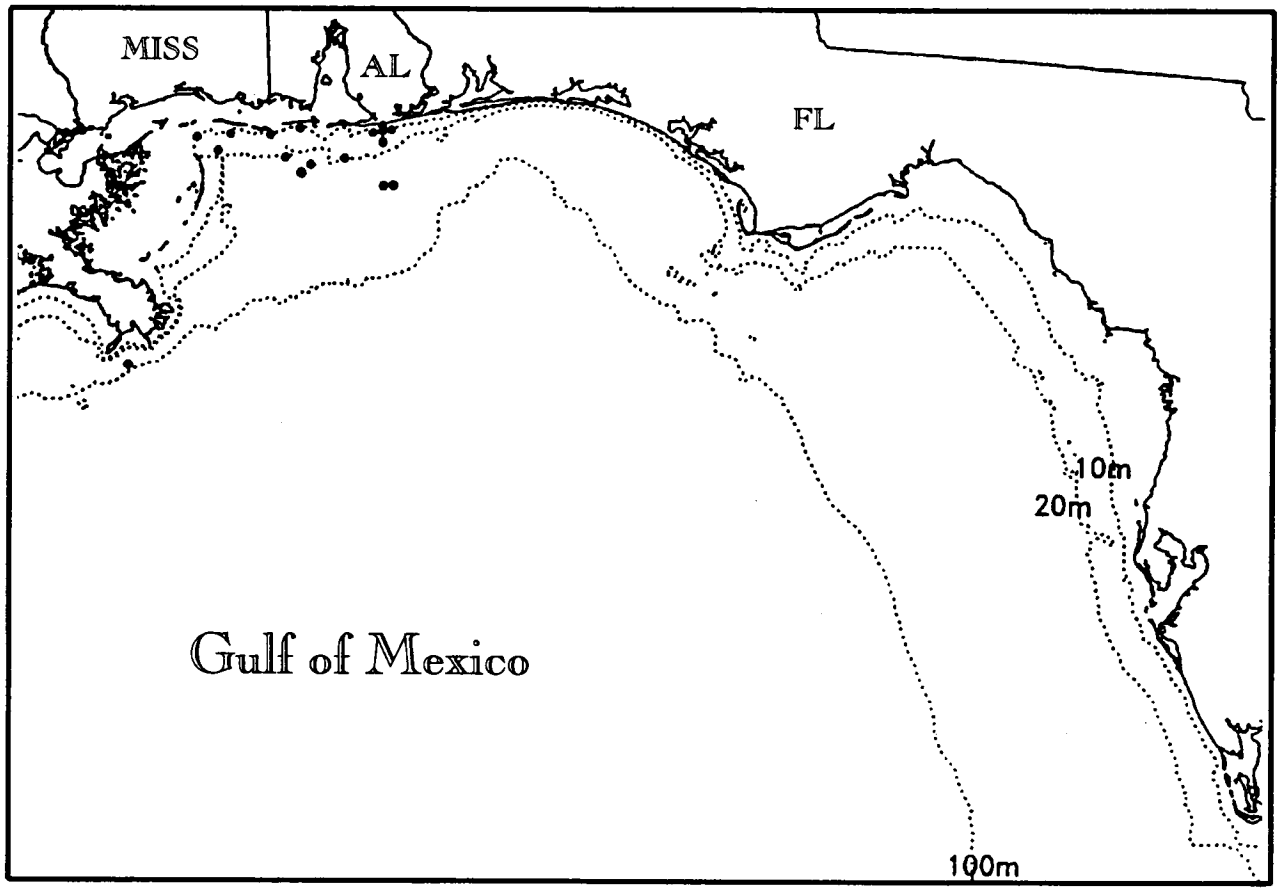
OCS Study
MMS 98-0046

Social and Economic Consequences of Onshore OCS-Related Activities in Coastal Alabama: Final Baseline Report

Economic Baseline of the Alabama Coastal Region



MMS U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

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Prepared under MMS Contract
1435-01-97-CT-30829
by
Foster Associates, Inc.
120 Montgomery Street, Suite 1776
San Francisco, California 94104

Published by

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

New Orleans
April 1999

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Citation

Suggested citation:

Kelley, J.Q. and W.W. Wade. 1999. Social and Economic Consequences of Onshore OCS-Related Activities in Coastal Alabama: Final Baseline Report, Economic Baseline of the Alabama Coastal Region. OCS Study MMS 98-0046. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, La. 102 pp.

Abstract

The coastal region of Alabama supports several natural resource-based industries, each of which thrives given the existence of other, competing industries. This report documents existing economic conditions in the coastal Alabama region and highlights industry sectors important to the region's economy. This report discusses the interplay among different users of the region's natural resources, notably the tourism, fishing and offshore natural gas industries. Data are presented that show how the tourism and natural gas industries contribute to the economic growth of coastal Alabama and the State of Alabama. The recent conflict between the offshore gas and tourism industries over the use of coastal Alabama resources is discussed. Coexistence and conflict issues between the offshore gas industry and the recreational and commercial fishing industries are presented. Several case studies highlight local area experience relative to economic growth, industry coexistence and the importance of the coastal region's natural resources to the local and state economies.

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List of Acronyms and Abbreviations

The following acronyms may be used throughout this Baseline Report:

ASD	Alabama State Docks
ADDSCO	Alabama Dry Dock and Shipbuilding Corporation
DIPBB	Dauphin Island Park and Beach Board
MRFSS	Marine Recreational Fishing Statistical Survey
MSA	Metropolitan Statistical Area
MOEPSI	Mobil Offshore Exploration and Producing Southeast
MCVC	Mobile Convention and Visitors Corporation
NAPA	National Association of Port Authorities
NMFS	National Marine Fisheries Service
O&M	Operations and Maintenance
USACE	US Army Corps of Engineers

Economic Baseline of the Alabama Coastal Region

1.0 Introduction

In 1979, two defining events occurred in Mobile Bay:

1. Hurricane Frederic leveled Gulf Shores in September and destroyed the bridge to Dauphin Island along with the lone vacation resort on the island.

2. Mobil Offshore Exploration and Producing Southeast, Inc. discovered natural gas in November about a mile northeast of Dauphin Island at a depth of 21,100 feet in the Norphlet Formation.

The bridge to Dauphin Island took three years to rebuild. During that time, Gulf Shores initiated the building program that has converted the desolate Gulf Shores beach to 10,000 high-rise hotel rooms and condo units that today comprise Gulf Shores and Orange Beach.

Coinciding with the development of Baldwin County's Gulf Coast in the wake of Hurricane Frederic, the State of Alabama conducted the first of two major lease sales that brought in nearly $500 million in bonus payments and started the coastal Alabama natural gas play. In 1982, the Federal government conducted a lease sale of offshore Alabama tracts that netted $220 million in bonus payments. Today a very large natural gas industry, producing over one BCFD, adjoins Mobile and Baldwin counties. Dauphin Island remains a sparsely populated island whose residents live with moderate growth, small-scale tourism and near the natural gas producing platforms.

The coastal region of Alabama supports several natural resource-based industries, each of which thrives given the existence of other, competing industries. The objective of this report is to document existing economic conditions in coastal Alabama and highlight industries important to the region's economy. This report discusses the interplay among industries that use the region's natural resources. Questions addressed include:

- How have the tourism and natural gas industries contributed to the economic growth of coastal Alabama and the State of Alabama?

- How will continued expansion of the coastal Alabama tourism and natural gas industries share the coastal resources and add to the continued health of the region and State of Alabama economies?

- How does changing economic power between tourism and natural gas development explain the recent conflict over use of coastal Baldwin County resources?

To illuminate these themes in context, several case studies highlight regional experiences relative to economic growth, industry coexistence and the importance of the coastal region's natural resources to the local and state economies. Selected case studies include:

- Gulf Coast and Dauphin Island Tourism Economy - Coexistence with Natural Gas
- Recreational Angler User Coexistence with Natural Gas Development
- Relationship of Commercial Fishing Industry with Natural Gas Development
- Effects of Natural Gas Development on the Town of Dauphin Island
- Comparison of Tourism and Natural Gas Tax Revenues to Local Governments and State of Alabama

2.0 Description of the Coastal Region

The coastal region of Alabama incorporates two counties: Mobile and Baldwin. These two counties make up the Mobile Metropolitan Statistical Area (MSA). The City of Mobile is the largest population center within the Mobile MSA, situated on Mobile Bay, 50 km (31 mi) north of the Gulf of Mexico, in Mobile County.

2.1 Economic and Demographic Characteristics of Alabama Coastal Region

The following subsections summarize general demographic and economic characteristics of Mobile and Baldwin counties, including population, labor force, income and industry presence. Figure 1.1 compares employment growth in the Mobile MSA to total state growth. The employment data reflect Mobile and Baldwin counties' growth in tourism since Hurricane Frederic and overall health in all sectors. Employment in the two counties has grown nearly 50 percent since 1979, with a six percent increase in 1996. During this same period, State of Alabama employment grew about 25 percent. Figure 1.2 shows the growth in employment of selected industry sectors for the Mobile MSA. The data show that the major industry sectors in coastal Alabama are doing well. Increased growth in employment for the retail trade and services sectors reflects the significance of the region's tourism industry. The gas industry has been a small employer of local people because of the specialized skills required. This is changing as operating personnel relocate to the region.

2.1.1 Mobile County

The Mobile Bay region has a strong and diverse economic base that includes the manufacturing, distribution and transportation, professional services, government and military, and retail and wholesale trade sectors. Mobile County is a leading industrial center with one of the strongest industrial bases in the Southeast. Major industries include paper

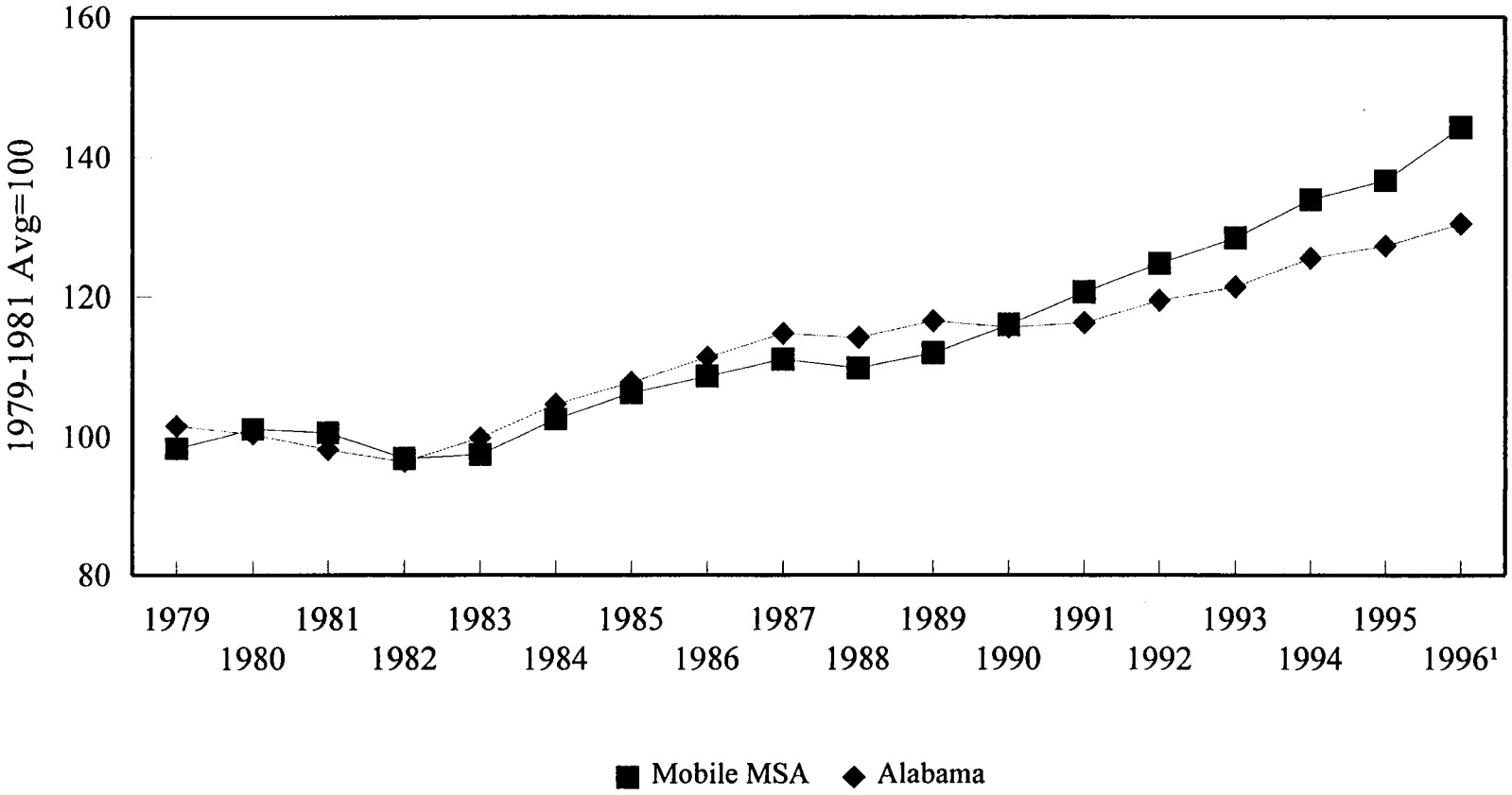

Figure 1.1. Alabama and Mobile MSA Employment Index.

[1] 1996 data are preliminary.
Source: Alabama Dept. of Industrial Relations, 1996.

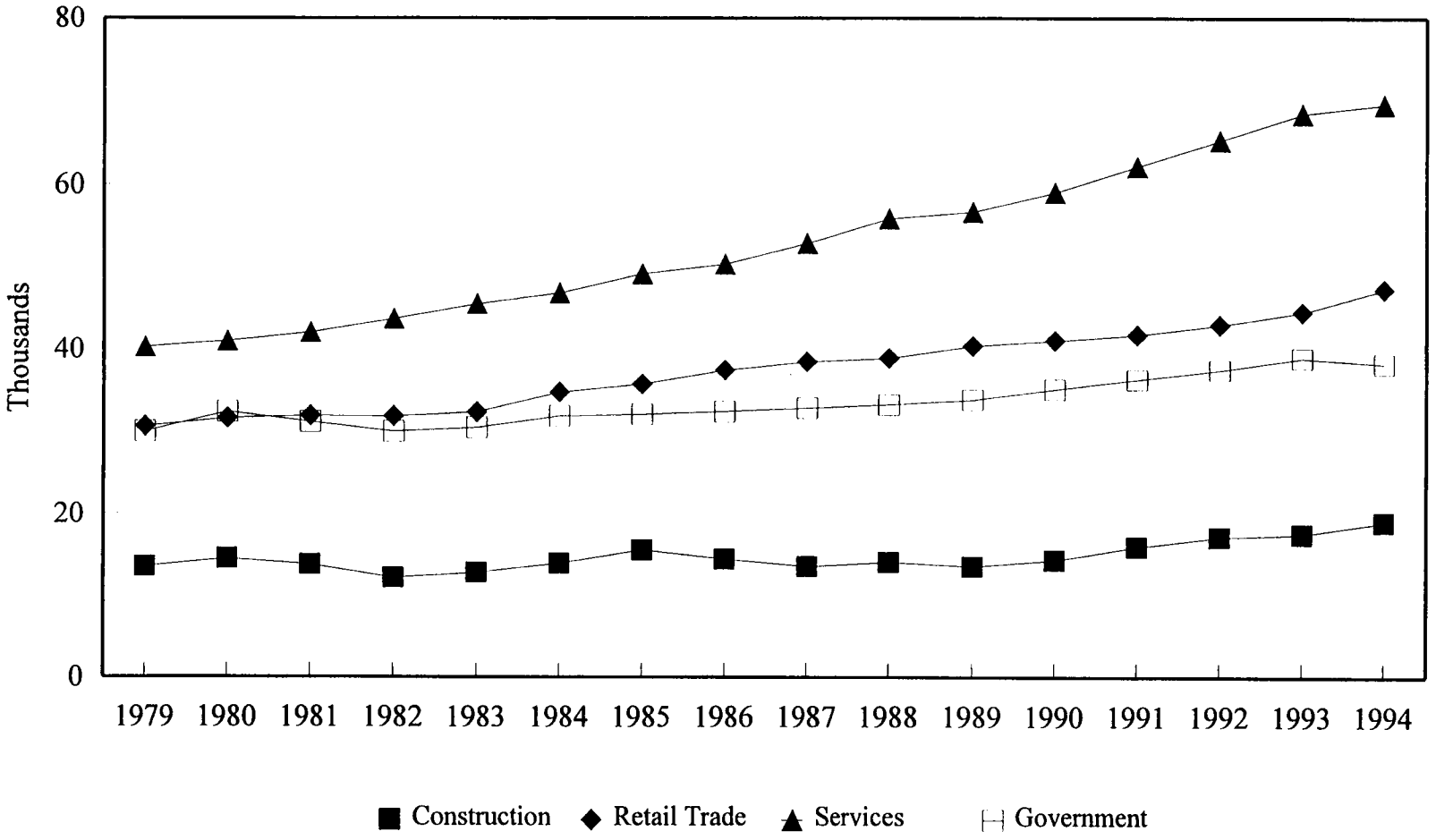

Figure 1.2. Mobile MSA Employment for Selected Industry Sectors.

Source: US DOC, BEA, REIS, 1996.

products, ship building, aviation, chemicals, lumber products, textiles, seafood processing, and oil and gas production (Mobile Area Chamber of Commerce, 1996b).

Table 1.1 presents historical population data for Mobile and Baldwin Counties since 1979. Between 1979 and 1995, population increased in Mobile County by almost ten percent (to a total of 397,400 residents). The largest percentage increase occurred between 1985 and 1986, when population in the county grew by 2.6 percent. Overall, Mobile County population growth since 1979 kept pace with the state's population growth.

In 1995, Mobile County's total labor force included over 194,900 people, an increase of about 24 percent over 1980 levels. Data from the Alabama Department of Industrial Relations show that the annual unemployment rate in Mobile County consistently increased in the early part of the 1980s, rising to almost 16 percent in 1983. Table 1.2 shows that the proportion of the labor force that was unemployed began to decrease after 1983. Variable rates of decline were experienced in subsequent years, and a slight increase in unemployment was seen during 1986. Preliminary figures for 1996 show unemployment at 5.1 percent.

Table 1.3 shows data on total personal income for Mobile County from 1979 to 1994. In 1979, residents of Mobile County earned almost $2.6 billion. Total personal income grew at an average annual rate of about seven percent over the 15-year period and totalled about $6.6 billion in 1994. Shown in real dollars, personal income grew by 1.5 percent annually.

As shown on Table 1.4, annual per capita income for residents of Mobile County has grown steadily over the past decade to $16,750 in 1994. Mobile County personal income has grown at a slower rate than Baldwin County and the United States as a whole. In recent years, Mobile County residents have earned slightly less than those living in Baldwin County, with the largest income gap reported in 1991. Baldwin County's real per capita income over the period grew at nearly twice the Mobile County annual rate.

2.1.2 Baldwin County

New industry has located to Baldwin County in recent years and existing businesses have expanded. Baldwin County capitalizes on its Gulf Coast location with a strong and growing tourist economy. The growth in supporting industries such as retail trade and real estate has boomed in the last decade. Other industries that make up Baldwin County's economic base include textile and apparel products manufacturing, lumber and wood products, and forestry and fishery products. Emerging professional service sectors include finance and insurance (South Alabama Regional Planning Commission, 1993).

Baldwin County's population has grown considerably in recent years. Table 1.1 shows that population in Baldwin County between 1979 and 1995 increased by almost 57 percent (to a total of 120,200 residents). The most significant population growth occurred from 1993 to 1994, when population increased by more than four percent. The significant change in Baldwin County's population since 1979 is due largely to the attractiveness of the coastal region. Notably, the cities of Gulf Shores and Orange Beach in southern Baldwin County have, in recent years, become popular recreation areas and tourist destinations due to the

Table 1.1
Population of Alabama Coastal Counties, 1979 - 1995

	Mobile County		Baldwin County		Alabama Total	
	Population	% Change	Population	% Change	Population	% Change
1979	361,700	--	76,600	--	3,869,400	--
1980	365,300	1.00	79,000	3.13	3,902,500	0.86
1981	364,100	-0.33	80,300	1.65	3,918,400	0.41
1982	368,800	1.29	83,300	3.74	3,925,300	0.18
1983	368,100	-0.19	83,900	0.72	3,934,300	0.23
1984	366,600	-0.41	86,500	3.10	3,952,200	0.45
1985	366,400	-0.05	89,200	3.12	3,973,000	0.53
1986	375,900	2.59	91,700	2.80	3,992,100	0.48
1987	377,200	0.35	93,600	2.07	4,015,800	0.59
1988	375,600	-0.42	95,200	1.71	4,024,400	0.21
1989	377,000	0.37	96,900	1.79	4,030,200	0.14
1990	379,100	0.56	98,900	2.06	4,048,300	0.45
1991	383,100	1.06	102,200	3.34	4,086,900	0.95
1992	388,200	1.33	106,200	3.91	4,131,200	1.08
1993	394,100	1.52	110,800	4.33	4,180,700	1.20
1994	396,500	0.61	115,700	4.42	4,218,700	0.91
1995	397,400	0.23	120,200	3.89	4,253,000	0.81
1979-1995		9.87		56.92		9.91

Source: USDOC, BEA/REIS, 1996; South Alabama Regional Planning Commission, 1996.

Table 1.2
Alabama Coastal Counties' Labor Force

	Mobile County			Baldwin County		
	County Labor Force	Employment	Unemployment Rate (%)	County Labor Force	Employment	Unemployment Rate (%)
1979 [1]	153,540	140,980	8.2	31,710	29,560	6.8
1980	156,760	145,160	7.4	32,530	30,290	6.9
1981	159,710	144,450	9.6	32,720	30,150	7.9
1982	160,820	138,500	13.9	33,560	29,540	12.0
1983	164,950	138,870	15.8	34,310	30,130	12.2
1984	166,450	145,530	12.6	36,260	32,380	10.7
1985	166,280	150,540	9.5	37,070	34,140	7.9
1986	171,950	152,640	11.2	39,580	36,160	8.6
1987	172,860	156,050	9.7	39,970	36,940	7.6
1988	169,410	153,890	9.2	40,170	36,970	8.0
1989	172,100	156,880	8.8	40,400	37,690	6.7
1990	169,360	157,500	7.0	46,360	43,910	5.3
1991	175,080	162,880	7.0	49,100	46,420	5.5
1992	182,060	167,380	8.1	52,140	48,930	6.2
1993	187,340	171,190	8.6	54,880	51,440	6.3
1994	190,420	176,890	7.1	57,880	55,150	4.7
1995	194,950	180,620	7.4	59,390	56,310	5.2

[1] Not comparable to other years due to changes in methodology.

Source: AL Department of Industrial Relations, 1996.

Table 1.3
Alabama Coastal Counties' Personal Income
(Millions)

	Mobile County		Baldwin County	
	Current $	1979$ [1]	Current $	1979$ [1]
1979	$2,591	$2,591	$537	$537
1980	$2,927	$2,579	$606	$534
1981	$3,262	$2,605	$710	$567
1982	$3,398	$2,556	$746	$561
1983	$3,508	$2,557	$824	$601
1984	$3,747	$2,618	$915	$639
1985	$3,979	$2,685	$1,011	$682
1986	$4,219	$2,795	$1,093	$724
1987	$4,380	$2,799	$1,164	$744
1988	$4,601	$2,823	$1,251	$768
1989	$4,915	$2,877	$1,373	$804
1990	$5,260	$2,922	$1,498	$832
1991	$5,642	$3,007	$1,650	$880
1992	$6,044	$3,127	$1,801	$932
1993	$6,338	$3,184	$1,974	$992
1994	$6,641	$3,253	$2,142	$1,049
Growth Rate 1979-1994	6.48%	1.53%	9.66%	4.57%

[1] Based on Consumer Price Index for all items.

Source: USDOC, BEA/REIS, 1996; US DOC, Bureau of Census, 1996b.

Table 1.4
Alabama Coastal Counties' Per Capita Personal Income

	Mobile County		Baldwin County		United States	
	Current $	1979 $ [1]	Current $	1979 $ [1]	Current $	1979 $ [1]
1979	$7,162	$7,162	$7,010	$7,010	$9,105	$9,105
1980	$8,012	$7,059	$7,669	$6,757	$10,307	$9,081
1981	$8,960	$7,156	$8,844	$7,064	$11,132	$8,891
1982	$9,214	$6,932	$8,953	$6,736	$11,707	$8,808
1983	$9,531	$6,947	$9,817	$7,156	$12,340	$8,995
1984	$10,221	$7,142	$10,582	$7,394	$13,560	$9,475
1985	$10,859	$7,327	$11,335	$7,648	$14,421	$9,730
1986	$11,224	$7,435	$11,920	$7,896	$15,155	$10,039
1987	$11,611	$7,420	$12,429	$7,943	$15,966	$10,204
1988	$12,250	$7,518	$13,139	$8,063	$17,028	$10,450
1989	$13,036	$7,632	$14,175	$8,299	$18,147	$10,625
1990	$13,873	$7,706	$15,144	$8,412	$19,170	$10,648
1991	$14,726	$7,850	$16,150	$8,609	$19,663	$10,481
1992	$15,569	$8,056	$16,954	$8,773	$20,609	$10,664
1993	$16,084	$8,081	$17,811	$8,949	$21,224	$10,663
1994	$16,751	$8,206	$18,517	$9,071	$22,059	$10,806
Growth Rate 1979-1994	5.83%	0.91%	6.69%	1.73%	6.08%	1.15%

[1] Based on Consumer Price Index for all items.

Source: USDOC, BEA/REIS, 1996; USDOC, Bureau of Census, 1996b.

availability of beach-front property, fine sand beaches and abundant recreational opportunities. Baldwin County has 32 miles of Gulf beaches for swimming, fishing and boating. Growth in the tourist trade during this time contributed significantly to the county's population boom.

Baldwin County's labor force grew by over 80 percent from 1980 to 1995, as shown in Table 1.2. This growth reflects significant tourism-driven expansion of the service and trade sectors in the county during this period. Similar to Mobile County, the proportion of the labor force that was unemployed increased steadily from 1979 to 1983, reaching a high of 12.2 percent. Unemployment levels in Baldwin County never reached the levels experienced in Mobile County. In subsequent years, the number of unemployed persons decreased overall, although the rate increased in 1986 and 1988. In 1996, unemployment in Baldwin County was 4.3 percent (preliminary data), lower than Mobile County.

Table 1.3 shows data on total personal income for Baldwin County from 1979 to 1994. Baldwin County's average annual rate of growth in personal income was more than 50 percent higher than for Mobile County. Personal income in current dollars increased by more than 16 percent annually, and totalled over $2.1 billion in 1994. Shown in real dollars annual growth was 4.6 percent, three times the Mobile County growth rate.

Table 1.4 shows that annual per capita income for residents of Baldwin County has steadily increased over the past decade, from $7,000 to $18,500 (current dollars). Baldwin County per capita income is less than the U.S. average but in recent years, residents of Baldwin County have earned slightly more than those living in Mobile County, with the largest income gap reported in 1991. In that year, people living in Baldwin County earned about five percent more in annual income.

3.0 Resource Industries of the Coastal Region

This report focusses on four primary industries which contribute to the economic vitality of the Alabama coastal region. The coastline, from east to west, includes Orange Beach, Gulf Shores, Dauphin Island and Bayou LaBatre, and is shown on Figure 3.1. These industries include tourism, marine recreation, commercial fishing and offshore natural gas. Each industry depends on the coastal resources for continued economic growth. In the following subsections each industry sector is briefly discussed in relation to the Alabama coastal region. Sections 4 through 8 discuss each industry in greater detail and present data which reflect the importance of these industries to the coastal region's economy.

3.1 Tourism

The tourism industry has experienced significant growth in coastal Alabama during the past decade. Coastal Alabama contains beautiful sand beaches, abundant wildlife, and a multitude of marine and freshwater recreation opportunities. Alabama's location on the Gulf of Mexico also provides access to nearby recreation areas such as those in Florida and Mississippi. Tourists and residents alike travel to the coastal areas of Mobile and Baldwin

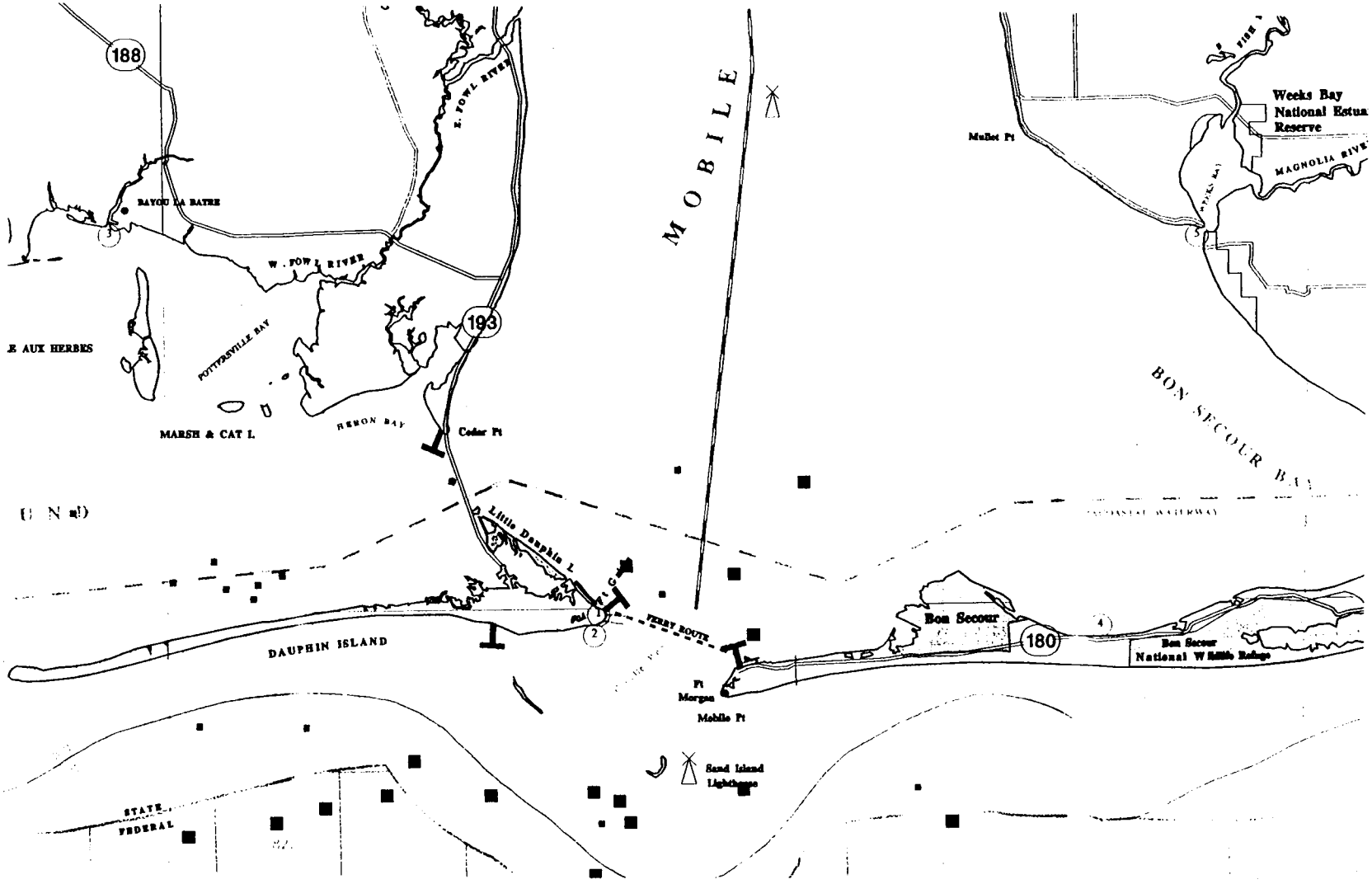

Figure 3.1. The Alabama Coastal Region.

Source: Alabama Dept. of Conservation, 1996d.

Counties to enjoy the natural surroundings, to explore historic sites such as those on Dauphin Island and the Fort Morgan peninsula, and to take advantage of vacation spots on Baldwin County's eastern shore, notably Point Clear, and in the Gulf Coast communities of Gulf Shores and Orange Beach.

A growing number of tourists and residents are attracted to Baldwin County's coastline, characterized by "sugar-fine, snow-white sand" and the availability of sportfishing and other marine recreation opportunities. The popularity of Alabama's beaches and Gulf Coast environment has spawned an increased number of vacation-lodging establishments, condominium complexes, and associated tourist trade.

The City of Mobile boasts fine recreational opportunities as well, although they are not geared entirely toward Gulf Coast resources. Mobile is home to several historic landmarks, such as the world class Bellingrath Gardens, and maintains a reputation for hospitality as well for being the "birthplace of Mardi Gras." In recent years the City of Mobile has invested in a number of redevelopment projects, such as a new downtown convention center, designed to lure business, industry and tourists to the region.

The coastal Alabama tourism industry is further discussed in Section 4.0.

3.2 Marine Recreation

Mobile Bay and the Alabama Gulf Coast provide abundant opportunities for various forms of marine recreation, notably boating and fishing. The waters offshore Alabama are home to several popular sportfishing species and a growing charter fishing fleet. Access to the water resources is available all around the Mobile Bay region via numerous public and private boat launching areas and fishing piers. Popularity of game fishing in the Gulf of Mexico has increased in recent years as well as the stock of native game fish in the local waters. Saltwater sport fishermen in the region are increasingly active in support of marine conservation measures ensuring designated game fish habitat. Due to the presence of commercial fishing in the region, these conservation measures protect important game fish from commercial harvest. Other conservation and enhancement measures supported in the region include the establishment of artificial reefs, fish restocking programs and marine habitat restoration.

The coastal Alabama marine recreation industry is further discussed in Section 5.0.

3.3 Commercial Fishing

The Alabama Gulf Coast has for years supported a significant commercial fishing industry. Alabama is perhaps best known for its bountiful shrimp harvests, which by far represent the greatest percentage of commercial fish landings in Alabama. The magnitude of Alabama's commercial fishing fleet has fluctuated over time, largely due to cyclical conditions and industry corrections, but its presence in Alabama significantly contributes to the economic vitality of the coastal region. The capital of Alabama's commercial fishing industry is Bayou LaBatre, located in south Mobile County. Bayou LaBatre, offering a channel into the Gulf

of Mexico, houses the majority of the industry's fishing fleet, as well as numerous seafood processing facilities.

The coastal Alabama commercial fishing industry is further discussed in Section 6.0.

3.4 Offshore Natural Gas

The discovery of large quantities of natural gas in Alabama's offshore waters in 1979 led to enthusiastic development of the resource which initiated need for an offshore support industry based out of Mobile County. To date, the natural gas industry has completed over 50 producing wells in state and federal Alabama waters. These wells produce over 1 BCFD and are located in Mobile Bay, just south of Mobile Bay in federal (OCS) waters and in the Mississippi Sound northwest of Dauphin Island. The State of Alabama and coastal counties Mobile and Baldwin have benefitted from increasing offshore natural gas development. Hundreds of millions of dollars have been collected by the State of Alabama in bonus payments, royalties and severance taxes related to offshore natural gas leasing, development and production. The coastal counties receive a percentage of the tax collections which benefit county and local governments.

The coastal Alabama offshore natural gas industry is further discussed in Section 7.0.

4.0 Tourism

The coastal Alabama region has developed into a leading vacation destination spot. The region has capitalized on the growing popularity of Alabama's beaches and marine recreation opportunities and has directly benefitted from this development in terms of jobs created and tax revenues collected. In 1995, tourists across Alabama spent $4.6 billion, an estimated 7.4 percent increase over the previous year and a 60 percent increase since 1989. Tourism expenditures in Alabama's Gulf Coast region amounted to about 28 percent of this, totalling $1.3 billion (Davidson-Peterson Associates, 1995a).

This section describes the tourism and recreation resources located in Mobile and Baldwin counties, emphasizing the region's dependance on its natural resources. The coastal communities that largely support the tourism industry are highlighted. Tourism in the region has significantly contributed to the region's economic base, funneling millions of dollars in tax revenues to the state, coastal counties and local municipalities. Data are presented to reflect this economic stimulus and the impact these revenues have had on the coastal communities. At the end of the section a case study is presented which discusses the coexistence between the tourism industry located along the coast and the presence of the offshore gas industry.

4.1 Mobile County Cultural, Historic and Recreation Resources

Many attractions draw visitors to Mobile County in contrast to the resort beaches which are the economic mainstay of neighboring Baldwin County to the east. A combination of

history, architecture, weather, established events, natural features and its waters brings travelers to Mobile County.

4.1.1 City of Mobile

Mobile is situated at the head of 30-mile long Mobile Bay, first named the Bay of the Holy Spirit by explorer Alonso Alverez de Pineda, a companion voyager of Columbus. The area was settled after 1699 when the LeMoyne brothers, Iberville, and Bienville, landed on Dauphin Island. Mobile, a colonial city established in 1711 during the reign of Louis XIV, became the capital of the French empire along the Gulf of Mexico. Mobile is called the "City of Six Flags" because in the past it was ruled by several colonial powers, including England, France and Spain.

Today only Fort Conde, reconstructed during America's Bicentennial year by the City of Mobile, gives tourists a view of colonial era structures. In 1996 more than 68,000 people visited the Fort Conte Visitor Information Center which serves as Mobile's downtown welcome center (Fort Conde, 1996.) The city's collection of other historic Gulf Coast architecture, ante-bellum homes and museums draws about 100,000 visitors each spring for pilgrimages, according to sponsor Historic Mobile Home tours.

The Convention and Visitor Department of the Mobile Area Chamber of Commerce began in the mid-1980s to strategically plan to attract conventions to Mobile. Meeting planners from around the country are invited to visit the city during special events such as Mardi Gras, the Azalea Festival and the Senior Bowl. Azaleas are Mobile's symbol of hospitality, and the Azalea Festival kicks off the early spring touring season in March when visitors can follow a 37-mile pink line in the streets bordered by blooms. The three-month-long festival began in 1929. The Senior Bowl began in 1951 and is the major post-season football game featuring outstanding college seniors from across the nation.

By publicizing events, the chamber's tourism department tried to promote Mobile as a destination rather than a stopping point for visitors traveling through to other points. The Mobile Convention and Visitors Corporation (MCVC), which now oversees tourism, focuses on the convention business also. MCVC reports that the economic impact of convention delegates to the city from October 1995 and September 1996 was over $180 million. This figure is based on visits by 250,000 conventioneers during that period.

Primary destination spots in Mobile County include historic Bellingrath Gardens and Home, the USS Alabama/Battleship Park and Greyhound Park. Local industry analysts target these three destinations as the main indicators of tourist activity in the county (University of South Alabama, 1996a). Table 4.1 shows historic attendance at these attractions since 1982.

Bellingrath Gardens and Home, located a few miles southwest of the Theodore Industrial Complex in southern Mobile County, is a beautifully landscaped estate that has been placed on the National Register of Historic Places. Known as the "Charm Spot of the Deep South," the gardens bloom throughout the year and have been open to the public since 1932. Attendance at Bellingrath Gardens in 1982 was 163,271, down to 158,285 in 1995 with a

Table 4.1
Annual Attendance at Mobile County Tourist Attractions
(1982-1995)

	Bellingrath Gardens	USS Alabama	Mobile Greyhound Park
1982	163,271	276,766	645,525
1983	155,708	272,262	728,305
1984	184,836	294,197	749,704
1985	166,072	284,803	802,657
1986	189,890	304,350	838,046
1987	195,810	315,792	863,764
1988	186,713	322,999	745,863
1989	178,589	330,955	692,330
1990	185,016	328,323	648,031
1991	169,453	323,601	637,729
1992	201,990	314,948	591,926
1993	148,186	298,568	466,826
1994	172,173	270,042	409,296
1995	158,285	265,886	360,818

Source: University of South Alabama 1996a.

record 201,990 visitors in 1992. The fluctuation in attendance at this attraction, in part, can be explained by the recent opening of gambling attractions in neighboring Mississippi. Visitation also depends on the number of travelers passing through the area on the way to Florida beaches.

The historic USS Alabama, a 35,000-ton decommissioned battleship, is permanently moored in Mobile Bay. This ship saw action in every major naval conflict during World War II and now hosts tours and special demonstrations, drawing some 300,000 visitors annually. Visitation has remained fairly constant during the past decade, fluctuating from 276,766 in 1982 to 265,886 in 1995 with a high of 330,955 visitors in 1989. The gradual decrease is attributed to the aging of the WWII veterans who used to visit, according to battleship staff who reported that most visits now are often on impulse and based on traffic on adjacent Interstate 10 (USS Alabama, 1996).

Mobile Greyhound Park, located in Theodore, a suburb of Mobile, attracts visitors and residents from nearby states to wager their dollars on daily dog races. Visitation to the Greyhound Park reached 870,000 people in the mid-1980s but declined to about 600,000 visitors in 1992. In 1995 the dog track had an attendance of only 360,818. Local economic analysts attribute this decline to competition from riverboat casinos in nearby Mississippi which opened in 1992 and from the Florida state lottery (University of South Alabama, 1993b). Gambling is illegal in Alabama where several bills to legalize gambling have died in the state legislature (MCVC, 1996).

Mobile's mild climate also promotes outdoor recreation such as fishing and golfing, which are promoted as major visitor attractions in coastal Alabama. Just west of Mobile is Magnolia Grove Golf Course, built in the early 1990s. One of seven courses along Alabama's Robert Trent Jones Golf Trail running across the state, the facility features 54 holes in addition to two championship 18-hole courses and a 18-hole short course. Other public greens include 18-hole courses such as Azalea City Golf Course, Spring Hill College Golf Course and the Linksman Club. Bay Oaks Golf Club in Bayou LaBatre south of Mobile features an 18-hole course as does the Isle Dauphin Golf Club on the beach at Dauphin Island within sight of several gas production platforms.

4.1.2 Dauphin Island

Dauphin Island is a barrier island 14 miles long and one mile wide and is located approximately three miles from the mainland, 40 miles south of Mobile. Dauphin Island has two main roads, one which runs east to west for seven miles, the other connecting the island to the mainland bridge. The remaining seven miles of the island are uninhabited. Dauphin Island is known for its rustic environment and relaxing beaches. A few thousand residents permanently live on Dauphin Island and seasonal residents and vacationers increase this total during the warm summer months. The campground on Dauphin Island has become a winter destination for "snowbirds" who contribute to the island's tourism business. Dauphin Island has limited recreational opportunities, largely centered around its waters. The primary

attractions include its beaches, historic Fort Gaines, the Dauphin Island Sea Lab and Estuarium, the Audubon Bird Sanctuary, and facilities for picnicking, camping and boating.

Fort Gaines, a Civil War fort on the east end of the island, is owned and operated by the Dauphin Island Park and Beach Board (DIPBB). The fort, established in 1821, saw action in the famous Battle of Mobile Bay. Fort Gaines is one of the main tourist attractions on the island and in 1996 had attendance of almost 47,000 people. This reflects a 20 percent increase in visitation from 1993 levels.

The Dauphin Island Sea Lab is located on 36 acres on the eastern end of Dauphin Island. Facilities include a 27-building complex, two research vessels, laboratories and a specialized marine science library. In 1971 the Alabama legislature created a non-profit public corporation known as the Marine Environmental Sciences Consortium. This consortium owns and operates the Dauphin Island Sea Lab, the center for marine research, conservation and educational programs in the State of Alabama. The consortium is governed by a Board of Directors consisting of the presidents of 21 colleges and universities within the State of Alabama. The Sea Lab is the center for marine education and research and offers programs ranging from school day-trips to graduate education at the masters and doctorate levels.

Land on Dauphin Island is owned either by private parties individually, by the Property Owners Association, which holds some private land for communal use of property owners (such as the golf club), or by the DIPBB, which holds title to lands designated for public access, such as beaches, Fort Gaines, the Audubon Bird Sanctuary, selected public picnic areas, campground, and boat launches, the fishing pier, and the ferry landing and Bar Pilots dock. The areas owned by the DIPBB are located primarily on the eastern end of the island. Public access to the island was an important feature behind the financial supporters of the original 1953 bridge project. The western end of the island is largely owned by private parties and remains undeveloped beyond the end of the main road, which traverses only half the island.

In stark contrast to Gulf Shores, virtually all buildings, except the Dauphin Island Sea Lab, are less than two stories, mostly one-story structures on stilts to achieve the building restriction of 8-9 feet above mean sea level. Virtually all residential houses are detached single family dwellings. Much of this housing stands unused most of the time, being owned by local area (Mobile) residents and used for vacation properties, sometimes rented to vacationers. The lone vacation resort that existed prior to Hurricane Frederic was never rebuilt. Dauphin Island today offers a few small-scale motels and rental properties. According to current housing information, accommodations on the island include eight establishments with about 100 units available for rent (Dauphin Island Development Network, 1996). The few restaurants and bars located on Dauphin Island cater to only a few hundred customers at any one time.

The two-lane road that runs from the eastern end to the middle of the island is not built to accommodate heavy summer traffic. Consequently, the proposed development of two miles of new properties beyond this is a concern to town officials. The Alabama Forever Wild Land Trust reportedly wants to buy the west end and preserve it from development.

4.2 Baldwin County Cultural, Historic and Recreation Resources

Baldwin County, Alabama, located along Alabama's Gulf Coast, has a land area of almost 1,600 square miles. Baldwin County capitalizes on its Gulf Coast location with a strong and growing tourist economy. Communities along Baldwin County's Gulf Coast have become popular recreation areas and tourist destinations due to the availability of beach-front property, pristine beaches and abundant recreational opportunities.

The Gulf Coast is Baldwin County's dominant feature and supports the county's most lucrative industry — tourism. Baldwin County's Gulf Coast boasts 32 miles of coastline, catering to beach-goers, anglers and other recreation enthusiasts. The largest communities along Baldwin County's Gulf Coast are those of Gulf Shores and Orange Beach. The Fort Morgan peninsula, located on the western tip of the coastline, is sparsely populated. Mainly vacation properties and Fort Morgan are on the western tip.

4.2.1 Eastern Shore

The oldest resort area in Baldwin County is Point Clear, located on the eastern shore of Mobile Bay near Fairhope. A place where wealthy Mobilians have always summered, the bayside resort is centered around the Marriott's four-star Grand Hotel. With 450 employees, the hotel, known for its excellent service, is the fourth largest employer in the Eastern Shore area (Eastern Shore Chamber of Commerce, 1996).

Point Clear, featuring bayfront summer mansions and moss-covered oaks, stands in strong contrast to sandy beaches and new condominiums on the Gulf Coast. Gulf Shores, one of two towns on the narrow 32-mile-long Baldwin County coastline, didn't have a single condo prior to Hurricane Frederic in 1979. Heavy development began following the storm which brought national attention to the area.

4.2.2 Gulf Shores and Fort Morgan Peninsula

The City of Gulf Shores and environs provide many recreational opportunities for enjoyment of the coastal environment. Located on or near the coast are several parks that provide access to miles of hiking trails, nature preserves, wildlife exhibits and other recreational facilities. These parks include the Bon Secour National Wildlife Refuge, Gulf State Park and other City of Gulf Shores parks. Other recreational resources include boat launch areas and marinas, golf courses, dining and shopping.

Visitor accommodations in Gulf Shores consist of hotels, motels and condominiums. There currently are 1,252 hotel and motel rooms in Gulf Shores and as of April 1996, 80 more were under construction. Condominiums greatly outnumber hotels and motels, with 2,894 listed as existing, new or converted. An additional 121 are currently pre-sold or under construction. (GCCVB, 1996b)

The Fort Morgan peninsula offers historic and cultural resources. Fort Morgan was constructed to guard the entrance to Mobile Bay. The brick fort was completed in 1834 and

to this day remains intact. Fort Morgan is now home to a park and museum which chronicle the fort's history and its importance from the Civil War through World War II. Among the historical highlights is Fort Morgan's stature as one of the last Confederate forts to fall to Union forces during the Civil War. This event took place after the famous Battle of Mobile Bay in 1864 (Compass Marketing, 1996).

Fort Morgan is also a gateway to Dauphin Island, providing seasonal ferry service across Mobile Bay to residents and tourists. There are few visitor accommodations in Fort Morgan compared to those available in nearby Gulf Shores and Orange Beach. The Fort Morgan peninsula has no hotels or motels, but condominiums have begun to sprout up. Currently there are 524 existing and 140 pre-sold condominiums in Fort Morgan. (GCCVB, 1996b)

4.2.3 Orange Beach

Nearby Orange Beach on the eastern end of Baldwin County's coastline was a charter fishing village of 400 year-round residents when it was incorporated in 1984. Now it has about 4,000 residents and thousands of condo units. Charter fishing is still a primary business in Orange Beach and continues to benefit by the growth in tourism. Other recreation opportunities include several public access points for boating and fishing, such as launching ramps and docks, piers and several marinas. Dive services are based in Orange Beach for those who enjoy the Gulf waters. Cultural points of interest in Orange Beach include the Orange Beach Indian and Sea Museum and the Orange Beach Recreation Center.
Visitor accommodations in Orange Beach consist of hotels, motels and condominiums. There currently are 814 hotel and motel rooms in Orange Beach and as of April 1996 120 more were under construction. Condominiums greatly outnumber hotels and motels, with 3,650 listed as existing or new. An additional 1,083 are currently pre-sold or under construction. (GCCVB, 1996b)

4.2.4 Other County Resources

Baldwin County outside of the coastal communities offers many more recreational resources. These include several nature preserves, parks and wildlife refuges, such as the Bon Secour National Wildlife Refuge, Gulf State Park, Weeks Bay National Esturarine Research Reserve, Biophilia Nature Center and Minamac Wildflower Bog.

The county also has 12 golf courses, seven of which are located in the Gulf Coast region. Other courses are located in Foley, Bay Minette, Fairhope and Daphne.

4.3 Economic Contribution to Coastal Alabama from Tourism Industry

The growth of tourism in Mobile and Baldwin counties during the past decade can be measured by identifying changes in industry characteristics. The economic health of the tourist economy is largely characterized by trends in tourist-related services, such as eating, drinking and lodging establishments. The following sections discuss recent trends in these industry sectors for each county, characterized by data on selected two-digit SICs. Data

reviewed includes total establishments and employment, taxable sales and tax receipts. For Baldwin County, data on two communities, Gulf Shores and Orange Beach, are highlighted.

4.3.1 Lodging (SIC 70) Establishments and Employment

Lodging establishments in Mobile County increased by about 25 percent from 1979 to 1994, with few annual fluctuations. Based on 1994 data for Hotels and Other Lodging Places (SIC 70), 54 establishments were recorded in Mobile County (US DOC, Bureau of Census, 1981-1996a). Lodging establishments increased steadily through the mid-1980s but experienced a dip during 1988 and 1989, as shown on Table 4.2. This downturn was short-lived, however, as the number of establishments increased in 1990 and again in 1993 and 1994.

Historical employment associated with lodging establishments reflects a flat trend, with wide fluctuations from year to year. In fact, net employment declined from 1979 to 1991 even as the number of establishments grew. In recent years, however employment has steadily increased, recording the highest level in many years in 1994. (See Table 4.2.) Data on annual payroll reflect both variable employment levels during the 1980s and growth in recent years. In current year dollars, payroll grew over 150 percent since 1979; inflation adjusted, real wages grew by only about 25 percent. For Mobile County, annual earnings in current year dollars for lodging establishments grew from $10.7 million in 1979 to about $27.5 million in 1994. In real dollars growth was less significant, reflecting only about 26 percent growth since 1979. Earnings increased annually until 1986 when they declined slightly for a few years. Earnings have steadily increased since 1990.

Much of the coastal tourist economy in Baldwin County was adversely affected by Hurricane Frederic in 1979. Data on Baldwin County's lodging industry, shown on Table 4.3, reflect this event. These data summarize lodging establishments and associated employment, payroll and earnings from 1979 to 1994. A reconstruction period took place during the early 1980s, after which employment and annual earnings continued to increase even as the number of establishments fluctuated, resulting in a small net increase from 1979 to 1994. The number of lodging establishments increased by almost 50 percent from 1979 to 1983, when 31 establishments were registered. Growth in Baldwin County's lodging industry during the 1980s was most significant in terms of annual payroll and earnings. Since 1979, annual earnings grew from $6.0 million to $30.8 million in 1994, a five-fold increase. During this period current dollar payroll quadrupled. Measured in constant 1979 dollars, real incomes grew at 5.1 percent annually and earnings grew at 6.3 percent annually. These rates of growth reflect the importance of this industry sector to Baldwin County's economic growth.

4.3.2 Food Service (SIC 58) Establishments and Employment

The number of eating and drinking establishments in Mobile County has increased by about 40 percent since 1979 with almost 550 establishments registered in 1994 under SIC 58, Eating and Drinking Places (US DOC, Bureau of Census, 1981-1996a). Table 4.4 summarizes the number of establishments in Mobile County and their associated employment, payroll and earnings since 1979. In 1994, 547 eating and drinking establishments in Mobile County employed about 10,300 people. Employment since 1979

Table 4.2
Mobile County Lodging Establishments and Employment (SIC 70)

	Number of Establishments	Employment	Annual Payroll (millions)		Annual Earnings (millions)	
			Current $	1979$	Current $	1979$
1979	43	2,163	$7.6	$7.6	$10.7	$10.7
1980	45	1,575	$8.4	$7.4	$12.8	$11.3
1981	49	1,856	$11.5	$9.2	$12.5	$10.0
1982	47	1,578	$10.1	$7.6	$12.4	$9.3
1983	52	976	$7.2	$5.2	$14.8	$10.8
1984	53	1,127	$8.0	$5.6	$17.8	$12.4
1985	53	1,304	$8.7	$5.9	$20.4	$13.8
1986	54	1,176	$8.6	$5.7	$21.6	$14.3
1987	55	1,148	$7.4	$4.7	$20.4	$13.0
1988	49	902	$6.7	$4.1	$19.3	$11.8
1989	46	1,031	$7.7	$4.5	$23.3	$13.6
1990	50	1,285	$11.8	$6.5	$22.4	$12.4
1991	50	1,335	$12.3	$6.5	$24.0	$12.8
1992	50	1,374	$14.6	$7.6	$25.0	$12.9
1993	51	1,439	$15.3	$7.7	$26.0	$13.1
1994	54	1,890	$19.1	$9.4	$27.5	$13.5

Source: US DOC, Bureau of Census, 1981-1996a, b; US DOC, BEA, REIS, 1996.

Table 4.3
Baldwin County Lodging Establishments and Employment (SIC 70)

	Number of Establishments	Employment	Annual Payroll (millions)		Annual Earnings (millions)	
			Current $	1979$	Current $	1979$
1979	21	651	$3.8	$3.8	$6.0	$6.0
1980	25	350	$4.0	$3.5	$6.4	$5.6
1981	24	643	$5.3	$4.2	$8.6	$6.8
1982	28	823	$5.1	$3.9	$9.6	$7.2
1983	31	627	$6.0	$4.4	$10.1	$7.3
1984	28	730	$7.3	$5.1	$11.6	$8.1
1985	28	890	$7.6	$5.2	$12.0	$8.1
1986	23	870	$7.5	$5.0	$12.7	$8.4
1987	28	823	$7.6	$4.9	$16.4	$10.5
1988	23	1,082	$11.4	$7.0	$18.3	$11.2
1989	22	1,063	$12.2	$7.1	$20.3	$11.9
1990	22	1,188	$12.9	$7.2	$23.7	$13.2
1991	24	1,184	$13.7	$7.3	$26.0	$13.9
1992	25	1,340	$14.8	$7.7	$27.0	$14.0
1993	29	1,318	$16.1	$8.1	$28.1	$14.1
1994	28	1,228	$16.3	$8.0	$30.8	$15.1

Source: US DOC, Bureau of Census, 1981-1996a ,b; US DOC, BEA, REIS, 1996.

Table 4.4
Mobile County Food Service Establishments and Employment (SIC 58)

	Number of Establishments	Employment	Annual Payroll (millions)		Annual Earnings (millions)	
			Current $	1979$	Current $	1979$
1979	364	6,119	$28.3	$28.3	$42.2	$42.2
1980	354	6,922	$33.2	$29.2	$47.5	$41.9
1981	362	6,746	$35.1	$28.0	$50.6	$40.4
1982	366	6,469	$36.9	$27.7	$53.8	$40.5
1983	428	6,443	$40.1	$29.2	$59.1	$43.1
1984	459	6,641	$41.6	$29.1	$61.3	$42.8
1985	439	7,021	$45.3	$30.6	$67.7	$45.7
1986	464	7,767	$50.3	$33.3	$74.8	$49.5
1987	499	8,238	$53.0	$33.9	$82.3	$52.6
1988	458	8,109	$55.5	$34.1	$85.3	$52.3
1989	481	8,648	$58.7	$34.4	$89.0	$52.1
1990	490	8,892	$63.2	$35.1	$94.8	$52.7
1991	504	8,991	$64.9	$34.6	$101.6	$54.2
1992	514	9,224	$68.3	$35.3	$111.5	$57.7
1993	544	9,803	$71.2	$35.8	$124.8	$62.7
1994	547	10,272	$73.2	$35.9	$140.9	$69.0

Source: US DOC, Bureau of Census, 1981-1996a, b; US DOC, BEA, REIS, 1996.

increased more or less in proportion to the number of establishments in business during this time, with a net gain of about 68 percent. Annual payroll for employees of these establishments grew steadily since 1979 to $73.2 million in 1994, reflecting almost a three-fold increase during the 15-year period. Growth in payroll measured in real dollars increased about 27 percent since 1979. Annual earnings for SIC 58 followed a similar pattern, increasing from $42.2 million in 1979 to $140.9 million in 1994. In current dollars this reflects a change of more than 200 percent; in real dollars growth was about 64 percent since 1979.

In Baldwin County, the rate of growth of eating and drinking establishments during the past decade was much greater than for Mobile County. The growth of Baldwin County's Gulf Coast as a resort destination significantly benefits these and other service industries. As shown on Table 4.5, the number of establishments more than tripled from 1979 to 1994, increasing steadily to 1987 when a brief decline occurred. In 1994, 224 establishments employed 3,398 persons. Up to 1990, employment grew by about half the rate at which establishments grew; since 1990 the number of establishments and employment increased by 30 percent. Data on annual payroll and earnings for food service establishments show steady growth over the 15-year period. Since 1990 earnings have jumped 65 percent to $44.6 million, and payroll increased by more than 50 percent to $29.3 million in 1994. Since 1979, real growth in both payroll and earnings has been significant; measured in 1979 dollars, each has increased by over 200 percent.

4.3.3 Tourism/Recreation-Related Taxable Sales Trends

Another indicator of a healthy tourist economy is the growth in taxable retail sales. Data were gathered on taxable retail sales for Mobile and Baldwin counties as well as for two communities in Baldwin County where tourism is the primary industry: Gulf Shores and Orange Beach.

Table 4.6 shows taxable retail sales for Mobile and Baldwin County since 1986. Mobile County retail sales grew by less than 10 percent in most years, totalling over $3 billion in sales by 1995. In 1992, sales increased by more than 20 percent from the previous year. Over the 10-year period retail sales volume in Mobile County grew by more than 60 percent.

The total retail sales volume in Baldwin County is much lower by comparison; but the growth rate during the 10-year period reflects a more significant change. Similar to data from Mobile County, retail sales volume in Baldwin County increased steadily since 1986, totalling almost $900 million in sales in 1995. About 25 percent of this volume was generated in the cities of Gulf Shores and Orange Beach. Annual growth rates for county retail sales increased during this period, albeit inconsistently, peaking in 1989 at 32 percent growth. This peak is likely due to the opening of a retail outlet center in Foley, located just north of Gulf Shores. Total retail sales growth over the 10-year period was more than 135 percent, double the growth of Mobile County. Figure 4.1 shows Baldwin County's retail sales growth since 1986.

Table 4.5
Baldwin County Food Service Establishments and Employment (SIC 58)

	Number of Establishments	Employment	Annual Payroll (millions)		Annual Earnings (millions)	
			Current $	1979$	Current $	1979$
1979	69	1,026	$4.3	$4.3	$7.3	$7.3
1980	75	893	$4.1	$3.6	$7.4	$6.5
1981	82	1,074	$5.8	$4.6	$9.9	$7.9
1982	92	1,304	$6.7	$5.0	$10.9	$8.2
1983	114	1,194	$7.6	$5.6	$12.3	$9.0
1984	120	1,459	$9.1	$6.4	$15.1	$10.5
1985	139	1,803	$11.1	$7.5	$16.8	$11.3
1986	146	2,140	$12.6	$8.4	$19.7	$13.0
1987	171	2,091	$14.6	$9.3	$22.1	$14.1
1988	156	2,060	$14.6	$9.0	$22.3	$13.7
1989	158	2,225	$15.7	$9.2	$25.6	$15.0
1990	170	2,557	$18.7	$10.4	$26.9	$14.9
1991	180	2,630	$19.7	$10.5	$31.7	$16.9
1992	199	2,918	$24.9	$12.9	$35.8	$18.5
1993	206	3,204	$26.9	$13.5	$38.2	$19.2
1994	224	3,398	$29.3	$14.4	$44.6	$21.8

Source: US DOC, Bureau of Census, 1981-1996a, b; US DOC, BEA, REIS, 1996.

Table 4.6
Taxable Retail Sales for Alabama Coastal Counties
1986-1995
(millions $)

	Mobile County	% Change	Baldwin County	% Change
1986	$1,914.86	--	$367.37	--
1987	$1,938.14	1.2%	$374.18	1.9%
1988	$1,965.49	1.4%	$389.87	4.2%
1989	$2,100.23	6.9%	$513.14	31.6%
1990	$2,187.81	4.2%	$556.49	8.4%
1991	$2,193.35	0.3%	$575.98	3.5%
1992	$2,650.93	20.9%	$675.31	17.2%
1993	$2,795.48	5.5%	$750.45	11.1%
1994	$2,929.41	4.8%	$810.44	8.0%
1995	$3,093.81	5.6%	$864.91	6.7%
1986-1995		61.6%		135.4%

Source: University of Alabama, CBER, 1996.

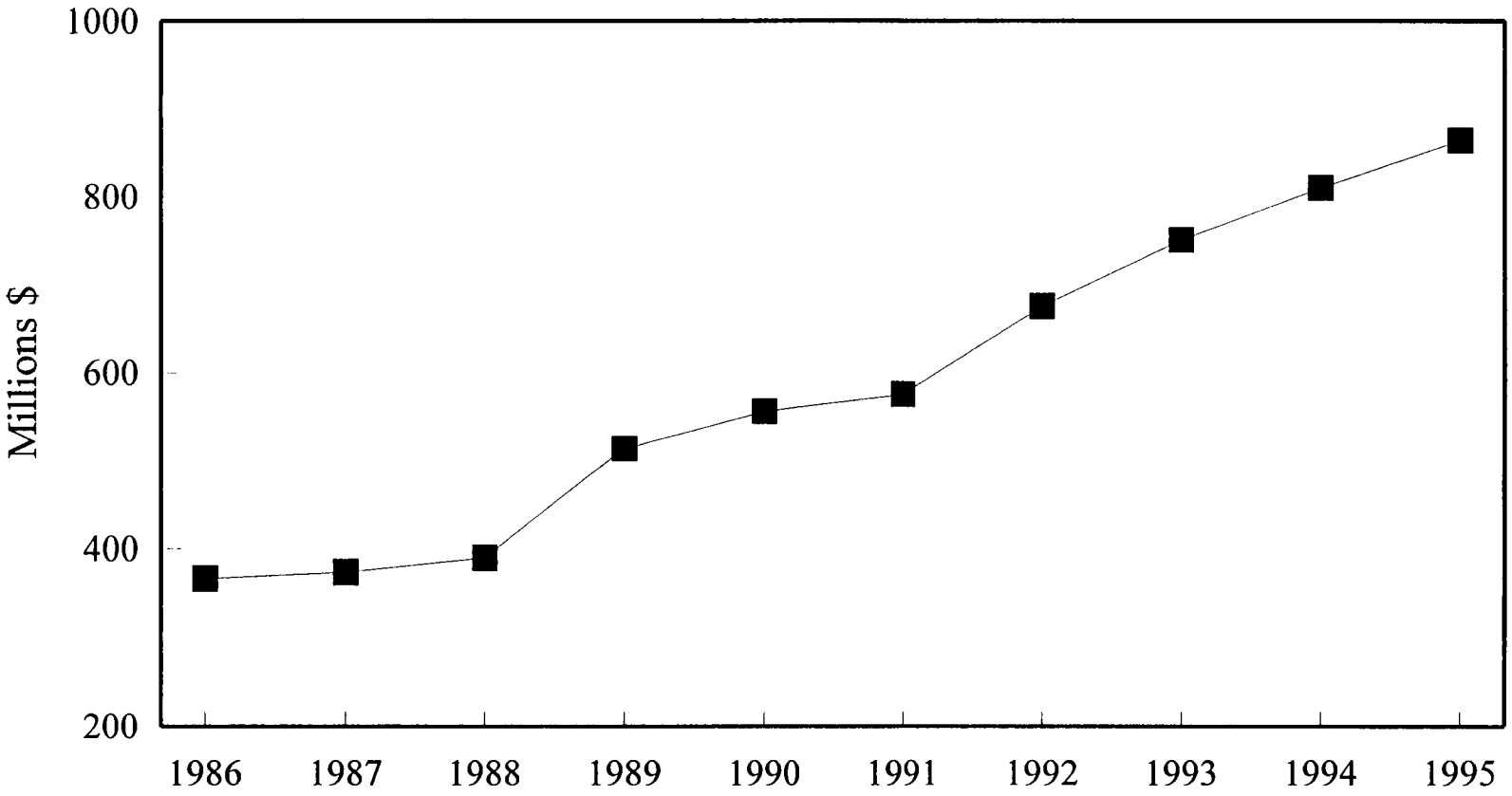

Figure 4.1. Baldwin County Taxable Retail Sales, FY 1986-1995.

Source: Gulf Coast Convention and Visitors Bureau, 1996b.

Table 4.7 summarizes similar data for selected Baldwin County communities. For Gulf Shores and Orange Beach, total lodging sales data were available in addition to retail sales for the years 1992 to 1996. Data from 1996 show the volume of retail and lodging sales to be comparable for both communities; retail sales were just over $100 million and lodging sales reached almost $50 million. The volume of sales in Orange Beach, however, grew by almost twice the rate for Gulf Shores. Orange Beach sales during the five year period increased by more than 80 percent, compared to about 40 percent for Gulf Shores. This difference is attributable to the more recent build-up of vacation units in Orange Beach and the growing popularity of the region. Gulf Shores has been growing as well, but its large-scale tourism development occurred several years earlier.

4.3.4 Tourism/Recreation-Related Tax Revenues, State and Coastal Region

Another indicator of the economic importance of the tourism sector in coastal Alabama is the tax revenue generated from tourist-related expenditures. This includes tax revenue for retail sales (gross receipts) and lodging sales.

Mobile County

In Mobile County, annual sales tax revenue collected by the state grew by almost 100 percent from 1979 to 1995, reflecting an average annual growth rate of 4.2 percent. Retail sales are taxed at four percent by the State of Alabama. Mobile County levies an additional one percent tax, and the City of Mobile levies an additional four percent. As shown on Table 4.8, sales tax revenue to the state from Mobile County was $81.2 million in 1995. In addition to tax revenues collected by the state, Mobile County's general fund received about $35 million in revenues from gross receipts in 1995 (Mobile County Commission, 1996), and sales tax revenue to the City of Mobile totalled over $57 million in 1995 (University of South Alabama, 1996b).

The State of Alabama assesses a lodging tax on lodging establishments located in each county. Most counties do not assess additional taxes, but some municipalities do. Currently, the state assesses a four percent lodging tax. In Mobile County the county has no additional lodging tax but the city of Mobile assesses an additional six percent tax; this proportion of the total tax benefits the city of Mobile's general fund. For establishments outside the city of Mobile but within a 3-mile radius of the city line (referred to as the city of Mobile Police Jurisdiction) the six percent is reduced to two percent. Other municipalities in the county may tax at a lower rate or assess no additional tax. The majority of lodging revenues collected in the county are associated with the city of Mobile and its Police Jurisdiction. In Mobile County since 1979, annual lodging tax revenue collected by the state grew by a larger proportion than sales tax receipts, increasing by almost 300 percent. These data are shown on Table 4.8. Annual growth in lodging tax revenues since 1986 was 5.8 percent. In 1995, lodging tax revenue to the state totalled about $1.9 million.

Located within Mobile County, Dauphin Island in recent years has attracted an increased number of visitors to the small community. As a result the number of rental units on the island has increased to accommodate seasonal vacationers. Lodging tax revenue from these

Table 4.7
Taxable Retail and Lodging Sales for Alabama Gulf Coast Communities (millions $)

Fiscal Year	Gulf Shores		Orange Beach	
	Retail Sales	Lodging Sales	Retail Sales	Lodging Sales
1992	$80.54	$31.84	na	na
1993	$89.60	$34.46	$59.57	$26.74
1994	$96.34	$37.13	$74.06	$33.59
1995	$106.95	$40.35	$92.74	$40.93
1996	$118.27	$44.34	$108.49	$49.28
Percent Change				
1992-1996[1]	46.8%	39.3%	82.1%	84.3%

[1] Data shown for Orange Beach reflect growth from 1993-1996.

Source: Gulf Coast Convention and Visitors Bureau, 1996b.

Table 4.8
Summary of Selected State Tax Collections for Alabama Coastal Counties (Millions)

	Mobile County		Baldwin County	
	Sales	Lodging	Sales	Lodging
1979	$40.64	$0.47	$6.41	$0.33
1980	$48.10	$0.62	$7.53	$0.21
1981	$48.37	$0.60	$7.75	$0.37
1982	$47.56	$0.67	$7.77	$0.34
1983	$47.90	$0.68	$8.01	$0.53
1984	$51.64	$0.91	$9.15	$0.77
1985	$55.04	$0.86	$9.82	$0.95
1986	$55.91	$1.05	$9.80	$1.05
1987	$57.67	$1.01	$9.74	$1.47
1988	$57.93	$1.07	$10.18	$1.79
1989	$59.85	$1.11	$11.09	$1.97
1990	$62.42	$1.25	$12.30	$2.37
1991	$63.17	$1.41	$12.90	$2.83
1992	$66.93	$1.45	$13.88	$2.93
1993	$67.51	$1.47	$14.99	$3.05
1994	$76.61	$1.84	$17.90	$3.65
1995	$81.15	$1.85	$19.83	$4.17
Total Growth	99.7%	296.1%	209.5%	1165.0%
Annual Growth Rate	4.2%	8.4%	6.9%	16.1%

Source: University of Alabama, 1996; AL Department of Revenue, 1996b.

establishments is collected by the Town of Dauphin Island for general fund expenses. Since 1990, lodging tax receipts to the town increased three-fold, to a reported $59,000 in 1996 (Dauphin Island, Town of, 1996).

Baldwin County

Tourism-related tax revenue in Baldwin County increased by a greater proportion than in Mobile County during the period from 1979 to 1995. As shown on Table 4.8, sales tax revenues to the state from Baldwin County grew by more than 300 percent since 1979, totalling $19.8 million in 1995. Gross receipts in Baldwin County are taxed at a four percent base rate plus local taxes. Table 4.9 shows retail sales tax receipts collected by three coastal communities in Baldwin County. The increase in revenues since 1990 reflects the region's tourism economy. In Gulf Shores, retail tax receipts to the city totalled over $3 million in 1995, a 50 percent increase from 1990. Sales tax receipts to Orange Beach and Foley more than doubled during this period, reaching $2.0 and $2.7 million in 1995, respectively.

The most significant indicator of the growth of tourism in Baldwin County is shown by the trend in lodging tax revenue. The state lodging tax rate is currently four percent and has increased only a few times during the past 10 years. Since 1979 lodging tax revenues collected by the state have, on average, risen by 16 percent per year, double the growth rate for Mobile County. Annual growth in lodging tax revenues to the state since 1986 was 14.8 percent. Table 4.8 shows that annual receipts from state lodging taxes assessed in Baldwin County in 1979 totalled $330,000; in 1995, they were over $4 million. After 1980, when the effects of Hurricane Frederic were felt, lodging tax revenue to the state increased steadily. For the past five years, lodging taxes collected from Baldwin County were double the receipts from Mobile County.

Similar to Mobile County, Baldwin County assesses no additional lodging tax. Most municipalities therefore collect only the four percent state tax and a city tax. In late 1993, however, a special district was created that consists of municipalities located in southern Baldwin County. This special district was formed to raise funds in support of the growing tourism industry located in Gulf Shores and Orange Beach. This special lodging district assesses an additional two percent lodging tax. The first year of reported collections was fiscal year 1994 (October 1993 to September 1994). In three years, the special district has collected more than $5 million in additional revenue. Table 4.10 shows these collections on a monthly basis, reflecting a seasonal pattern for the tourism industry in this region. Collections exceeded $2 million for fiscal year 1996. Each municipality within the special district distributes half of the collected receipts from this additional tax to the sponsoring organization, the Gulf Coast Convention and Visitors Bureau. The remaining funds are kept by the municipality. Gulf Shores and Orange Beach both assess an additional city lodging tax of three percent. Monies collected from this portion of the total lodging tax are designated for the cities' use.

Table 4.11 compares lodging tax receipts collected in Baldwin County and the State of Alabama for fiscal years 1990 to 1995. Statewide, Baldwin County has continually ranked number one in state lodging tax collections. In 1995, 20 percent of state lodging tax

Table 4.9
Retail Sales Tax Receipts for Alabama Coastal Communities
($ Millions)

Fiscal Year	Gulf Shores[1]	Orange Beach[1]	Foley
1990	$2.02	$0.76	$1.12
1991	2.25	0.88	1.32
1992	2.35	0.97	1.59
1993	2.64	1.17	1.95
1994	2.91	1.59	2.30
1995	3.09	2.01	2.71
Percent Change 1990-1995	52.6	162.9	140.9

[1] For years prior to 1991 for Gulf Shores and 1994 for Orange Beach, sales tax revenues were reported combined with lodging tax revenues. For this analysis estimates were made of the sales tax portion based on percentages derived from subsequent years.

Source: City of Gulf Shores, 1996; City of Orange Beach, 1996; City of Foley, 1996.

Table 4.10
Lodging Tax Receipts to Baldwin County Special Lodging District[1]
(Gulf Shores and Orange Beach Corporate Limits)

	FY 93-94	FY 94-95	FY 95-96	FY 94-96
Oct	n/a	$117,492	$120,910	
Nov	$22,669	$78,524	$85,724	
Dec	$32,151	$37,878	$49,644	
Jan	$18,341	$25,161	$27,573	
Feb	$25,434	$25,404	$23,308	
Mar	$35,230	$40,860	$40,071	
Apr	$87,492	$103,810	$117,081	
May	$131,508	$151,923	$168,493	
Jun	$150,546	$180,496	$191,098	
Jul	$280,071	$318,047	$374,347	
Aug	$352,881	$402,400	$490,465	
Sep	$221,206	$231,789	$311,567	
Total	$1,357,530	$1,713,784	$2,000,282	$5,071,595

[1] Represents collections of special Baldwin County District 2% lodging tax in addition to state and city lodging tax collections. Tax was instituted beginning Oct. 1993; receipts reflect previous month's collections. Revenues collected from this special District tax are distributed to the Gulf Coast Convention and Visitors Bureau.

Source: Alabama Dept. of Revenue, 1996b.

Table 4.11
Summary of State of Alabama and Baldwin County Lodging Tax Receipts
FY 1990-1995

	Total State of Alabama Receipts	State Receipts From Baldwin County	Other Baldwin County Lodging Tax Receipts				Total Baldwin County Lodging Tax Receipts
			Special District (CVB)	City of Gulf Shores[1]	City of Orange Beach[1]	Total Other Receipts	
1990	$14,969,039	$2,374,734	$0	$1,090,200 est	$509,300 est	$1,599,500	$3,974,234
1991	$15,718,159	$2,833,277	$0	$1,256,300	$586,400 est	$1,842,700	$4,675,977
1992	$15,993,483	$2,913,830	$0	$1,253,700	$648,680 est	$1,902,380	$4,816,210
1993	$15,690,533	$3,051,792	$0	$1,344,100	$779,100 est	$2,123,200	$5,174,992
1994	$18,960,298	$3,646,800	$1,357,530	$1,004,200	$981,190	$3,342,920	$6,989,720
1995	$20,806,751	$4,169,572	$1,713,784	$1,123,100	$1,242,760	$4,079,644	$8,249,216

[1] For years prior to 1991 for Gulf Shores and 1994 for Orange Beach, lodging tax revenues were reported combined with sales tax revenues. For this analysis estimates were made of the lodging tax portion based on percentages derived from subsequent years.

Source: University of Alabama,1996; City of Gulf Shores, 1996; City of Orange Beach, 1996; AL Dept of Revenue, 1996b.

collections came from Baldwin County, up from 15 percent in 1990. Other leading counties include Montgomery and Mobile. Table 4.11 also totals additional Baldwin County lodging tax revenue collected by local jurisdictions; this represents the three percent local portion discussed above. In 1995 local tax receipts, together with state collections within Baldwin County, totalled over $8 million.

Case Study: Gulf Coast and Dauphin Island Tourism Economy - Coexistence with Natural Gas

Coastal Alabama supports a thriving tourism industry. This case study highlights two aspects of the local tourism industry: 1) the differences between Dauphin Island and Gulf Shores/Orange Beach; and 2) the relationships between the local tourism industry, mostly in Baldwin County, and the offshore natural gas industry, supported from Mobile County.

Dauphin Island Vacation Homes Compared to Gulf Shores Tourism Development

Mobile Bay tourism brochures highlight several destination areas and attractions around the bay that interest the many visitors who travel to the region. The City of Mobile and the Gulf Coast of Baldwin County--Gulf Shores and Orange Beach--are primary destination areas. They offer a wide variety of recreational, cultural and historical amenities. Local attractions include Bellingrath Gardens and historical sights such as Fort Morgan in Baldwin County and Fort Gaines located on Dauphin Island. Point Clear, on Baldwin County's eastern shore, is a third major destination. This area is not discussed because it is nearly 20 miles from Mobile Bay natural gas fields.

Dauphin Island is a small barrier island 14 miles in length (7 inhabited) where mostly area residents maintain second homes. The island road, which runs east-west from the connecting bridge, stops in the middle of Dauphin Island. The western half, owned privately, has remained largely wildlife habitat since its purchase in 1953. Influenced by the outflow from the Mobile Bay estuary, Dauphin Island does not have the same quality of fine snow white sand found on the beaches from Gulf Shores to Panama City. This natural occurrence, the fact that no bridge connected the island to Mobile County until 1953, and ownership patterns have limited Dauphin Island's tourism over the years to visitors seeking a rustic vacation experience. Much of the land has remained in the hands of local Mobile people, many who bought the land in the 1953 land sale associated with the bridge development. Few are interested in tourism development. The original deed "restrictions and covenants" on 1953 property sales limited the coastal land available for commercial development to a small set of designated areas.

Compared to Gulf Shores and Orange Beach (GS/OB) the island provides visitors with a much more limited range of recreational amenities. Accommodations for visitors other than second homes located on the island include a few small motels and condominium complexes. A recent listing of accommodations on the island compiled by town staff shows about 100 rooms for rent (Dauphin Island Development Network, 1996). Dauphin Island offers a few public beaches and a campground that accommodates about 150 campers. There are fewer than five restaurants located on the island. These are primarily supported by residents of the island.

The cities of Gulf Shores and Orange Beach along Alabama's Gulf Coast are home to a densely developed tourism industry. This strip of Baldwin County's Gulf Coast has beautiful beaches and has attracted commercial developers who have built numerous high-rise vacation resorts on this prime piece of real estate. References to Alabama's limited 32 miles of Gulf Coast beach are to this beach, from Fort Morgan to the Florida line. Accommodations along Baldwin County's Gulf Coast include hotels, motels and condominium complexes that offer over 10,000 lodging units to visitors (Gulf Coast Area Chamber of Commerce, 1996).

Case Study: Gulf Coast and Dauphin Island Tourism Economy - Coexistence with Natural Gas, Continued

The Gulf Shores/Orange Beach tourism industry is supported and monitored by the Gulf Coast Convention and Visitors Bureau (GCCVB) located in Gulf Shores. The volume of visitor inquiries to the GCCVB increased from 46,858 in 1992 to 119,155 in 1996 (GCCVB, 1996b). The highest volume of visitors to the region is during the months of June, July and August. Annual occupancy rates at hotels and motels averaged about 66 percent from 1992 to 1996; during peak season occupancy rates increased to an average of 82 percent. The average daily rate for rooms was about $67 in 1992 and rose to over $85 in 1996. Rates peak during the summer season when travellers flock to area beaches. In 1992 summer rates averaged about $95 per room and rose to $115 by 1996 (GCCVB, 1996b).

According to Gulf Coast building permit reports compiled by the Gulf Coast Area Chamber of Commerce (GCACC), the total volume of construction in Orange Beach grew ten-fold from 1991 to 1995. In 1995 total construction was valued at $102.8 million, increasing from $10.6 million in 1991. Orange Beach experienced its largest increase in construction volume from 1994 to 1995, when it grew by over 50 percent. In nearby Gulf Shores construction volume in 1995 was $48.6 million. The increase in construction in Gulf Shores since 1990 was more gradual than for Orange Beach, largely due to the existing number of vacation properties already located in Gulf Shores. Construction volume in Gulf Shores peaked for several years in the early 1980s and continued at a constant level through 1991 when activity picked up again (GCACC, 1996). Local industry representatives, such as the GCCVB and area chambers of commerce, continue to market the region as both a destination vacation spot and as a region that is growing economically, hoping to attract young families interested in relocating. Condominium sales are booming. Local businesses support the continued real estate development. Real estate developers hold important civic positions in local politics.

Coexistence of the Tourism Industry with Offshore Natural Gas Industry

Following Hurricane Fredric in 1979, Dauphin Island was without a bridge until 1982. Little tourism existed before the hurricane and no new tourism developments were built to replace the Holiday Inn, the lone island motel that was destroyed in the hurricane. The Baldwin County tourism industry initiated its growth after the hurricane, which also destroyed much of the pre-existing accommodations. Both the local area and the state have prospered from the growing Baldwin County tourist trade, as evidenced by the increase in tax revenues to the coastal communities and the state. Significant tax revenues are collected by the state and the local communities from tourism-related businesses such as lodging and food service, as shown in Section 4 of the report.

Development of natural gas reserves offshore Alabama began in the early 1980s after gas was discovered and the State of Alabama and the federal government leased offshore tracts to oil and gas companies. The offshore natural gas industry that has grown up west and southwest of Fort Morgan is over 15 miles away from the bulk of Gulf Shores development and nearly 25 miles away from Orange Beach. No platforms can be seen from the tourist areas of Baldwin County except in the region of Fort Morgan and from some private housing built on the western end of

Case Study: Gulf Coast and Dauphin Island Tourism Economy - Coexistence with Natural Gas, Continued

the Fort Morgan Peninsula. There is no economic evidence that shows that the offshore gas industry had an adverse impact on Baldwin County's tourism economy. Both sectors grew up together post Hurricane Fredric.

Dauphin Island, today, is virtually surrounded by visible gas platforms. The natural gas support industry grew up in Mobile County from bases on Dauphin Island for shallow draft crew and provisions boats, and on the Theodore Ship Channel, for deep draft support vessels. Three gas plants are in south Mobile County and the connections to interstate pipelines are in Mobile County. Exploration, development, production and transportation is supported from south Mobile County—well away from the major destination tourism locations in Baldwin County. Relationships between local residents in south Mobile County and Dauphin Island and the gas industry are reported to be excellent.

Goodwill measures provided by several operators have added significantly to the quality of local life. One of the largest, and most prized tourist attractions is the historic Bellingrath Gardens and Home, which feature 65 acres of landscaped displays. The gardens are located about 10 miles from Bayou LaBatre, and close to three natural gas processing plants operated by Exxon, Shell and Mobil. Exxon's gas processing plant is located about one mile away from Bellingrath Gardens and according to staff at the site there have been no negative reports at the gardens related to plant operations (Bellingrath Gardens, 1996). Bellingrath Gardens has received the biggest funding in its history from Exxon. Exxon sponsored the construction of a large boardwalk and other projects. Exxon's first grant was $100,000 to pave 2.5 miles of walkways to make them handicapped accessible. A second grant of $50,000 was used for an emergency warning system for possible gas plant leaks; this project also allowed the installation of a sound system in the gardens. The third grant of $100,000 paid half the cost of an ecological boardwalk through the gardens' wetlands/bayou area. New programs at Bellingrath Gardens will be conducted around the new 1,600 foot wooden pier. Other industry contributions include a $5,000 donation from Shell for a 14-passenger tram for handicapped visitors. According to the manager of Bellingrath Gardens, new projects sponsored by gas industry grants have helped annual attendance (Bellingrath Gardens, 1996). Civic contributions by Mobil have largely benefitted Dauphin Island and are discussed in a separate case study. (See *Case Study: Effects of Natural Gas Development on the Town of Dauphin Island.*)

In contrast to the positive relationships between the offshore gas industry with Dauphin Island and Bellingrath Gardens in Mobile County, a proposed expansion of the gas industry eastward along Alabama's Coast has not been welcomed by tourist venues along Baldwin County's Gulf Coast. Gulf Shores, which depends solely on the local tourism economy, has taken an aggressive stance toward expansion of gas drilling within sight of its shores, citing concerns about the visual impact from drilling rigs located in close proximity to beachfront condominiums. In April 1996 the Department of Interior announced it was considering offering an area south of Baldwin County in federal waters in the Five Year leasing plan. This action would open a 15-mile strip of Alabama Gulf waters, currently protected by the 1988 moratorium designed to protect Florida beaches, to drilling in 2001. The proposed area included waters due south of Gulf Shores and Orange Beach (Mobile Press Register, 4/21/96).

Case Study: Gulf Coast and Dauphin Island Tourism Economy - Coexistence with Natural Gas, Continued

South Baldwin County governments, the tourism industry, and developers, represented by the Gulf Coast Area Chamber of Commerce (GCACC), quickly raised concerns about the impact drilling would have on its beaches. Concerned that new offshore drilling might harm coastal Alabama's tourism economy and impact water quality, the GCACC drafted a resolution that would require any new offshore drilling to remain at least 15 miles offshore. At this distance, offshore activity would be out of sight of the Gulf Shores and Orange Beach tourist areas and guarantee unobstructed views from prime beach frontage. The resolution was approved by the city councils from Gulf Shores, Orange Beach and Foley and the Baldwin County Commission (Mobile Press Register 5/1/96; 5/8/96).

In July 1996 the Alabama House of Representatives passed a resolution which "expressed opposition to drilling within 15 miles of Orange Beach and Gulf Shores" (Mobile Press Register 8/1/96). In response to Baldwin County opposition, Alabama Governor Fob James reversed his prior support of the drilling proposal and in August 1996 requested that the Department of Interior lease no new tracts within 15 miles of the shoreline. These actions influenced the Minerals Management Services' recommendation to the Secretary of the Interior to limit offshore gas drilling from within sight of Gulf Shores and Orange Beach (Mobile Press Register 8/3/96). In August 1996, U.S. Secretary of the Interior Bruce Babbitt limited drilling within a 15-mile buffer zone offshore Alabama (Mobile Press Register 8/31/96).

In contrast to Baldwin County interests, local supporters of the offshore drilling proposal included the Business Council of Alabama, Mobile Chamber of Commerce and city of Bayou LaBatre which identified the economic benefits to the state of drilling. These include the allocation of funds to support Forever Wild land acquisitions—the purchase of pristine acreage for protection against development and pollution. Supporters claimed that risk to the environment from natural gas development is negligible (Mobile Press Register, 4/21/96, 7/20/96). Mobile County supporters of the gas industry point to high rise condominiums in Orange Beach as greater environmental intrusions than the offshore gas industry.

Large scale development of the Baldwin County Gulf Coast is creating a conflict with conservationists who fear the coastal natural resource is becoming threatened by intense development of the Baldwin County coastline (Mobile Press Register 11/10/96). Development of structures on the coastline will continue to prevent the natural beach from repairing itself, causing increased damage and loss of beach habitat. The loss of wetland and salt marsh habitat will be detrimental to native species. These habitats function to replenish underground water supplies, filter surface water, add oxygen and provide nurseries for seafood species. The recent drilling conflict spurred local activists to join forces toward protection of coastal resources from future development and is likely a sign of things to come in the future regarding both offshore platforms and Gulf Coast beachfront development.

Case Study: Gulf Coast and Dauphin Island Tourism Economy - Coexistence with Natural Gas, Continued

No Platforms! Versus What Platforms?

The conflict between Gulf Shores tourism representatives and the offshore gas industry is easily understandable in view of the:

- stock of real estate investment by developers
- tax revenues paid by tourists to local, county and state coffers
- limited economic benefits that accrue to Baldwin County from natural gas
- large number of in-migrating people who bought a vista with no evidence of offshore industry
- fear of the unknown

Dauphin Island's coexistence with the gas industry is equally understandable in terms of the noticeable fiscal and economic effects, a slow-growing local population that grew up with the gas industry, absence of problems with producers, carefully nurtured relationships, and prospects of more benefits. Dauphin Island leaders report no problems with the platforms--"What platforms?"--while Gulf Shore and Orange Beach leaders successfully opposed more platforms--"No platforms!".

5.0 Marine Recreation

The Alabama Gulf Coast is known for its excellent marine resources and residents and visitors participate in various forms of marine recreation. The Gulf waters offshore Alabama are home to several popular sportfishing species. The City of Orange Beach houses a growing charter fishing fleet to support recreational anglers. The tourism industry along Baldwin County's Gulf Coast is well supported by patrons of deep water fishing excursions who spend many days (and dollars) a year fishing off Alabama's coast. The once small fishing village of Orange Beach has grown into a popular destination city that now houses several charter fishing operations targeting seasonal tourists.

This section presents data on the recreational fishing industry in Alabama, including local resources and recreational fish landings trends. Also highlighted are important recreational species found in Alabama waters. At the end of the section a case study is presented which discusses the coexistence between recreational anglers who depend on the coastal resources and the offshore gas industry.

5.1 Pleasure Boat Registration and Boat Launching Areas

In recent years the number of residents in Mobile and Baldwin Counties who own and register personal craft has increased. The most recent count of pleasure boats in the coastal area, based on state registrations in fiscal year 1995, was about 42,000. This shows an increase of about 28 percent from 1989 levels. Table 5.1 summarizes pleasure boat registrations for each county for four recent years. The upward trend in registrations is shown on Figure 5.1.

Table 5.1
Recent Pleasure Boat Registrations for Coastal Alabama

	Mobile County	Baldwin County
FY 1988-1989	21,923	10,780
FY 1990-1991	24,707	11,669
FY 1992-1993	25,389	12,967
FY 1994-1995	26,037	15,975

Source: AL DOC, 1996b.

Launching areas include individual boat ramps and launches, as well as marinas where these facilities are also available. A count of such sites in Mobile County revealed almost 20 different sites from which recreational boaters can reach Mobile Bay's waters. Of these, about one-half include individual boat ramps or launch areas and the remainder are marinas (Alabama Sea Grant Extension Service, 1987).

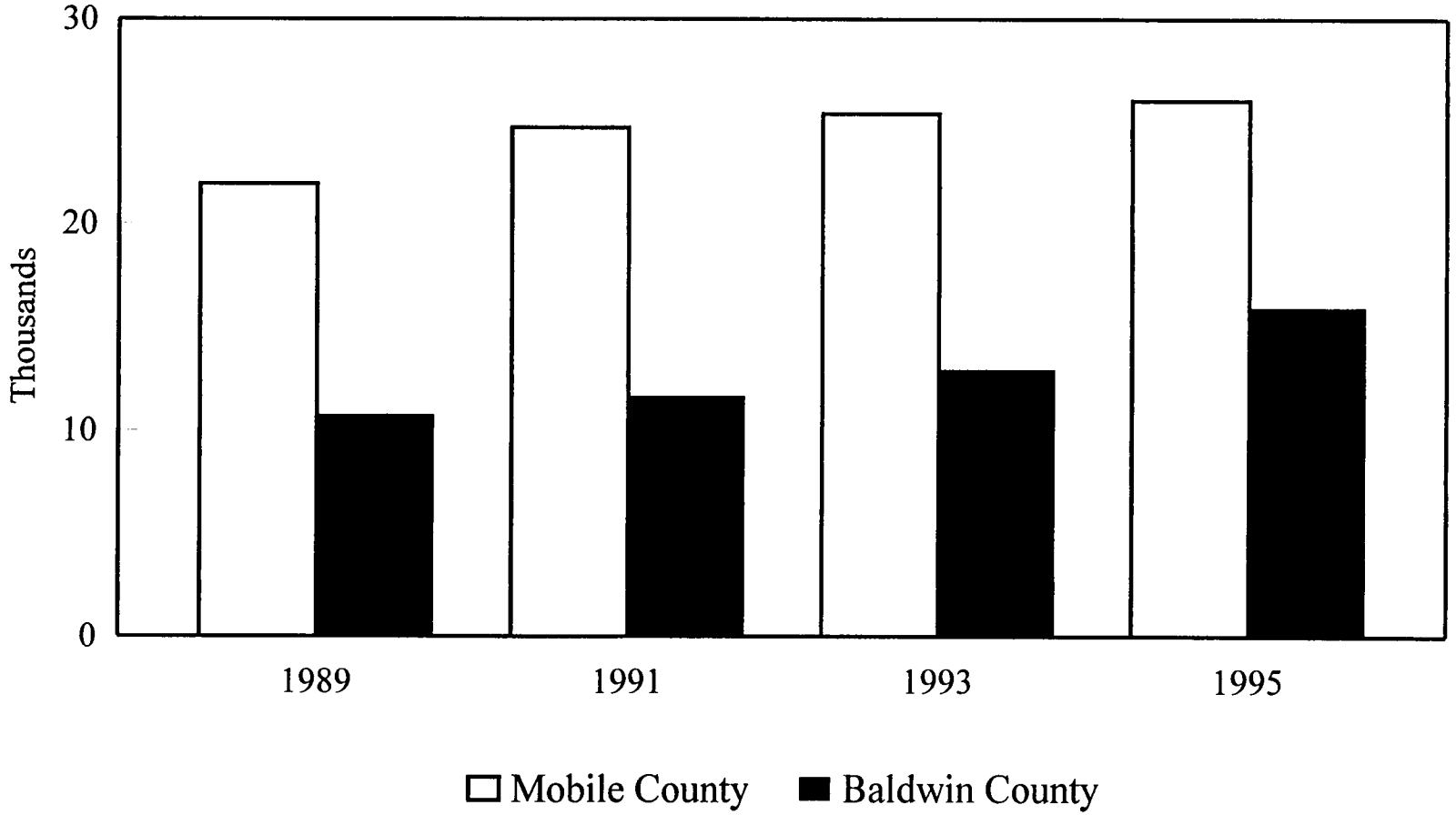

Figure 5.1. Coastal Alabama Pleasure Boats Registrations.

Source: Alabama Dept. of Conservation, 1996b.

In Baldwin County, by contrast, about 40 sites give recreational boaters access to Mobile Bay and adjacent waters. Baldwin County has a much larger land mass than Mobile County and extends slightly farther south into the Gulf of Mexico. Also, several small bays are located in Baldwin County near the Florida border. These sites are high-use areas for recreational boaters. The majority of the county's launching sites can be found in this region. About half of the launching areas in Baldwin County are marinas; the remainder are individual boat ramps and fishing camps (Alabama Sea Grant Extension Service, 1987).

5.2 Party Boat and Charter Boat Operations (Orange Beach)

Residents and visitors who don't own boats and are interested in participating in the abundant recreational reef fisheries in the Gulf may use either party boats or charter boats, both of which are available commercially on a fee-for-service basis. Charter boat fees are generally higher because the charge includes rental of the boat with captain and mate; the cost is spread among fewer people (charters are usually limited to about six anglers plus crew); so per-head charges are more than party boat fees (which are generally large-group rates). Also, charter boats operate only when reserved by a person or group while party boats typically operate on a daily schedule.

Private boat operators are found in coastal areas adjacent to tourist destinations, major urban areas, and commercial fishing ports (Holland, et al., 1992). A 1986-1987 assessment of the distribution of party boats in the Gulf of Mexico identified fewer than five boats operating in Alabama (Ditton, et al., 1992). Current data on charter boat operations in Alabama show that the number of charter boats in Orange Beach, Alabama alone is over 100 (Orange Beach Fishing Association, 1996), reflecting a 20-fold increase. Recent figures on party boat operations are not available. According to local sources, however, recreational and charter fishing, sailing, and cruising services have increased by about three-fold during the past five years.

Recent data reported by NMFS on the number of fish caught by recreation anglers by fishing mode reflect the growing popularity of charter boat and party boat fishing. Data from the 1995 Marine Recreational Fishing Statistical Survey (MRFSS) reported almost 20 million fish caught by party and/or charter boats along the Atlantic and Gulf Coasts, up almost 30 percent from 1993 (US DOC, NOAA, NMFS, 1987-1996e).

5.3 Fishing Permits

Recent data for Mobile and Baldwin Counties show that almost 95,000 fishing permits were issued for the coastal area in 1992-1993 (Alabama Department of Conservation, 1996a). This figure includes all permits issued for saltwater and freshwater fishing as well as those for hunting/fishing combined. Non-residents of Alabama were issued only 10 percent of Mobile County's fishing permits, whereas this proportion was close to 35 percent in Baldwin County. Saltwater fishing permits issued in Mobile County made up just over 90 percent of total permits; in Baldwin County this proportion was about 70 percent.

5.4 Recreational Fish Landings Trends

Saltwater fish commonly caught off the coast of Alabama by recreational anglers include the following species (not necessarily in order of abundance or catch):

- Red snapper
- Vermilion snapper
- Southern flounder
- Cobia
- Triggerfish
- Blue runner
- King mackerel
- Spanish mackerel
- Crevalle jack

According to area fishery specialists and recreational charter operators in Alabama, the top five species targeted for recreational fishing in recent years are Red snapper, Vermilion snapper, Triggerfish, King mackerel and Spanish mackerel. Snappers, Amberjacks and Triggerfish are popular reef fishes found off Alabama's coast. Near shore species include the mackerels, cobia and pompano. Inshore species include Tarpon, Speckled trout, Flounder, Red fish and Mullet. Offshore pelagic species include billfish, tunas and wahoo (Gulf Coast Conservation Association, 1996b).

For several years the National Marine Fisheries Service has conducted the MRFSS for the Gulf of Mexico to quantify the types and numbers of fish caught by recreational anglers. Table 5.2 summarizes catch data from these surveys for five recent years for both Alabama and the entire Gulf Region (including Florida, Alabama, Mississippi and Louisiana). As shown on the table for Alabama, total landings for several species have not been significant in the past. For the targeted recreational species listed above, however, recreational landings for Alabama are a significant proportion of Gulf-wide totals for each species.[1] For example, Red snapper (species code 28) landings in Alabama since 1990 have ranged from a catch of 474,000 fish to 950,000 fish, showing some fluctuations year to year.

Between 1990 and 1995, Red snapper landings reported for Alabama averaged about 40 percent of all such landings in the Gulf. Recreational landings data for other popular game fish such as Spanish mackerel and Triggerfishes validate the importance of these fish to recreational anglers, relative to other species, but show fluctuations in total landings since 1990.

Figure 5.2 shows the trend in recreational catch since 1987. Recreational landings have generally increased over time, with a few dips during 1989 and 1994. Overall, landings rose from about two million fish in 1987 to over six million by 1995. Growth in the charter business in Orange Beach largely contributes to this increasing trend.

Table 5.3 summarizes, for 1990 through 1995, the top 10 species caught by recreational anglers in Alabama. In each year the most or second-most common species caught is Red snapper. Other common species caught by recreational anglers include Sheepshead, Sand seatrout, Spanish mackerel, Vermilion snapper and Atlantic croaker. The variance in catch by year is largely due to the seasonal availability of species.

[1] Fish landings are reported in the state where catch is landed, not where the fish are caught.

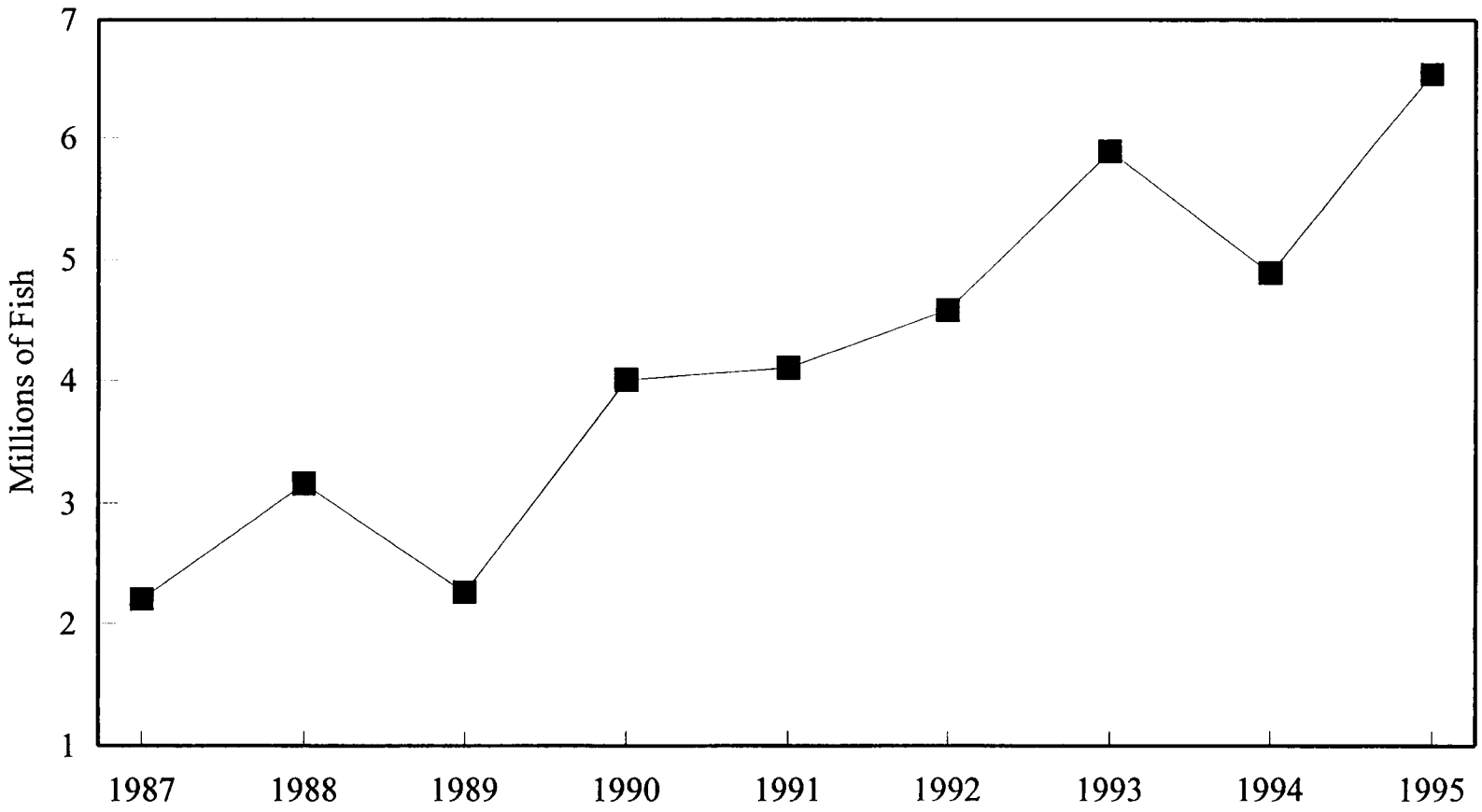

Figure 5.2. Recreational Fishing Catch in Alabama, 1987-1995.

Source: US DOC, NOAA, NMFS, 1987-1996e.

Table 5.2
Estimated Total Number of Fish Caught by Marine Recreational Anglers in Alabama and the Gulf of Mexico by Year, 1990 - 1995
(1,000s)

	Species Group	1990		1991		1992		1993		1994		1995	
		Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total
43	Sand seatrout	294	4,583	508	5,135	401	3,780	949	4,068	853	5,665	1,206	4,355
28	Red snapper	474	930	638	1,509	634	1,908	950	2,458	766	1,916	603	1,539
47	Atlantic croaker	85	4,094	217	7,122	362	3,827	338	3,959	396	3,445	452	2,537
58	Spanish mackerel	563	3,665	372	2,924	243	3,994	200	2,506	150	2,007	424	1,574
37	Pinfish	55	6,063	190	14,764	328	9,423	461	9,887	387	10,513	371	12,349
5	Herrings	1	18,051	20	28,310	221	23,337	102	29,013	241	33,562	335	23,813
30	Vermilion snapper	345	593	198	1,020	299	812	447	1,090	187	706	325	1,029
7	Saltwater catfishes	164	11,435	154	13,779	258	11,913	311	10,568	142	11,317	318	9,906
38	Sheepshead	364	2,071	244	2,240	147	4,389	178	4,329	141	2,663	282	3,552
67	Other fishes	160	4,940	209	7,849	113	7,300	212	7,743	100	7,809	251	6,790
65	Triggerfishes/filefishes	426	1,116	126	968	157	837	169	695	103	719	245	685
51	Mullets	127	2,389	69	2,648	180	1,896	121	1,574	52	1,724	234	1,746
46	Kingfishes	44	876	147	1,683	191	1,224	111	782	253	1,029	196	1,013
41	Spotted seatrout	50	1,862	99	26,054	47	19,986	145	19,026	40	19,438	148	20,610
20	Bluefish	54	427	104	959	85	589	129	376	178	484	144	464
49	Red Drum	41	2,401	51	6,642	86	7,809	85	6,310	62	5,913	125	7,096
62	Southern flounder	62	1,168	27	839	49	616	95	572	54	539	117	706
22	Blue runner	53	1,123	65	1,283	73	1,559	89	2,962	174	4,680	102	1,211
35	Grunts, other	0	2,498	24	2,907	66	1,814	100	2,532	35	1,898	95	2,006
57	King mackerel	81	487	47	751	64	485	78	500	111	682	86	622
21	Crevalle jack	30	1,003	9	2,043	6	2,367	10	1,489	20	1,357	81	2,145
50	Drums, other	46	1,261	201	1,141	103	1,101	49	1,002	40	1,307	55	1,119
19	Sea basses, other	120	2,444	20	2,806	13	2,426	31	2,338	7	1,491	47	1,572
23	Greater amberjack	40	139	39	518	56	577	80	380	60	233	46	126
27	Gray snapper	5	1,872	6	6,332	26	4,185	20	4,408	10	3,534	41	3,237
64	Flounders	19	322	6	557	2	339	7	331	6	189	39	153
34	White grunt	35	3,356	21	7,864	19	4,434	0	4,642	0	4,992	29	5,380
48	Black drum	124	680	7	671	37	1,130	37	1,268	19	824	23	1,063
18	Groupers	2	2,747	2	4,740	2	4,449	7	4,050	18	4,317	22	4,691
2	Sharks, other	25	409	3	487	21	570	35	527	22	681	14	669
39	Red porgy	11	147	6	164	19	105	13	128	18	130	12	157
55	Little tunny/Atl bonito	20	328	16	531	35	513	71	500	103	418	11	210
3	Skates/rays	8	402	9	560	64	668	15	469	21	550	10	568
16	Striped bass	0	157	0	97	0	162	1	15	2	15	9	30
33	Pigfish	18	958	34	2,653	66	1,571	109	1,615	43	1,910	9	1,621
26	Dolphins	5	681	2	1,114	25	406	42	701	8	683	9	1,004
61	Gulf flounder	23	250	30	343	6	214	14	183	13	775	5	138

Table 5.2 (Continued)
Estimated Total Number of Fish Caught by Marine Recreational Anglers in Alabama and the Gulf of Mexico by Year, 1990 - 1995
(1,000s)

Species Group		1990		1991		1992		1993		1994		1995	
		Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total	Alabama	Gulf Total
32	Snappers, other	1	495	2	795	2	545	14	606	1	176	5	211
29	Lane snapper	5	156	15	1,290	7	759	2	933	3	970	4	758
24	Florida pompano	5	74	4	339	5	174	8	125	2	89	4	104
45	Spot	0	424	148	413	38	229	1	988	4	227	2	185
25	Jacks, other	1	1,058	6	2,960	6	4,171	10	3,227	13	1,275	2	900
4	Eels	2	29	0	65	1 .	34	1	42	4	46	2	51
40	Porgies	8	161	0	241	3	318	1	313	3	204	1	249
6	Freshwater catfishes	3	188	0	333	4	157	11	199	8	164	1	100
13	Searobins	0	77	3	71	2	48	6	52	2	20	0	18
59	Tunas/mackerels	1	60	2	262	5	898	6	248	3	139	0	291
66	Puffers	1	347	0	285	0	253	1	307	2	340	0	221
8	Toadfishes	1	152	1	73	1	169	4	124	1	160	0	145
52	Barracudas	0	186	1	452	0	274	2	389	1	327	0	320
12	Codfishes/hakes, other	0	0	0	0	1	1	0	0	0	0	0	1
17	Black sea bass	0	3,323	2	3,280	0	2,380	0	2,375	0	2,735	0	2,170
44	Silver perch	3	424	0	393	0	579	4	603	3	690	0	1,323
31	Yellowtail snapper	0	1,142	0	3,889	0	1,087	0	1,577	0	975	0	1,020
1	Sharks, dogfish	0	5	0	0	1	13	3	4	7	8	0	13
	Totals	4,003	96,228	4,102	177,148	4,581	144,809	5,887	147,109	4,892	148,661	6,542	135,574
	Percent of Gulf Total	**4.16%**		**2.32%**		**3.16%**		**4.00%**		**3.29%**		**4.83%**	

1 Includes Florida, Alabama, Mississippi, and Louisiana.
2 Actual figures included in totals; "(*)" denotes none reported.

Source: US DOC, NOAA, NMFS, 1987-1996e.

Table 5.3
Recreational Catch in Alabama by Species, 1990 - 1995
(1,000s)

	Rank	Species Group	Number of Fish
1990	1	58 Spanish mackerel	563
	2	28 Red snapper	474
	3	65 Triggerfishes/filefishes	426
	4	38 Sheepshead	364
	5	30 Vermilion snapper	345
	6	43 Sand seatrout	294
	7	07 Saltwater catfishes	164
	8	67 Other fishes	160
	9	51 Mullets	127
	10	48 Black drum	124
1991	1	28 Red snapper	638
	2	43 Sand seatrout	508
	3	58 Spanish mackerel	372
	4	38 Sheepshead	244
	5	47 Atlantic croaker	217
	6	67 Other fishes	209
	7	50 Drums, other	201
	8	30 Vermilion snapper	198
	9	37 Pinfish	190
	10	07 Saltwater catfishes	154
1992	1	28 Red snapper	634
	2	43 Sand seatrout	401
	3	47 Atlantic croaker	362
	4	37 Pinfish	328
	5	30 Vermilion snapper	299
	6	07 Saltwater catfishes	258
	7	58 Spanish mackerel	243
	8	05 Herrings	221
	9	46 Kingfishes	191
	10	51 Mullets	180
1993	1	28 Red snapper	950
	2	43 Sand seatrout	949
	3	37 Pinfish	461
	4	30 Vermilion snapper	447
	5	47 Atlantic croaker	338
	6	07 Saltwater catfishes	311
	7	67 Other fishes	212
	8	58 Spanish mackerel	200
	9	38 Sheepshead	178
	10	65 Triggerfishes/filefishes	169
1994	1	43 Sand seatrout	853
	2	28 Red snapper	766
	3	47 Atlantic croaker	396
	4	37 Pinfish	387
	5	46 Kingfishes	253
	6	05 Herrings	241
	7	30 Vermilion snapper	187
	8	20 Bluefish	178
	9	22 Blue runner	174
	10	58 Spanish mackerel	150
1995	1	43 Sand seatrout	1,206
	2	28 Red snapper	603
	3	47 Atlantic croaker	452
	4	58 Spanish mackerel	424
	5	37 Pinfish	371
	6	05 Herrings	335
	7	30 Vermilion snapper	325
	8	07 Saltwater catfishes	318
	9	38 Sheepshead	282
	10	67 Other fishes	251

Source: US DOC, NOAA, NMFS, 1987-1996e.

Case Study: Recreational Angler User Coexistence with Natural Gas Development

Coastal Alabama has long supported recreational anglers due to its healthy stock of marine species and its proximity to some of the finest fisheries in the Gulf of Mexico. The recreational fishing industry along Baldwin County's coastline supports over 100 charter boat businesses that depend on access to the marine resources and a healthy supply of marine species popular with sportfishermen. This case study discusses coastal Alabama recreational fishing in relation to the offshore natural gas industry and its impact on marine resources.

Contacts with local marine resource and sportfishing representatives revealed a largely positive attitude toward offshore natural gas development and comment on the importance of the offshore natural gas platforms to the marine environment. The presence of natural gas structures in near-shore waters has proven beneficial for sportfishing. The platforms, which serve as artificial reefs, provide habitat to many recreationally-desirable reef species. Due to their varied locations in the Gulf of Mexico, offshore gas platforms in state and federal waters provide a range of excellent fishing locations.

According to staff of the Marine Resource Division of the Alabama Department of Conservation (DOC), located on Dauphin Island, the biologic finfish stock offshore Alabama has never been healthier. The finfish resource and catch is much enhanced by both the presence of platforms and Alabama's aggressive artificial reef program. DOC officials feel the gas industry has had a positive impact on the fisheries and consider coastal Alabama to be a world class fishery (Alabama Department of Conservation, 1996c).

Natural gas platforms provide a target destination for anglers. The Orange Beach Fishing Association (OBFA) represents the charter boat operators who are based out of Orange Beach and support the continued presence of gas structures as artificial reefs (OBFA, 1996). The increase in habitat for many reef fish species benefits the charter boats operating in the Gulf. According to the president of the OBFA, business for over 100 charter boats based out of Orange Beach is doing very well; these boats take in from $600 to $1,000 in charter fees per trip and employ several hundred people locally. The challenge faced by both resource officials and charter captains is to manage the catch to preserve the resource. Fishermen who come to Orange Beach tend to stay in local hotels and add nearly $20 million annually to the local economy for food, beverages and lodging, according to the Orange Beach Fishing Association (OBFA, 1994).

Although mutual admiration exists between the gas industry and recreational anglers, some conflict exists between segments of the fishing industry and resource managers. Saltwater sport fishermen in the region are active in support of marine conservation measures ensuring designated game fish habitat. Due to the presence of commercial fishing in the region, recreational anglers support conservation measures designed to protect important game fish from commercial harvest. The Gulf Coast Conservation Association represents the conservation arm of the sportfishing industry and rallies support from local recreational anglers on various conservation-oriented proposals. For example, the GCCA is involved in stopping the incidental kill by shrimp trawlers of juvenile fish important to recreational anglers, such as red snapper. In late 1996 the GCCA was successful in pushing for the requirement of a Byproduct Release Device (BRD) on shrimp nets. Other conservation and enhancement measures supported in the region include the continued establishment of artificial reefs, fish restocking programs and marine habitat restoration.

6.0 Commercial Fishing

The Alabama Gulf Coast region supports a significant commercial fishing industry. Commercial fishing along Alabama's coast has long contributed to the character of the region due to the presence of a large number of both vessels and seafood processing plants. The capital of Alabama's commercial fishing industry is Bayou LaBatre, located in southeastern Mobile County. Bayou LaBatre offers a channel into Mobile Bay and the Gulf of Mexico and houses the majority of the industry's fishing fleet, as well as numerous seafood processing facilities. Most processors in Bayou LaBatre process shrimp, oysters and crab—which comprise the greatest percentage of Alabama's catch from the Gulf of Mexico. Processing facilities in Alabama are supported by the large annual harvests from Alabama waters as well as from other Gulf of Mexico locations.

This section presents data on the Alabama commercial fishing industry including commercial landings trends and highlights important commercial species found in Alabama waters. Data are also presented to reflect the significance of the seafood processing industry in Alabama relative to the Gulf Coast region. At the end of the section a case study is presented which discusses the coexistence between commercial fishing enterprises that depend on the coastal resources and the offshore gas industry.

6.1 Commercial Fishing Vessels and Boats

The number of commercial fishing vessels in Alabama's coastal area is difficult to measure accurately. State and region-specific records for Alabama are not maintained on an annual basis nor are licensing records highly reliable. Instead, a "count" is usually taken at some interval to gauge the general size of the fleet (Auburn University Marine Resource Center, 1994). On a region-wide basis, the National Marine Fisheries Service (NMFS) tabulates data from required documentation for vessels working in federal waters. Recent NMFS data identify about 1,000 fishing vessels and boats working in Alabama's waters in 1994 (US DOC, NOAA/NMFS, 1984-1996d). These data have remained relatively constant since 1990. Table 6.1 summarizes similar data for adjacent states in the gulf region. The greatest number of commercial fishing vessels and boats are registered in Louisiana followed by Florida, with 15,800 and 10,800, respectively, in 1994. The data reported by NMFS may not reflect information on vessels not actively fishing, however, and may mis-state the actual number of active vessels.

6.2 Commercial Fish Landing Trends, Alabama and Gulf of Mexico

Since about the mid-1980s, commercial fish landings have declined throughout the Gulf of Mexico, including Alabama. In spite of this general decline, Alabama's major commercial seafood port ranks in the top 50 U.S. ports in terms of volume of seafood landed. In 1995, commercial catch landed at Bayou LaBatre ranked 36th in volume, up from a rank of 47th in 1992. Total value of these landings in 1995 ranked 12th nationally, as reported by NMFS (US DOC, NOAA, NMFS, 1984-1996d). The significance of landings at Bayou LaBatre was much greater in the mid-1980s when landings ranked 29th in volume among the top 50

Table 6.1
Number of Commercial Fishing Vessels[1] and Fishing Boats[2] in the Gulf of Mexico Region, 1990-1994

	Alabama			Florida			Louisiana			Mississippi		
	Vessels	Boats	Total	Vessels	Boats	Total	Vessels	Boats	Total	Vessels	Boats	Total
1990	451	587	1,038	2,500	4,800	7,300	3,628	9,113	12,741	704	1,199	1,903
1991	411	531	942	2,349	6,609	8,958	2,945	9,786	12,731	761	1,145	1,906
1992	409	694	1,103	2,264	9,409	11,673	2,824	8,917	11,741	885	1,003	1,888
1993	411	676	1,087	2,248	9,464	11,712	2,820	13,737	16,557	531	976	1,507
1994	426	644	1,070	2,340	8,439	10,779	2,846	12,954	15,800	535	934	1,469

[1] Vessels are craft greater than 5 net registered tons.

[2] Boats are craft less than 5 net registered tons.

Source: US DOC, NOAA, NMFS, 1984-1996d.

U.S. ports and ninth in total value. The high rank of commercial seafood landings in Alabama is due largely to the volume of shrimp caught; shrimp has a high value compared to other types of seafood landed at ports across the United States.

Table 6.2 shows total commercial seafood landings for the port at Bayou LaBatre, Alabama, for the state, and for the entire Gulf of Mexico region. Landings for all areas peaked between 1984 and 1986. During this time, landings at Bayou LaBatre represented about 70 percent of total state landings, increasing from 18.2 to 25.6 million pounds. The total value of fish landed at Bayou LaBatre since 1980 has ranged from 65-70 percent of total commercial fish value for Alabama, and has increased to more than 75 percent of total state value in 1994 and 1995. In the late 1980s seafood landings in all regions declined annually, but in recent years have seen an upturn in both volume and value. Figures 6.1 and 6.2 reflect this trend, showing historic volume and value data for Bayou LaBatre and Alabama.

Table 6.3 shows landings for all species caught commercially in Alabama between 1990 and 1995. Total commercial catch between 1990 and 1994 has fluctuated, averaging about 23 million pounds; landings in 1995 increased to over 28 million pounds. Value of landings in 1995 totalled almost $50 million. In terms of total volume of landings, the top three catches during most years included brown shrimp, white shrimp and blue crab. Since 1990, the volume of brown shrimp landed has ranged from nine (1992) to over 12 million pounds (1990). Total catch of brown shrimp in 1995 was about 11.2 million pounds with a value of almost $25 million. Landings of other shrimp species such as pink, white and bobs are much lower than that for brown shrimp but have enjoyed a consistent increase in catch since 1990. During the years 1990 to 1995 shrimp landings averaged over 65 percent of Alabama's total catch and over 85 percent of total value. Shellfish landings in Alabama since 1990, including shrimp, crab and oyster, averaged about 80 percent of total landings and close to 95 percent of total value.

Table 6.4 shows a ranking by total volume and total value for the top 25 species landed in Alabama for 1995. Other species important to Alabama's commercial fishing industry include Atlantic and Gulf Menhaden, Striped Mullet, Spanish Mackerel and Atlantic and Gulf Flounder.

The downturn in the commercial seafood industry that occurred in the mid- to late 1980s is attributable both to a general decline in the availability of resources during this time and to the over-capitalization of the shrimp industry that occurred during the early part of the decade (Auburn University Marine Resource Center, 1994). Because shrimp landings are so high valued, an increasing number of vessels entered the market in the early 1980s. As a result, shrimp prices declined and many commercial harvesters found increasing competition from imported product. A combination of these factors, and the subsequent general decline in fishing stock affected Gulf-wide commercial fishing.

Commercial fishing in Mobile and Baldwin counties has long been an important, albeit small, contributor to the region's industrial base. The most recent *County Business Patterns for Alabama* (1994) shows that a small percentage of jobs and wages is attributed to the fishing industry in Alabama's coastal region (as denoted by SIC 09 - Fishing, Hunting and

Table 6.2
Total Commercial Fish Landings for Alabama and the Gulf Coast
(Millions of Pounds and Dollars)

	Bayou La Batre, AL			Alabama Total		Gulf Coast Total		Alabama Percent of Gulf	
	Pounds	Value	% of Total AL Value	Pounds	Value	Pounds	Value	Pounds	Value
1980	19.9	$23.7	71.3%	24.8	$33.2	1,924.5	$498.6	1.3%	6.7%
1981	25.1	$31.4	71.4%	32.9	$44.0	1,680.4	$568.0	2.0%	7.7%
1982	17.8	$33.8	72.8%	24.7	$46.4	2,298.7	$626.0	1.1%	7.4%
1983	13.6	$28.5	66.4%	21.1	$42.9	2,516.9	$634.4	0.8%	6.8%
1984	18.2	$31.5	71.8%	26.3	$43.9	2,623.7	$663.8	1.0%	6.6%
1985	21.0	$30.4	73.2%	29.1	$41.5	2,416.6	$622.7	1.2%	6.7%
1986	25.6	$43.3	67.6%	36.7	$64.0	2,366.4	$814.9	1.6%	7.9%
1987	15.1	$29.8	66.9%	24.5	$44.6	2,523.4	$781.9	1.0%	5.7%
1988	12.4	$23.8	60.9%	22.3	$39.1	1,902.4	$729.1	1.2%	5.4%
1989	14.9	$24.7	64.5%	25.4	$38.3	1,774.3	$630.9	1.4%	6.1%
1990	13.7	$20.7	56.9%	23.3	$36.4	1,624.6	$640.4	1.4%	5.7%
1991	14.9	$24.6	66.9%	22.1	$36.8	1,678.5	$641.2	1.3%	5.7%
1992	16.2	$24.0	67.5%	23.7	$35.6	1,426.4	$652.1	1.7%	5.5%
1993	16.0	$24.3	71.1%	22.1	$34.2	1,714.8	$630.7	1.3%	5.4%
1994	18.3	$36.7	76.0%	23.5	$48.3	2,152.7	$806.3	1.1%	6.0%
1995	22.1	$37.5	75.5%	28.7	$49.7	1,464.7	$724.6	2.0%	6.9%

Source: US DOC, NOAA, NMFS, 1984- 1996d.

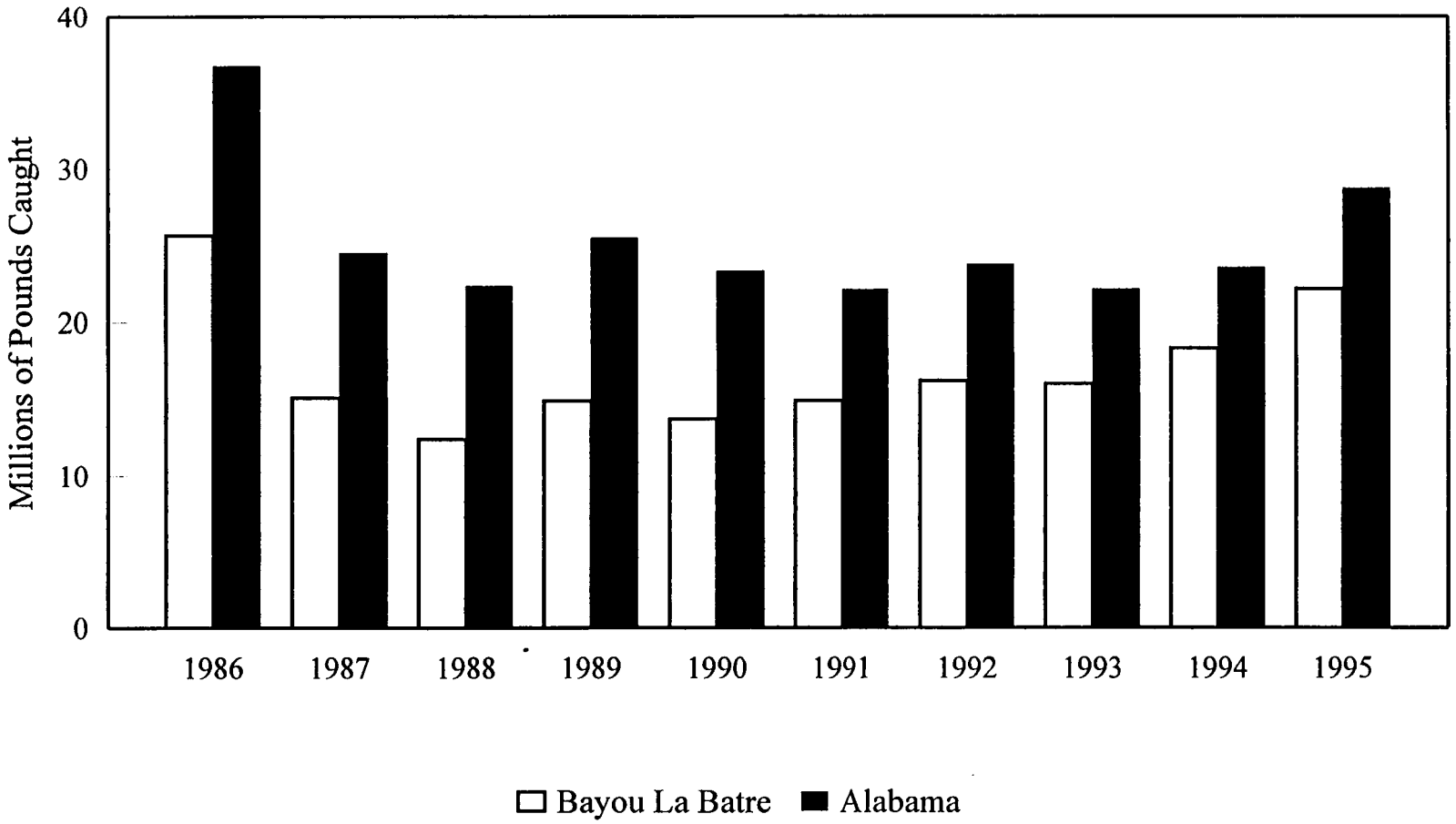

Figure 6.1. Commercial Fish Landings in Coastal Alabama, 1986-1995.

Source: US DOC, NOAA, NMFS, 1984-1996d.

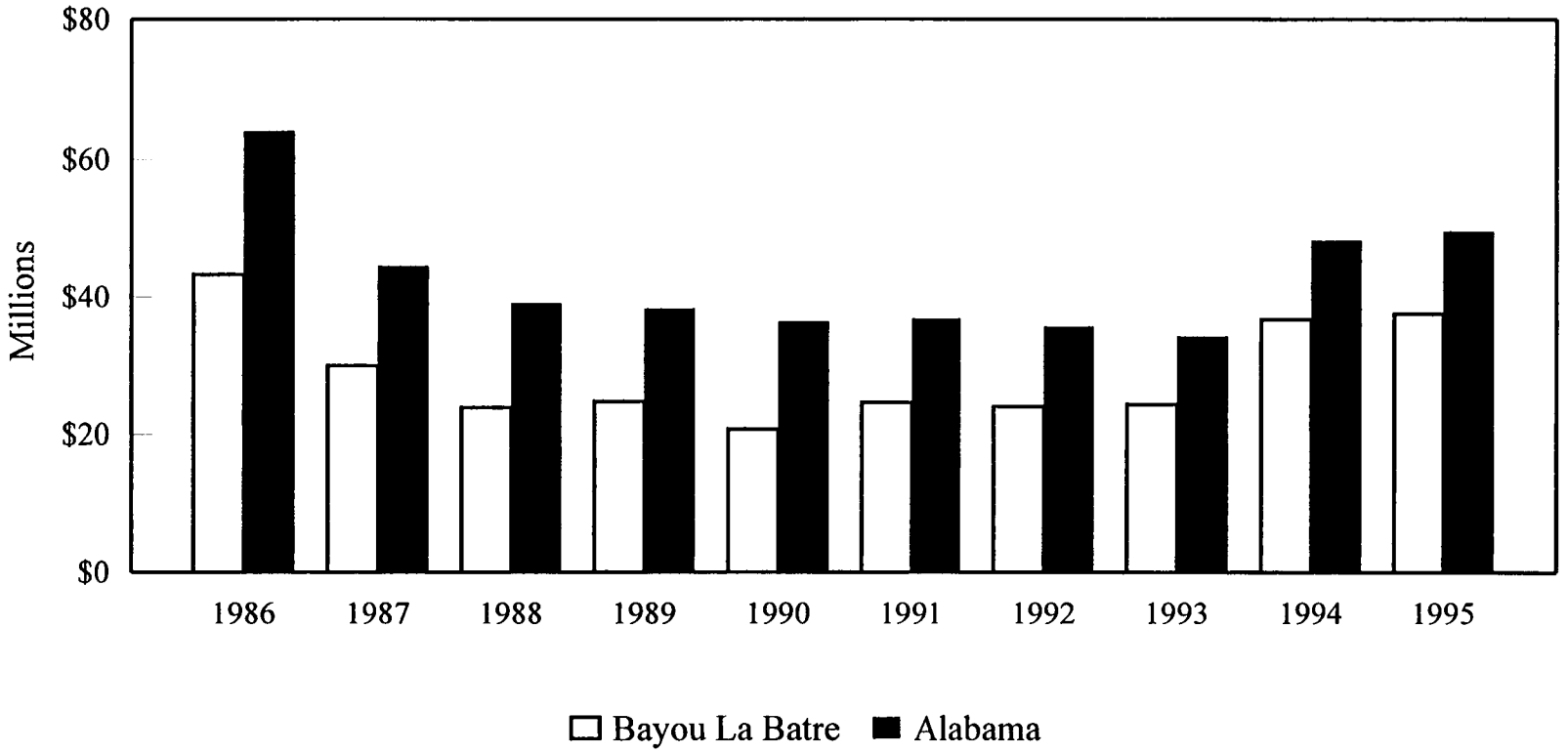

Figure 6.2. Value of Commercial Fish Landings in Coastal Alabama, 1986-1995.

Source: US DOC, NOAA, NMFS, 1984-1996d.

Table 6.3
Total Alabama Commercial Fish Landings and Dockside Value by Species, 1990 - 1995

Species	1990		1991		1992		1993		1994		1995	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack	15,206	$12,503	2,194	$2,088	21,432	$19,039	7,657	$7,639	0	$0	2,704	$2,777
Bearded brotula	9,243	$3,351	17,465	$7,877	18,514	$7,665	12,344	$5,856	6,980	$2,517	20,382	$19,855
Blue runner	1,350	$199	1,154	$276	3,895	$890	0	$0	14,012	$3,888	40,402	$10,015
Bluefish	25,536	$5,626	28,220	$7,256	16,443	$4,292	2,123	$527	4,727	$1,277	34,991	$7,917
Bonito	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Butterfish, lg	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Butterfish, unc	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Catfish	44	$33	0	$0	721	$219	0	$0	0	$0	0	$0
Cobia	5,221	$4,660	1,965	$1,669	2,998	$3,520	3,897	$4,486	4,310	$5,137	865	$961
Crab, blue, soft/peeler	0	$0	3	$3	655	$1,696	0	$0	0	$0	0	$0
Crabs, blue, hard	3,302,889	$1,264,543	2,731,120	$942,256	3,549,715	$1,464,938	2,554,158	$1,185,526	2,687,961	$1,473,800	2,520,268	$1,712,120
Croaker, At unc	6,596	$2,647	21,632	$8,102	18,463	$6,015	8,765	$3,268	23,281	$8,718	6,469	$3,372
Dolphinfish	170	$197	1,255	$1,537	330	$494	0	$0	0	$0	0	$0
Drum, black	57,158	$17,591	22,172	$4,433	37,368	$7,971	66,494	$12,694	56,008	$10,367	57,204	$9,956
Drum, red	0	$0	19	$8	0	$0	0	$0	0	$0	0	$0
Finfishes, unc bait	331,997	$77,420	855,178	$85,163	96,928	$11,661	0	$0	0	$0	0	$0
Finfishes, unc for food	14,341	$10,470	5,261	$2,618	0	$0	5,221	$2,272	7,044	$3,539	6,557	$3,294
Finfishes, unc gen	0	$0	0	$0	2,110,254	$173,379	0	$0	0	$0	0	$0
Flounder, At&Gf unc	167,200	$187,276	228,819	$225,378	170,461	$174,928	175,380	$209,455	198,055	$227,521	207,513	$286,779
Gizzard shad	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Grouper, black	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Grouper, gag	179	$281	0	$0	0	$0	0	$0	0	$0	0	$0
Grouper, red	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Grouper, snowy	0	$0	86	$131	0	$0	0	$0	0	$0	0	$0
Grouper, yellowedge	798	$1,427	0	$0	1,179	$2,534	0	$0	0	$0	0	$0
Grouper, yellowfin	134	$241	232	$348	0	$0	0	$0	0	$0	0	$0
Groupers	12,656	$20,935	44,034	$85,263	41,200	$86,645	35,395	$78,620	1,485	$2,875	4,307	$10,995
Grunts	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Harvestfish, unc	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Hind, speckled	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Hogfish	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Jewfish	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
King mackerel/cero	471	$412	53	$53	8,696	$5,921	1,949	$1,992	0	$0	0	$0
King whiting	86,613	$41,084	101,895	$49,199	141,436	$70,648	83,850	$43,804	59,386	$29,809	73,612	$36,348
Lobster, slipper	2,493	$9,572	1,891	$8,399	10,099	$36,042	2,006	$6,889	8,620	$30,057	589	$1,992
Lobsters, spiny	336	$839	0	$0	255	$765	0	$0	0	$0	0	$0
Marlin, unc	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Marlin, white	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Menhaden, At & Gf	0	$0	0	$0	176,969	$16,046	1,805,432	$150,103	1,328,850	$131,047	2,614,442	$249,733
Mullet, striped	1,999,483	$2,313,759	1,279,809	$1,155,936	723,705	$197,502	834,273	$383,081	1,058,307	$915,270	1,098,386	$928,807
Mullet with roe red	28,072	$41,850	630	$535	504,866	$619,579	370,969	$478,158	110,949	$145,928	22,488	$29,238
Oyster, estn, pb, f	46,266	$129,639	115,720	$172,260	620,878	$936,510	424,024	$578,474	426,919	$763,200	337,771	$621,091
Oyster, estn, pb, s	525	$1,874	139,800	$292,006	554,285	$752,680	462,821	$489,742	277,916	$300,227	363,949	$480,127
Oyster, estn, pv, f	19,226	$37,268	1,376	$1,757	11,299	$19,256	8,498	$11,757	5,614	$12,476	4,672	$10,458
Oyster, estn, pv, s	18,038	$42,266	24,063	$31,209	15,337	$20,287	24,275	$26,019	1,543	$1,880	3,600	$5,872
Pompano	740	$1,109	1,225	$1,972	1,513	$2,705	2,860	$6,854	1,688	$1,839	4,384	$10,725
Porgy, red (w. snapper)	165	$140	268	$215	191	$156	0	$0	0	$0	0	$0
Porgy, whitebone	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Scads (except bigeye)	0	$0	0	$0	90	$103	0	$0	0	$0	0	$0
Scamp	745	$1,253	83	$158	0	$0	0	$0	0	$0	0	$0
Scups or porgies, unc	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Sea catfish	42	$9	12	$1	887	$88	0	$0	0	$0	0	$0

Table 6.3 (Continued)
Total Alabama Commercial Fish Landings and Dockside Value by Species, 1990 - 1995

Species	1990		1991		1992		1993		1994		1995	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Sea trout, spotted	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Sea trout, white	56,246	$27,761	68,008	$32,511	120,472	$55,627	142,857	$67,145	141,381	$73,786	73,320	$36,578
Shark, black tip	4,270	$2,505	0	$0	11,734	$6,923	0	$0	0	$0	0	$0
Shark, bonito	1,258	$1,125	74	$74	0	$0	0	$0	0	$0	0	$0
Sharks, dogfish, spiny	0	$0	85	$59	0	$0	0	$0	0	$0	0	$0
Shark, hammerhead	13,035	$7,484	0	$0	0	$0	0	$0	0	$0	0	$0
Shark, longfin mako	0	$0	0	$0	45	$33	0	$0	0	$0	0	$0
Shark, lemon	288	$169	0	$0	0	$0	0	$0	0	$0	0	$0
Shark, sandbar	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Shark, tiger	790	$466	0	$0	0	$0	0	$0	0	$0	0	$0
Sharks, thresher	228	$102	0	$0	0	$0	0	$0	0	$0	0	$0
Sharks, unc	1,414,341	$803,508	1,071,864	$625,790	507,886	$285,441	58,117	$33,973	389,159	$301,106	31,011	$21,475
Sheepshead, At	342,206	$70,607	84,748	$22,604	278,017	$81,517	122,969	$37,886	131,974	$36,738	117,420	$42,583
Sheepshead, Fw	300	$60	0	$0	0	$0	0	$0	0	$0	0	$0
Shrimp, At & Gf, brn.	12,516,046	$24,615,838	12,140,849	$25,458,671	9,040,714	$21,285,908	9,231,976	$18,593,741	10,137,693	$29,001,366	11,156,659	$24,878,927
Shrimp, At & Gf, pink	735,192	$1,117,095	567,911	$1,054,118	678,230	$1,104,062	2,081,310	$3,703,511	2,228,570	$4,546,322	3,557,597	$7,087,352
Shrimp, At & Gf, red	163,027	$331,121	170,867	$328,642	241,229	$471,731	552,187	$984,670	512,800	$957,286	447,209	$887,572
Shrimp, At & Gf, bobs	0	$0	4,755	$2,852	0	$0	0	$0	2,905	$2,324	0	$0
Shrimp, At & Gf, wht.	1,531,990	$4,878,063	2,038,691	$5,921,668	2,279,546	$6,129,407	2,180,053	$6,585,538	2,699,845	$8,481,225	3,088,084	$9,632,145
Shrimp, rock	40,126	$24,465	11,999	$9,893	1,260,599	$1,188,638	257,115	$223,687	180,962	$226,247	2,134,471	$2,542,765
Snapper, gray	439	$389	2	$2	0	$0	0	$0	0	$0	0	$0
Snapper, lane	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Snapper, mangrove	0	$0	0	$0	55	$55	0	$0	0	$0	0	$0
Snapper, mutton	130	$217	0	$0	0	$0	0	$0	0	$0	0	$0
Snapper, queen	0	$0	9	$9	0	$0	0	$0	0	$0	0	$0
Snapper, red	51,297	$126,391	51,278	$126,007	62,705	$138,854	45,213	$91,019	76,240	$155,616	36,440	$79,182
Snapper, silk	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Snapper, vermilion	20,048	$36,038	6,629	$10,520	18,855	$32,342	22,373	$35,980	23,326	$38,697	3,766	$6,579
Snapper, yellowtail	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Snappers, unc	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Spanish mackerel	146,651	$46,250	136,188	$42,975	146,452	$41,199	117,697	$37,604	241,075	$82,359	368,600	$94,851
Spot	35,017	$9,523	60,514	$14,435	76,505	$15,204	71,712	$15,483	64,802	$14,372	30,571	$9,478
Squids, long finned	0	$0	721	$288	0	$0	0	$0	0	$0	0	$0
Squids, unc	12,559	$3,579	4,566	$2,058	3,567	$1,572	4,902	$2,337	3,155	$1,412	2,111	$1,039
Swordfish	1,017	$3,122	84	$222	1,379	$4,222	0	$0	0	$0	0	$0
Tenpounder	0	$0	1,550	$232	0	$0	0	$0	0	$0	0	$0
Tilefish	7,133	$12,484	5,908	$9,227	10,025	$10,389	0	$0	0	$0	0	$0
Tilefish, blueline	31	$15	0	$0	0	$0	0	$0	0	$0	0	$0
Tilefish, unc	0	$0	3,834	$4,914	37,255	$42,259	0	$0	0	$0	0	$0
Triggerfishes	16,613	$9,269	6,993	$4,910	6,551	$5,626	10,413	$9,905	8,389	$7,512	5,268	$5,875
Tripletail	126	$50	30	$6	4	$4	0	$0	0	$0	0	$0
Tuna, big eye	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Tuna, blackfin	279	$113	732	$470	833	$732	2,987	$781	0	$0	0	$0
Tuna, bluefin, giants	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Tuna, unc	0	$0	0	$0	1,116	$1,674	0	$0	0	$0	0	$0
Tuna, yellowfin	204	$493	6,282	$12,322	7,107	$16,343	0	$0	0	$0	0	$0
Wahoo	0	$0	171	$196	161	$201	0	$0	0	$0	0	$0
Warsaw	3,274	$3,100	526	$504	19	$41	0	$0	0	$0	0	$0
TOTAL	23,268,094	$36,361,876	22,073,502	$36,774,285	23,652,123	$35,564,178	21,794,272	$34,110,476	23,125,931	$47,997,740	28,478,082	$49,768,833

Source: US DOC, NOAA,NMFS, 1996a.

Table 6.4
Top Ranked Commercial Fish Landings in Alabama by Weight and Dockside Value

Rank	Species	1995 Pounds	Rank	Species	1995 Value
1	Shrimp, At & Gf, brn.	11,156,659	1	Shrimp, At & Gf, brn.	$24,878,927
2	Shrimp, At & Gf, pink	3,557,597	2	Shrimp, At & Gf, wht.	$9,632,145
3	Shrimp, At & Gf, wht.	3,088,084	3	Shrimp, At & Gf, pink	$7,087,352
4	Menhaden, At & Gf	2,614,442	4	Shrimp, rock	$2,542,765
5	Crabs, blue, hard	2,520,268	5	Crabs, blue, hard	$1,712,120
6	Shrimp, rock	2,134,471	6	Mullet, striped	$928,807
7	Mullet, striped	1,098,386	7	Shrimp, At & Gf, red	$887,572
8	Shrimp, At & Gf, red	447,209	8	Oyster, Estn, pb, f	$621,091
9	Spanish mackerel	368,600	9	Oyster, Estn, pb, s	$480,127
10	Oyster, Estn, pb, s	363,949	10	Flounder, At&Gf unc	$286,779
11	Oyster, Estn, pb, f	337,771	11	Menhaden, At & Gf	$249,733
12	Flounder, At&Gf unc	207,513	12	Spanish mackerel	$94,851
13	Sheepshead, At	117,420	13	Snapper, red	$79,182
14	King whiting	73,612	14	Sheepshead, At	$42,583
15	Sea trout, white	73,320	15	Sea trout, white	$36,578
16	Drum, black	57,204	16	King whiting	$36,348
17	Blue runner	40,402	17	Mullet with roe red	$29,238
18	Snapper, red	36,440	18	Sharks, unc	$21,475
19	Bluefish	34,991	19	Bearded brotula	$19,855
20	Sharks, unc	31,011	20	Groupers	$10,995
21	Spot	30,571	21	Pompano	$10,725
22	Mullet with roe red	22,488	22	Oyster, Estn, pv, f	$10,458
23	Bearded brotula	20,382	23	Blue runner	$10,015
24	Finfishes, unc for food	6,557	24	Drum, black	$9,956
25	Croaker, At unc	6,469	25	Spot	$9,478

Source: US DOC, NOAA, NMFS, 1996a.

Trapping). In 1994, between 100 and 250 jobs were generated under this industry classification. Perhaps a better representation of the fishing industry in coastal Alabama is the seafood processing sector, classified in SIC 20 - Food and Kindred Products. In 1994 in Mobile County, 23 establishments were classified under SIC 2092 - Fresh or Frozen Prepared Fish. Employment for this industry sector totalled about 800 in 1994 with a payroll of about $9 million. About 70 percent of these establishments employ less than 50 people.

6.3 Alabama Commercial Seafood Processing

In 1995 there were 87 seafood processing firms located in Mobile and Baldwin counties. Of these, 14 process shrimp products, 29 process crabmeat and 47 process oysters (US DOC, NOAA, NMFS, 1996b). Most firms process more than one product. The majority of these firms are located in Mobile County, notably in Bayou LaBatre. All shrimp, oysters and crab landed in Alabama waters are processed by Alabama plants. About 80 percent of product processed by Alabama plants consists of seafood caught between Florida and Texas or within foreign waters (US DOC, NOAA, NMFS, 1996c). Fishermen land their catch anywhere from Florida to Louisiana to rendezvous with a trucker, who brings the raw frozen product to Bayou LaBatre for processing.

Seafood processing volume for Alabama plants, however, has declined in recent years. As shown on Table 6.5, almost 40 million pounds of seafood was processed by 87 Alabama plants in 1995. The primary products of shrimp, crab and oyster are represented also. This is a decline from about 54 million pounds in 1990 and 71 million pounds in 1986. Table 6.6 shows the total value of processed products from Alabama's firms. The value of all processed catch has also declined since the mid 1980s. Figure 6.3 shows this trend for both volume and value of processed seafood. Figure 6.4 compares total processing volume for all Gulf Coast states. In recent years Louisiana has led the region in total processed volume.

In Alabama, shrimp represented about 75 percent of all processed products in 1995; crab and oyster round out the majority of Alabama's processed products. Table 6.7 shows that in 1995 shrimp products totalled $111.2 million, representing over 70 percent of the state's total processing value. Table 6.7 also shows data for shrimp processing companies and employment in Alabama. About 700 people were employed by 14 firms in Alabama in 1995. In the Gulf Coast region, including Alabama, 82 shrimp processing companies employed about 4,700 people and processed over 200 million pounds of shrimp in 1995. Table 6.8 shows historic data on shrimp processing for the entire Gulf of Mexico. Alabama shrimp processing represents less than 20 percent of total processing Gulf-wide. Figure 6.5 shows the trend in shrimp processing in Alabama since 1986. Figures 6.6 and 6.7 show that shrimp processing in Alabama is a relatively small percentage of total Gulf of Mexico processing.

According to Alabama seafood processing industry representatives, the decline in production is due to a variety of influences. Most significant is the cyclicity of the seafood industry and the effect annual fluctuations in catch can have on processing volume. Environmental conditions play a large role in the annual landings data. Declining shrimp processing volume in Alabama, for example, has been attributed to less than abundant resources Gulf-wide year-

Table 6.5
Alabama Seafood Processing Volume for Selected Species

	Shrimp	Crab	Oyster	All Catch
1986	46,584,790	9,531,049	4,737,208	70,881,402
1987	48,110,221	7,257,886	3,274,226	67,386,333
1988	38,016,401	8,073,542	2,383,048	55,405,283
1989	32,692,457	5,455,907	2,042,154	42,123,954
1990	41,252,847	6,891,226	2,376,302	54,287,324
1991	30,744,470	6,582,468	2,395,723	41,541,613
1992	30,016,154	4,870,226	3,796,835	39,919,960
1993	30,152,472	4,635,407	5,208,843	41,355,860
1994	30,849,251	4,920,195	5,094,132	42,096,702
1995	29,464,745	3,655,496	5,779,860	39,808,659

Source: US DOC , NOAA, NMFS, 1996b.

Table 6.6
Alabama Seafood Processing Value for Selected Species
($)

	Shrimp	Crab	Oyster	All Catch
1986	$189,565,194	$23,682,789	$15,189,191	$242,373,849
1987	185,096,039	18,812,451	12,289,681	228,907,578
1988	142,137,158	20,511,273	9,354,958	183,886,053
1989	127,522,602	16,787,904	8,620,907	160,946,092
1990	139,098,886	19,442,864	10,080,720	184,127,089
1991	118,570,780	18,302,653	9,281,897	152,349,576
1992	120,236,995	21,860,076	12,441,747	158,997,650
1993	111,116,357	20,677,418	14,655,772	152,809,013
1994	119,663,425	22,668,880	14,408,354	163,139,495
1995	111,183,996	21,190,574	18,053,626	155,247,011

Source: US DOC, NOAA, NMFS, 1996b.

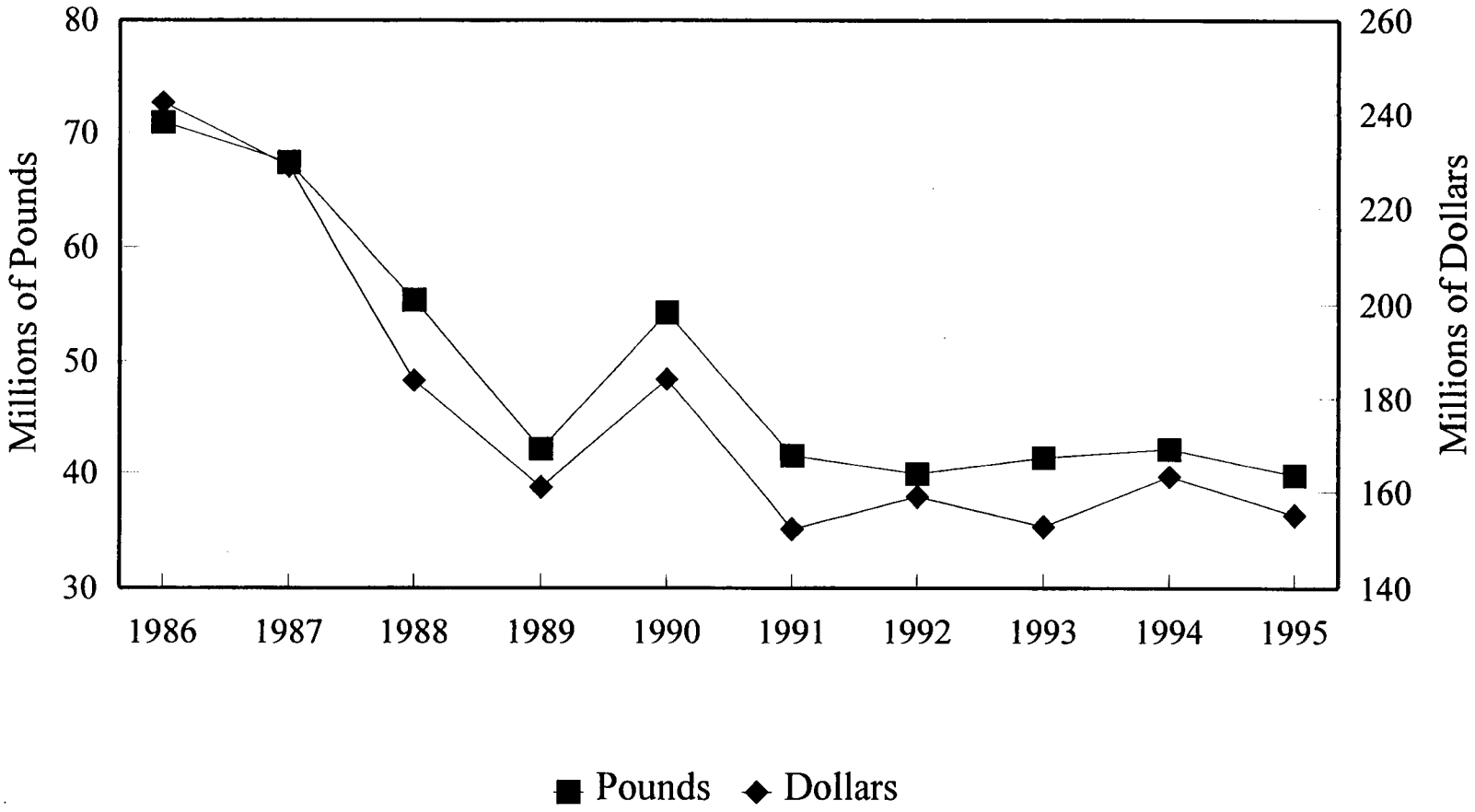

Figure 6.3. Alabama Seafood Processing Volume and Value.

Source: US DOC, NOAA, NMFS, 1996b.

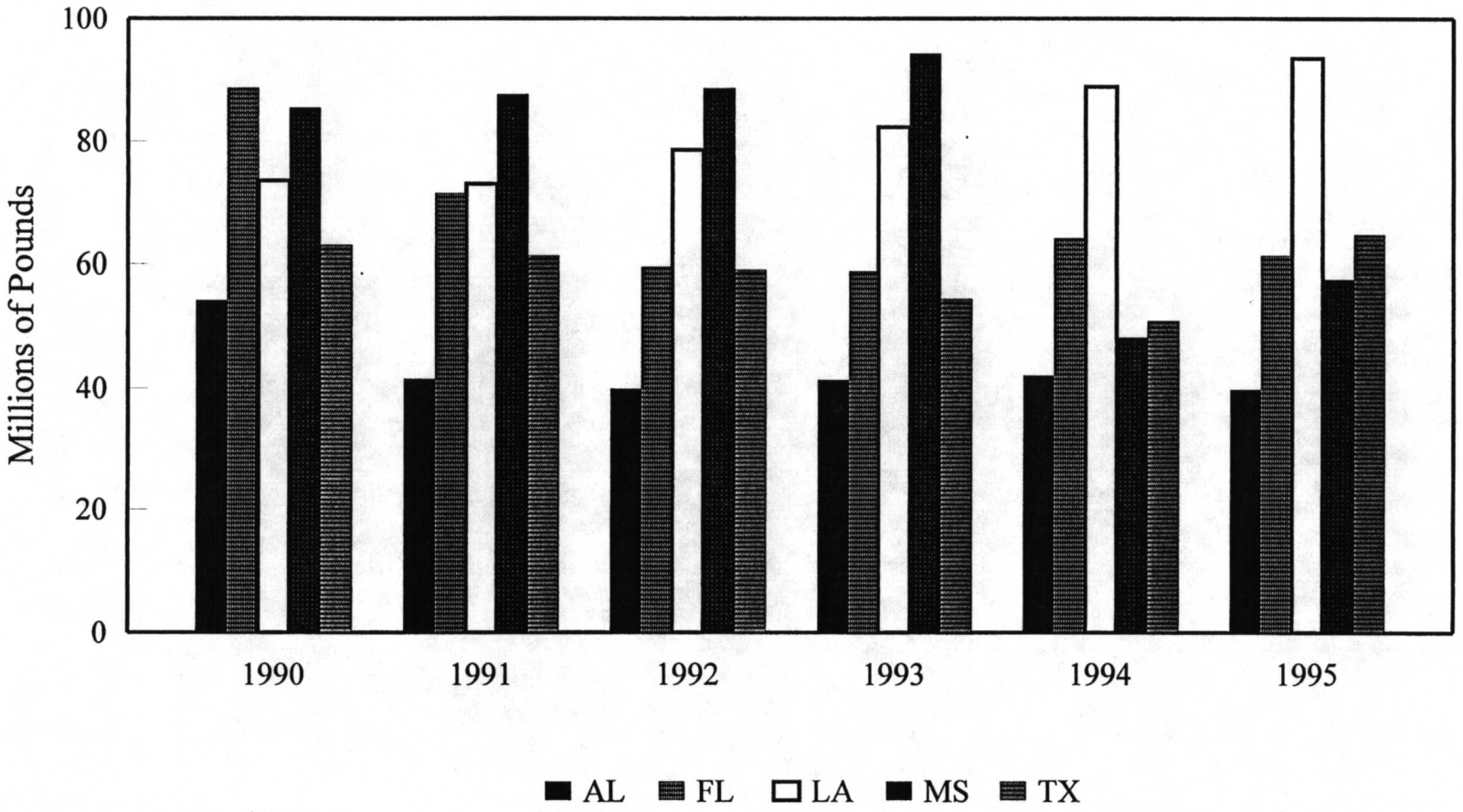

Figure 6.4. Total Volume of Processed Seafood for Gulf States.

Source: US DOC, NOAA, NMFS, 1996b.

Table 6.7
Alabama Shrimp Processing Production and Employment

	Number of Companies	Employment		Volume (Pounds)	Value (Dollars)	% of AL Process.	Percent of Gulf	
		Average	Seasonal				Volume	Value
1986	17	1011	1011	46,584,790	$189,565,194	66%	17.8%	19.1%
1987	19	1163	1178	48,110,221	$185,096,039	71%	20.5%	20.8%
1988	19	1030	1074	38,016,401	$142,137,158	69%	15.9%	17.2%
1989	17	884	905	32,692,457	$127,522,602	78%	13.1%	13.8%
1990	18	847	863	41,252,847	$139,098,886	76%	15.7%	15.3%
1991	18	879	899	30,744,470	$118,570,780	74%	13.4%	14.6%
1992	17	835	851	30,016,154	$120,236,995	75%	14.6%	17.3%
1993	15	762	782	30,152,472	$111,116,357	73%	14.8%	16.5%
1994	15	769	769	30,849,251	$119,663,425	73%	15.3%	16.9%
1995	14	733	733	29,464,745	$111,183,996	74%	13.7%	14.3%

Source: US DOC, NOAA, NMFS, 1996b.

Table 6.8
Gulf of Mexico Shrimp Processing Production and Employment

	Number of Companies	Employment		Volume (Pounds)	Value (Dollars)
		Average	Seasonal		
1986	119	6847	6918	261,308,585	$991,696,485
1987	124	6710	6824	234,488,199	$888,272,831
1988	123	6609	6924	239,499,754	$826,418,353
1989	115	6959	7113	248,612,306	$921,964,178
1990	114	6097	6252	262,021,527	$906,514,161
1991	103	5366	5560	228,778,408	$812,979,586
1992	101	4999	5113	205,219,464	$694,471,387
1993	90	4447	4558	203,144,320	$672,178,112
1994	88	4452	4484	201,512,709	$707,518,426
1995	82	4688	4776	215,423,224	$776,208,222

Source: US DOC, NOAA, NMFS, 1996b.

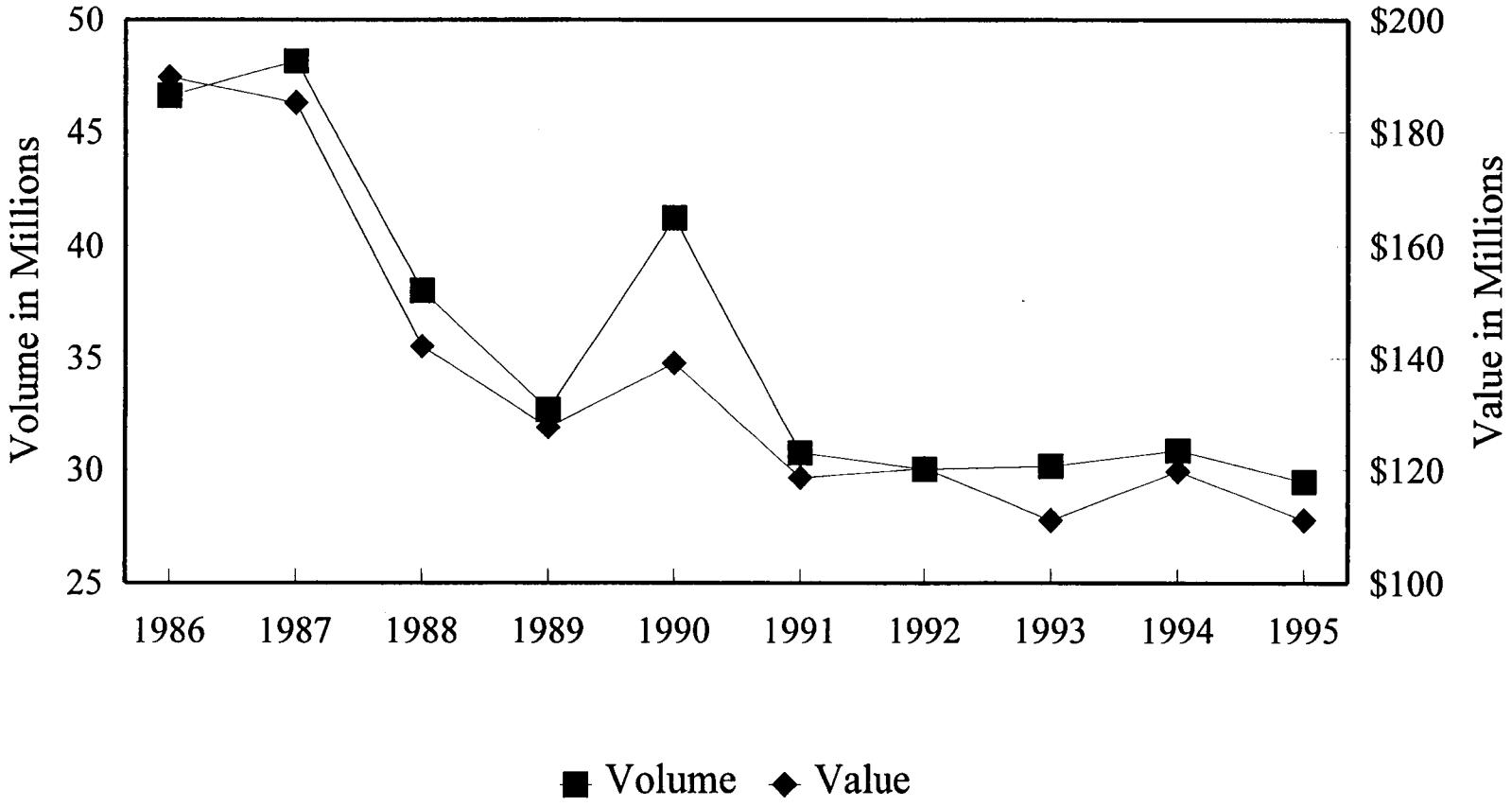

Figure 6.5. Alabama Shrimp Processing Volume and Value.

Source: US DOC, NOAA, NMFS, 1996b.

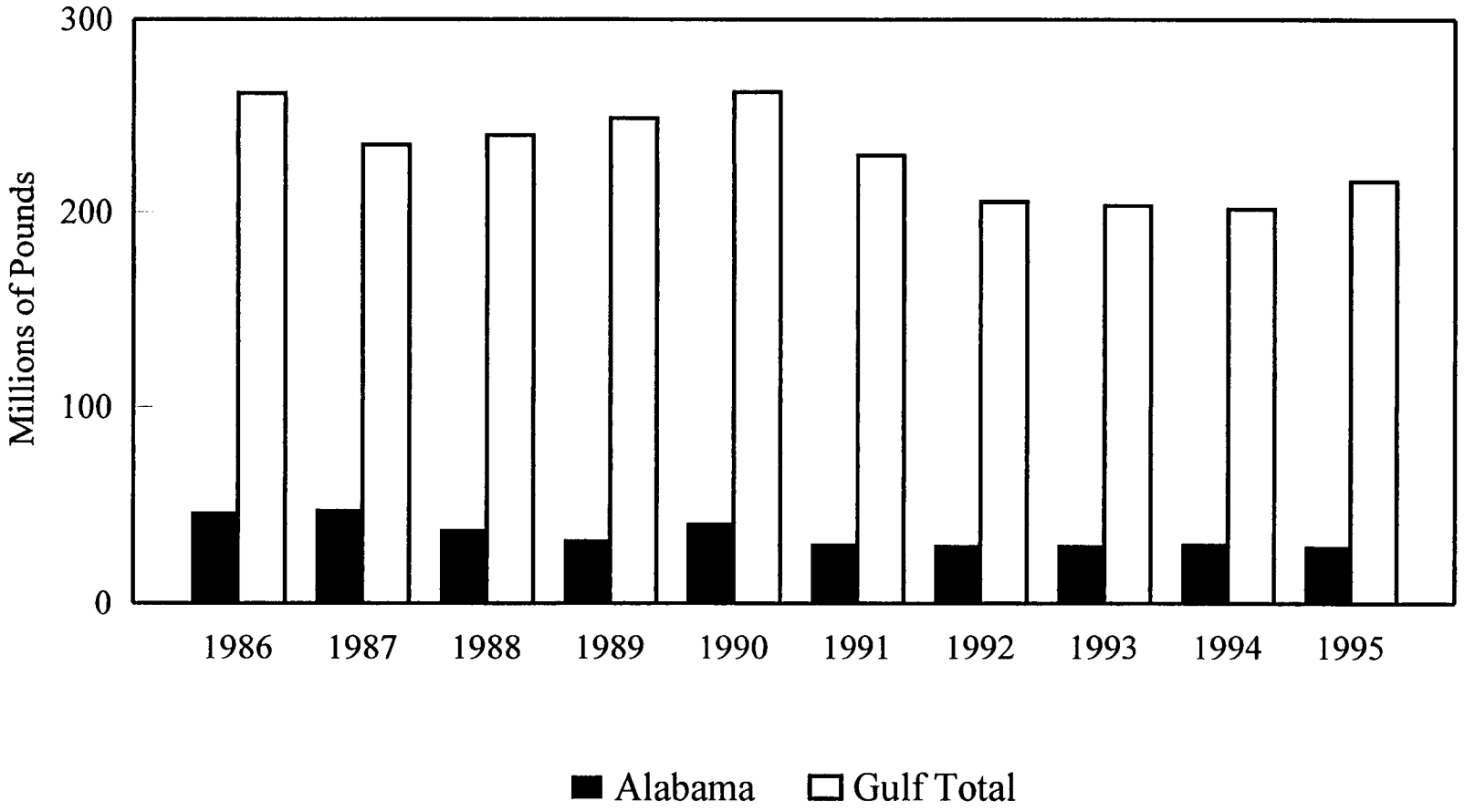

Figure 6.6. Total Volume of Processed Shrimp.

Source: US DOC, NOAA, NMFS, 1996b.

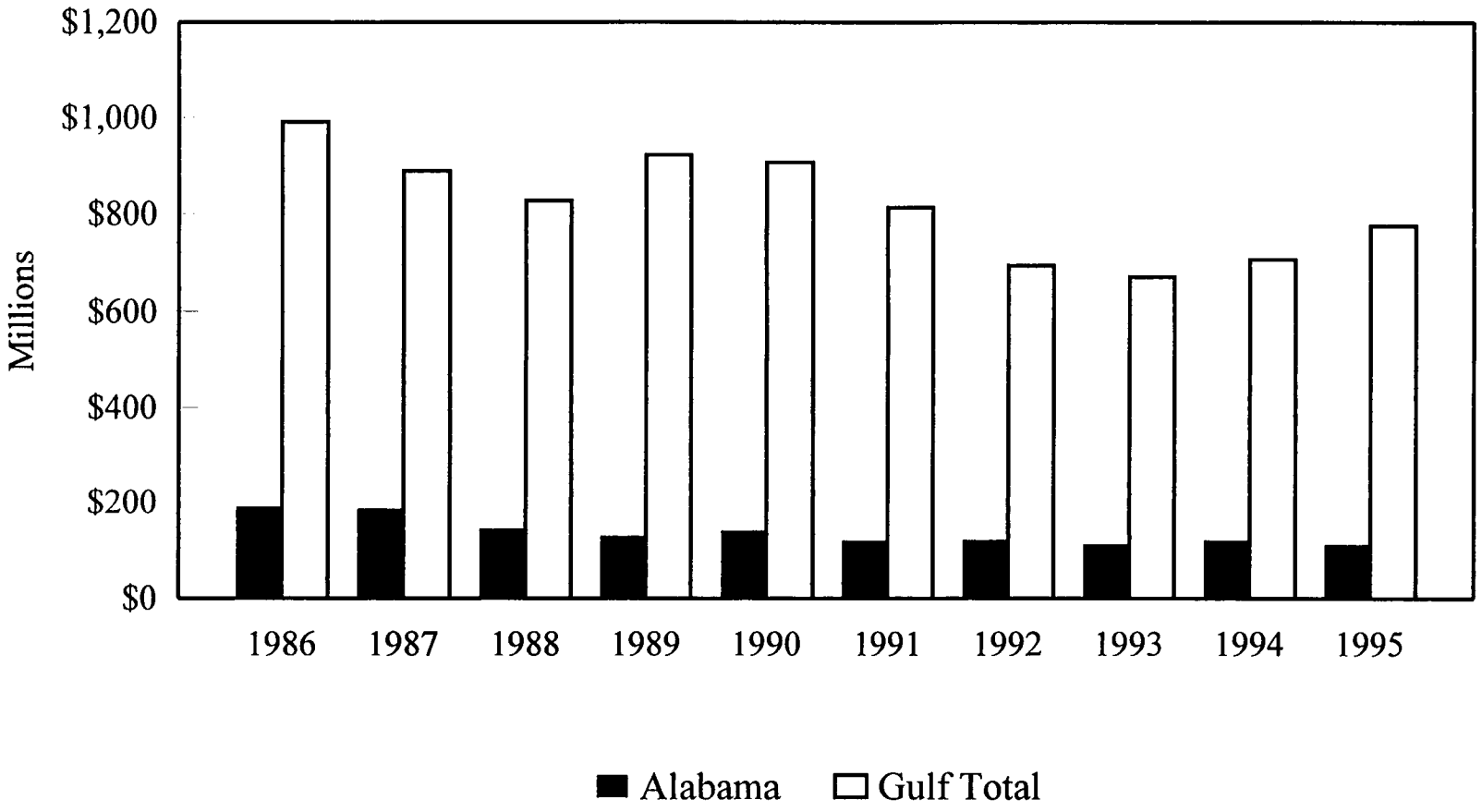

Figure 6.7. Total Value of Processed Shrimp.

Source: US DOC, NOAA, NMFS, 1996b.

to-year. This is due in part to the increasing presence of natural predators such as red fish. Resource management strategies designed to protect certain species found in Alabama coastal waters have indirectly hindered commercial fishing efforts. In Alabama, conservation measures sponsored by the recreational fishing groups have led to the protection of red fish whose primary diet consists of shrimp and crab. Restrictions on catch of this and other species prevent commercial fishermen from reducing the presence of such predators. Also, some Alabama shrimpers have been negatively affected by the harvesting of juvenile product by competing shrimp boats in neighboring waters.

Other more recent actions imposed on Alabama's commercial fishing industry which affect the volume of catch include gear restrictions. In 1996, shrimp boats were required to install fish excluder devices in addition to the turtle excluder devices already in place. According to shrimp industry representatives these devices significantly reduce the volume of shrimp caught.

Case Study: Relationship of Commercial Fishing Industry with Natural Gas Development

The abundant fisheries along Alabama's Gulf Coast support the commercial fishing industry as much as they do recreational anglers. The commercial fishing and seafood processing industries in Alabama depend on access to the Gulf and rely each year on an abundant marine supply. This case study discusses coastal Alabama commercial fishing in relation to the offshore natural gas industry and its impact on marine resources.

Commercial fishing representatives, including both vessel operators and seafood processors, were contacted to provide perspective on their relationship with the offshore gas industry. Contact with several of coastal Alabama's biggest seafood processing companies and the Alabama Seafood Association (ASA) president revealed a positive attitude toward offshore gas exploration and development and few conflicts with commercial fishing. The gas platforms are generally viewed as "good neighbors" by seafood processors although trawling area has been slightly reduced due to certain platform locations. They reported no concerns about offshore industry pollution because Alabama strictly enforces its zero tolerance emission rule (Deep Sea Foods, 1996; Alabama Seafood Association, 1996).

One main concern is the presence of unmarked artificial reefs installed by recreation anglers which occasionally have torn trawler nets and damaged boats. When unmarked artificial reef material is dumped outside authorized reef areas, nets snag and tear, creating expense from loss of equipment and catch. Gas related activity is sometimes blamed, if only for the "deep pockets."

The Alabama Seafood Association (ASA), representing the local fish processing industry, is friendly to the offshore industry and comments that the presence of structures has been a positive influence on the fish habitat. However similar concerns about underwater debris cutting into trawling area were cited (Alabama Seafood Association, 1996). Another seafood processor has experienced "peaceful co-existence" with the industry and generally thinks the gas industry and its workers are good for the community and feels obliged to work together (Sea Pearl Seafood, 1996).

One concern in the local region includes the concentration of gas processing plants in an area where evacuation roads are limited, in the event of an emergency. Another concern cited by each industry representative contacted is the absence of direct fiscal stimulus to the local area from the millions of dollars collected by the state each year in offshore tax revenues. Commercial fishing processors stated that they have seen no evidence of fiscal benefit to the region; i.e., government spending of gas revenues. Although the industry is their neighbor, the gas tax and royalty revenues are seen as going directly to Montgomery, with none of it coming back to the local community. Bayou LaBatre gets no portion of the severance tax revenue distributed to Mobile County (Deep Sea Foods, 1996; ASA, 1996; Sea Pearl Seafood, 1996). Gas industry civic contributions to the new Bayou LaBatre high school and MOEPSI's recent staging from the City Dock represent the largest local economic stimulus reported by local seafood processors and elected officials. (This overlooks the significant direct and secondary economic effects associated with Schambeau's Foodland and SEACOR's (John E. Graham's) longstanding services provided to the offshore oil and gas industry. New crew boat construction in local ship yards will add noticeable economic benefits beginning in 1997.)

7.0 Onshore Natural Gas Support Industry and Government Revenues

Since 1979, when large deposits of natural gas were first discovered in Mobile Bay, the gas industry has experienced significant growth in Alabama's offshore waters. The State of Alabama coastal waters extend three nautical miles seaward from all land areas under the jurisdiction of the State of Alabama to the state/federal boundary. These waters are confined to Mobile Bay, the Alabama portion of Mississippi Sound, and all open Gulf waters north of the state/federal boundary (Alabama Oil and Gas Board, 1986). Federal Outer Continental Shelf (OCS) waters are adjacent to the boundary.

Significant gas reserves are located in the deep Norphlet Formation underlying the waters off Alabama. As a direct result of the 1979 gas discovery in Mobil's Mary Ann Field, several State of Alabama lease sales took place during the 1980s. Major oil companies purchasing state leases included Mobil Offshore Exploration and Producing Southeast, Inc. (MOEPSI), Exxon Corporation and Shell Offshore Inc. This activity in state waters spurred new lease sales in adjacent federal OCS waters in the Mobile and Pensacola OCS. Phase II of this study will focus on the history of natural gas development offshore Alabama.

As offshore development began in the state and federal waters offshore Alabama, oil and gas companies required the use of existing coastal facilities. This section documents existing coastal facilities, offshore natural gas support bases and other coastal industries that operate in the Mobile Bay region. The section then details the total revenue contribution to the state and coastal region from offshore gas industry tax and royalty payments. At the end of the section two case studies are presented which discuss:

1. The effects of Natural Gas Development on the Town of Dauphin Island; and

2. A comparison of the tax revenues collected by the state and local counties from the tourism and natural gas industries.

7.1 Coastal Facilities

In addition to the waterways which support waterborne commerce in the Mobile Bay region, this area also houses several facilities to support the shipping and other industries. The two major port facilities in the Mobile Bay region include the Port of Mobile and the former Naval Station Mobile, now known as the Mobile Middle Bay Port. These facilities are described below.

7.1.1 Port of Mobile

The Port of Mobile is served by a 36.5 mile channel with a 45-foot depth through Mobile Bay. This waterway is the deep-water outlet for the Tennessee-Tombigbee Waterway and the Warrior-Tombigbee and Coosa-Alabama Rivers (Mobile Area Chamber of Commerce, 1996b). Other waterways providing coastal access include the Theodore Ship Channel (40-foot depth), Bayou LaBatre Channel (12-foot depth) and the Port of Chickasaw Channel (25-

Table 7.1
Port of Mobile Tonnage, 1991-1995

	1991	1992	1993	1994	1995
Alabama State Docks	16,240,342	15,231,026	14,775,281	14,855,060	17,622,563
General Cargo	3,477,679	3,054,196	3,000,848	3,413,543	3,684,198
Bulk Ores & Coal	10,629,572	9,136,267	9,058,731	9,573,623	12,761,444
Grain Elevator	298,859	480,500	858,655	754,996	1,176,921
Industry	1,834,232	1,619,447	1,857,047	1,112,898	271,097
General Port	19,030,470	20,535,555	22,210,868	26,396,814	24,561,813
Total Port of Mobile	35,270,812	35,766,581	36,986,149	41,251,874	42,184,376

Source: Mobile Area Chamber of Commerce, 1996a, b.

foot depth). Facilities at the Port of Mobile are operated by the Alabama State Docks and include 37 berths. Table 7.1 shows the volume of cargo that typically moves through the Port of Mobile. In 1995 42 million tons of cargo was transferred, an increase of about 20 percent from 1991 levels.

Similar data provided by the US Army Corps of Engineers (USACE) identifies total waterborne freight traffic at Mobile Harbor. Table 7.2 shows the breakout of ship traffic at Mobile Harbor among domestic and foreign shipments. In 1994, foreign imports and exports represented about 40 percent of the total waterborne freight tonnage at Mobile Harbor. Variation in the data reported by the USACE compared to Alabama State Docks information reflect the differences in reporting entities and the type of information recorded. In 1995, according to the National Association of Port Authorities (NAPA), the Port of Mobile was ranked 33rd among the nation's ports in terms of total container shipment volume. Mobile has maintained this position in recent years, ranking 34th and 33rd in 1994 and 1993, respectively (NAPA, 1996).

7.1.2 Mobile Middle Bay Port

The Mobile Middle Bay Port is the former Naval Station Mobile, one of several Gulf of Mexico homeports recently closed by the federal government in the past two years. The land with improvements was sold back to the Alabama State Docks (ASD) and renamed Middle Bay Port after the homeport was decommissioned. The site is located on the north side of the Theodore Ship Channel, south of the main State Docks along the Mobile River in Mobile. The 200-acre site is set up to support industry services, including offshore gas services, with its lay berth, ship repair berth, warehouses and dock facilities.

According to ASD this facility appears to be ideal for offshore industry service use. Facilities at the site could move pipe and are set-up to fabricate, bundle and export. There is a 69,000 square foot industrial machine shop on the base and housing for offshore crews. A 38-foot turning basin is dredged off the port (off the 40-foot ship channel) and there is a state-of-the-art double decker pier designed to service battleships; these facilities could handle most gas industry requirements.

The offshore gas industry was the first industry targeted as a potential buyer, but with a $100 million asking price there have been no buyers. The port has been approached by several rig companies but according to Alabama State Docks, use by these types of companies pose liability concerns with respect to handling jack-up and floating rigs (Mobile Middle Bay Port, 1996). The facilities are currently being used by the U.S. Navy on a temporary basis. In 1997, ASD will begin to lease the facilities piecemeal to create revenue. It currently costs the State $650,000 annually to maintain the underused facility.

7.2 Support Bases for Offshore Natural Gas Production and Development

Existing support bases for offshore natural gas development are located along the Theodore Ship Channel, at Bayou LaBatre and on Dauphin Island. The facilities and operations at these locations are described below.

Table 7.2
Waterborne Freight Traffic at Mobile Harbor, AL
(1,000s of Short Tons)

		Foreign		Domestic					
				Coastwise		Internal			
	Total	Imports	Exports	Receipts	Shipments	Receipts	Shipments	Intraport	Local
1988	36,476	5,652	11,130	294	1,245	12,617	5,193	N/A	346
1989	39,980	6,623	11,831	1,149	1,089	12,117	6,491	N/A	681
1990	41,136	8,046	11,294	1,880	699	11,539	7,193	485	N/A
1991	41,260	7,041	13,580	1,527	1,095	11,624	5,784	610	N/A
1992	40,482	7,636	12,276	2,049	886	11,293	5,845	497	N/A
1993	43,960	7,576	11,865	1,948	968	12,405	7,333	121	N/A
1994	44,997	8,864	9,859	1,827	791	11,348	9,794	721	N/A

Source: US Army Corps of Engineers, 1996.

7.2.1 Theodore Ship Channel

Theodore, Alabama is an unincorporated portion of Mobile County that is home to many industrial facilities. The Theodore Ship Channel provides access to Mobile Bay and is the support site for several offshore producers. The Theodore Ship Channel is currently the only deep water access (40-foot depth) available to the natural gas industry in coastal Alabama. That depth will govern support base locations for future gas industry deep water draft vessel requirements.

Currently Theodore's position for providing base support to the offshore gas industry is guaranteed by its deep channel. The existing channel into Bayou LaBatre, at 12 feet, is too shallow for most supply vessels that support the offshore industry. Businesses located in Bayou LaBatre recognized this as a competitive disadvantage and have joined with state and federal agencies to sponsor a channel deepening project that will dredge the channel to 18 feet. This dredging project is currently underway and is expected to be completed by 1999.

On the Theodore Ship Channel three shore bases are present:

- Midstream Fuel Service, Inc.
- M-I Drilling Fluids
- Exxon

Midstream Fuel Services set up a supply base at Theodore to provide mud, drilling pipe, workers and supply boat services for its operations. Midstream also has a base in Bayou Cassotte at Pascagoula, Mississippi. Midstream's facilities currently provide support services to offshore producers. Unocal currently works out of Midstream at Theodore, and Chevron works out of the Midstream Bayou Cassotte dock in Mississippi to service work on its OCS development facilities. Future Chevron production from the Destin Dome OCS will likely be serviced out of Midstream's Theodore location. Also located at Midstream's property are two drilling fluid suppliers: Baroid Drilling Fluids and Baker Hughes.

Across the channel on the north side is M-I Drilling Fluids. This company provides drilling supplies to offshore operators from tanks located at this facility. Also located on M-I's property is Coastal Oil and Gas, a fuel supplier.

Theodore is the main staging area for Exxon. Facilities at Theodore which support Exxon's offshore operations include docking and crew loading facilities; a parking area and support building are available for crew changes. Exxon contracts with local suppliers to provide fuels and drilling materials.

7.2.2 Bayou LaBatre

Bayou LaBatre largely supports the seafood processing and ship building industries and is gearing up to offer additional resources along the channel to the offshore gas industry. As discussed above, a long-awaited dredging program is currently underway, sponsored by the federal and state governments and the Town of Bayou LaBatre, to dredge the channel to an

18-foot depth. The economic development of Bayou LaBatre, population 2,400, has been negatively affected by the current depth of its channel (12 feet), which foreclosed access from heavy offshore supply boats. Most of the local services which support the offshore gas industry are located out of the Theodore Ship Channel. In view of the positive economic advantages a deeper channel will offer Bayou LaBatre, town officials are actively recruiting industry business.

Bayou LaBatre is well-situated to service offshore gas industry activity on the western side of Mobile Bay. The new 18-foot channel will help the town compete in the offshore marine business, especially handling deeper draft offshore support vessels. The Town of Bayou LaBatre currently leases dock space to MOEPSI which uses the location as a staging area for offshore drilling. For now Mobil is the only offshore operator working out of Bayou LaBatre.

7.2.3 Dauphin Island

Coastal facilities that support the offshore industry also include those located on Dauphin Island. The proximity of producing wells in Alabama's waters to Dauphin Island contributed to the location of support services and facilities on the island. Due to channel limitations, shore bases at Dauphin Island only provide crew support service and small consumables movement, notably groceries.

Facilities at Dauphin Island largely support shallow draft vessels. Three offshore support shore bases exist on Dauphin Island:

- McHugh Oilfield Services, Inc.
- Crewboat Services, Inc.
- Mobil's small shorebase on the eastern edge of the island.

McHugh Oilfield Services was founded by a geologist who came to Dauphin Island from Louisiana in the 1970s to open a support base, even before Mobil made the 1979 offshore gas discovery. McHugh operates the largest support base on Dauphin Island, serving miscellaneous crew boats including Shell's. Mike McHugh, the founder's son, moved to Dauphin Island in 1990 from Louisiana to take over his father's business. McHugh's business sells crane services, fuel, and miscellaneous support and dock usage.

Adjoining Crewboat Services, Inc., operated by Collier Farnell, is a smaller site. Mobil is said to use Crewboat Services facilities. Mobil also owns and operates a small site on the eastern end of the Dauphin Island near the pilots' dock and the ferry dock. At each shorebase, a couple dozen parked cars with mostly Louisiana and Mississippi license plates were observed. The site visit occurred during completion of Mobil's 95-5 well in November 1995. A Mobil spokesperson stated that the out-of-state cars predominately reflect workers on the new well. Offshore operations and maintenance (O&M) crews are reported to be relocating to the area. Drilling crews will remain largely out-of-state workers as they work all over the Gulf.

In addition to these facilities, PHI operates helicopter services from the Dauphin Island landing strip, and Miller Diving provides industry diving services. Miller Divers, one of the oldest diving companies in the United States, has gone from profits of $80,000 in 1991 to more than $1 million annually, largely due to the offshore gas industry, mostly pipeline work. Headquartered near Fairhope in Baldwin County, the diving company formed in the late 1800s is still owned and operated by descendants of the founder. It employees between six to 20 people, depending on the work available. About 90 percent of the company's work is offshore Alabama for Mobil, Shell, Exxon and Transco. Miller diving teams have worked around the world on gas and oil projects (Miller Divers, 1996).

7.3 Services to Offshore Gas Industry

In addition to offshore support base locations, the offshore industry is supported by local business services. These services, largely based out of Bayou LaBatre, include water transportation and offshore supplies.

7.3.1 Transportation Services

Water transportation services are provided to the offshore gas industry by local businesses. John E. Graham Marine company, a Bayou LaBatre-based company supplying offshore support vessels, is the largest among local offshore support businesses. Graham Marine has sales of $50 million annually, 75 vessels and 600 employees with 350 in the Alabama, Mississippi and Florida Panhandle areas. About 10 of Graham's boats work the Alabama platforms. This has a reasonably large economic effect on Bayou LaBatre. Crews for boats are specialized and hub around Bayou LaBatre. Graham Marine recently sold itself to SEACOR, headquartered in New Orleans, which now operates the transportation business. Vessels are manned and operated by the company and leased by offshore companies on a day rate to provide everything from food to rope for the rigs. Supplies to the boats are purchased locally. SEACOR's purchase of the company in late 1995 is not likely to change local employment patterns related to operations.

After Graham sold to SEACOR in 1995, descendants of the family started two new marine businesses which focus on construction and leasing of offshore crew boats. C&G Boat Works, the construction company, is a shipyard and repair facility and will be the only crewboat construction facility in Bayou LaBatre. They currently have a contract to build a 140-foot boat for an oil company customer. According to the owner, offshore demand is increasing because fields are moving to deeper water. Local construction will benefit from this because most Louisiana shipyards are full with orders through 1998.

7.3.2 Supply Services

Schambeau's Foodland, started 75 years ago in 1921, is the oldest and largest grocery market in Bayou LaBatre. Schambeau serves individual gas rigs in addition to crew boats. Boat customers include SEACOR in Bayou LaBatre, McHugh Oilfield Services and Crewboat Services on Dauphin Island and other gas field boats that come into Midstream Fuel and Exxon docks on the Theodore Ship Channel. The grocery is unique because they provide

dockside service. This service was in place to support the commercial shrimping industry long before the Alabama gas fields were developed.

Crum Schambeau, a fourth generation owner, says offshore customers are the third largest part of his business behind households and shrimp boats. Several rigs located in Mobile Bay are customers; orders are faxed to the store and shipped to Dauphin Island where supplies are transferred to the rigs' crewboats.

7.3.3 Other Services

The local restaurants in Bayou LaBatre are positively effected by the employees working out of the gas industry plants located nearby. Workers from Exxon, Mobil and Shell's gas processing facilities drive only about 10 minutes to patronize several eating and drinking establishments in Bayou LaBatre. During construction at these plants, the large workforce created a very beneficial impact on the local restaurants. A motel is under construction in Bayou LaBatre, anticipating business from gas industry workers. The next closest hotel rooms are at the Tillman's Corner section of Mobile at the intersection of U.S. HWY 90 and I-10.

7.4 Ship Building

Ship construction in the Mobile Bay region is an established industry that has weathered fluctuations in business over the past 25 years. According to the 1995 Mobile Area Manufacturers Directory, about 20 firms in the region perform ship building and repair operations (SIC 3731). An additional 15 firms build and repair boats (SIC 3732). Among the ship building and repair businesses, over 60 percent are located in Bayou LaBatre. The rest are based either out of the City of Mobile or Baldwin County. Operations include repair and conversion of ships, barges and drill rigs; construction of ships, barges and drill rigs as well as construction of fishing vessels and work boats. The largest ship builders listed are Atlantic Marine and Bender Shipbuilding. Both employ between 500-1000 workers. Other large employers (100-250 employees) include Steiner Shipyard, Master Marine, and Alabama Shipyard (Mobile Area Chamber of Commerce, 1994).

Among the boat building firms, a greater percentage are located in Baldwin County where there is more demand for recreational and sport fishing vessels. The boat building and repair companies are smaller, most with under 10 employees.

The ship building firms based in or near Bayou LaBatre constructed approximately 1100 vessels for domestic use from 1975 through 1986 and about 250 vessels for foreign interests during the same time (US Army Corps of Engineers, 1988). Data on total ships constructed in the region since 1986 were not available, but information dating back to 1988 estimate that about 150 new ships are constructed each year in Bayou LaBatre and over 1000 vessels are repaired and/or outfitted. Ship builders who build vessels bigger than the Bayou LaBatre Channel allows (>12 foot draft) typically split their construction operations between two yards, one located on a deeper channel. The current dredging project along the Bayou LaBatre's channel will alleviate this burden in the future.

Mobile grew up around its waterfront, and its two major shipyards view the growing offshore gas industry as positive for their business. These shipyards are Atlantic Marine and Bender Shipbuilding.

7.4.1 Atlantic Marine

Atlantic Marine, with headquarters in Jacksonville, Florida, in the late 1980s bought the Alabama Dry Dock and Shipbuilding Corporation (ADDSCO), established in 1917. It grew to cover nearly a square mile of land across the Mobile River from the city by turning out Liberty ships during World War II. The yard is capable of building the biggest offshore equipment in use. Four offshore semi-submersible drilling rigs and a pipe-laying barge were constructed at ADDSCO in the 1970s. In 1972 ADDSCO built the first of seven semi-submersible deep-water, propulsion-assisted drilling rigs for Diamond M. Company of Houston, Texas. In 1974 Exxon contracted for the Semac I, 400-foot catamaran-hulled pipelayer. The vessel set pipe-laying records when it was first used in the North Sea.

The push to develop offshore gas reserves has been a boon to Atlantic Marine, Inc. After a slowdown, their Mobile yard is getting new conversion work on rigs, semi-submersibles and drill ships, along with derrick barge repairs. It is refitting the "Global Explorer" — a vessel built for the U.S. Navy to raise submarines — for offshore duty.

The Mobile yard of Atlantic Marine, which specializes in conversion and repair of heavy vessels, has been busy since the beginning of 1996 due to the offshore industry boom. They are currently seeking contracts for new drilling rigs and floating production platforms and drill ships. Almost all of the gas field vessels are 15 to 20 years old and nearing replacement age so the local yards are planning to bid on building AHTVS s (offshore supply boats) in addition to heavy drill ships (Atlantic Marine, 1996).

7.4.2 Bender Shipbuilding

Mobile's other big shipyard, Bender Shipbuilding and Repair Co., Inc. has nearly a mile of yards along both sides of the Mobile River. Bender, a Mobile family-owned and operated shipyard founded 75 years ago, does conversion, construction and repair, including work on some offshore boats.

The company currently is designing some offshore vessels for the gas industry. Two vessels are under construction for North America Shipyard of LaRose, Louisiana, a subsidiary of Edison Shouest, a worldwide company providing support vessels for drilling rigs. Both are seismic research vessels in the 220-foot range. One supply boat is being outfitted and a drilling rig is in the yards for repair. Design work also is being constructed for possible contracts, and in the past six months Bender has also bid on upgrading several rigs for deepwater drilling (Bender Shipbuilding, 1996).

7.4.3 Steiner Shipyard

Steiner is the largest boat builder in the area and is primarily engaged in new boat construction. Steiner Shipyard builds vessels for industrial and fishing needs: trawlers, tugs, tows, supply boats, environmental work boats and passenger ferries. Steiner was founded in 1954 as family owned business; now Steiner has two boat building yards, one almost exclusively for construction of fishing boats, the other for work boats. They build tugs and ferries and do not currently service the offshore industry. According to development staff at Steiner the company is beginning to actively seek gas industry customers (Steiner Shipyard, Inc., 1996).

7.5 Revenue Contribution from Offshore Taxes and Royalties to State and Coastal Region

This section describes revenue sources to the State of Alabama and coastal region related to offshore natural gas production. Revenue sources include severance tax payments to the State of Alabama, Mobile County and Baldwin County as well as royalty payments to the state. Also discussed is the significance of severance tax payments to the counties' finances, relative to other revenue sources. Economic impacts more generally will be addressed in Phase III of this study.

7.5.1 Natural Gas Severance Tax Revenues

Gas produced in Alabama is subject to a severance tax, administered through the Alabama Department of Revenue and currently levied at 10 percent. The severance tax includes both privilege taxes and production taxes, which are assessed on the basis of "engaging in the business of producing or severing oil or gas within the state" (Alabama Department of Revenue, 1992). On average, privilege taxes are assessed at eight percent of gross value of hydrocarbons.[2] Production taxes are always assessed at two percent of gross value of hydrocarbons. Together, these tax rates total 10 percent. Tax is based on the value of the hydrocarbons at the point of production. In addition, all gas produced, all leases in production, and all gas submerged on producing properties within the State of Alabama are exempt from ad valorem (property) taxes levied by the state or by any county or municipality (Alabama Department of Revenue, 1996a).

In 1996 the State of Alabama passed a new tax law designed to encourage development of the state's oil and natural gas resources. The state issued a blanket tax reduction on all new wells drilled between July 1996 and July 1999. The law promises a 50 percent severance tax

[2] Exemptions to privilege taxes have been granted in recent years depending on the type of offshore well drilled. For instance, production greater than 200 MMCFD from gas fields with permits granted on or after July 1988 is taxed at four percent; production from wells drilled to depths greater than 18,000 feet is taxed at six percent. Other exemptions exist for occluded gas wells, enhanced recovery projects, and discovery wells. Therefore, based on individual circumstances, privilege taxes are assessed at from two to eight percent of gross value of production (Alabama Department of Revenue, 1992).

break for five years on all new wells (Mobile Press Register, 9/9/96). With this new law, Alabama hopes to provide incentives for more oil and gas development within its borders.

Payments of Severance Tax Revenues to the State of Alabama

Severance tax payments for offshore gas production are collected by each county where gas is produced. A state collector in each county receives wire transfer directly from the operator. The distribution of severance tax revenues, once collected by the state Department of Finance, is as follows: privilege taxes are dispersed to the state's General Fund (90 percent) and to the county from which the tax was assessed (10 percent); all production tax revenues (100 percent) are directed to the state's General Fund. The exception to this relates to offshore revenues collected from producing wells annexed by the Town of Dauphin Island. The state categorizes these wells as "onshore" therefore the dispersement of funds to the local regions is calculated based on a different, more complicated formula.

Severance tax collections from Mobile Bay began in 1988 when gas was first produced for sale. Table 7.3 shows the amount of offshore gas tax revenues received by the state since 1988. In 1993, Dauphin Island increased the town's jurisdiction by annexing several additional miles of adjacent waters where producing gas wells are located. Currently a total of six gas wells are in production within the town limits and a percentage of severance tax revenues paid by the operators to the state is remitted to the Town of Dauphin Island. (These payments are presented in the next section.) Although the wells are located offshore, the state of Alabama categorizes them as "onshore" wells since they fall within Dauphin Island's jurisdiction. However, the state records all tax monies paid by these offshore operators as "onshore" dollars even though they technically are collected from offshore production. Contacts with Alabama Department of Revenue and Mobile County were not able to provide detail on these "onshore" payments from production off Dauphin Island. As a result, Foster Associates estimated the payments to the state and the share received by Mobile County from this production, based on actual Dauphin Island tax receipts and the tax allocation formula provided by the Alabama Department of Revenue.

As shown on Table 7.3, tax receipts to the state from offshore gas production for fiscal years 1988 through 1996 totalled almost $37 million. Severance tax revenues to the state from offshore production were significantly higher after 1992, increasing from $2.8 million in 1992 to over $6 million thereafter. Total tax revenues to the state related to offshore production in 1996 are estimated to be over $8 million.

Severance Tax Revenue Disbursements to Mobile County

As noted above, 10 percent of privilege-tax revenues are distributed to the counties from which they are collected. Table 7.3 also shows revenue distributions to Mobile County since 1988. Payments to Mobile County in 1988 were small, totalling about $15,000 and peaked at almost $600,000 in 1993, prior to payments received from the Dauphin Island "onshore" allocation. After 1993, when Dauphin Island's annexation took effect, tax receipts to Mobile County related to offshore production more than doubled. Mobile County tax receipts from offshore gas production are estimated at $1.9 million in 1996. These revenues are allocated

Table 7.3
Severance Tax Payments to Alabama and Coastal Counties from Offshore Gas Production in State Waters (Millions $)

Fiscal Year	State of Alabama			Mobile County			Baldwin County
	Offshore	DI Onshore[1]	Total	Offshore	DI Onshore[1]	Total	
1988	$0.26	--	$0.26	$0.15	--	$0.15	$0.012
1989	$1.03	--	$1.03	$0.06	--	$0.06	$0.043
1990	$0.65	--	$0.65	$0.04	--	$0.04	$0.027
1991	$1.36	--	$1.36	$0.06	--	$0.06	$0.073
1992	$2.82	--	$2.82	$0.22	--	$0.22	$0.057
1993	$6.81	--	$6.81	$0.59	--	$0.59	$0.086
1994	$6.08	$3.57	$9.65	$0.42	$1.69	$2.11	$0.189
1995	$3.89	$2.27	$6.16	$0.24	$1.10	$1.34	$0.149
1996	$4.84	$3.40	$8.24	$0.27	$1.61	$1.88	$0.215

Source: Alabama Dept. of Finance, 1996; Alabama Dept. of Revenue, 1996a.

[1] The portion of the Dauphin Island offshore tax revenues, designated as "onshore" by the state, allocated to the state and Mobile County were estimated based on historical offshore tax revenues to Dauphin Island and the Alabama onshore tax allocation formula.

to three primary funds: the County General Fund (35 percent), School Fund (35 percent), and Indigent Care Fund (30 percent).

In addition to Mobile County, The Town of Dauphin Island, located within the jurisdiction of Mobile County, also directly benefits from offshore gas production. The Town of Dauphin Island's boundary extends into Mobile Bay and encompasses an area where six producing gas wells are located. Mobil's Aloe Bay well is due to be completed in July 1997 and will be an additional source of revenue to the town. Table 7.4 shows the total annual payments to the town's general fund since 1990. Revenues peaked at about $320,000 in 1994, and were about $302,000 in 1996.

Table 7.4
Severance Tax Payments to the Town of Dauphin Island

Fiscal Year	
1990	$226
1991	$28,348
1992	$27,696
1993	$121,205
1994	$317,656
1995	$205,644
1996	$301,871

Source: Dauphin Island, Town of, 1996.

Severance Tax Revenue Disbursements to Baldwin County

Table 7.3 also shows revenue distributions to Baldwin County since 1988. Payments to Baldwin County were first recorded for fiscal year 1989 in the amount of about $40,000. Revenues dropped slightly the next year but rose to $70,000 in 1991 and to $84,000 in 1993. Payments peaked in 1996 with $215,000 collected by the county. Baldwin County revenues are allocated to four primary funds: the County General Fund (32.5 percent), School Board (32.5 percent), Indigent Care Board (five percent) and the Alabama Trade School (five percent) (Baldwin County Commission, 1996).

In addition to the state severance tax levied on offshore gas producers, in 1993 Baldwin County began to collect an additional one percent of the value of gas production from all operators within the County's jurisdiction. Revenues collected are deposited into the "Baldwin County One Percent Oil and Gas Severance Tax Fund." Fund provisions require

that the fund reach $15 million before the interest can be spent. Also, when the fund totals $15 million, the tax is no longer in effect (Alabama Department of Revenue, 1996a). As of September 30, 1996, the trust fund had about $2.5 million. Under law the county can spend 90 percent of the interest and must put 10 percent back into the trust fund. The county has been putting all the interest back into the fund and to date it amounts to about $300,000 to $350,000 (PASH Inc., 1996).

7.5.2 Royalty Payments to Alabama from Offshore Gas Production

Royalty payments are based on the net back value of gas production at the well head. The percentage of value assessed varies by operator based on the payment term arranged at the time an offshore tract was leased. Bidders in the 1981, 1982 and 1984 lease sales were granted royalty terms from 16.67 percent upwards to 28 percent. Mobil currently pays a royalty rate of 16.67 percent from gas production in the state's Mary Ann Field.

Actual royalty payments vary by operator because producers are allowed to deduct from the total value of production "reasonable direct costs" (Alabama Department of Revenue, 1996a). Allowable expenses typically include the costs of transportation and processing.

Table 7.5 summarizes the annual offshore gas royalty payments collected by the State of Alabama between 1988 and 1995. When gas production increased, royalty payments generally followed suit. Royalty payments can decrease in some years due to variance in gas prices, the amount of production, the terms of the producing leases, and from allowable deductions. Royalty payments were first recorded in 1988 at $1.5 million and grew to over $17 million by 1992. Payments totalled about $90 million in 1994, declined to just over $70 million in 1995 and increased to about $102 million in 1996. As of February, 1997 royalty payments to the state for the current fiscal year total about $44 million.

Table 7.5
Royalty Payments to Alabama from Offshore Gas Production in Federal and State Waters
(Millions $)

Fiscal Year	Federal Waters (8g)	State Waters
1988	$0.25	$1.54
1989	0.71	3.35
1990	n/a	1.02
1991	0.30	4.68
1992	1.56	17.91
1993	6.56	46.90
1994	8.33	89.80
1995	7.37	70.80
1996	10.27	101.82
1997 (prelim.)	3.87	44.96

Source: Alabama Dept. of Revenue, 1996a. Note: Preliminary 1997 8(g) royalty payments reflect data as of January; state royalty payments reflect data as of February.

7.5.3 Mobile County Revenue Sources

Table 7.6 shows total revenues received by Mobile County for fiscal years 1991-1995. (Data were only available for selected years.) In 1995, Mobile County's revenue base totalled about $110 million, about 64 percent of which was collected from taxes. Since 1991, Mobile County's revenue grew by almost 30 percent. Revenue collections by the county increased the most from "Charges for Services," which includes county fees for services provided by agencies and courts. Severance tax receipts by Mobile County from offshore gas production totalled about $1.34 million in 1995; in all years offshore tax revenue to the county represented less than three percent of revenues received by the county.

Town of Dauphin Island

Table 7.7 shows total revenues received by the Town of Dauphin Island for the years 1990-1996. Dauphin Island's receipts more than doubled from 1990 to 1995, when revenues totalled about $850,000. Data for 1996 show increased growth, largely due to a significant state grant. Dauphin Island relies on the funds collected from offshore gas companies for

Table 7.6
Mobile County Revenues
(Millions $)

Fiscal Year	Taxes: All Sources	Taxes: Offshore Production	Licenses & Permits	Intergovern-mental	Charges for Services	Misc.	Total Revenues	Offshore Production as % of Total: Taxes	Offshore Production as % of Total: Revenues
1991	$58.04	$0.06	$0.92	$13.58	$6.64	$5.38	$84.56	0.11%	0.07%
1992	$63.92	$0.22	$1.00	$13.39	$9.91	$5.74	$93.96	0.35%	0.24%
1993	$62.74	$0.59	$1.13	$14.93	$11.80	$6.76	$97.37	0.95%	0.61%
1994	$67.45	$2.11	$1.41	$15.27	$11.11	$4.81	$100.05	3.13%	2.11%
1995	$69.96	$1.34	$1.34	$15.81	$13.74	$8.69	$109.54	1.91%	1.22%

Source: Mobile County Commission, 1991-1995; Alabama Dept. of Finance, 1996; Alabama Dept. of Revenue, 1996a; Table 7.3.

Table 7.7
Town of Dauphin Island Revenues

Fiscal Year	State & Federal Grants	Ad Valorem Tax	Sales Tax	Offshore Prod. Tax	Licenses & Permits	Other	Total Revenues	Offshore Prod. Tax as % of Total
1990	$27,000	$0	$79,548	$226	$43,717	$195,758	$346,249	0.07%
1991	$36,760	$87,654	$96,869	$28,348	$54,060	$168,109	$471,800	6.01%
1992	$36,500	$87,202	$89,347	$27,696	$61,708	$340,488	$642,941	4.31%
1993	$27,000	$90,923	$129,899	$121,205	$65,374	$211,173	$645,574	18.77%
1994	$27,000	$90,766	$140,044	$317,657	$77,749	$237,754	$890,970	35.65%
1995	$22,237	$103,181	$165,513	$205,645	$83,696	$264,661	$844,933	24.34%
1996	$198,735	$101,715	$233,216	$301,871	$104,721	$407,639	$1,347,897	22.40%

Source: Dauphin Island, Town of, 1996.

their general fund expenses. As shown on the table, tax receipts from gas production contribute a significant portion of annual revenues, increasing from six percent in 1991 to about 25 percent in recent years. For the last three years, gas tax revenues were the largest single source of income to Dauphin Island.

7.5.4 Baldwin County Revenue Sources

Table 7.8 shows total revenues received by Baldwin County for the years 1990-1995. In 1995, Baldwin County's revenue base totalled about $28 million, about 54 percent of which was collected from taxes. Since 1990, Baldwin County's revenue grew by over 75 percent. This growth is largely attributable to revenues collected from taxes and fees for licenses and permits. Severance tax receipts by Baldwin County from offshore gas production totalled about $150,000 in 1995; in all years offshore tax revenue to the county represented less than one percent of revenues received by the county.

Table 7.8
Baldwin County Revenues
(Millions $)

Fiscal Year	Taxes: All Sources	Taxes: Offshore Production	Licenses & Permits	Intergovern-mental	Charges for Services	Misc.	Total Revenues	Offshore Production as % of Total: Taxes	Offshore Production as % of Total: Revenues
1990	$7.58	$0.027	$0.38	$4.92	$2.14	$1.14	$16.17	0.36%	0.35%
1991	$8.53	$0.073	$0.43	$4.66	$2.28	$1.03	$16.94	0.86%	0.51%
1992	$11.13	$0.057	$0.49	$5.76	$2.35	$1.20	$20.92	0.51%	0.90%
1993	$11.72	$0.086	$0.59	$6.14	$2.55	$1.32	$22.31	0.74%	0.67%
1994	$13.02	$0.189	$0.88	$6.59	$2.65	$1.15	$24.29	1.45%	0.78%
1995	$15.30	$0.149	$0.94	$7.26	$2.80	$2.10	$28.40	0.97%	0.52%

Source: Baldwin County Commission, 1990-1995; Alabama Dept. of Finance, 1996; Alabama Dept. of Revenue, 1996a; Table 7.3.

Case Study: Effects of Natural Gas Development on the Town of Dauphin Island

The first Mobile Bay Norphlet natural gas discovery was made in November 1979 by Mobil Offshore Exploration and Producing (MOEPSI) about a mile northeast of Dauphin Island near the mouth of Mobile Bay. The bridge to Dauphin Island had been destroyed by Hurricane Fredric in September; the island had little tourism business before the hurricane and none until the bridge was rebuilt in 1982, although home owners could ferry to the island. The gas discovery represented an exciting new business prospect to local and state officials. Today, 18 years later, the natural gas industry has been an influencing presence to the small island community.

Natural gas platforms can be seen from numerous points on the island. Although these platforms may be considered a visual eyesore to some, leaders of Dauphin Island report no problems associated with their presence. The gas industry has contributed to the growth of the island's economy and benefitted local residents. The Town of Dauphin Island annexed several miles of offshore waters in 1992 and extended the town limits to capture revenues from producing wells located nearby, significantly adding to the town's revenue base. This case study describes the impacts to the community from the gas industry, including direct industry activity and expenditures; tax receipts by local government; royalty receipts by landowners; and civic contributions by the industry.

Direct Industry Activity and Expenditures

Dauphin Island is home to several shore base suppliers to the offshore gas industry and has limited staging facilities. These include McHugh Oilfield Services, Inc., Crewboat Services, Inc., PHI Helicopter Services and Miller Diving. MOEPSI also owns and operates a small shorebase on the eastern edge of the island near the pilots' dock and the ferry dock. Local suppliers mainly operate with a limited workforce, but the facilities serve as a staging point for local crews as well as those based out of other states.

The MOEPSI site on the eastern end of the island is about the only place on the island where local conflict with the gas industry has been reported in the past. The Dauphin Island Parks and Beach Board (DIPBB) manages a campground nearby and in the past campground residents complained about the smell of diesel fumes and noise of idling diesel crewboats. This problem has been corrected.

Tax Receipts by Local Government

The Town of Dauphin Island receives about $300,000 annually in severance tax revenue from five wells owned by Exxon and one Union well annexed by the town. (Refer to Section 7.3.1.) This amount represents about 22 percent of the 1996 town budget. This is the largest single source of the town's budget. No money comes to Dauphin Island from the state earnings on the Alabama Trust Fund, the depository for Alabama offshore royalty monies. Dauphin Island's income from the industry increased in 1997 when MOEPSI's Aloe Bay well in tract 75 came on line in July. Mobil may ultimately drill more wells in the Mississippi Sound within the jurisdiction of the town.

Case Study: Effects of Natural Gas Development on the Town of Dauphin Island, Continued

Royalty Receipts by Land Owners

Over the last 15 years land owners on Dauphin Island have received bonus checks at five year intervals. On a per lot basis, the checks totalled:

- $500 for the first five years;
- $750 for the second five years;
- $1,000 for the most recent five years.

The Dauphin Island Property Owners Association (POA) received substantially more, about $1.2 million. The DIPBB also received a substantial bonus check. Contacts with the DIPBB confirmed that about $80,000 a year has been received in royalty income from Mobil, related to state tracts 76 and 94 (DIPBB, 1996). A unification agreement exists among the property owners which defines the distribution of royalty money among mineral rights holders. Most island residents are anticipating the start-up of Mobil's well in tract 75 (Aloe Bay) as a source of royalty income.

Civic Contributions by Industry

Industry goodwill toward the communities influenced by natural gas development are apparent on Dauphin Island. Recent examples of funds contributed to the local community by the gas industry include the following:

- Mobil sponsored the construction of a new bike trail on the island.
- Exxon and Mobil currently contribute to the Estuarium under construction by the Dauphin Island Sea Lab.
- Mobil paid for a $1.0 million sand stabilization project on the east end of the island.
- Mobil, Exxon, and Shell all financially support the Sea Lab education program.

Case Study: Comparison of Tourism and Natural Gas Tax Revenues to Local Governments and State of Alabama

The State of Alabama currently benefits from two thriving industries located along its Gulf Coast: tourism and offshore natural gas development. Each industry makes significant payments to both the state and local governments. This case study compares recent fiscal contributions to the state and local governments, based on materials in Sections 4 and 7.

Comparison of Selected State Tourism and Gas Industry Tax Revenues

Tourism expenditures in the State of Alabama total several billions of dollars annually and include spending for travel, lodging, food and beverages, retail purchases, and recreation. Visitor spending in Mobile and Baldwin Counties provides significant tax revenues to the state. Collection of lodging tax revenues by the state reflects the importance of this industry to the state. The state levies a four percent lodging tax on all lodging sales in the state.

Table 1 shows state collections of lodging tax for 1990-1995. In 1995, over $20 million was received by Alabama from sales of overnight accommodations, reflecting a 40 percent increase in total revenues since 1990. State collections in Baldwin County for many years have been the highest in the state. Table 1 shows the amount of state lodging tax revenues collected in the coastal region, from Mobile and Baldwin counties. In 1995, almost 30 percent of all state revenues came from this region, with Baldwin County's contribution twice Mobile's. Since 1990, lodging tax collections in the coastal region increased almost 70 percent from $3.6 million to $6.0 million in 1995, nearly twice the statewide increase, and mostly arising from the tourism boom in Gulf Shores and Orange Beach.

The offshore natural gas industry also has significantly contributed to Alabama's tax base, especially with the increase in offshore production in recent years. Table 1 summarizes offshore gas severance tax revenues to the state since 1990. (Refer to Section 7 for additional discussion.) Collections of severance tax revenue by the state began when offshore production was initiated in 1988. Revenues in the first few years were small but gained momentum when more producers came online after 1990. By 1992 the state had collected only a few million dollars in tax revenue from offshore production, but this increased significantly in 1993, when $6.8 million was received from offshore producers. To date the largest amount was received in 1994, close to $10 million. With increasing production offshore, and rising prices, future revenues to the state from gas industry operators will continue to grow. MOEPSI's well 95-5, which came on line in December 1996, and MOEPSI's Aloe Bay well, which came on line in July 1997, both added significant tax revenues in 1997 because both of these wells produced at daily rates much higher than Mary Ann field wells.

Case Study: Comparison of Tourism and Natural Gas Tax Revenues to Local Governments and State of Alabama, Continued

Table 1
Comparison of Selected State of Alabama Revenues
(Millions $)

	Lodging Tax (Total State)	Lodging Tax (From MC & BC)	Offshore Gas Tax (To State)	Offshore Gas Interest Income (To State)
1990	14.97	3.62	0.65	95.80
1991	15.72	4.24	1.36	105.50
1992	15.99	4.38	2.82	93.60
1993	15.69	4.52	6.81	97.50
1994	18.96	5.49	9.65	92.40
1995	20.81	6.02	6.16	99.40
1996	23.12	6.73	8.24	102.40

Source: Table 4.8; Table 4.11; Table 7.3; Alabama Treasurer's Office, 1996.

Data on Table 1 show that taxes to the state from regional tourism and gas production activity have been of a similar magnitude, with both showing signs for a healthy future trend--$6.7 and $8.2 million for FY 1996. But these revenue flows are swamped by the earnings from the two trust funds established by Governors Fob James and George Wallace. The State of Alabama manages the trust funds, which hold funds collected from bonus payments from offshore leases, state royalty payments which run between 16.67 and 28 percent of wellhead gas values, and 8(g) revenues—27 percent of the federal royalty payment—received from the federal government for wells producing within the three- to six-mile lines. The principal cannot be spent by the state but these funds earn significant yields each year. The interest income is spent by the state and benefits programs funded by the state's general fund. Table 1 shows that income from the state trust funds adds about $100 million annually to the state budget. These earnings will continue to grow because new royalty income is added to the principal every month from existing wells--and more wells are anticipated. Tourism tax receipts are important to the state budget, but earnings on the gas trust funds have changed the face of Alabama. Interest income amounts to about 12 percent of the state General Fund.

Case Study: Comparison of Tourism and Natural Gas Tax Revenues to Local Governments and State of Alabama, Continued

Comparison of Local Government Tourism and Gas Industry Tax Revenues

The Gulf Coast communities of Gulf Shores and Orange Beach represent the largest share of the tourism industry in coastal Alabama. These communities have greatly benefitted from increased visitation to area beaches, where numerous resorts have been built. Fiscal contributions to the region from tourism are reflected by both lodging tax and retail sales tax revenues.

Table 2 summarizes lodging and sales tax collections by the Cities of Gulf Shores and Orange Beach since 1990. Revenues shown reflect taxes that accrue to the local communities. Municipalities levy additional taxes for selected business operations. In Gulf Shores and Orange Beach, an additional three percent lodging tax is collected by the cities and an additional two percent benefits the Gulf Coast Convention and Visitors Bureau (GCCVB). Since 1990, lodging tax revenues received by these entities increased by over 150 percent, totalling over $4 million in 1995. Retail sales tax revenues received by Gulf Shores and Orange Beach increased just as significantly during this time increasing by over 85 percent to $5.1 million in 1995. These two tax items totalled $9.2 million in 1995.

Table 2
Comparison of Selected Local Government Revenues
(Millions $)

	Lodging Tax (GS, OB & GCCVB)	Retail Sales Tax (GS & OB)	Offshore Gas Tax (MC, BC, & DI)
1990	1.60	2.78	0.07
1991	1.84	3.13	0.16
1992	1.90	3.32	0.30
1993	2.12	3.81	0.80
1994	3.34	4.50	2.62
1995	4.08	5.10	1.69

Source: Table 4.9; Table 4.11; Table 7.3; Table 7.4.

Case Study: Comparison of Tourism and Natural Gas Tax Revenues to Local Governments and State of Alabama, Continued

The coastal counties and the Town of Dauphin Island receive a portion of offshore gas severance taxes redistributed by the state. Monies are allocated by the state based on a severance formula and payments are received by the counties typically on a monthly basis. In Mobile and Baldwin counties, offshore gas tax revenues are allocated between the general fund and other special revenue funds. Table 2 summarizes total payments to both counties since 1990. Revenues reached almost $1.0 million in 1993 and significantly increased after this time, totalling $2.6 million in 1994. The large increase in offshore tax payments in 1994 is due to the annexation of six offshore wells by the Town of Dauphin Island, which adds over $1.0 million to Mobile County and $300,000 to the Town of Dauphin Island. Variability in production flows and prices governed the downturn in 1995. Although offshore gas tax payments to the region were much less than total tourism tax dollars received, the continued growth of each will benefit the coastal region. Clearly, however, tourism tax revenues in Baldwin County are 3-4 times greater than offshore tax revenues received by the entire coastal region.

Comparison of State and Local Government Tourism and Gas Revenues

Table 1 revealed that State government has an important reliance on natural gas severance tax and trust funds' revenues. Local governments along the Baldwin County Gulf Coast (Gulf Shores and Orange Beach) have an overwhelming reliance on tourism revenues. Table 2 shows the lodging, sales and gas tax collections arising from the Gulf Coast regions of Mobil and Baldwin Counties. Dauphin Island has an important reliance on natural gas revenues. State government is the real winner from Alabama's natural gas revenue payments. Gulf Shores and Orange Beach have little to gain and fear the loss of tourism dollars with the expansion of the gas industry in federal waters southeast of Baldwin County.

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The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Royalty Management Program** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.