed to facilitate continued economic growth in the Parish. The Parish has submitted a grant proposal for funding to relocate the railroad out of Belle Chasse. Receipt of this grant would be a major boost to these needed improvements.

Deepening of Baptiste Collette

¹² A complete analysis of the multimodal transportation network is provided in the Multi-modal Transportation sections of the Community Assessment and Community Agenda.

The deepening of Baptiste Collette is a current project that will greatly improve access from the Gulf of Mexico to the Mississippi River and Plaquemines Parish. The project is anticipated to begin in January 2011 and be completed in March 2011.¹³ It will provide a quicker route to oil in the eastern portion of the Gulf of Mexico and improve access to the Venice Port Complex. This navigation improvement will expedite travel time for existing and potential businesses entering and leaving the Eastern Gulf of Mexico. The Parish anticipates that it will provide a significant boost to economic development. Baptiste Collette will be dredged at a depth to accommodate deep-draft vessels.

Airport Study

The New Orleans Regional Planning Commission recently completed a study that explored the possibility of building a general aviation airport in the middle of the Parish. Additional aviation facilities would likely have a positive impact on business attraction to the Parish. Current airport facility discussions include two possibilities:

1. Purchase and expansion of the Southern Seaplane facility by Plaquemines Parish.
2. Acquisition of land for a new airport site and construction of appropriate facilities and infrastructure, led by Plaquemines Parish and in partnership with the Louisiana Department of Transportation and Development.

Plaquemines Port, Harbor and Terminal District

The Plaquemines Port, Harbor and Terminal District has the same boundaries as Plaquemines Parish and is governed by the Plaquemines Parish Council. The state legislature established the district in 1954. The port has 100 miles of deep draft (45 feet minimum) access and multiple privately run terminals. The primary inbound cargoes include Coke, carbon black feed stock, crude, fuel, oil, IC₄, gasoline, heating oil, naphtha, natural gas, nickel, cobalt, petroleum products, phosphate, and sulphur. Primary outgoing cargoes include coal, grain-corn, soybean, and wheat. Major port facilities include the following: the Venice Port Complex, Port Eads, and Braithwaite Port Facilities.

Port of Venice

The Port of Venice is the most important location for the offshore oil and gas operations. Because of this, the Port of Venice is commonly called the “Gateway to the Gulf” and has a significant impact on the local, regional, and state economy¹⁴:

- From 2005 to 2009, oil and gas production activities supported by Venice contributed an estimated \$1.69 billion in state mineral revenues.
- During 2008 and 2009, the Venice Port employed an average of more than 850 people in the local economy.
- The Port of Venice is one of the closest potential service bases to newly opened eastern Gulf of Mexico oil leasing areas – symbolizing the potential for a significant boost to the

¹³ Implementation time frame according to the Venice Port Complex. Information from <http://www.uneakmedia.com/sites/vpc/projects.htm>, accessed December 2010.

¹⁴ LSU Center for Energy Studies. *The Benefits of Continued and Expanded Investments in the Port of Venice*.

local, regional and state economy.

This major port facility is located on a 1,500 acre parcel in Venice at the end of Highway 23. This location contains extensive petroleum infrastructure, a large pipeline network, heliports, storage facilities, and both deep and shallow draft. While the port primarily focuses on serving offshore oil and gas production, it caters to industrial and recreational clients as well. The Gulf of Mexico is easily reached from the Port via Tiger Pass, Baptiste Collette, South Pass or the Mississippi River. At the time of this analysis, Venice was serving as a hub for the Deepwater Horizon Disaster response efforts. See **Section 3.1** Dominant Industry Sectors the importance of energy and fishing industries in Plaquemines Parish.

Port Eads

This Port was primarily used by deepwater vessels and fisherman for docking and refueling purposes. It is located approximately 20 miles south of Venice. It is the closest port to the continental shelf (five miles away). Port Eads received extensive damage due to Hurricane Katrina but since then Plaquemines Parish has been awarded an \$8.8 million grant from the Federal Emergency Management Agency (FEMA) to rebuild the Port Eads Marina. The FEMA grant will cover nearly all rebuilding costs.

Proposed Amax Port Facility

Located near the Saint Bernard Parish border, the vacant AMAX facility is being considered for redevelopment as a new port facility. The site provides proximity to New Orleans and available industrial land as well as rail service. The vacant AMAX site is shown on **Map 3.1 Current Economic Resources – Belle Chasse**.

There are several other competing ports in the area, most notably, the Port of New Orleans. Plaquemines Port facilities have also competed with Port Fourchon in Jefferson Parish, particularly in the aftermath of Hurricane Katrina.

For several years, Plaquemines Parish and its public and private partners have been actively pursuing the possibility of establishing a deepwater sea port and/or large container port within Plaquemines Parish. Such facilities would capitalize on new shipping associated with improvements to the Panama Canal. Completion of widening of the Panama Canal is anticipated in 2014. The Parish has identified 11 potential sites for additional port facilities and these are shown on the Future Land Use Map in the Land Use Element of the Community Agenda. A Port Master Plan prepared for Plaquemines Parish in 2010 narrowed the list of potential port facilities to three locations: AMAX, Citrus II, and Venice.

Utilities

Entergy Louisiana and Atmos Energy, respectively, provide electric and gas to Plaquemines Parish businesses. Plaquemines Parish provides water and sewer services to the Parish through a contracted service provider. Water and sewer service areas are depicted in **Section 5 of the Technical Assessment** along with details of their contractual relationship.

Local Agencies

Plaquemines Parish Economic Development Board - Eleven members make up this local board. Nine members are selected by the Plaquemines Parish Council and two members are selected at large.

Plaquemines Association of Business and Industry (PABI) - This group formed in 2004 as a way for business leaders to leverage their voice in Parish affairs. The organization works closely with Plaquemines Government and other regional organizations to further economic development in the Parish. The organization has over 180 members.

Regional Agencies

Fundamental to solidifying a platform for sustained economic prosperity within Plaquemines Parish is taking a regional perspective of baseline conditions and potential economic growth areas. Companies located in Plaquemines Parish depend on facilities, infrastructure, and support companies located both within the Parish and in adjacent communities. Aside from those agencies listed below, the Parish has a working relationship with St. Bernard, Orleans, and Jefferson Parishes to coordinate economic development across jurisdictions. Plaquemines Parish residents travel to other parishes for work and vice versa.

Greater New Orleans, Inc. – GNO, Inc. acts as a regional catalyst for economic development. Its mission is to serve as the catalyst for wealth creation in the Greater New Orleans region, which includes Plaquemines Parish.

New Orleans Regional Planning Commission – NORPC has an economic development director that leads jurisdiction specific or inter-jurisdictional economic development initiatives. The NORPC provides resources and guidance on state and federal economic incentives and leads the update of the region’s Comprehensive Economic Development Strategy

State, Federal and Private Resources

Louisiana Department of Economic Development
Federal Energy Commission
U.S. Economic Development Administration
Entergy Louisiana Economic Development Department

LSU AgCenter/ Louisiana Sea Grant Program - assists with the appropriate use of coastal resources, including fishery stocks, habitat utilization, and socioeconomic development of coastal industries.

Workforce Development Resources

Aside from in-house training at local businesses, there are limited opportunities for workforce training within Plaquemines Parish. Currently no technical or higher education colleges or universities are located within Plaquemines Parish. Having limited workforce development resources can inhibit the ability of the labor force to increase its skills base and limit the Parish’s ability to prepare for diversification its employment base.

The Louisiana Workforce Commission has a Workforce Development Department, but it primarily provides workforce training opportunities to employers and not directly to individuals seeking skills development on their own. Veterans Services provides training opportunities to Veterans and other eligible persons. The State also manages an apprenticeship program through the State Director of Apprenticeship. The program offers supervised training leading to certification in a trade, occupation, or craft, combining on the job training with classroom related instruction. The Apprenticeship Program contains multiple programs with their own regulations. There are several educational institutions in adjacent communities¹⁵ that provide degree programs and other training opportunities:

Four-Year Colleges & Universities (within 100 miles)

University of New Orleans, New Orleans - 8,628

Tulane University, New Orleans - 10,606

Loyola University, New Orleans - 4,634

Southern University, New Orleans - 2,648

Xavier University, New Orleans - 3,089

Dillard University, New Orleans - 1,953

Our Lady of Holy Cross, New Orleans - 1,259

Nicholls State University, Thibodaux - 6,881

Two-Year Colleges (within 100 miles)

Delgado College - New Orleans - 14,450

Elaine P. Nunez Comm., New Orleans - 1,664

Technical Colleges

Jefferson Campus - Jefferson Parish

West Jefferson Campus - Jefferson Parish

Sidney N. Collier Campus - Orleans

Deepwater Horizon Disaster Response

In response to the Deepwater Horizon Disaster, new training programs have been developed to engage unemployed members of the labor force in boom deployment and monitoring, oil collection protocols, and active containment strategies and other strategies to address mitigation and clean-up efforts. These efforts are being orchestrated in coordination local, state, and federal agencies as well as BP Oil Company.

Louisiana Green Corps

In 2008, the U.S. Department of Labor provided a National Emergency Grant (NEG) to provide green job training to unemployed, under-employed, court involved, and other disadvantaged youth. The program continues in operation as a resource for providing green job skills training

¹⁵ Entergy Louisiana Economic Development. Accessed July 2010. Parish and Community Profiles: Plaquemines Parish Local Data. <<http://louisianasiteselection.com/SelectProfile.aspx>>

for people aged 17-24 in the Greater New Orleans Area. Green Corps is currently a program of the United Way Agency and The Corps Network. This program is a great resource for young adults in Plaquemines Parish and is consistent with the Parish's green energy goals.

Tourism Resources

- Fort Jackson* - Fort Jackson was built in the 1820s and '30s to protect the coast. It served as a battleground during the American Civil War and has historically hosted Parish's Orange Festival. It is being pursued in Congress to be studied as a National Park.
- Fort St. Philip* - Fort St. Philip was built in the location of Fort San Felipe in the 18th century while the Spanish controlled Louisiana and played a role in the War of 1812. The Fort was later
- Nine Fishing Piers – The nine fishing piers provide a low-cost opportunity for recreational fishers from inside and outside the Parish. In particular, these facilities are believed to draw many visitors from the region.
- Plaquemines Parish Courthouse* - The Plaquemines Parish Courthouse is the historic seat of the Parish on the east bank. It sustained much damage from a 2002 fire and the subsequent 2005 hurricanes. It is the proposed site of a museum commemorating Hurricane Katrina.
- Plaquemines Parish Jail* - Damaged during the 2003 courthouse fire, this facility is no longer used and is need of repair.
- Woodland Plantation* & Spirits Hall – Woodland Plantation is a historic home that has been converted into a bed and breakfast. It has been featured on the plantation on the label of Southern Comfort since the 1930s. Spirits Hall is a historic church converted to a restaurant, bar, and special events facility.
- Delta National Wildlife Refuge – This natural resource haven is located at the southeast corner of the Parish where the Parish lands end. It is home to numerous species of birds and plants and is a top ecotourism destination in the Parish.
- Wetlands Discovery Center (planned) – The Wetlands Discovery Center will provide education on the delta's unique ecosystem. It is proposed for around mile marker 49 on the river.
- Welcome Center (planned) - The Parish intends to construct a tourist welcome center with exhibits, information and maps directing tourists to a variety of attractions, hotels and restaurants.
- Woodland Trails (planned) – The Woodland Trails provide access to a unique preserve of native coastal trees. This site will provide recreational opportunities for local and regional residents.
- Mardi Gras Point* - Home to the first Mardi Gras celebrated in the New World – a under marketed heritage claim unique to Plaquemines Parish.
- English Turn* - Plaquemines Parish was first settled at this location in 1709 by French

explorers.

- Fort St. Leon at English Turn* - Ruins of a historic site fort built in the 1700s. Designed by De Verges and garrisoned in 1754, but abandoned in 1792. Because of strategic value it was rebuilt by Layour in 1808 and garrisoned to defend New Orleans; Destroyed by Adm. Farragut during Civil War in advance up the river.
- Port Eads* - Port Eads is a historic marina and stopping ground for fishermen and deepwater vessels needing to refuel or rest.
- Harlem Plantation* - A historic cottage located just north of Pointe a la Hache on the east bank. The house was constructed in 1840 and reflects both French and Anglo-American influence.
- Mary Plantation* - Listed on the National Register of historic places, this site is significant due to the integrity of its architecture, dating to the early 1800s.
- Lighthouses in the southern end of Plaquemines Parish: three in Southwest Pass, one in South Pass at Port Eads (listed on the National Register of Historic Places), and one at the end of Pass A Loutre.

*Historic site

3.4 Future Economic Trends

Plaquemines Parish has a relatively diverse economy; however, its dominant industries are highly influenced by natural conditions and face many challenges due to the propensity of storms and their impact on the east and west banks of the Parish. It is important that critical measures, such as levee repairs, be taken to protect these existing industries against future storms. Recent events in the Gulf of Mexico, notably the Deepwater Horizon Disaster, also indicate the need to prepare the economy for other possible disasters associated with the oil and gas and other intense industries in and adjacent to the Parish.

Energy Diversification

Oil and gas continue to play a dominant role in the Plaquemines economy; however, there is a growing policy and resource trend in favor of renewable resources. As the U.S. economy shifts away from an oil-dependent economy, it will be important that Plaquemines Parish has adequately diversified its economy with other employment opportunities. The Parish is currently working with public and private partners to invest in renewable energy, including hydrokinetic energy and wind energy. Plaquemines Parish is also considering ways to incorporate solar energy as a component of its energy diversification efforts.

Such investments would not only help diversify the Plaquemines Parish energy base but also help prepare the area for a time when oil resources are no longer plentiful. Another factor that increases the attractiveness of renewable energy production is the potential federal mandate that a predefined percentage of local energy production come from renewable resources. Federal debates and draft legislation have pegged tentative renewable energy requirements at 15 to 20 percent of local power production.

Hydrokinetic Energy Investments

Plaquemines Parish is currently working with the private sector to place river turbines in three river bends in Plaquemines Parish: one at the 12-mile point on the west bank, a second one near Jesuit Bend on the west bank, and a third one near Myrtle Grove. These structures generally range from four to six feet wide. Energy produced from turbines would be sold to utility providers or industrial users. The Federal Energy Regulatory Commission permits such technology. The Navy is sponsoring a test unit of hydro-kinetic energy generation at the Jesuit Bend site.

Wind Energy Investments

The potential installation of wind turbines at the mouth of the Mississippi River is also being considered. The capacity of a wind source to produce energy is generally measured by Wind Power Density. Wind Power Densities are then broken into seven Wind Power Classes. According to the American Wind Energy Association, Plaquemines currently has winds in specified areas that fall into a Wind Power Class of seven, which make the Parish a particularly attractive location for wind turbine investment. Wind turbines would likely be placed at the mouth of the Mississippi where winds are the strongest.

As of December 2009, Louisiana had no wind energy projects, whereas 36 other states had at last two, and in some cases several hundred projects, suggesting that there would be high upfront costs for establishing new such enterprises in the state. One proposal is that investors would install the wind energy infrastructure into the Parish, then after a five year period, the investors would turn the infrastructure over to the Parish.

Wind Energy Systems Technology has proposed to build a 12.5 MV wind farm in Barataria Bay off the coast of Plaquemines Parish. The energy would be sent to Myrtle Gove through an underground cable. The wind farm would be supplemented with natural gas turbines when wind speeds are either not sufficient enough or too robust to supply power. A similar proposal is being considered for the southern portion of the Parish.

Solar Energy

The City of New Orleans is one of the U.S. Department of Energy's 25 Solar America Cities. This program is a cooperative agreement between DOE and each city to develop comprehensive, city-wide approaches to increasing solar energy use. Participating cities receive technical support and are eligible for special funding through the program. Plaquemines Parish can benefit and learn from the initiatives being pursued by New Orleans as a part of this program.

Naval Base Expansion

The naval base will continue to foster growth. The base is expected to expand from 5000 to 7500 civilian and military staff by 2012 and a new Commissary is under construction. See the Land Use Element for more information. This growth will undoubtedly provide some new job and business development opportunities. The anticipated impacts are presented in the

Economic Development Element of the Community Agenda.

Port Investments

The expansion of the Panama Canal will influence the activity of ports in the southeastern United States and could potentially be a boon to New Orleans area ports and the regional economy. The \$5.25 billion expansion project will double the Panama Canal's capacity and allow more traffic and longer, wider trips. The expansion had an anticipated completion date of 2014.

There are several ongoing studies and initiatives that consider the addition of or improvement to New Orleans area port facilities to leverage new opportunities resulting from the Panama Canal expansion. Plaquemines Parish Port, Harbor and Terminal District is among the stakeholders considering adding a new or expanded facilities to meet anticipated demand. A deepwater port and a public container port are among the initiatives under consideration. Strategic investment decisions regarding new port facilities will have an important influence on the area's ability to capture economic benefits. Generating additional industrial and commercial development will be important to building the Plaquemines Parish economy. See the Community Agenda for an evaluation of employment impacts.

Construction

Table 3.8 shows the value of new construction in the New Orleans Area in 2007 for select construction sectors. Public works constituted a significant percentage of new construction in Plaquemines Parish in 2007 (45 percent). In 2007 Plaquemines Parish had no industrial construction and limited commercial construction, estimated at \$14.5 million value.

Table 3.8: Value of New Construction in Greater New Orleans Area, 2007 YTD (in 000's)

Parish	Public Works	% of Total Construction	Commercial	% of Total Construction	Industrial	% of Total Construction	Total Construction (\$)
Jefferson	\$252,150	41%	\$97,073	16%	\$82	0%	\$617,996
Orleans	\$355,232	32%	\$88,506	8%	\$250	0%	\$1,102,846
Plaquemines	\$52,732	45%	\$14,480	12%	\$0	0%	\$116,119
St. Bernard	\$43,249	32%	\$1,006	1%	\$10,000	7%	\$134,745
St. Charles	\$12,414	24%	\$677	1%	\$6,000	11%	\$52,451
St. James	\$3,573	13%	\$1,326	5%	\$0	0%	\$27,983
St. John the Baptist	\$312	0%	\$4,445	0%	\$1,000,000	97%	\$1,034,771
St. Tammany	\$17,614	3%	\$125,587	22%	\$0	0%	\$561,299
Tangipahoa	\$59,458	18%	\$39,477	12%	\$0	0%	\$331,212
Washington	\$15,177	19%	\$0	0%	\$0	0%	\$79,450
TOTAL	\$811,911	20%	\$372,577	9%	\$1,016,332	25%	\$4,058,872

Source: Greater New Orleans, Inc. Does not include residential construction.

Conflicting Industry Interests

Because of the strong tie between Plaquemines' core businesses and the natural environment, the actions of one industry often conflict with the bottom line of another industry. Regulatory and investment decisions that the Parish makes in support of each industry are likely to have some other associated impact on other key industries, shaping the future.

3.5 Economic Growth Forecasts

Table 3.9 shows the anticipated industry growth for the New Orleans Regional Labor Market Area (RLMA) by major industry sector for year 2016. These projections have been developed based on numerous econometric modeling and forecast revisions and incorporate recent data from 2007 and 2008. They provide important insights into the New Orleans RLMA employment base and likely trends for the future.

The projections anticipate growth in three of Plaquemines' strongest industries: a 10.5 percent growth in Mining, an 8.2 percent growth for manufacturing, and 9.9 percent growth in transportation and warehousing. These projections also indicate a 10.5 percent drop in agriculture, fishing, forestry, and hunting, suggesting that this sector of the economy was experiencing reverse growth even prior to the Deepwater Horizon Disaster.

Greater growth is anticipated in service sectors, including Health Care and Social Assistance (47.3 percent growth), Accommodation and Food Services (41.6 percent growth), and Arts,

Entertainment and Recreation (39.8 percent growth). The educational services sector is also anticipated to see notable growth at 32.9 percent increase from 2006 levels.

Table 3.9: 2006-2016 Projected Employment by Industry New Orleans Regional Labor Market Area 1*

Industry Sectors	NAICS CODE	2006 Average Employment	2016 Projected Employment	Employment Change 2006 - 2016	Percent Change 2006 - 2016
TOTAL, All Industries		481,386	596,915	115,807	24.0
Agriculture, Fishing, Forestry, and Hunting	11	1,318	1,179	139	-10.5
Mining	21	7,091	7,838	747	10.5
Utilities	22	2,376	2,236	-140	-5.9
Construction	23	30,896	31,210	314	1.0
Manufacturing	31-33	34,628	37,480	2,852	8.2
Wholesale Trade	42	21,755	25,343	3,588	16.5
Retail Trade	44-45	51,279	60,516	9,237	18.0
Transportation and Warehousing	48-49	24,240	26,631	2,391	9.9
Information	51	6,567	8,268	1,701	25.9
Finance and Insurance	52	15,718	19,342	3,624	23.1
Real Estate and Rental and Leasing	53	7,438	9,196	1,758	23.6
Professional, Scientific, and Technical Services	54	25,666	32,829	7,163	27.9
Management of Companies and Enterprises	55	6,069	7,848	1,779	29.3
Administrative and Waste Services	56	30,479	35,567	5,088	16.7
Educational Services	61	32,803	43,582	10,779	32.9
Health Care and Social Assistance	62	48,125	70,891	22,766	47.3
Arts, Entertainment and Recreation	71	9,565	13,372	3,807	39.8
Accommodation and Food Services	72	45,048	63,795	18,747	41.6
Other Services, Except Public Administration	81	49,170	59,277	10,107	20.6
Government	90	31,155	40,515	9,360	30.0

Source: Louisiana Workforce Commission.

* Regional Labor Market Area (RLMA) 1: Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, & St. Tammany

3.6 Data Needs

There are several economic indicators that the Parish can track in upcoming years to develop a better understanding of the growth and attrition trends in the local economy going forward. Doing so will better help identify successful and unsuccessful business recruitment policies, workforce development needs, and other potential economic development needs. In 2012, the U.S. Census will release its Economic Survey. Prior to that, valuable economic data will be

released as in 2011 as a part of the 2010 Census.

Plaquemines Parish currently has a limited records base of existing businesses. Records of occupational licenses are kept at the Plaquemines Parish Sheriff's office but are not in a malleable format. Developing a more telling and detailed list of businesses located in the Parish will help with the Parish identify growth trends and possible business support needs, along with other opportunities.

List of Sources

New Orleans Regional Planning Commission. 2009 Update. Economic Development District One Comprehensive Economic Development Strategy.

Entergy Louisiana Economic Development. Accessed July 2010. Parish and Community Profiles: Plaquemines Parish Local Data. <<http://louisianasiteselection.com/SelectProfile.aspx>>

Greater New Orleans, Inc.

Greater New Orleans, Inc. *Plaquemines Parish Profile*. Accessed July 2010.

Louisiana Workforce Commission. 2009. 3rd Quarter monthly employment data.

LSU Center for Energy Studies. June 2006. *The Importance of Energy Production and Infrastructure in Plaquemines Parish*.

LSU AgCenter. *2009 Louisiana Summary of Agriculture & Natural Resources*. Accessed at <<http://www.lsuagcenter.com>>

LSU Center for Energy Studies, prepared for the Louisiana Office of Mineral Resources. *Analysis of the Economic Impact Associated with Oil and Gas Activity on State Leases*.

LSU Center for Energy Studies. *The Benefits of Continued and Expanded Investments in the Port of Venice*.

Plaquemines Parish Government. 2010. *Plaquemines Parish Gateway to America Report*.

Travel Industry Association. 2006. The Economic Impact of Travel on Louisiana Parishes.

U.S. Census Bureau, Census 2000.