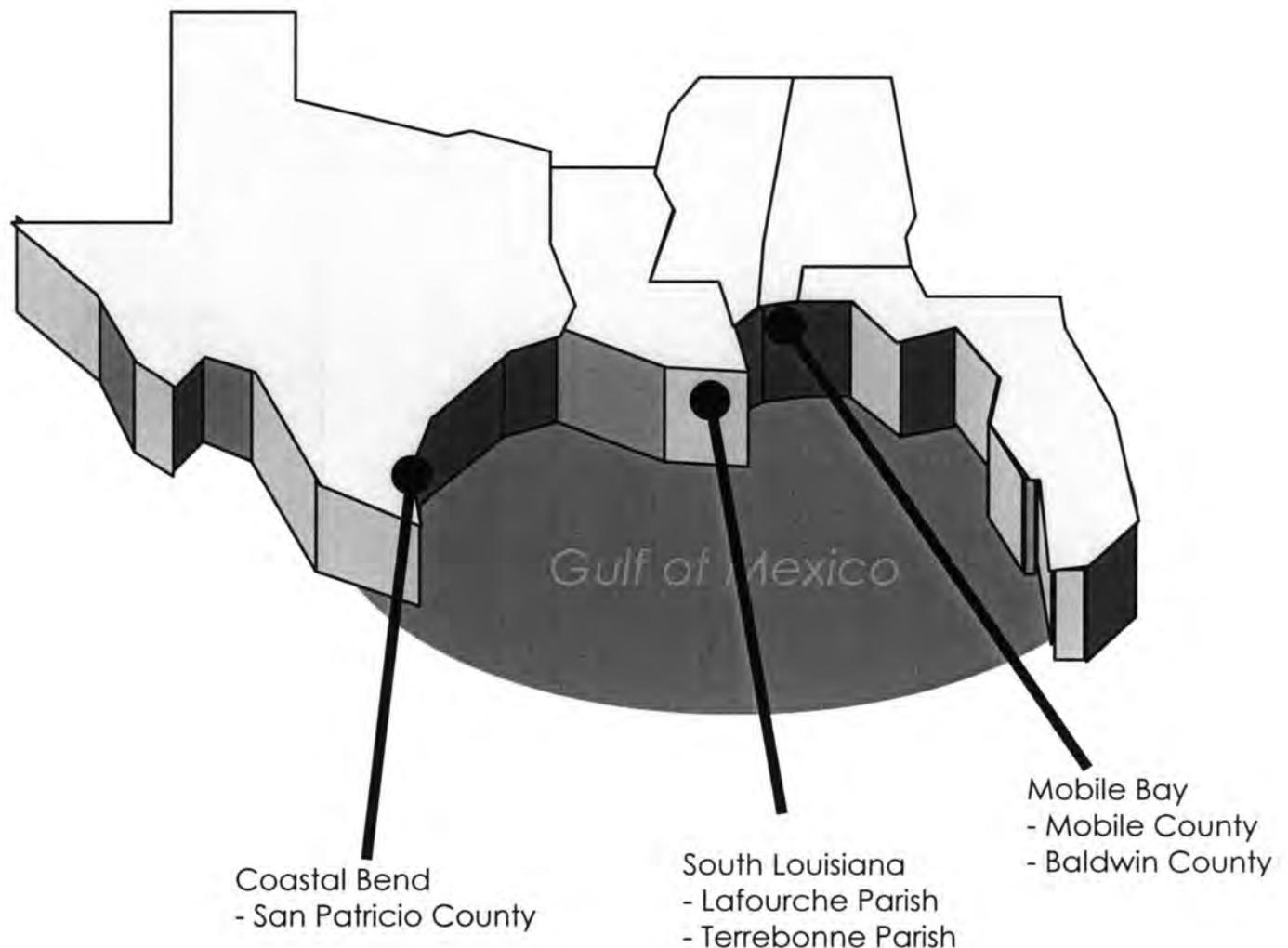




# Assessment of Historical, Social, and Economic Impacts of OCS Development on Gulf Coast Communities

## Volume I: Executive Summary



# **Assessment of Historical, Social, and Economic Impacts of OCS Development on Gulf Coast Communities**

## **Volume I: Executive Summary**

### Authors

Barbara Wallace  
James Kirkley  
Thomas McGuire  
Diane Austin  
David Goldfield

Prepared under MMS Contract  
14-34-0001-30808  
by  
TechLaw, Inc.  
4340 East West Highway  
Suite 1120  
Bethesda, Maryland 20814

Published by

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

**New Orleans  
April 2001**



## **DISCLAIMER**

This report was prepared under contract between the Minerals Management Service (MMS) and TechLaw, Inc. This report has been technically reviewed by MMS and it has been approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Service, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. It is, however, exempt from review and compliance with the MMS editorial standards

## **REPORT AVAILABILITY**

Extra copies of the report may be obtained from the Public Information Office (Mail Stop 5034) at the following address:

U.S. Department of the Interior  
Minerals Management Service  
Gulf of Mexico OCS Region  
Public Information Office (MS 5034)  
1201 Elmwood Park Boulevard  
New Orleans, Louisiana 70123-2394

Telephone Number: (504) 736-2519 or  
1-800-200-GULF

## **CITATION**

Suggested citation:

Wallace, B., J. Kirkley, T. McGuire, D. Austin, and D. Goldfield. 2001. Assessment of the historical, social, and economic impacts of OCS development on Gulf Coast communities; Volume I: Executive Summary. Prepared by TechLaw, Inc. OCS Study MMS 2001-026. U.S. Dept. of the Interior, Minerals Mgmt. Service, Gulf of Mexico OCS Region, New Orleans, LA. 12 pp.



## EXECUTIVE SUMMARY

The objective of this study was to enhance the understanding of the relationship between Outer Continental Shelf (OCS) development and the economies, communities and households of the Gulf of Mexico (GOM) region. The study examined historical, social, and economic changes in selected coastal communities between 1930 and the mid- to late 1990's and the roles of the offshore oil industry in those changes. This is the second part of a two-phased project to provide a baseline of the social and economic consequences of OCS development on Gulf Coast communities. A secondary objective of the project was to enhance the understanding of methodologies for studying offshore oil and gas impacts through the use and integration of analytical approaches used in history, anthropology, and economics.

### Study Areas

The study focused on three areas: South Louisiana, Coastal Bend, Tex., and Mobile Bay, Ala. (see Figure 1). The study areas included five counties or parishes and six communities within the counties or parishes:

South Louisiana	Coastal Bend, Texas	Mobile Bay, Alabama
Lafourche Parish -- Galliano Terrebonne Parish -- Schriever	San Patricio County -- Ingleside -- Mathis	Baldwin County -- Gulf Shores Mobile County -- Theodore

**South Louisiana study area.** The South Louisiana study area, Lafourche and Terrebonne parishes, is located in the south central part of the State. The area's natural features, which vary from marshland, waterways, and bayous in the coastal areas and to flat agricultural lands in the north, have helped to shape settlement patterns and development. Settlers included Houma Indians, French, Spanish, English, and French farmers, French Acadians (Cajuns) forcibly exiled from present day Nova Scotia in the 1700's, and later Anglo-American planters and their African slaves. The area, along with southwestern Louisiana, has historically been the primary staging and support area for offshore oil and gas exploration and development. The Port of Fouchon, at the mouth of Bayou Lafourche on the Gulf of Mexico, is a major onshore staging area for OCS oil and gas activities in the Central and Western Gulf of Mexico and the land fall for the Louisiana Offshore Oil Port. While the area's traditionally strong ties to agriculture, fishing, and trapping are still evident, they are no longer the mainstay of the economy.

**Coastal Bend, Texas study area.** The Coastal Bend, Tex. study area is San Patricio County, located across Corpus Christi Bay from the city of Corpus Christi. The cultural and social character of San Patricio County has been influenced by two groups of settlers. In the early 1800's, about 200 Irish Catholic families were settled in the area under an agreement between two individuals and the government of Mexico. In the early 1900's, trainloads of laborers

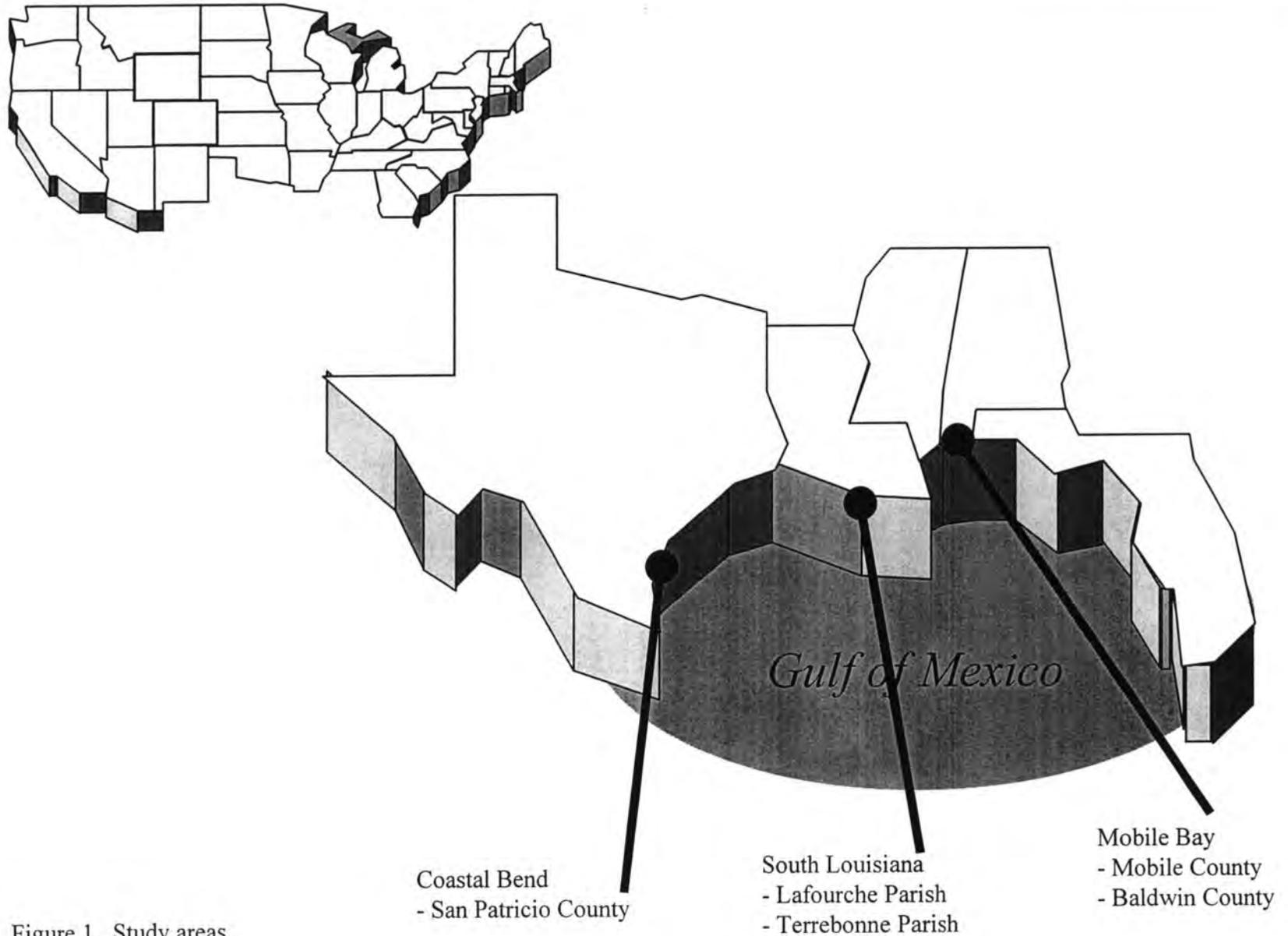


Figure 1. Study areas.

were brought from Mexico to ready the land for farming. Many of the laborers stayed to work in the fields. The oil and gas industry has also been part of the county's economy since the early 1900's. The military has had a significant presence in the Corpus Christi Bay area, in general, and more recently in San Patricio County.

***Mobile Bay, Alabama study area.*** The Mobile Bay study area, Baldwin and Mobile counties, is located in the southwestern portion of Alabama. The counties are opposite each other across Mobile Bay. Coastal resource-dependent industries in this area include tourism, marine recreation, commercial fishing, and most recently, offshore gas. Large quantities of natural gas were discovered in Alabama's offshore waters in 1979. Baldwin County especially has a strong tourism economy and has a large retiree population. The important commercial fishing industry in the area is located in southeastern Mobile County. The Port of Mobile, the largest seaport in Alabama, is also in Mobile County. The military has had a long presence in the area. The build up and downsizing of military installations has handed the area some special challenges. The area's second port, Mobile Middle Bay Port, is a former Naval Station.

## **Issue Findings**

Drawing from the disciplines of economics, cultural anthropology, and history, the study analyzed the relationship of offshore oil and gas to three issues in the study areas — changes in economic and social structure; community landscapes; and work and education. Field work for the study was completed in June 1998.

***Changes in Economic and Social Structure.*** OCS oil and gas activities have been important to the social and economic characteristics of the Gulf of Mexico study areas. The level of importance, however, has varied considerably over time and with respect to each of the five study counties or parishes. The available information supports four different patterns for Lafourche and Terrebonne parishes, and San Patricio County: (1) 1969 to 1974 - substantial expansion in economic activity; (2) 1974 to 1981 - sustained economic growth, with economic activity being even higher than it was between 1969 and 1974; (3) 1981 to 1987 - large contraction or downturn in economic activity frequently referred to as the "bust" years; and (4) 1987 to 1995 - recovery from the bust period and modest economic growth.

For Mobile and Baldwin counties, there were different patterns. Growth slowed in Mobile County between 1981 and 1987, but never stopped or reversed itself. While Baldwin County experienced some slower growth in the "boom" times of 1974 to 1981, it has generally enjoyed robust growth since 1965.

The statistical analysis showed that although OCS oil and gas activities have affected the social and economic structures of Lafourche and Terrebonne parishes and San Patricio County, the effects have been highly erratic, varying, and unstable. Moreover, the effects have been mostly transitory or changing over time. Events affecting OCS oil and gas activities in one year and subsequently the social and economic characteristics have typically

lasted for only up to 7 years. The economies of the study areas have become more diversified over time.

***Community Landscapes.*** The study area communities were used to illustrate the historical and contemporary processes that define five types of “landscapes:” agricultural, maritime, industrial, military, and leisure.

The agricultural landscape is described primarily using Schriever, La. and Mathis, Tex. The manifest change in the Texas landscape — from labor-intensive vegetable production to land-extensive dry farming of grains and cotton — was driven by a combination of natural and socio-political forces. In the 1960's, in rapid succession, a hurricane devastated the packing-shed infrastructure of the vegetable business, a minimum wage was mandated for farm workers, and Chicanos became politically active. In Schriever, labor strife in the sugar mills, mechanization of the sugar harvest, consolidation of farms and the retention of a small, “loyal” workforce characterize the history of sugar in the area. Southern Baldwin County, Ala., tells a preeminently modern agricultural land-use story. Productive farmlands compete with residential developments which demand horticultural plants and grass and spawn labor-intensive and soil-depleting nursery and turf industries.

The maritime landscape appears in south Lafourche Parish, La. where local residents for generations have had to grapple with the problematic definition of land and water. Throughout the historical progression of oil development from land to marsh to bay to the Outer Continental Shelf, local Cajuns have sought ways to work with, and buffer against, the industry. When the oil and gas industry was booming, they put their generations-long knowledge of boats, the bayous, and open water into service for that industry. During downturns, they could resume traditional pursuits in the fisheries. Most local residents are equally at ease piloting a shrimp boat, a tugboat, a crewship and now a deepwater anchor tender, and not at all reluctant to cross the social divide into the “sports,” the recreational fishery.

Theodore, Ala., on the western shore of Mobile Bay, provides the story of the complex industrial landscape of the Gulf Coast and of the South since World War II. The community lies in an area of Mobile County which, by local choice, is unplanned, unzoned, and unincorporated, circumstances not uncommon throughout the region. The industrialization of Theodore is a story of the intersection of interests: public and private, local, national, and international. Local residents now wake up to see yet another chemical plant under permit and construction in the neighborhood. In south Louisiana, industrial stories have home-grown roots: the development of major shipbuilding operations by local families and the aggressive construction and marketing of a port designed to service new deepwater development on the Outer Continental Shelf.

Of the study communities, Ingleside, Tex. is the only victor in the recent battle to create a military landscape, but other areas along the coast have experienced the booms and busts of the military. Brookley Field Air Base was constructed in Mobile in 1940, and soon employed 17,000 civilian workers. With its closure in 1969, the Mobile Chamber of

Commerce issued tax-free industrial development bonds to attract industry to the site. The military landscape now is dominated by “homeports,” planned and, in some cases, constructed during the 1980's to berth a proposed expansion of the naval fleet, which instead was reduced. One such base was built on the Theodore Ship Channel, at substantial local expense. It was never staffed and at the time of the field work (1998) was for rent. Another was constructed at Ingleside, with \$168 million in local inducements. With the downsizing of the Navy it never became a “homeport,” but found new life, as the “mine warfare capital of the world.” The military landscape, altered time and again by external forces and decisions, provides a comparative perspective on the cyclic impacts of the oil and gas industry on Gulf coast communities.

Gulf Shores, Ala. is an example of the leisure activity that has made the coastal zone one of the most embattled landscapes throughout the country in recent decades. Near the turn of the century, major storms destroyed such coastal communities as Grand Isle, La. and Galveston, Tex. and their tourism industries which often disappeared or relocated. By the time Hurricane Frederic made land fall on the Alabama coast in 1979, there was emergency relief from the government and developers jumped at the hurricane's “natural urban renewal” to build Gulf Shores into a resort. Since Frederic, the coastal landscape of Gulf Shores and other seaside locales has been demarcated by myriad lines, allowing or prohibiting myriad things. Those who draw these lines reside in numerous places: local planning, zoning and building inspection offices, county seats, state offices of environmental management, regional headquarters of the national estuary program, and the federal offices of coastal zone regulators. Gulf Shores, across the bay from the unincorporated, unplanned, ungoverned Theodore, is an archetype for the regulated manipulation of the Gulf's coastal zone. Much the same story could be told for Coastal Bend, Tex.

Several conclusions are drawn from the review of the historical, social, and economic landscapes of Gulf Coast communities. OCS oil and gas activities have had variable impacts along the coast. Direct impacts have been felt most sharply in the Louisiana “core.”

Despite its history and rhetoric of separatism, the Gulf Coast, like the South, is tied to the Federal government by multistranded cords. The Department of Agriculture mediates the agricultural landscape; Defense creates the military landscape; the Federal Emergency Management Agency subsidizes life on the beach; the National Marine Fisheries Service attempts to regulate the maritime landscape; the Army Corps of Engineers maintains Mobile Bay and its industry. Some of these federal interventions are more welcome locally than others; all of them, and a host of others, have shaped the landscape of the gulf.

Nor is the Gulf Coast insulated and isolated from global forces. Cajun oil workers and boat captains are as knowledgeable of the North Sea as they are of the Louisiana bayous and bays. Many of the fabrication yards and flower nurseries along the Gulf Coast employ as many Latin Americans as North Americans. American shrimpers compete with Thai shrimp farmers; Alabama gillnetters sell their mullet roe to Asia; Mathis growers sell grains to Russia. South Mobile County is rapidly becoming an industrial outpost of Germany. The

price of oil, and all this means to the backward- and forward-linked activities along the Gulf of Mexico, may be set, arguably, in the Middle East.

Finally, notions of planning and zoning are largely foreign to the Gulf Coast and its communities. A dominant feature of the coastal landscape is accordingly an almost chaotic intermixture of land uses due mostly to local reluctance to plan and manage that landscape. Nevertheless, or because of this, there is a substantial level of local concern and consternation over land uses, despite the general characterization of the region as oblivious to environmental issues. This growing concern may, in time, alter the look of the land.

***Occupation and Education.*** Education and work are closely related in any economy, and the particular history of the American South has shaped the relationship between occupation and education within the six study area communities. Three patterns of evolution were identified in the analysis, with the path to industrialization being the most obvious distinction among them. OCS activity affected education and work in the period of rapid and extensive industrialization that followed World War II. That industrialization had a dramatic influence on education, particularly in the continuous shift from a preindustrial society where family, community, occupation, and education overlapped to a highly structured social order where formal schooling has come to be valued as an end.

Differences in the educational and occupational trajectories of the six study area communities stem from: (1) economic diversification to buffer cycles in the dominant industries; (2) proximity to urban and industrial areas to which residents can commute to work; (3) the ease of the transition from prewar economic activities, such as fishing, to industrial activity, such as servicing offshore oil and gas rigs; (4) the diversity of skills and opportunities of individual residents; (5) racial and ethnic makeup; and (6) community cohesion which dictated who would and could leave and who would or could not. Despite the differences, in all communities, as the level of skill needed in the workforce has increased, particularly due to technological changes, the demands placed on educational institutions have also grown.

The centralization and institutionalization of education occurred gradually in response to changes in the nature and structure of individual and family life. As work increasingly became an activity separated from other aspects of life, in time, place, and the nature of the activity, preparation for that work changed accordingly. Even to the present, with the most recent permutation of occupational education in school-to-work initiatives, education and industry resonate. OCS-related activities have demanded large numbers of workers, both skilled and unskilled. Where they have played a prominent role in the community economy, as in south Louisiana, they have had a significant impact on the when, how, and why of the transition from education to work. Especially as other sectors of the economy such as shrimping and trapping have dwindled, large companies with huge workforce needs have had the power to significantly alter the occupational landscape. By taking students out of the educational system or by leading them down one path instead of another, the companies servicing the oil and gas industry also have affected the educational system.

World War II was a major turning point for work and education in the South because of its lasting impacts on who became part of the workforce and the skills and expectations with which workers entered the postwar economy. In all cases, though there may be remnants of past patterns, the occupational choices of the majority of local residents at the end of the twentieth century differ significantly from those of residents immediately following World War II. Likewise, the majority of community residents enjoy greater educational opportunities than their predecessors. And, despite the flurry of interest in and activity surrounding work and education in communities impacted by OCS activities, these communities have not strayed far from the basic tenet of southern education: education provides a means to escape physical labor. The increased materialism of the postwar years and new messages about education as a mechanism for achieving racial and ethnic equity have been adopted in these places as well.

The greatly increased prosperity following World War II and the transition for many communities to much greater participation in regional, national, and international economies have led to dramatic changes. Material expectations, especially of young workers and their families, have sharply risen. The promotion of college as the easy path to corporate jobs and the American dream have led families to expect their children to pursue higher education. Yet, the fact that so many young people have done so diminished the power of a college education to assure success. This erosion of formal education's power to produce gains for the individual has also called into question the capacity of formal education to produce gains for the community. These changes and the lessons they are providing are more easily absorbed by the young, than their elders. For many older adults, struggling to make sense of these changes, this period of transition and increased competition has meant reduced material success. For some, but not all, younger people, who can make the system work in their interests and who embrace a world of heightened competition, these changes present substantial opportunities.

## **Findings and Conclusions**

***Similarities Among Study Areas, but No Single Story.*** While there are similarities across political boundaries in the GOM region, there is no one story as differences occur between and among counties. The impacts of OCS oil and gas activities have varied among the study areas. Direct impacts have been felt most keenly in the South Louisiana study area, particularly south Lafourche Parish, an area with strong ties to marine resources — both fish and oil. Early on many residents combined traditional trawling and trapping occupations with oil industry-related work. Local boat building expanded to support the oil industry. OCS-related activities demand a large labor force of skilled and unskilled workers. In areas where the industry has been a major presence, as in south Lafourche Parish, the industry has had a significant effect on education and the transition to work. When other sectors of the economy decline and the oil industry has a high demand for labor, the industry affects occupational selection. That in turn, has altered the educational system either by offering jobs before formal education was completed or by influencing the curriculum so that graduates were educated to feed into the oil industry. This is not dissimilar from regions with

other dominant industries, such as textiles, where vocational education and community colleges offer programs specializing in the local industry.

In the other study areas, the impacts from oil and gas are seen in different ways. Coastal Bend, Tex., interacts with the industry as a fabrication center, a refining region for domestic and foreign oil, and the home port for the U.S. Navy's minesweepers whose primary task is to keep the world's harbors and shipping lanes clear. The oil and gas industry is relatively new to the Mobile Bay study area, but the area has a long history with heavy industry. Industrial development apart from the oil and gas industry continues in the region.

Oil and gas impacts differ within the study areas as well as among them. For example, oil economics have impacted the agricultural communities in the study areas. Good times for the offshore oil industry can be difficult times for farmers in the study areas and elsewhere, who are squeezed when the price of fuel rises. Oil prices are, however, set outside the region. The availability of highly paid oil and gas jobs can also reduce workers available for other local jobs.

In addition, a number of global trends relate to the similarities across communities:

- Ascension of knowledge-based economies
- Globalization of the economy and resulting competitiveness
- Consolidation of oil companies

***Federal, but Non-MMS, Policies Affected Study Areas.*** The study area communities were exposed to changes from a variety of sources during the study's period of interest. OCS-related activities and regulations were only one and were not the driver for all that occurred during the period of interest. Federal policies have driven much of the change in the study areas. The similarities across the study areas often relate to the national, although non-MMS related, policies. The text touches upon some of these national policies and trends:

- GI Bill and access to education
- Altered perceptions of returning World War II veterans towards racial and ethnic tolerance
- Civil rights movement and school desegregation
- Development of the Interstate highway system
- Rise in environmental protection issues
- Strategic decisions on military bases and personnel

Other types of changes occurred during the study's period of interest, but were not addressed. Almost all of these changes were reflected in Federal legislation or are affected by Federal regulation. Among these are changes in technology (e.g., introduction of television and broadcasting, computers and the Internet), telecommunications (e.g., increased access to land line and cellular telephones), and transportation (e.g., the automobile and commercial air travel). Another example is the changes in banking regulations that occurred during the period of interest. All of these served to bring the world closer to home. At the same time,

the world's horizons broadened with space exploration. And, world borders changed. Societal changes included social and political activism among minority groups (e.g., Native Americans, as well as blacks, Hispanics, and gays and lesbians).

***The Mid-1980's Decline Resulted in Changes.*** The decline, referred to as the “bust,” in oil and gas activity in the mid-1980's brought change to the economies and to individuals most directly affected by the offshore oil and gas industry — Lafourche and Terrebonne parishes and to a lesser extent, San Patricio County. The changes are seen in the county-level statistics and in the personal stories told by individuals who lived through the decline years and are still living in the study areas. The changes can also be seen within the industry itself.

The statistics give one set of dates for the bust. Individuals give differing dates, perhaps reflecting the fact the decline affected different sectors at different times. Both the statistics and the personal stories confirm there was a decline. The bust is a marker in time — things are dated or measured in terms of before and after the decline.

The consensus among the individuals interviewed for this study is that the bust was sudden, and for many devastating. In South Louisiana, unemployment rose. Workers left. The out migration was, however, not viewed as all bad by those who stayed, those with limited opportunities elsewhere or strong ties to the area. Those who stayed found ways to make a living, although not quite like the days when oil and gas jobs were at their prime.

The oil and gas industry started to pick up again in the 1990's, although the industry was not quite what it had been. Between the mid-1980's and the 1990's the industry had undergone some changes. The industry still demanded a large labor force of skilled and unskilled workers, but like many other industries, was operating with a reduced labor force. Where experience had once been sufficient for an oil job, formal education was now required. Federal employment laws and regulations resulted in human resource managers being hired in larger companies to handle the reporting and other requirements of laws and regulations. There was a consolidation of companies.

In the interim, the residents had also changed. Much of the once resident labor force had left when oil declined and had not been replaced. Remaining local residents reacted in several ways to the opportunities in the oil industry. For many, there was a reluctance to rejoin an industry which had more than amply demonstrated it lacked job security. They had found alternative, more stable employment and were more interested in maintaining that job security than reaping the financial rewards of the oil industry. For others, there was a cautious reentry over time. Finally, there were those who jumped in wanting to enjoy the financial rewards while they lasted. Overall, the expectation was that the industry would experience a downturn again. (Time proved them correct. Since the field work was completed in June 1998, the industry has experienced a downturn and another resurgence.)

In the interim between the bust and the rebound, the next generation of mariners was not trained. There was a reluctance of some parents to encourage their children to enter marine occupations. The study area communities faced the common problem of communities with

limited job opportunities — how to keep the youth in school and provide job opportunities locally for an educated workforce. Where the oil industry is a major presence, as in Lafourche and Terrebonne parishes, it can influence the skills taught and the career path chosen. In areas with greater diversification, such as Coastal Bend, Tex. or Mobile Bay, Ala. the focus in education is less on OCS.

***Leisure/Tourism/Retirees Economies Incompatible with OCS Oil and Gas Activity.*** The transition to new economies, as seen in leisure/tourism/retirees, may be fundamentally incompatible with OCS oil and gas activity. Areas with leisure/tourism/retiree and oil and gas economies are all dependent upon natural resources, but in different ways. Oil and gas activities are dependent upon an extractive and nonrenewable natural resource and are industrial activities. Tourism can be based on nonconsumptive use of natural resources even as the tourists consume oil as they drive to their destinations. Natural resources also serve as amenity resources of scenic beauty or outdoor recreation which attract residents whose income generally originates elsewhere (e.g., retirees). When the industrial activities of offshore oil and gas occur in proximity to the activities of leisure/tourism/retirees, natural endowments meet quality-of-life factors and conflicts can arise. The leisure landscape story of south Baldwin County is an example of these conflicts. Concerns about the visual impacts of rigs, the negative impacts on tourism, concerns of oil spills and inadequate public services to deal with spills all surfaced in the stories told about the oil industry and the leisure world of south Baldwin County. The recreational fishing sector which serves the same area acknowledged, however, the benefit of the presence of offshore platforms as rigs or reefs which act as fish aggregators.

The expansion of leisure time, the rise of leisure/tourism/retiree economies, and separation of work and leisure are other examples of societal change which occurred during the study's period of interest. These resulted from a variety of factors including a decline in the hours of the work week; institutionalization of vacation; a demographic shift in the country to a larger proportion of older Americans and a larger proportion living years in retirement; and increased disposable income following World War II.

Retirement came to have new characteristics during the study's period of interest. Longer life expectancy and changing birthrates increased the number of expected retirement years. Geographic areas with good weather, reasonable living costs, and other desirable quality-of-life factors drew scores of retirees. Local economies in some places became highly dependent on retirees, either as in-migrant residents, part time residents, or visitors. The United States is on the brink of a whole new generation of retirees, the baby boomers born between 1946 and 1964 and pre-boomers (born between 1941 and 1945), who have redefined every age group they have reached and have lived through years of national prosperity. This group is expected to redefine retirement and old age. It is also a group that was coming of age as environmentalism and energy conservation became national issues in the late 1960's and 1970's.

In addition to increased leisure through retirement, leisure is increasing through the blurring of the line between work and leisure. Conventions combine work and pleasure with a

mixture of meetings and golf and tennis. (Mobile actively promotes its convention center and the attractiveness of the surrounding area.) Technology now allows workers to stay connected to the office through laptops, Internet, and cellular telephones virtually anywhere including while on vacation.

***Oil and Gas Industry is Complex.*** The statistical analysis and the personal stories told by individuals revealed many characteristics of the oil and gas industry:

- The industry is international in scope. At the beginning of the period of interest of this study, the offshore oil and gas industry was in its earliest stages, locally emerging in the Gulf of Mexico. Since then the industry has grown to be international in scope, both in terms of companies involved in offshore oil and gas activities, and in terms of places where offshore oil and gas are produced.
- Technology has transformed the industry multiple times. Techniques and equipment for drilling in water have evolved greatly during this study's period of interest. Exploratory drilling rigs — drilling barges, jack-up rigs, semisubmersibles, and drillships — were designed over a period of years to meet industry needs as it moved offshore. Development systems are designed for deeper and deeper water depths. Changes have also occurred in the use of people. Where experience or being able-bodied was once sufficient for a job with the industry, formal training is now required.
- The offshore oil and gas industry operates within the larger context of business and industry and, therefore, is not immune to trends seen in the larger business world. Some of the more obvious business trends seen in the oil and gas industry include consolidation of companies, use of contract workers, at least discussion of unionization in fields previously not associated with unions, and use of human resource managers to handle Federal employment laws and regulations.
- The oil and gas industry brings uncertainty. It is an extractive industry of a non-renewable resource. So, by its nature there is uncertainty. Oil and gas activities occur in a series of stages — exploration (including geophysical surveying), development, production, and abandonment. Development projects depend on successful surveying and exploration programs. Discoveries of oil or gas reserves do not always result in production projects. Each stage has distinctive features and a differing labor skill mix. The same stage can re-occur and two or more stages can occur contemporaneously when specific projects overlap. The industry is influenced by price, interest rates, and regulations. Oil prices in more recent times are set by complex geopolitical dealings.
- The industry can be an agent of change. As seen in the study areas, where the oil and gas industry was a major force, the industry greatly influenced the formal education system, choices for the path from school to work, and choices in how to make a living. It also influenced population, business, and economic growth and decline.

- Neither the industry nor its impacts are monolithic. The oil and gas industry is really an umbrella term to capture companies which undertake offshore exploration, development, or production, provide oil and gas transportation and storage, provide oil and gas processing, and provide the many support services and facilities, such as crew bases, platform fabrication yards, and pipe coating yards.

As seen across and within the study areas, the impacts from the offshore oil and gas industry varied. In South Louisiana and Coastal Bend, Tex., impacts showed in the statistical analysis and in the personal stories told by individuals. Within the South Louisiana study area, the area closest to the coast experienced greater impacts than more inland communities. In Mobile Bay, where offshore gas is a relative new comer, impacts were less noticeable. These findings suggest several things. The extent of OCS impacts can be predicted in part by the physical and sociocultural isolation of an area and the capacity of an area to respond to OCS oil and gas industry needs — skills of the workforce, infrastructure, geography — and economic diversification. It also suggests that close proximity to offshore oil and gas activities does not necessarily result in benefits or negative impacts.

***The three disciplines contribute to identifying and understanding OCS impacts.*** This study demonstrated that the analytical approaches of history, anthropology, and economics are useful in identifying and explaining impacts of offshore oil and gas on coastal counties, parishes, and communities. The analytical approaches of each of the three disciplines resulted in new insights about the impacts of offshore oil and gas activities. The integration of the findings of the three disciplines, moreover, provided an added dimension to understanding offshore oil and gas impacts on counties, communities, households, families, and individuals. Yet, in the end there is still much to learn about the timing, magnitude, and location of OCS impacts on coastal communities and the households, families, and individuals who reside there.



### **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.