

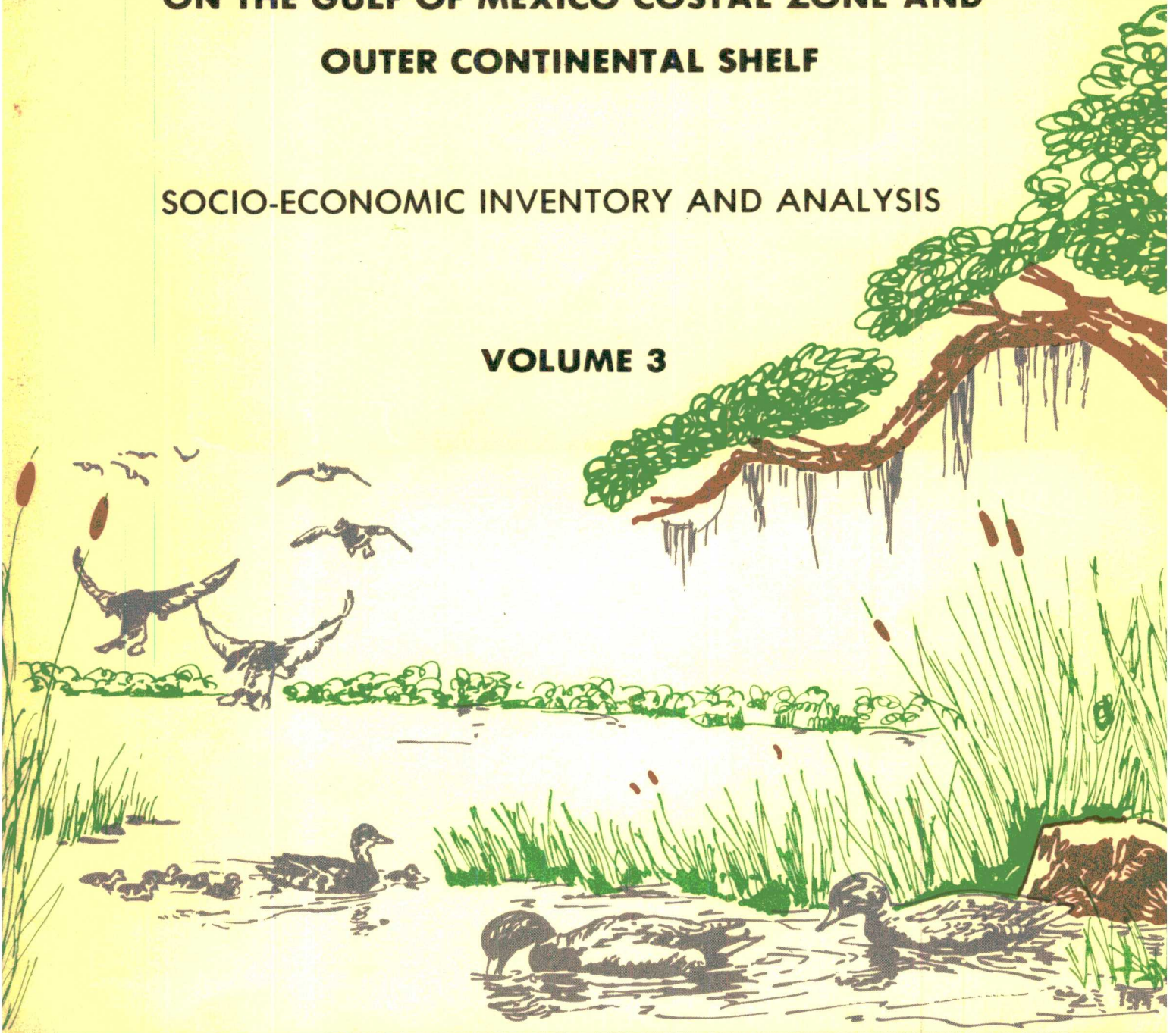
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1974 - 4

**ENVIRONMENTAL AND SOCIO-ECONOMIC BASELINE  
ON THE GULF OF MEXICO COSTAL ZONE AND  
OUTER CONTINENTAL SHELF**

**SOCIO-ECONOMIC INVENTORY AND ANALYSIS**

**VOLUME 3**



**DEPARTMENT OF THE INTERIOR  
Bureau of Land Management**

SOCIO-ECONOMIC INVENTORY AND ANALYSIS  
OF THE  
GULF OF MEXICO REGION  
VOLUME III of III

Prepared for:  
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## INTRODUCTION AND SUMMARY

This socio-economic report on the Gulf of Mexico coastal zone has been prepared at the request of the Department of the Interior, Bureau of Land Management, in order to facilitate impact evaluations of resource development projects in this geographic area. With increasing interest in and need for refinery construction, development of additional port facilities, and offshore petroleum development in the coastal region, it is essential that such developments be undertaken with due consideration for socio-economic factors which will affect and be impacted by these activities.

In recent years, several major studies of this region have been conducted and results published. Among these studies are: The Report on Gulf Coast Deep Water Port Facilities-Texas, Louisiana, Mississippi, Alabama and Florida, 1973, prepared by the U.S. Army Corps of Engineers, which evaluates the economic and social effects of the designated port location alternatives along the Gulf Coast; the Potential Onshore Effects of Deepwater Oil Terminal Related Industrial Development, 1973, prepared for The Council of Environmental Quality by Arthur D. Little, Inc., an effort to analyze and evaluate the impact of deepwater terminal facilities on the Gulf Coastal region; and The Final Environmental Impact Statement for a Proposed 1973 Outer Continental Shelf (OCS) Oil and Gas General Lease Sale: Offshore Mississippi, Alabama, and Florida, U. S. Department of the Interior, Bureau of Land Management, 1973.

This report, rather than being a duplication of the above efforts, presents recent socio-economic data in a format which can be easily utilized in the evaluation of various proposed developments over the next several years. Thus, the report contains a number of maps which depict graphically the relevant socio-economic information. These maps are accompanied by brief supporting narrative text and tables of data where appropriate. It should be noted that a report such as this requires regular updating since social and economic characteristics of any region are dynamic and constantly changing. While major trends and patterns can be established, the most recent census and development data should be utilized whenever possible in attempting to present an accurate picture of an area. The dynamic nature of socio-economic characteristics is also reflected in the bibliography for this volume, which is limited to comparatively recent references.

The most recent U. S. Census data and various public and private reports have been utilized to describe the study area. The Gulf of Mexico coastal region is seen as an area of varied socio-economic patterns, ranging from low-density, rural undeveloped sections to high-density, urban highly-developed centers. Median education and income levels vary, usually in direct relationship to the degree of urbanization. Though much of the region is classed as rural because of its low density, blue-collar or white-collar workers are predominant in all but one of the counties studied. Throughout the region, the unemployment rate at the time of the 1970 U. S. Census was relatively low when compared with those rates in other sections of the country. Even so,

these rates vary within the region itself.

Commercial fishing is a significant industry along the coast, and economic activities related to recreation and tourism are very important on the Florida Gulf Coast. This study surveys the ship building and repairing industry, heavy manufacturing industries, and reviews the economic contributions of the important petroleum and petrochemical industries. Natural resources such as forests and mineral deposits are depicted on accompanying maps. Major transportation systems and public parks and preserves also are shown on five-color maps. Graphic representations of effluent and emission sources are included as well as the volume of pollutants discharged.

A summary of the dominant socio-economic characteristics of the Gulf of Mexico coastal region follows. Twenty-one parameters are shown and the dominant characteristic in each parameter is noted for each county. The assessment that a county has high (H) density, or a low (L) unemployment rate, or medium (M) educational level, has been made in comparison with the same parameters in the other Gulf Coastal counties, not those of the United States as a whole.

It should be emphasized that this tabular summary provides a general overview only. To obtain a more specific, exact understanding of socio-economic conditions in the coastal region, the full volume should be studied. The text and supportive tables provide a detailed presentation of the data from which the summary was derived. A study of these data and the accompanying maps, used in conjunction with Volume II, Current and Recent Research on Environmental Processes and Conditions in the Gulf of Mexico Region, should be a useful tool in the evaluation of any resource, industrial, or urban development in the coastal region with respect to the impact on the environmental systems of the area.

SUMMARY OF SOCIO-ECONOMIC CHARACTERISTICS  
OF GULF COASTAL COUNTIES

KEY

- L - Low
- Lg - Large
- M - Medium
- S - Small
- VLg - Very large
- H - High
- VH - Very high
- R - Predominantly rural
- U - Predominantly urban
- B - Predominantly blue collar skills
- W - Predominantly white collar skills
- SV - Predominantly service skills
- W/B - Balanced white/blue collar skills
- F - Predominantly farm worker skills
- P - Phosphorus
- PO<sub>4</sub> - Phosphate
- Mg - Magnesium
- H<sub>2</sub>PO<sub>4</sub> - Phosphoric Acid
- H<sub>2</sub>SO<sub>4</sub> - Sulfuric Acid
- Cyp - Cypress
- L.Leaf - Long leaf pine
- Slash - Slash Pine
- Lob - Loblolly Pine
- Short - Short leaf Pine
- Hick - Hickory

	Population size	Population density	Urban/Rural population	Median income levels	Educational attainment	Job skills	Unemployment	Commercial fishing	Tourism	Port activities	Ship building	Heavy manufacturing	Industrial/Chemical minerals	Building materials	Forests	Mineral industries	Area size	Land Development	Intensity of archaeological/Historical sites	Intensity of water pollution	Intensity of air pollution
ALABAMA																					
Baldwin	M	L	R	H	M	B	M	M	M	-	-	L	H <sub>2</sub> SO <sub>4</sub>	Clay	L.Leaf/Slash	-	Lg	L	L	M	L
Mobile	Lg	H	U	H	H	W	H	VH	M	H	H	M	-	-	L.Leaf/Slash	L	M	M	M	H	H
FLORIDA																					
Bay	M	L	U	H	VH	W	M	M	M	L	-	L	-	-	L.Leaf/Slash	-	S	M	L	VH	M
Charlotte	S	L	U	M	VH	W	L	M	L	-	-	-	Rock Salt	-	L.Leaf/Slash	-	S	M	L	L	L
Citrus	S	L	R	L	H	W	H	L	M	-	-	-	PO <sub>4</sub>	Carbonate	Oak/Hick	-	S	L	L	L	M
Collier	S	L	U	VH	VH	W	L	M	M	-	-	-	Rock Salt	Carbonate	Oak/Gum/Cyp	-	Lg	L	L	M	L
DeSoto	S	L	R	M	M	W/B	M	-	-	-	-	-	PO <sub>4</sub>	-	L.Leaf/Slash	-	S	L	L	M	L
Dixie	S	L	R	L	M	B	L	L	-	-	-	L	-	Carbonate	Oak/Gum/Cyp	-	S	L	L	L	L
Escambia	Lg	H	U	H	VH	W	H	M	M	L	-	M	-	Clay	L.Leaf/Slash	-	S	H	M	VH	H
Franklin	S	L	R	L	M	B	M	H	-	-	-	-	-	-	L.Leaf/Slash	-	S	L	L	L	L
Gulf	S	L	R	H	M	B	L	M	-	-	-	-	Mg	-	L.Leaf/Slash	-	S	L	L	L	L
Hernando	S	L	R	L	M	W/B	M	-	-	-	-	-	-	Carbonate	Oak/Hick	-	S	L	L	L	L
Hillsborough	VLg	VH	U	H	H	B	M	M	H	VH	M	H	H <sub>2</sub> SO <sub>4</sub>	-	L.Leaf/Slash	-	M	H	M	H	VH
Holmes	S	L	R	L	L	B	L	-	-	-	-	-	-	-	Oak/Gum/Cyp	-	S	L	L	-	L
Jefferson	S	L	R	L	L	W/B	L	-	-	-	-	-	-	-	L.Leaf/Slash	-	S	L	L	L	L
Lee	Lg	M	U	H	VH	W	L	VH	M	-	-	L	Rock Salt	Carbonate	L.Leaf/Slash	-	M	M	L	M	M
Levy	S	L	R	L	M	B	L	L	L	-	-	-	-	Carbonate	Oak/Gum/Cyp	L	M	L	M	L	L
Manatee	Lg	M	U	M	VH	W	L	M	M	-	-	L	P	Carbonate	L.Leaf/Slash	-	S	M	L	M	M
Monroe	M	L	U	H	VH	W	M	VH	-	-	-	-	Rock Salt	-	Oak/Gum/Cyp	-	M	M	L	M	M
Okaloosa	M	L	U	H	VH	W	VH	M	M	-	-	L	-	-	Oak/Hick	-	M	L	M	M	M
Pasco	M	M	R	L	H	W/B	H	-	L	-	-	-	Gypsum	Carbonate	L.Leaf/Slash	-	S	L	L	M	L
Pinellas	VLg	VH	U	H	VH	W	M	M	VH	L	VH	M	P	Carbonate	L.Leaf/Slash	-	S	VH	M	M	H
Santa Rosa	S	L	R	H	VH	W	M	L	L	-	-	L	-	Carbonate	L.Leaf/Slash	-	M	L	L	M	L
Sarasota	Lg	L	R	M	VH	W	L	L	H	-	M	L	Rock Salt	Carbonate	L.Leaf/Slash	-	S	H	M	M	M
Taylor	S	L	U	M	M	B	L	L	L	-	L	L	-	-	L.Leaf/Slash	-	M	L	L	H	M
Wakulla	S	L	R	M	L	B	L	M	-	-	-	L	-	-	L.Leaf/Slash	-	S	L	M	L	L
Walton	S	L	R	L	M	B	M	L	-	-	-	-	-	Clay	Oak/Hick	-	M	L	M	M	L
LOUISIANA																					
Ascension	S	M	R	H	M	B	H	II	-	-	-	M	-	-	-	-	S	L	L	↑	H
Assumption	S	L	R	M	L	B	VH	-	-	-	-	-	-	-	Oak/Gum/Cyp	L	S	L	L	↑	L
Calcasieu	Lg	M	U	H	H	W	H	M	M	L	-	M	Salt Domes	-	-	M	M	M	L	↑	M
Cameron	S	L	R	H	M	B	H	-	-	-	-	-	Salt Domes	-	-	M	Lg	L	M	↑	L
East Baton Rouge	Lg	VH	U	H	VH	W	M	-	L	VH	-	M	Salt Domes	-	Oak/Gum/Cyp	M	S	H	L	↑	H
Iberia	M	M	U	H	M	B	H	-	-	-	M	L	Rock Salt	-	-	M	S	L	M	↑	M
Iberville	S	L	R	M	L	B	VH	-	-	-	M	L	Salt Domes	-	Oak/Gum/Cyp	L	S	L	L	↑	M
Jefferson	Lg	VH	U	VH	VH	W	M	M	-	H	-	H	Salt Domes	-	-	H	S	VH	L	↑	H
La Fourche	M	L	R	M	L	B	M	-	-	M	-	L	Salt Domes	-	-	M	M	L	L	↑	L
Lafayette	Lg	H	U	M	H	W	M	-	L	-	-	L	Salt Domes	-	-	VH	S	M	L	↑	L
Livingston	S	L	R	H	M	B	VH	-	-	-	-	-	Salt Domes	-	Lob/Short	-	S	L	L	↑	L
Orleans	VLg	VH	U	H	M	W	H	-	VH	VH	VH	H	-	-	-	VH	S	VH	H	↑	M
Plaquemines	S	L	R	H	M	B	M	-	-	-	M	L	Sulphur Mines	-	-	H	M	M	M	↓	M
St. Bernard	M	M	U	VH	H	W	H	-	-	-	-	L	-	-	-	L	M	H	M	↓	L

	Population size	Population density	Urban/Rural Population	Median income levels	Educational Attainment	Job skills	Unemployment	Commercial fishing	Tourism	Port activities	Ship building	Heavy manufacturing	Industrial/Chemical minerals	Building materials	Forests	Mineral industries	Area size	Land Development	Intensity of archaeological/Historical sites	Intensity of water pollution	Intensity of air pollution
LOUISIANA																					
St. Charles	S	M	R	VH	M	B	M	-	-	-	-	M	Salt Domes	-	Oak/Gum/Cyp	L	M	M	L	-	M
St. James	S	L	R	H	M	B	H	-	-	-	-	L	Brine	-	-	-	S	L	L	-	M
St. John	S	M	R	H	M	B	H	-	-	-	-	L	PO4	-	Oak/Gum/Cyp	-	S	L	L	-	M
St. Martin	S	L	R	L	L	B	VH	-	-	-	-	-	-	-	Oak/Gum/Cyp	M	M	L	L	-	M
St. Mary	M	M	U	H	M	B	M	-	L	-	M	M	Rock Salt	-	-	H	S	L	L	-	M
St. Tammany	M	L	R	H	H	W	VH	-	L	-	L	-	-	-	L.Leaf/Slash	-	M	L	M	-	M
Tangipahoa	M	L	R	L	M	W/B	H	-	L	-	-	-	Salt Domes	-	Lob/Short	-	M	L	L	-	M
Terrebonne	M	L	R	H	M	B	M	-	-	-	M	L	Salt Domes	-	-	H	Lg	M	M	-	M
Vermillion	S	L	R	L	L	B	H	-	-	-	-	-	Salt Domes	-	-	M	M	L	L	-	M
West Baton Rouge	S	L	R	L	M	B	VH	-	-	-	-	L	Salt Domes	-	Oak/Gum/Cyp	-	M	L	L	-	M
MISSISSIPPI																					
Hancock	S	L	U	M	H	B	H	L	-	-	-	-	-	-	L.Leaf/Slash	-	S	M	L	L	M
Harrison	Lg	H	U	H	VH	W	M	H	M	L	-	L	-	-	L.Leaf/Slash	-	S	H	M	M	M
Jackson	M	M	U	H	VH	W	M	VH	L	M	M	L	Mg	-	L.Leaf/Slash	-	S	H	L	VH	M
TEXAS																					
Aransas	S	L	R	M	H	W	M	↑	L	-	L	L	-	-	-	L	S	L	M	L	M
Brazoria	Lg	L	U	VH	VH	B	L	↑	L	L	M	H	-	-	-	M	Lg	M	L	M	M
Calhoun	S	L	U	H	H	B	L	↑	-	L	-	L	-	-	-	L	M	L	M	M	M
Cameron	Lg	M	U	L	L	W	VH	↑	M	L	M	L	Salt Domes	Clay	-	-	M	L	M	M	L
Chambers	S	L	R	H	M	W	M	↑	M	M	M	H	Salt Domes	-	-	M	M	H	H	L	M
Galveston	Lg	H	U	VH	H	W	M	↑	M	M	M	H	Brine	-	-	M	M	H	H	H	M
Harris	VLg	VH	U	VH	VH	W	L	↑	VH	VH	VH	VH	H <sub>2</sub> PO <sub>4</sub>	-	-	VH	Lg	VH	M	VH	VH
Jackson	S	L	R	H	M	B	L	↑	-	-	-	-	-	Clay	-	M	M	L	M	L	L
Jefferson	Lg	H	U	VH	H	W	M	↑	M	VH	L	VH	Salt Domes	-	-	M	M	H	H	VH	VH
Kenedy	S	L	R	L	L	F	L	↑	-	-	-	-	-	-	-	M	L	L	M	L	L
Kleberg	S	L	U	H	H	W	H	↑	-	-	-	-	-	Clay	-	M	L	L	M	L	L
Matagorda	S	L	U	H	M	B	M	↑	L	-	-	L	Salt Domes	-	-	M	Lg	L	M	M	L
Nueces	Lg	H	U	H	H	W	M	↑	M	H	L	M	-	Clay	-	VH	M	H	M	H	M
Orange	M	H	U	VH	H	B	H	↑	L	-	M	M	Brine	-	Lob Short	M	S	H	M	H	M
Refugio	S	L	R	H	M	B	H	↑	-	-	-	L	H <sub>2</sub> SO <sub>4</sub>	Clay	-	M	M	L	L	L	L
San Patricio	M	L	U	H	M	W	M	↑	-	-	-	L	-	Clay	-	M	S	L	H	M	M
Victoria	M	L	U	H	H	W	M	↑	-	-	-	L	-	-	Oak/Hick	M	M	L	L	M	L
Wharton	S	L	R	M	M	Sv	L	↑	-	-	-	L	-	-	-	M	S	-	L	L	L
Willacy	S	L	R	L	L	W/B/F	H	↓	-	-	-	-	-	Clay	-	-	M	L	L	L	L

## I. DEMOGRAPHY

This chapter describes the coastal counties from Texas to Florida in terms of the usual demographic parameters. The following discussion and supportive tables and maps provide a demographic profile for both the states and their individual coastal counties.

### A. Population, Urbanization, and Population Density

Tables I-1 through I-5 and Figure I-1 show the total population, percentage urban population, and population densities for the coastal counties in the five Gulf states. As one might expect from looking at population totals and densities for the coastal counties, there appears to be a positive correlation between these two variables.

The degree of urbanization and the population density of the coastal counties vary considerably. These two characteristics are a good indicator of the location of the most extensively developed areas. Generally, the highly urbanized counties and parishes also have the highest population density.

The urban percentage of the population ranges from a low of 15.1 percent in Sarasota County, Florida, to a high of 99.7 percent in Orleans Parish, Louisiana. The median figure for all coastal counties is 51.7 percent urban. In the following 16 counties more than three-fourths of the population is considered urban: Mobile, Alabama; Bay, Escambia, Hillsborough, and Pinellas counties in Florida; East Baton Rouge, Jefferson, Orleans, and St. Bernard parishes in Louisiana; and Cameron, Galveston, Harris, Jefferson, Kleberg, Nueces and Victoria counties in Texas.

The population density per square mile ranges from .5 persons in Kenedy County, Texas to 2,895 persons in Orleans Parish, Louisiana. The median figure for all coastal counties is 55.8 persons per square mile. The most densely populated counties (i.e., with density in excess of 1,000 persons per square mile) are: Pinellas County, Florida; Jefferson and Orleans Parishes, Louisiana; and Harris County, Texas.

### B. Educational Attainment Levels and Median Incomes for Coastal Counties

Tables I-6 through I-10 and Figure I-2 present data on median school years completed for the total population, female and male populations as well as median incomes of families and unrelated individuals. There is an apparent positive correlation between median school years completed

and median income. Also, it is not unusual to note that the counties/parishes with the highest educational attainment levels and income levels are, for the most part, highly urbanized.

There is considerable variance in educational attainment levels within the coastal area, from 5.5 years in sparsely populated Kenedy County, Texas, to 12.4 years in Okaloosa and Sarasota Counties, Florida. Higher educational attainment levels are prevalent in Florida where almost one-half of the counties report for the total population a median school years completed figure of 12.0 or more. Although the median school years completed for two of the three Mississippi counties is over 12.0, it is noteworthy that these high levels are not accompanied by correspondingly high median income figures.

Just as education levels vary considerably in the Gulf coast area, so do median income levels for coastal county families and unrelated individuals. From \$4,156 median income in Willacy County, Texas, to \$10,435, \$10,348 and \$10,235 for Brazoria County, Texas, Harris County, Texas and Jefferson Parish, Louisiana, respectively, the variability of this socioeconomic parameter probably reflects in part a wide diversity in life style and standard of living across the Gulf Coast States. It should be noted that the three counties listed above as having high median income levels exist as cores of activity in the petroleum industry, and as such provide an indication of the prosperity that often accompanies this industry.

### C. Employment/Unemployment Characteristics for Coastal Counties

Tables I-11 through I-20 and Figure I-3 show employment and unemployment data for the counties within each coastal state. In general, the heavily populated counties and those with pockets of dense urban concentration, have a comparatively higher ratio of white collar workers to total workers. In this same vein, these urbanized counties tend to have higher rates of unemployment. Noteworthy exceptions to this rule are the heavily populated and highly urbanized counties of Harris, Texas, and Jefferson, Louisiana, which have relatively low unemployment rates of 2.7 percent and 3.3 percent respectively.

#### 1. Alabama

Table I-11 shows that in Mobile County, Alabama, the site of the city and major part of Mobile, 45 percent of the 106,000 employed persons are white collar workers and 39 percent are blue collar. In view of this distribution, it is not surprising that many of the county's experienced unemployed persons are classified as white or blue collar workers. The 4.8 percent unemployment rate in Mobile County is somewhat

higher than that of neighboring Baldwin County, and is reflective of generally higher unemployment in urban areas.

## 2. Florida

Table I-13 shows that, with the possible exception of Jefferson County and DeSoto County, where farm workers comprise 22 percent and 16 percent of the labor force, respectively, the Gulf county occupational opportunities are primarily non-rural. Okaloosa, Pinellas, Sarasota, and Escambia Counties are significant employment centers for white collar workers in the state. By contract, significant numbers of blue collar workers are employed in Dixie, Holmes, Hillsborough, and Taylor counties.

Unemployment rates are generally low in Florida Gulf Coast counties, but where unemployment does exist, Table I-14 indicates that it is likely to appear in Okaloosa, Citrus, Escambia and/or Pasco counties.

## 3. Louisiana

Coastal Louisiana is not a significant farming area as Table I-15 suggests. Only Assumption Parish with 15 percent farm workers out of the total employed population for that area is a comparatively significant farming area. Orleans, Lafayette, Jefferson, and East Baton Rouge parishes are primarily white collar employment centers, while Plaquemines, St. John the Baptist, St. James, and Livingston parishes employ significant numbers of blue collar workers.

By comparison with Florida, unemployment is a greater problem in Louisiana. Assumption, Iberville, Livingston, St. Martin and West Baton Rouge parishes, all have unemployment rates over 6 percent.

## 4. Mississippi

Table I-17 shows that farm workers represent a negligible proportion of the coast's labor force. Harrison and Jackson counties appear to employ more white collar workers while Hancock County may afford somewhat better employment opportunities for blue collar workers. Unemployment rates are neither strikingly low nor high for the three coastal counties, but the relatively sparsely populated county of Hancock does show a rate of 5.3 percent.

## 5. Texas

As Table I-19 indicates, only the sparsely populated counties of Kenedy and Willacy employ significant proportions of farm workers, with 48 percent and 26 percent, respectively. Harris, Galveston,

Aransas, Jefferson and Nueces counties are important employment centers for white collar workers. By comparison, Calhoun, Brazoria, and Orange counties are, ostensibly, important job centers for blue collar workers.

It is significant to note that heavily populated and highly urbanized Harris County, which is the home of Houston, has a very low unemployment rate of 2.7 percent. In similar fashion, the other coastal counties do not experience significant unemployment problems. Only Cameron County and sparsely populated Kleberg and Willacy counties have unemployment rates over 5 percent.

#### D. Racial Distribution of Coastal Population

Table I-21 presents racial distribution by state for the Gulf Coast region population. The data include aggregate statistics from only coastal counties for each state. Heaviest concentrations of minority populations appear in Alabama and Louisiana coastal regions, in both of which minorities comprise around 30% of the total population. In Mississippi and Texas, some 17% of the total coastal populations are minority. The Florida Gulf coast region has the most homogeneous racial distribution with Caucasians representing approximately 88% of the population, while minorities only comprise about 12% of the total population. (The U.S. Census Caucasian category includes whites and Spanish-surname persons; the minority category includes persons of all other racial groups.)

Tables I-22 through I-26 show racial distribution by county for each of the five states along the Gulf Coast. In each table, the absolute numbers as well as percentages of Caucasians, Negroes, and other minorities are presented.

#### E. Growth and Migration

Table I-27 shows population and mobility data for the Gulf of Mexico coastal area. These data published by the U. S. Bureau of the Census indicate that almost all Gulf coastal counties have experienced significant population growth over the past decade. Only six State Economic Areas (SEA) encompassing the Gulf of Mexico coastal counties had growth rates under ten percent during that period. Two SEA's, Area 6 in Florida including counties of the Sarasota-Fort Meyers urban area, and Area G in Texas consisting of Harris County (Houston urban area), each had growth rates in the total population over five years of age in excess of 45%.

During the period 1965-1970, only a few of the State Economic Areas had fewer persons moving into a different house than in the period 1955-1960. These few are Areas 8 and D in Alabama, Areas 6, 7 and D in Louisiana, and Areas 11, 15, H and N in Texas. Most of these are major population centers, with the exception of some south Texas counties which are not highly urbanized.

Most of those persons moving into a different house in Florida in each reporting period came from another SEA, and more of those were from out-of-state than from Florida. This same pattern holds true for Alabama and Mississippi. In Louisiana, most movers were from a different SEA, but most were also from other places in Louisiana. The exception in this intra-state mobility pattern in Louisiana was in Calcasieu Parish, where Lake Charles is located. East Baton Rouge Parish seems to be approaching this latter pattern of in-migration from other states.

Harris, Jefferson, Orange and Nueces Counties in Texas had more migrants from other states than from elsewhere in Texas. This appears to indicate a pattern of out-of-state migration to the higher density urban areas, while movement to the less dense urbanized areas in Texas seems to have come from the rural areas of the same state.

Table I-28, Population Change in Gulf Coast Countries, shows specifically the percent change in total population from the 1960 Census to that of 1970 for the study region. The greatest growth was experienced in areas of the State of Florida, where four counties had a growth rate of over 100 percent. Other high growth rates were experienced by Hernando County, just north of the large growth in Pasco County; in Lee County, where Ft. Myers is located; in Manatee County between the urban centers of St. Petersburg and Sarasota; and in Okaloosa County just east of Pensacola. Growth in these areas seems to follow the pattern of suburban growth outside urban centers. Only two Florida counties in the study area (Holmes and Jefferson) lost population during the decade.

Healthy growth rates were felt in Louisiana, as well, in Jefferson, St. Bernard and St. Tammany Parishes. All are suburban areas surrounding the city of New Orleans. Correspondingly, Orleans Parish (the City of New Orleans) lost population during the past decade, following a national trend of migration from large urban centers to the surrounding suburban rings.

The more urban area of coastal Alabama has had only slight growth, while rural Baldwin County has grown by 21.0% during the past decade.

In Mississippi, the greatest growth in the coastal area was found in Jackson County, with Hancock County also showing significant growth. Jackson County, the location of Biloxi and Pascagoula, is just west of Mobile, Alabama. Hancock County abuts the Mississippi River and St. Tammany Parish, Louisiana, a growing suburban parish.

Only in Texas were there several coastal counties losing population:

- Cameron - Brownsville and Harlingen
- Jackson - coastal rural
- Jefferson - Beaumont
- Kenedy - very sparsely populated rural and site of King Ranch
- Refugio - about 54 percent rural and lightly populated
- Wharton - about 55 percent rural, southwest of Houston

Willacy - a Lower Rio Grande county about 49 percent rural and sparsely populated.

It would appear that the rural areas may have lost population because of a downturn in agricultural employment in those areas. The more urban areas, such as Cameron and Jefferson Counties, apparently did not have enough new jobs in the cities to make up for the job decrease in the rural areas of those counties, and thus they too lost population during the past decade.

Texas coastal counties showing large growth rates were Calhoun, with its Port Lavaca; and Harris County, with burgeoning Houston. Brazoria County where Freeport and Brazosport are located, and Galveston County also both showed significant growth (over twenty percent) during the past decade.

Table I-1. Total population, percentage urban population, and population density for Alabama coastal counties, 1970.

County	Population	% Urban Population <sup>1</sup>	Population Density <sup>2</sup>
Baldwin	59,382	26.6	37.6
Mobile	317,308	82.0	255.9

<sup>1</sup> 100% minus summation of percent rural non-farm and percent rural farm populations

<sup>2</sup> population ÷ square miles

Source: Economic Abstract of Alabama, 1972; U. S. Census, 1970.

Table I-2. Total population, percentage urban population, and population density for Florida coastal counties, 1970.

County	Population	% Urban Population <sup>1</sup>	Population Density <sup>2</sup>
Bay	75,283	76.4	87.4
Charlotte	27,559	59.6	33.1
Citrus	19,196	0	29.0
Collier	38,040	66.1	18.0
DeSoto	13,060	43.3	20.1
Dixie	5,480	0	7.7
Escambia	205,334	83.9	271.2
Franklin	7,065	44.1	12.5
Gulf	10,096	43.6	17.5
Hernando	17,004	23.9	33.5
Hillsborough	490,260	81.2	461.6
Holmes	10,720	0	22.1
Jefferson	8,778	0	14.4
Lee	105,216	70.2	104.7
Levy	12,756	0	11.2
Manatee	97,115	71.3	123.7
Monroe	52,586	71.4	37.1
Okaloosa	88,187	62.1	87.9
Pasco	75,955	33.7	98.4
Pinellas	522,325	96.1	1690.4

(contd.)

Table I-2 (contd)

County	Population	% Urban Population <sup>1</sup>	Population Density <sup>2</sup>
Santa Rosa	37,741	34.5	32.8
Sarasota	120,413	15.1	194.2
Taylor	13,641	56.4	13.0
Wakulla	6,308	0	9.9
Walton	16,087	30.8	14.2

<sup>1</sup> 100% minus summation of percent rural non-farm and percent rural farm populations

<sup>2</sup> population ÷ square miles

Source: Florida Statistical Abstract, 1972; U. S. Census, 1970.

Table I-3. Total population, percentage urban population, and population density for Louisiana coastal parishes, 1970.

Parish	Population	% Urban Population <sup>1</sup>	Population Density <sup>2</sup>
Ascension	37,086	32.2	123.2
Assumption	19,654	0	55.2
Calcasieu	145,415	74.7	131.6
Cameron	8,194	0	5.7
East Baton Rouge	285,142	86.7	621.0
Iberia	57,397	63.3	97.4
Iberville	30,743	33.5	49.0
Jefferson	337,568	95.8	1019.8
La Fourche	68,941	39.1	60.4
Lafayette	109,716	72.0	388.0
Livingston	36,511	18.5	55.8
Orleans	593,467	99.7	2895.0
Plaquemines	25,225	28.8	24.5
St. Bernard	51,185	91.6	99.6
St. Charles	29,550	27.2	102.6
St. James	19,733	32.5	78.0
St. John the Baptist	23,813	51.7	95.3
St. Martin	32,453	37.1	44.1
St. Mary	60,752	65.4	97.4
St. Tammany	63,585	36.9	68.7

(contd.)

Table I-3. (contd.)

Parish	Population	% Urban Population <sup>1</sup>	Population Density <sup>2</sup>
Tangipahoa	65,875	35.7	81.6
Terrebonne	76,049	52.6	55.6
Vermillion	43,071	38.4	35.7
West Baton Rouge	16,864	40.2	83.0

<sup>1</sup> 100% minus summation of percent rural non-farm and percent rural farm populations

<sup>2</sup> population ÷ square miles

Source: Statistical Abstract of Louisiana, 1971; U. S. Census, 1970.

Table I-4. Total population, percentage urban population, and population density for Mississippi coastal counties, 1970.

County	Population	% Urban Population <sup>1</sup>	Population Density <sup>2</sup>
Hancock	17,387	58.0	36.1
Harrison	134,582	83.1	230.1
Jackson	87,975	71.6	119.5

<sup>1</sup> 100% minus summation of percent rural non-farm and percent rural farm populations

<sup>2</sup> population ÷ square miles

Sources: Mississippi Statistical Abstract, 1972; U. S. Census, 1970.

Table I-5. Total population, percentage urban population, and population density for Texas coastal counties, 1970.

County	Population	% Urban Population <sup>1</sup>	Population <sup>2</sup> Density
Aransas	8,902	51.1	32.3
Brazoria	108,312	61.2	76.2
Calhoun	17,831	59.3	33.3
Cameron	140,368	77.5	159.0
Chambers	12,187	0	19.8
Galveston	169,812	89.9	395.8
Harris	1,741,908	95.5	1,018.1
Jackson	12,975	41.1	15.2
Jefferson	244,937	95.0	259.2
Kenedy	699	0	.5
Kleberg	33,173	85.7	39.0
Matagorda	27,913	55.3	24.5
Nueces	237,542	94.1	283.5
Orange	72,215	66.1	200.0
Refugio	9,494	48.0	12.3
San Patricio	47,288	64.5	69.5
Victoria	53,766	76.9	60.2
Wharton	36,729	45.2	34.0
Willacy	15,570	52.3	26.2

<sup>1</sup> 100% minus summation of percent rural non-farm and percent rural farm populations

<sup>2</sup> population ÷ square miles

Sources: Texas Almanac, 1972; U. S. Census 1970.

Table I-6. Median school years completed, and median income for population of Alabama coastal counties, 1970.

County	Median school years completed <sup>1</sup>			Median Income <sup>2</sup>
	Female	Male	Total Population	
Baldwin	11.0	10.4	10.8	\$7,338
Mobile	11.2	10.9	11.1	\$7,811

<sup>1</sup>For population 25 years and over

<sup>2</sup>Of families and unrelated individuals

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Source:  
U. S. Census, 1970.

Table I-7. Median school years completed, and median income for population of Florida coastal counties, 1970.

County	Median school years completed <sup>1</sup>			Median Income <sup>2</sup>
	Female	Male	Total Population	
Bay	11.8	12.1	12.0	\$7,416
Charlotte	12.2	11.9	12.1	6,255
Citrus	11.1	10.7	11.0	5,563
Collier	12.3	12.2	12.3	9,136
DeSoto	10.5	9.5	10.0	6,320
Dixie	9.8	9.2	9.5	5,666
Escambia	11.8	12.1	12.0	8,027
Franklin	10.2	9.6	9.9	4,338
Gulf	11.2	10.4	10.9	7,322
Hernando	11.0	10.3	10.7	5,863
Hillsborough	11.9	11.9	11.9	8,162
Holmes	9.0	8.8	8.9	4,754
Jefferson	9.2	8.0	8.8	5,519
Lee	12.2	12.1	12.1	7,878
Levy	10.2	9.3	9.9	5,821
Manatee	12.1	12.0	12.1	6,591
Monroe	12.2	12.2	12.2	7,334
Okaloosa	12.3	12.5	12.4	7,876
Pasco	11.3	10.6	11.0	4,998
Pinellas	12.1	12.0	12.1	7,642

(contd)

Table I-7. (contd)

County	Median school years completed <sup>1</sup>			Median Income <sup>2</sup>
	Female	Male	Total Population	
Santa Rosa	12.1	12.2	12.1	\$7,707
Sarasota	12.4	12.4	12.4	7,739
Taylor	10.1	9.9	10.0	6,814
Wakulla	9.8	8.8	9.2	6,128
Walton	10.1	10.5	10.2	5,828

<sup>1</sup>For population 25 years and over

<sup>2</sup>Of families and unrelated individuals

Source:

U. S. Census, 1970.

Table I-8. Median school years completed, and median income for population of Louisiana coastal parishes, 1970.

Parish	Median school years completed <sup>1</sup>			Median Income <sup>2</sup>
	Female	Male	Total Population	
Ascension	10.5	10.1	10.3	\$ 7,894
Assumption	7.9	7.2	7.5	6,135
Calcasieu	11.6	11.9	11.7	8,404
Cameron	9.6	9.3	9.4	7,726
E. Baton Rouge	12.3	12.4	12.3	7,070
Iberia	9.5	9.1	9.4	7,109
Iberville	8.9	8.5	8.7	6,251
Jefferson	12.0	12.1	12.1	10,235
La Fourche	8.6	8.4	8.5	6,049
Lafayette	11.5	11.9	11.7	5,922
Livingston	10.9	10.1	10.5	7,625
Orleans	10.8	10.8	10.8	7,445
Plaquemines	10.0	9.6	9.8	8,601
St. Bernard	11.0	10.9	11.0	9,638
St. Charles	10.7	11.2	10.9	9,004
St. James	9.4	9.9	9.6	8,049
St. John the Baptist	10.0	9.8	9.9	8,275
St. Martin	7.9	6.9	7.5	5,157
St. Mary	10.0	9.8	9.9	8,146
St. Tammany	11.9	11.8	11.9	8,655

(contd)

Table I-8. (contd.)

Parish	Median school years completed <sup>1</sup>			Median Income <sup>2</sup>
	Female	Male	Total Population	
Tangipahoa	9.9	9.3	9.6	\$ 5,208
Terrebonne	9.8	9.2	9.6	8,338
Vermillion	8.4	8.2	8.3	5,946
W. Baton Rouge	10.1	10.1	10.1	5,885

<sup>1</sup>For population 25 years and over

<sup>2</sup>Of families and unrelated individuals

Source:  
U. S. Census, 1970.

Table I-9. Median school years completed, and median income for population of Mississippi coastal counties, 1970.

County	Median school years completed <sup>1</sup>			Median Income <sup>2</sup>
	Female	Male	Total Population	
Hancock	11.5	11.4	11.5	\$6,485
Harrison	12.1	12.2	12.1	7,233
Jackson	12.1	12.2	12.2	8,548

<sup>1</sup>For population 25 years and over

<sup>2</sup>Of families and unrelated individuals

Source:  
U. S. Census, 1970.

Table I-10 Median school years completed, and median income for population of Texas coastal counties, 1970.

County	Median school years completed <sup>1</sup>			Median Income <sup>2</sup>
	Female	Male	Total Population	
Arkansas	11.5	10.9	11.3	\$ 6,661
Brazoria	12.1	12.1	12.1	10,435
Calhoun	11.9	11.3	11.4	8,353
Cameron	8.4	8.7	8.5	5,068
Chambers	10.5	10.5	10.5	8,025
Galveston	11.6	11.4	11.5	9,778
Harris	12.1	12.2	12.1	10,348
Jackson	10.3	9.5	10.0	7,080
Jefferson	11.5	11.8	11.6	9,024
Kenedy	5.8	5.3	5.5	4,586
Kleberg	11.5	12.1	11.8	6,968
Matagorda	10.9	10.1	10.6	7,404
Nueces	11.7	12.0	11.8	8,168
Orange	11.2	11.5	11.3	9,450
Refugio	10.2	9.9	10.1	6,994
San Patricio	10.1	10.0	10.0	7,266
Victoria	11.3	11.1	11.2	7,921
Wharton	9.9	9.4	9.7	6,535
Willacy	7.3	7.7	7.5	4,156

<sup>1</sup>For population 25 years and over

<sup>2</sup>Of families and unrelated individuals

Source:

U. S. Census, 1970.

Table I-11. Employed persons by job classification for Alabama coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
Baldwin	7,559	37	9,000	44	1,243	6	2,092	10	575	3	20,469
Mobile	47,628	45	41,599	39	1,225	1	12,172	12	3,567	3	106,191

<sup>1</sup>Percentage of total workers for the county.  
Source: U. S. Census, 1970.

Table I-12. Unemployed persons by job classification, and unemployment rates<sup>1</sup> for Alabama coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service <sup>2</sup> Worker		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Baldwin	89	117	293	224	13	00	18	81	413	422	835	3.9
Mobile	600	1150	1950	460	49	35	370	742	2969	2387	5356	4.8

<sup>1</sup> Unemployment rate -  $\frac{\text{total unemployed}}{\text{total employed} + \text{total unemployed}}$

<sup>2</sup> Including private household workers

Source: U. S. Census, 1970.

Table I-13. Employed persons by job classification for Florida coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
Bay	11,780	48	8,326	34	87	0	3,688	15	668	3	24,549
Charlotte	3,170	46	2,361	35	164	2	1,016	15	114	2	6,825
Citrus	2,079	41	1,946	38	122	2	805	16	164	3	5,116
Collier	6,303	45	4,236	31	1,243	9	1,767	13	355	2	13,904
DeSoto	1,289	30	1,293	30	720	16	977	22	102	2	4,381
Dixie	540	30	963	55	52	3	180	10	29	2	1,764
Escambia	29,628	47	23,558	38	549	1	6,949	11	2,147	3	62,831
Franklin	761	31	1,421	57	29	1	207	9	66	3	2,484
Gulf	1,244	37	1,523	45	80	2	421	13	109	3	3,377
Hernando	2,110	40	1,992	38	462	8	629	12	123	2	5,316
Hillsborough	54,891	36	66,600	45	4,249	3	20,188	14	3,028	2	148,956
Holmes	1,055	31	1,626	48	416	12	249	8	48	1	3,394
Jefferson	1,029	34	885	29	643	22	297	10	154	5	3,008
Lee	17,301	48	12,313	34	1,510	4	4,272	12	583	2	35,979

Table I-13. (Cont'd.)

County	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
Levy	1,330	30	1,789	40	473	11	650	15	197	4	4,439
Manatee	12,993	45	9,812	34	1,446	5	3,770	13	725	3	28,746
Monroe	7,357	50	4,478	30	163	1	2,619	18	248	1	14,865
Okaloosa	12,168	56	6,026	28	191	1	2,863	13	499	2	21,747
Pasco	7,244	40	7,251	40	1,545	9	1,915	10	254	1	18,209
Pinellas	88,662	54	47,233	29	1,164	1	24,088	14	3,855	2	165,002
Santa Rosa	5,273	47	4,463	39	405	4	912	8	237	2	11,290
Sarasota	19,426	53	10,853	29	430	1	5,129	14	1,117	3	36,955
Taylor	1,903	39	2,206	45	86	2	572	11	141	3	4,908
Wakulla	800	35	997	43	77	3	344	15	88	4	2,306
Walton	1,857	38	2,118	43	290	6	525	11	117	2	4,907

<sup>1</sup>Percentage of total workers for the county.  
Source: U. S. Census, 1970

Table I-14. Unemployed persons by job classification, and unemployment rates<sup>1</sup> for Florida coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service <sup>2</sup> Worker		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Bay	105	210	294	108	00	00	61	194	460	512	972	3.8
Charlotte	36	50	68	6	00	4	4	26	108	86	194	2.8
Citrus	34	48	112	4	00	00	17	30	163	82	245	4.6
Collier	34	73	117	6	53	33	8	31	212	143	355	2.5
DeSoto	00	20	36	45	10	3	6	38	52	106	158	3.5
Dixie	5	00	14	6	00	5	8	10	27	21	48	2.6
Escambia	204	664	966	335	57	16	165	521	1392	1536	2928	4.5
Franklin	5	10	41	40	00	00	00	00	46	50	96	3.7
Gulf	00	13	31	00	00	4	5	9	36	26	62	1.8
Hernando	7	24	72	18	9	34	7	29	95	105	200	3.6
Hillsborough	829	1201	1827	1024	167	103	281	827	3104	3155	6259	4.0
Holmes	00	15	35	11	00	00	00	16	35	42	77	2.2
Jefferson	00	00	22	14	3	17	00	11	25	42	67	2.2
Lee	157	197	361	71	59	39	54	141	631	448	1079	2.9
Levy	5	15	44	18	6	25	5	4	60	62	122	2.7

Table L-14. (contd)

County	White Collar		Blue Collar		Farm Worker		Service <sup>2</sup> Worker		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Manatee	75	172	263	81	37	20	17	89	392	362	754	2.6
Monroe	61	160	200	21	00	12	32	103	293	296	589	3.8
Okaloosa	52	477	328	125	5	4	94	258	479	864	1343	5.8
Pasco	102	183	261	68	75	47	22	83	460	381	841	4.4
Pinellas	1049	1107	1368	640	66	10	473	579	2956	2336	5292	3.1
Santa Rosa	40	149	118	42	6	4	14	37	178	232	410	3.5
Sarasota	92	200	204	38	22	6	65	70	383	314	697	1.9
Taylor	10	16	32	11	00	00	00	28	42	55	97	1.9
Wakulla	14	11	33	00	00	00	00	11	47	22	69	2.9
Walton	5	27	63	29	7	00	4	17	79	73	152	3.0

1 Unemployment rate -  $\frac{\text{total unemployed}}{\text{total employed} + \text{total unemployed}}$

2 Including private household workers

Source: U. S. Census, 1970.

Table I-15. Employed persons by job classification for Louisiana coastal parishes, 1970.

Parish	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
Ascension	3,603	33	5,173	48	362	3	1,290	12	377	4	10,805
Assumption	1,172	24	2,409	48	720	15	382	8	246	5	4,929
Calcasieu	21,059	44	19,208	40	731	2	5,198	11	1,452	3	47,648
Cameron	806	31	1,249	48	182	7	338	13	26	1	2,601
Iberia	6,374	37	7,248	42	914	5	1,857	10	953	6	17,346
Iberville	2,558	32	3,341	41	475	6	1,177	15	467	6	8,018
Jefferson	68,971	57	40,697	33	347	0	11,033	9	1,297	1	122,345
La Fourche	7,880	38	9,538	45	758	4	2,261	11	527	2	20,964
Lafayette	19,810	53	10,675	28	1,150	3	4,288	12	1,646	4	37,569
Livingston	3,855	35	5,527	50	262	2	1,123	10	299	3	11,066
Orleans	106,807	51	63,888	31	559	0	29,705	14	7,828	4	208,787
Plaquemines	2,809	35	4,101	52	178	2	753	10	64	1	7,905
St. Bernard	8,226	47	7,655	44	42	0	1,526	9	72	0	17,521
St. Charles	3,437	38	4,158	47	113	1	977	11	225	3	8,910

Table I-15. (Cont'd.)

Parish	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
St. James	1,367	27	2,529	51	481	10	495	10	104	2	4,976
St. John the Baptist	1,932	30	3,336	53	283	5	619	10	151	2	6,321
St. Martin	2,495	30	3,596	43	823	10	1,008	12	379	5	8,301
St. Mary	7,881	41	8,016	42	725	4	1,839	9	732	4	19,193
E. Baton Rouge	55,564	54	31,152	30	758	1	11,595	11	3,508	4	102,577
W. Baton Rouge	1,524	33	2,134	46	257	6	448	10	220	5	4,583
St. Tammany	9,157	47	7,399	38	249	1	2,198	11	605	3	19,608
Tangipahoa	7,453	39	7,349	38	1,733	9	2,087	11	672	3	19,294
Terrebonne	9,219	40	10,505	46	458	2	2,190	10	586	2	22,958
Vermillion	4,220	34	4,915	39	1,408	11	1,440	12	536	4	12,519

<sup>1</sup>Percentage of total workers for the Parish.  
Source: U. S. Census, 1970.

Table I-16. Unemployed persons by job classification, and unemployment rates<sup>1</sup> for Louisiana coastal parishes, 1970.

County	White Collar		Blue Collar		Farm Worker		Service <sup>2</sup> Worker		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Ascension	41	55	308	18	17	7	22	57	388	137	525	4.6
Assumption	7	30	183	14	51	27	7	13	248	84	332	6.3
Calcasieu	253	424	1288	79	46	00	107	417	1694	920	2614	5.2
Cameron Parish	4	19	46	23	5	00	23	13	78	55	133	4.8
E. Baton Rouge	423	823	1616	155	21	00	285	589	2345	1567	3912	3.7
Iberia	67	118	362	123	54	7	45	148	528	396	924	5.0
Iberville	52	36	463	15	21	6	30	90	566	147	713	8.2
Jefferson	626	915	1783	278	5	00	172	423	2586	1616	4202	3.3
La Fourche	34	63	428	82	47	7	22	122	531	267	798	3.7
Lafayette	192	329	439	98	40	7	79	224	750	658	1408	3.6
Livingston	56	64	543	20	22	00	8	44	629	128	757	6.4
Orleans	1411	2242	4118	781	49	19	931	1695	6509	4737	11246	5.1

Table I-16. (contd)

County	White Collar		Blue Collar		Farm Worker		Service Worker <sup>2</sup>		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Plaquemines	5	68	155	316	00	6	5	36	165	126	291	3.6
St. Bernard	114	167	349	98	00	00	38	48	501	313	814	4.4
St. Charles	15	68	227	00	6	00	13	22	261	90	351	3.8
St. James	00	17	168	13	25	00	11	47	204	77	281	5.3
St. John the Baptist	13	43	161	13	16	6	12	75	202	137	339	5.1
St. Martin	27	41	341	108	40	5	11	46	419	200	619	6.9
St. Mary	85	130	192	82	31	57	43	100	351	369	720	3.6
St. Tammany	183	270	484	47	11	00	34	137	712	454	1279	5.6
Tangipahoa	85	114	566	75	24	21	42	157	717	367	1651	5.3
Terrebonne	53	115	394	43	10	00	24	88	481	246	727	3.1
Vermillion	49	61	369	83	30	00	50	74	498	218	716	5.4
W. Baton Rouge	33	38	159	4	15	18	12	53	219	113	332	6.8

<sup>1</sup> Unemployment rate -  $\frac{\text{total unemployed}}{\text{total employed} + \text{total unemployed}}$

<sup>2</sup> Including private household workers

Source: U. S. Census, 1970.

Table I-17. Employed persons by job classification for Mississippi coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
Hancock	2,220	40	2,409	44	98	2	669	12	129	2	5,525
Harrison	18,062	48	13,673	36	227	1	4,807	12	1,087	3	37,856
Jackson	12,450	45	11,736	42	130	1	2,796	10	518	2	27,630

<sup>1</sup>Percentage of total workers for the county.  
Source: U. S. Census, 1970.

Table I-18. Unemployed persons by job classification, and unemployment rates<sup>1</sup> for Mississippi coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service Worker <sup>2</sup>		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Hancock	50	30	138	23	00	00	16	50	204	103	307	5.3
Harrison	97	397	476	129	26	6	102	245	701	777	1478	3.8
Jackson	97	272	514	226	00	00	30	134	641	632	1273	4.4

<sup>1</sup> Unemployment rate -  $\frac{\text{total unemployed}}{\text{total employed} + \text{total unemployed}}$

<sup>2</sup> Including private household workers

Source: U. S. Census, 1970.

Table I-19. Employed persons by job classification for Texas coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
Aransas	1,335	47	1,020	36	49	2	335	12	106	3	2,845
Brazoria	16,306	41	17,598	44	848	2	4,193	11	866	2	39,811
Calhoun (S.A. Bay, Matagorda Is.)	2,038	35	2,705	46	302	5	687	12	103	2	5,835
Cameron	17,350	43	13,823	35	3,596	9	4,510	11	899	2	40,178
Chambers	1,534	36	1,656	39	484	11	471	11	146	3	4,291
Galveston	31,007	47	24,054	37	326	1	8,328	13	1,287	2	65,002
Harris	384,397	54	235,697	33	2,675	1	74,523	10	14,457	2	711,749
Jackson	1,360	31	1,914	42	650	14	410	9	195	4	4,529
Jefferson	39,721	44	36,524	41	683	1	10,682	12	2,238	2	89,848
Kenedy	36	12	33	11	143	48	56	19	30	10	298
Kleberg	3,510	40	3,032	35	475	6	1,327	15	312	4	8,656
Matagorda	3,490	36	3,829	40	835	9	1,108	11	417	4	9,679
Nueces	39,647	48	28,224	35	1,690	2	9,452	12	2,292	3	81,305

Table I-19. (Cont'd.)

County	White Collar		Blue Collar		Farm Worker		Service Worker		Private Household		Total
	Number	% <sup>1</sup>	Number	%	Number	%	Number	%	Number	%	
Orange	9,452	38	12,111	50	111	1	2,366	9	388	2	24,428
Refugio	1,158	33	1,331	38	294	9	483	14	205	6	3,471
San Patricio	6,021	40	5,651	38	1,316	9	1,490	10	469	3	14,947
Victoria	8,296	43	7,333	38	773	4	2,271	12	683	3	19,356
Wharton	4,793	27	4,578	26	1,853	10	5,784	33	641	4	17,649
Willacy	1,357	26	1,433	28	1,327	26	868	17	143	3	5,128

<sup>1</sup>Percentage of total workers for the county.  
Source: U. S. Census, 1970.

Table I-20. Unemployed persons by job classification, and unemployment rates<sup>1</sup> for Texas coastal counties, 1970.

County	White Collar		Blue Collar		Farm Worker		Service <sup>2</sup> Worker		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Aransas	37	11	35	5	00	00	7	11	79	27	106	3.6
Brazoria	67	261	412	38	21	00	25	202	525	501	1026	2.5
Calhoun	16	44	43	30	4	4	4	31	67	109	176	2.9
Cameron	127	274	965	332	308	155	79	215	1479	976	2455	5.8
Chambers	19	27	64	4	10	00	3	20	96	51	147	3.3
Galveston	261	423	814	88	6	00	204	439	1285	950	2235	3.3
Harris	2791	4928	6453	1275	87	39	1275	2791	10606	9033	19639	2.7
Jackson	5	00	47	13	00	00	00	46	52	59	111	2.4
Jefferson	248	784	1305	171	9	00	298	690	1860	1645	3505	3.8
Kenedy	00	7	6	00	00	00	00	00	6	7	13	2.3
Kleberg	52	144	140	33	6	00	14	71	212	248	460	5.0
Matagorda	18	51	139	20	44	00	2	62	203	133	336	3.4
Nueces	357	698	1101	147	49	28	177	375	1684	1248	2932	3.5
Orange	62	321	474	32	5	5	43	137	584	515	1099	4.3

Table I-20. (contd)

County	White Collar		Blue Collar		Farm Worker		Service Worker <sup>2</sup>		Sub Total		Total Male & Female	Unemployment rate (%)
	M	F	M	F	M	F	M	F	M	F		
Refugio	24	29	51	00	17	00	15	11	107	40	147	4.1
San Patricio	63	115	292	25	33	18	40	40	428	198	626	4.0
Victoria	27	190	291	50	4	4	62	128	384	372	756	3.8
Wharton	20	95	128	40	15	5	14	58	177	198	375	2.1
Willacy	17	37	72	24	84	25	00	25	173	111	284	5.2

<sup>1</sup> Unemployment rate -  $\frac{\text{total unemployed}}{\text{total employed} + \text{total unemployed}}$

<sup>2</sup> Including private household workers

Source: U. S. Census, 1970.

Table I-21. Racial distribution by state for the Gulf Coast Region population.

STATE: (includes only coastal counties)	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Alabama	262,720	69.7	112,952	30.0	1,018	0.3
Florida	1,829,932	88.1	237,576	11.5	8,706	0.4
Louisiana	1,599,795	71.4	628,524	28.2	9,702	0.4
Mississippi	199,502	83.1	39,468	16.5	974	0.4
Texas	2,470,242	82.6	498,435	16.7	21,713	0.7

Source:

U. S. Census, 1970.

Table I-22. Racial distribution by county for the Alabama coastal population.

COUNTY	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Baldwin	48,650	81.9	10,569	17.8	163	0.3
Mobile	214,070	67.4	102,383	32.3	855	0.3

Source:  
U. S. Census, 1970.

Table I-23. Racial distribution by county for the Florida coastal population.

COUNTY	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Bay	65,203	86.6	9,644	12.8	436	0.6
Charlotte	26,733	97.0	733	2.7	93	0.3
Citrus	17,339	90.3	1,832	9.6	25	0.1
Collier	34,706	91.2	3,178	8.4	156	0.4
DeSoto	10,389	79.6	2,614	20.0	57	0.4
Dixie	4,527	82.6	926	16.9	27	0.5
Escambia	163,014	79.4	40,362	19.6	1,958	1.0
Franklin	5,730	81.1	1,323	18.7	12	0.2
Gulf	7,750	76.8	2,330	23.1	16	0.1
Hernando	14,559	85.6	2,401	14.1	44	0.3
Hillsborough	422,119	86.1	66,648	13.6	1,498	0.3
Holmes	10,371	96.7	342	3.2	7	0.1
Jefferson	3,874	44.1	4,897	55.8	7	0.1

(contd)

Table I-23. (contd)

COUNTY	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Lee	92,806	88.2	12,148	11.5	262	0.3
Levy	9,540	74.8	3,205	25.1	11	0.1
Manatee	85,346	87.9	11,433	11.8	336	0.3
Monroe	47,690	90.7	4,222	8.0	674	1.3
Okaloosa	81,219	92.1	6,350	7.2	618	0.7
Pasco	71,924	94.7	3,781	5.0	250	0.3
Pinellas	478,043	91.5	42,765	8.2	1,521	0.3
Santa Rosa	35,492	94.0	1,979	5.3	270	0.7
Sarasota	111,956	93.0	8,106	6.7	351	0.3
Taylor	10,561	77.4	3,067	22.5	13	0.1
Wakulla	4,776	75.7	1,522	24.1	10	0.2
Walton	14,265	88.7	1,768	11.0	54	0.3

Source:

U. S. Census, 1970.

Table I-24. Racial distribution by parish for the Louisiana coastal population.

PARISH	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Ascension	27,048	72.9	9,957	26.9	81	0.2
Assumption	12,298	62.6	7,336	37.3	20	0.1
Calcasieu	113,690	78.2	31,468	21.6	257	0.2
Cameron	7,627	93.1	542	6.6	25	0.3
East Baton Rouge	202,528	71.0	81,781	28.7	858	0.3
Iberia	41,344	72.0	15,964	27.8	89	0.2
Iberville	16,102	52.4	14,577	47.4	67	0.2
Jefferson	294,480	87.3	41,950	12.4	1,138	0.3
Lafayette	85,640	78.1	23,857	21.7	219	0.2
La Fourche	61,046	88.5	7,731	11.2	164	0.3
Livingston	32,375	88.7	4,118	11.3	18	0.05
Orleans	323,420	54.5	267,308	45.0	2,743	0.5
Plaquemines	18,852	74.7	5,778	22.9	595	2.4

(contd)

Table I-24. (contd)

PARISH	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
St. Bernard	48,357	94.5	2,631	5.1	197	0.4
St. Charles	21,737	73.6	7,774	26.3	39	0.1
St. James	10,401	52.7	9,321	47.2	11	0.1
St. John the Baptist	12,738	53.5	11,035	46.3	40	0.2
St. Martin	21,098	65.0	11,292	34.8	63	0.2
St. Mary	43,387	71.4	17,056	28.1	309	0.5
St. Tammany	51,482	81.0	11,887	18.7	216	0.3
Tangipahoa	45,093	68.5	20,648	31.3	134	0.2
Terrebonne	62,251	81.9	11,423	15.0	2,375	3.1
Vermillion	37,206	86.4	5,830	13.5	35	0.1
West Baton Rouge	9,595	56.9	7,260	43.0	9	0.1

Source:

U. S. Census, 1970.

Table I-25. Racial distribution by county for the Mississippi coastal population.

COUNTY	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Hancock	14,894	85.7	2,467	14.2	26	0.1
Harrison	111,061	82.5	22,743	16.9	778	0.6
Jackson	73,547	83.6	14,258	16.2	170	0.2

Source:

U. S. Census, 1970.

Table I-26. Racial distribution by county for the Texas coastal population.

COUNTY	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Aransas	8,490	95.4	357	4.0	55	0.6
Brazoria	97,685	90.2	10,137	9.4	490	0.4
Calhoun	16,874	94.6	785	4.4	172	1.0
Cameron	138,862	98.9	623	0.5	883	0.6
Chambers	9,671	79.4	2,487	20.4	29	0.2
Galveston	135,480	79.8	33,314	19.6	1,018	0.6
Harris	1,377,118	79.1	350,668	20.1	14,126	0.8
Jackson	11,393	87.8	1,539	11.9	43	0.3
Jefferson	183,100	74.8	61,064	24.9	609	0.3
Kenedy	678	100.0	--	--	--	--
Kleberg	31,424	94.7	1,380	4.2	362	1.1
Matagorda	22,352	80.1	5,371	19.2	190	0.7
Nueces	223,836	94.2	11,023	4.6	2,685	1.2

(contd)

Table I-26. (contd)

COUNTY	Caucasian population	% of total	Negro population	% of total	Other minority population	% of total
Orange	64,483	90.6	6,518	9.2	169	0.2
Refugio	8,535	89.9	908	9.6	51	0.5
San Patricio	46,254	97.8	745	1.6	289	0.6
Victoria	49,363	91.8	4,186	7.8	217	0.4
Wharton	29,263	79.7	7,262	19.8	204	0.5
Willacy	15,381	98.8	68	0.4	121	0.8

I-43

Source:

U. S. Census, 1970.

Table I-27. Mobility status of the population 5 years and over, for selected state economic areas of the Gulf of Mexico coastal area: 1955-60 and 1965-70.

State Economic Area	Total population 5 years old and over		Different House in the United States (Movers)											
			Different County (Migrants)										Different State	
			Total		Total		Same State Economic Area		Different State Economic Area					
									Total		Same State			
1955-60	1965-70	1955-60	1965-70	1955-60	1965-70	1955-60	1965-70	1955-60	1965-70	1955-60	1965-70			
Alabama														
Area 8*	72,457 <	86,261	32,851 >	32,696	12,266 <	13,591	580 >	461	11,686 <	13,130	5,773 <	5,824	5,913 <	7,506
Area D	271,765 <	288,363	141,024 >	113,590	42,578 >	30,580	-	-	42,578 >	30,580	15,545 >	9,544	27,033 >	21,036
Florida														
Area 1	161,329 <	205,655	94,883 <	102,352	54,856 <	62,440	3,802 >	3,751	51,054 <	58,659	9,240 <	11,744	41,814 <	46,945
Area 2	122,146 <	152,086	62,634 <	65,282	29,908 <	35,150	2,035 >	1,764	27,873 <	33,386	11,262 <	16,136	16,611 <	17,250
Area 5	391,150 <	532,740	218,564 <	244,991	114,632 <	138,510	8,179 <	8,608	106,453 <	129,902	27,440 <	41,181	79,013 <	88,721
Area 6	280,957 <	464,787	181,793 <	234,997	121,904 <	154,388	4,855 <	8,940	117,049 <	145,448	19,562 <	26,990	97,487 <	118,458
Area B	700,287 <	945,148	416,910 <	440,675	239,653 <	235,200	4,923 <	7,655	234,730 <	227,545	27,423 <	41,798	207,307 <	185,747
Area D	175,398 <	221,614	101,832 <	103,477	51,523 <	53,707	2,805 <	3,583	48,718 <	50,124	6,927 <	8,187	41,791 <	41,937
Louisiana														
Area 5	221,086 <	272,591	93,545 <	102,902	34,929 <	47,317	4,694 <	5,623	30,235 <	41,694	18,188 <	25,388	12,047 <	16,306
Area 6	317,840 <	392,765	129,111 >	124,293	39,077 <	41,970	8,328 <	10,240	30,749 <	31,730	17,235 <	18,868	13,514 >	12,862
Area 7	126,299 <	138,388	48,852 >	41,218	14,360 >	13,132	2,241 >	1,985	12,119 >	11,149	7,416 <	7,594	4,703 >	3,583
Area C	199,753 <	259,099	103,750 <	105,110	39,057 <	43,470	-	-	39,057 <	43,470	21,307 <	22,067	17,750 <	21,403
Area D	123,818 <	131,685	67,949 >	50,849	28,077 >	18,061	-	-	28,077 >	18,061	12,152 >	8,661	15,925 >	9,400
Mississippi														
Area 8	162,693 <	216,207	87,577 <	103,607	50,329 <	59,830	2,632 <	4,269	47,697 <	55,561	9,113 >	8,979	38,584 <	46,582
Texas														
Area 10	111,719 <	127,500	40,527 <	45,064	14,468 <	21,379	1,436 >	1,317	13,032 <	20,062	10,925 <	14,701	2,107 <	5,361
Area 11	184,752 <	188,640	79,942 >	68,014	31,965 <	29,952	5,522 >	4,128	26,443 >	25,824	19,756 >	18,331	6,687 <	7,493
Area 14	302,564 <	365,193	139,700 <	154,743	55,417 <	74,008	10,196 >	10,056	45,221 <	63,952	34,566 <	49,029	10,655 <	14,923
Area 15	298,288 <	300,578	130,914 >	97,459	37,211 >	27,138	5,065 >	3,808	32,146 >	23,330	16,793 >	12,111	15,353 >	11,219
Area G	1,083,365 <	1,574,815	584,255 <	776,356	176,340 <	290,044	-	-	176,340 <	290,044	93,788 <	142,802	82,552 <	147,242
Area H	268,103 <	290,187	137,885 >	115,723	44,927 >	39,049	5,644 >	5,389	39,283 >	33,660	19,606 >	17,273	19,677 >	16,387
Area N	190,248 <	214,739	102,656 >	91,339	36,656 <	37,175	-	-	36,656 <	37,175	21,939 >	20,938	14,717 <	16,237

Table I-27 (cont'd.).

\*Counties in State Economic Areas:

Alabama	
SEA 8	Baldwin, Escambia
SEA D	Mobile
Florida	
SEA 1	Wakulla, Okaloosa, Liberty, Gulf, Franklin, Calhoun, Bay, Walton, Washington
SEA 2	Bradford Clay, Dixie, Levy, Nassau, Putnam, St. Johns, Taylor
SEA 5	Citrus, DeSoto, Hardee, Hernando, Highlands, Lake, Marion, Osceola, Pasco, Polk, Sumter
SEA 6	Charlotte, Collier, Glades, Hendry, Lee, Manatee, Martin, Monroe
SEA B	Hillsborough, Pinellas
SEA D	Escambia, Santa Rosa
Louisiana	
SEA 5	E. Feliciana, W. Feliciana, Tangipahoa, Washington, Livingston, Plaquemines, St. Charles, St. Helena, St. Tammany
SEA 6	Ascension, Assumption, Iberia, Iberville, Lafourche, St. James, St. John the Baptist, St. Martin, St. Mary, Terrebonne, W. Baton Rouge
SEA 7	Acadia, Allen, Cameron, Jefferson Davis, Vermilion
SEA C	E. Baton Rouge
SEA D	Calcasieu
Mississippi	
SEA 8	Hancock, Harrison, Jackson
Texas	
SEA 10	Caldwell, Fayette, Gonzales, Guadalupe, Lavaca
SEA 11	Aransas, Atascosa, Bee, DeWitt, Frio, Goliad, Jim Wells, Karnes, Live Oak, Refugio, San Patricio, Wilson
SEA 14	Austin, Brazoria, Calhoun, Chambers, Colorado, Ft. Bend, Jackson, Liberty, Matagorda, Victoria, Waller, Wharton
SEA 15	Cameron, Hidalgo, Willacy
SEA G	Harris
SEA H	Jefferson, Orange,
SEA N	Nueces

Source: U. S. Department of Commerce, Bureau of the Census 1960 and 1970 Censuses.

Table I-28. Population Change in Gulf Coast Counties

	1970 Population				1960 Population			Percent Change 1960-1970
	Total	Total Urban	Urban Percent of Total	Total Rural	Total	Urban	Rural	
Alabama	3,444,165	2,011,941	58.4	1,432,224	3,266,740	1,791,721	1,475,019	5.4
Baldwin County	59,382	15,815	26.6	43,567	49,088	12,944	36,144	21.0
Mobile County	317,308	260,480	82.1	56,828	314,301	270,711	43,590	1.0
Florida	6,789,443	5,468,137	80.5	1,321,306	4,951,560	3,661,383	1,290,177	37.1
Bay County	75,283	57,480	76.4	17,803	67,131	43,650	23,481	12.1
Charlotte County	27,559	16,491	59.8	11,068	12,594	7,397	5,197	118.8
Citrus County	19,196	-	-	19,196	9,268	-	9,268	107.1
Collins County	38,040	25,159	-	12,881	15,753	7,879	7,874	141.5
DeSoto County	13,060	5,658	43.3	7,402	11,683	5,889	5,794	11.8
Dixie County	5,480	-	-	5,480	4,479	-	4,479	22.3
Escambia County	205,334	172,539	84.0	32,795	173,829	128,049	45,780	18.1
Franklin County	7,065	3,102	43.9	3,963	6,576	3,099	3,477	7.4
Gulf County	10,096	4,401	43.6	5,695	9,937	4,217	5,720	1.6
Hernando County	17,004	4,060	23.9	12,944	11,205	3,301	7,904	51.8
Hillsborough County	490,265	398,270	81.2	91,995	397,788	317,501	80,287	23.2
Holmes County	10,720	-	-	10,720	10,844	-	10,844	-1.1
Jefferson County	8,778	-	-	8,778	9,543	-	9,543	-8.0
Lee County	105,216	73,939	70.3	31,277	54,539	26,900	27,639	92.9
Levy County	12,756	-	-	12,756	10,364	-	10,364	23.1
Manatee County	97,115	69,318	71.4	27,797	69,168	42,981	26,187	40.4
Monroe County	52,586	37,643	71.6	14,943	47,921	33,956	13,965	9.7
Okaloosa County	88,187	54,702	62.0	33,485	61,175	30,106	31,069	44.2
Pasco County	75,955	25,767	33.9	50,188	36,785	11,166	25,619	106.5
Pinellas County	522,329	502,277	96.2	20,052	374,665	341,384	33,281	39.4
Santa Rosa County	37,741	12,989	34.4	24,752	29,547	4,108	25,429	27.7
Sarasota County	120,413	90,615	75.3	29,798	76,895	52,562	24,333	36.6
Taylor County	13,641	7,701	56.5	5,940	13,168	8,030	5,138	3.6
Wakulla County	6,308	-	-	6,308	5,257	-	5,257	20.0
Walton County	16,087	4,966	30.9	11,121	15,576	5,282	10,294	3.3
Louisiana	3,641,306	2,406,150	66.1	1,235,156	3,257,022	2,060,606	1,196,416	11.8
Ascension Parish	37,086	11,879	32.0	25,207	27,927	9,334	18,593	32.8
Assumption Parish	19,654	-	-	19,654	17,991	-	17,991	9.2
Calcasieu Parish	145,415	108,713	74.8	36,702	145,475	107,459	38,016	-
Cameron Parish	8,194	-	-	8,194	6,909	-	6,909	18.6
East Baton Rouge Parish	285,167	247,869	86.9	37,298	230,058	195,780	34,278	24.0
Iberia Parish	57,397	36,469	63.5	20,928	51,657	34,630	17,027	11.1
Iberville Parish	30,746	10,245	33.3	20,501	29,939	7,689	22,250	2.7
Jefferson Parish	337,568	323,507	95.8	14,061	208,769	196,458	12,311	61.7
Lafourche Parish	68,941	26,753	38.8	42,188	55,381	22,962	32,419	24.5
Livingston Parish	36,511	6,752	18.5	29,759	26,974	5,991	20,983	35.4

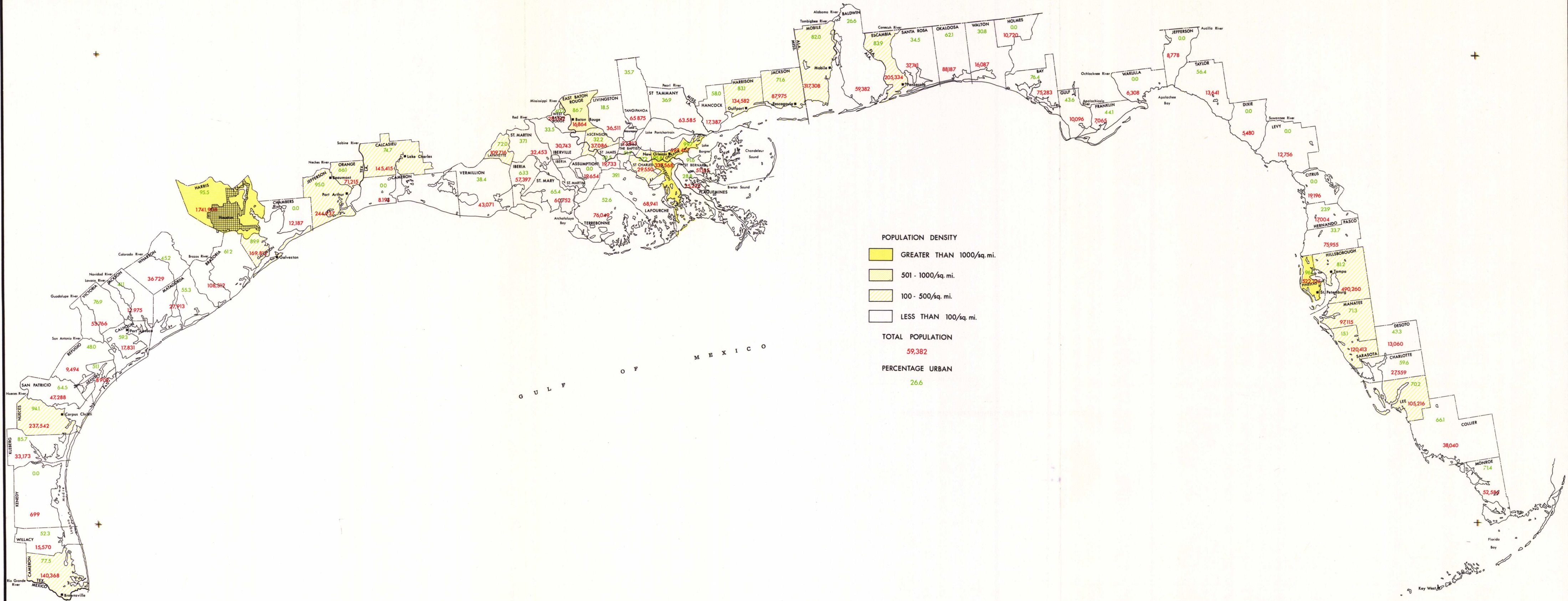
Table I-28. Population Change in Gulf Coast Counties (contd)

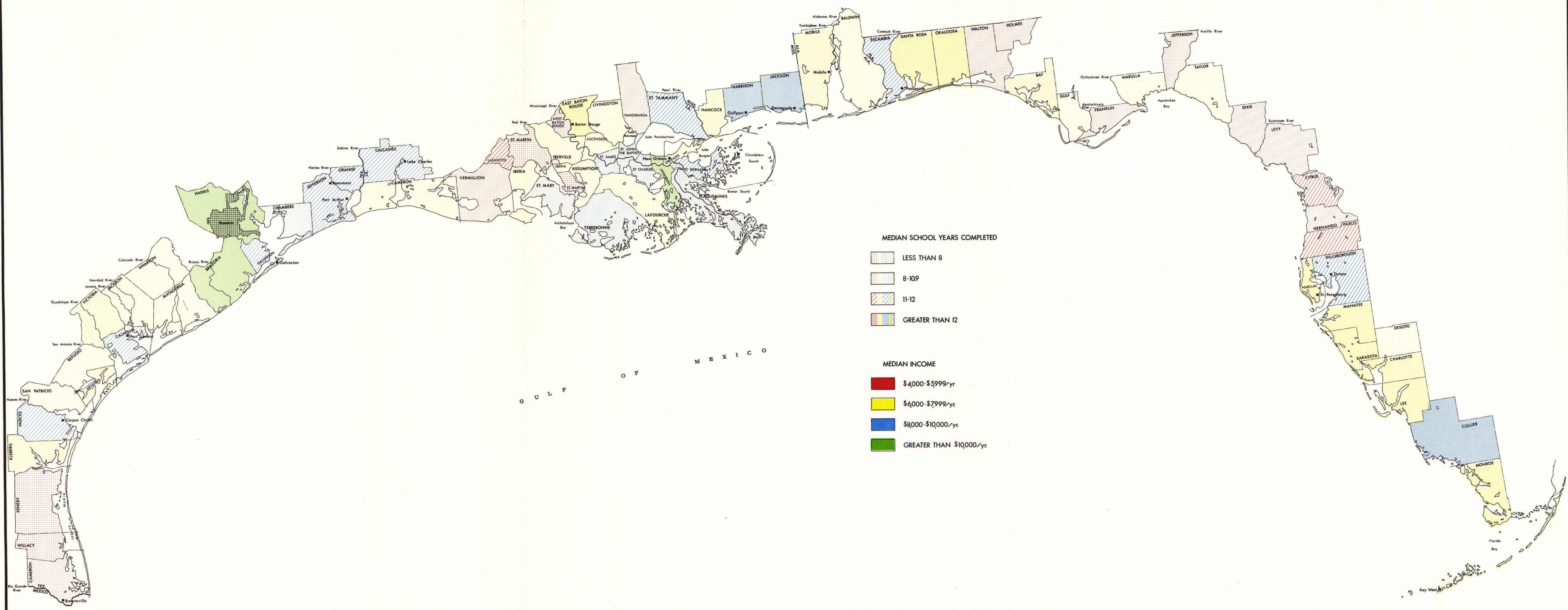
	1970 Population			1960 Population			Percent Change 1960-1970	
	Total	Total Urban	Urban Percent of Total	Total Rural	Total	Urban		Rural
Louisiana (contd)								
Orleans Parish	593,471	591,502	99.7	1,969	627,525	627,525	-	-5.4
Plaquemines Parish	25,225	7,135	28.3	18,090	22,545	7,776	14,769	11.9
St. Bernard Parish	51,185	46,719	91.3	4,466	32,186	21,254	10,932	59.0
St. Charles Parish	29,550	8,028	27.2	21,522	21,219	4,682	16,537	39.3
St. James Parish	19,733	6,478	32.8	13,255	18,369	3,274	15,095	7.4
St. John the Baptist Parish	23,813	12,334	51.8	11,479	18,439	8,838	9,601	29.1
St. Martin Parish	32,453	12,095	37.3	20,358	29,063	9,771	19,292	11.7
St. Mary Parish	60,752	39,609	65.2	21,143	48,833	29,016	19,817	24.4
St. Tammany Parish	63,585	23,271	36.6	40,314	38,643	13,110	25,533	64.5
Tangipahoa Parish	65,875	23,361	35.5	42,514	59,434	21,213	38,221	10.8
Terrebonne Parish	76,049	39,999	52.6	36,050	60,771	31,640	29,131	25.1
Vermilion Parish	43,071	16,536	38.4	26,535	38,855	15,681	23,174	10.9
West Baton Rouge Parish	16,864	6,558	38.9	10,306	14,796	5,796	9,000	14.0
Mississippi	2,216,912	986,642	44.5	1,230,270	2,178,141	820,805	1,357,336	1.8
Hancock County	17,387	9,860	56.7	7,527	14,039	5,073	8,966	23.8
Harrison County	134,582	111,684	83.0	22,898	119,489	92,505	26,984	12.6
Jackson County	87,975	62,672	71.2	25,303	55,522	34,029	21,493	58.5
Texas	11,196,730	8,920,946	79.7	2,275,784	9,579,677	7,187,470	2,392,207	16.9
Aransas County	8,902	4,605	51.7	4,297	7,006	3,924	3,082	27.1
Brazoria County	108,312	66,392	61.3	41,920	76,204	44,760	31,444	42.1
Calhoun County	17,831	10,491	58.8	7,340	16,592	8,864	7,728	7.5
Cameron County	140,368	108,805	77.5	31,563	151,098	116,320	34,778	-7.1
Chambers County	12,187	-	-	12,187	10,379	-	10,379	17.4
Galveston County	169,812	151,744	89.4	18,068	140,364	125,819	14,545	21.0
Harris County	1,741,912	1,664,296	95.5	77,616	1,243,158	1,174,710	68,448	40.1
Jackson County	12,975	5,332	41.1	7,643	14,040	5,038	9,002	-7.6
Jefferson County	244,773	232,393	94.9	12,380	245,659	235,543	10,116	-0.4
Kenedy County	678	-	-	678	884	-	884	-23.3
Kleberg County	33,166	28,711	86.6	4,455	30,052	25,297	4,755	10.4
Matagorda County	27,913	15,375	55.1	12,538	25,744	15,332	10,412	8.4
Nueces County	237,544	223,266	94.0	14,278	221,573	196,462	25,111	7.2
Orange County	71,170	47,146	66.2	24,024	60,357	40,068	20,289	17.9
Refugio County	9,494	4,340	45.7	5,154	10,975	4,944	6,031	-13.5
San Patricio County	47,288	30,340	64.2	16,948	45,021	27,129	17,892	5.0
Victoria County	53,766	41,349	76.9	12,417	46,475	33,047	13,428	15.7
Wharton County	36,729	16,444	44.8	20,285	38,152	13,434	24,718	-3.7
Willacy County	15,570	7,987	51.3	7,583	20,084	9,385	10,699	-22.5

Source: U. S. Department of Commerce, Bureau of the Census, Number of Inhabitants, Alabama, Florida, Louisiana, Mississippi and Texas, 1971.

Table I-28. Population Change in Gulf Coast Counties

	1970 Population				1960 Population			Percent Change 1960-1970
	Total	Total Urban	Urban-Percent of Total	Total Rural	Total	Urban	Rural	
Alabama	3,444,165	2,011,941	58.4	1,432,224	3,266,740	1,791,721	1,475,019	5.4
Baldwin County	59,382	15,815	26.6	43,567	49,088	12,944	36,144	21.0
Mobile County	317,308	260,480	82.1	56,828	314,301	270,711	43,590	1.0
Florida	6,789,443	5,468,137	80.5	1,321,306	4,951,560	3,661,383	1,290,177	37.1
Bay County	75,283	57,480	76.4	17,803	67,131	43,650	23,481	12.1
Charlotte County	27,559	16,491	59.8	11,068	12,594	7,397	5,197	118.8
Citrus County	19,196	-	-	19,196	9,268	-	9,268	107.1
Collins County	38,040	25,159	-	12,881	15,753	7,879	7,874	141.5
DeSoto County	13,060	5,658	43.3	7,402	11,683	5,889	5,794	11.8
Dixie County	5,480	-	-	5,480	4,479	-	4,479	22.3
Escambia County	205,334	172,539	84.0	32,795	173,829	128,049	45,780	18.1
Franklin County	7,065	3,102	43.9	3,963	6,576	3,099	3,477	7.4
Gulf County	10,096	4,401	43.6	5,695	9,937	4,217	5,720	1.6
Hernando County	17,004	4,060	23.9	12,944	11,205	3,301	7,904	51.8
Hillsborough County	490,265	398,270	81.2	91,995	397,788	317,501	80,287	23.2
Holmes County	10,720	-	-	10,720	10,844	-	10,844	-1.1
Jefferson County	8,778	-	-	8,778	9,543	-	9,543	-8.0
Lee County	105,216	73,939	70.3	31,277	54,539	26,900	27,639	92.9
Levy County	12,756	-	-	12,756	10,364	-	10,364	23.1
Manatee County	97,115	69,318	71.4	27,797	69,168	42,981	26,187	40.4
Monroe County	52,586	37,643	71.6	14,943	47,921	33,956	13,965	9.7
Okaloosa County	88,187	54,702	62.0	33,485	61,175	30,106	31,069	44.2
Pasco County	75,955	25,767	33.9	50,188	36,785	11,166	25,619	106.5
Pinellas County	522,329	502,277	96.2	20,052	374,665	341,384	33,281	39.4
Santa Rosa County	37,741	12,989	34.4	24,752	29,547	4,108	25,429	27.7
Sarasota County	120,413	90,615	75.3	29,798	76,895	52,562	24,333	36.6
Taylor County	13,641	7,701	56.5	5,940	13,168	8,030	5,138	3.6
Wakulla County	6,308	-	-	6,308	5,257	-	5,257	20.0
Walton County	16,087	4,966	30.9	11,121	15,576	5,282	10,294	3.3
Louisiana	3,641,306	2,406,150	66.1	1,235,156	3,257,022	2,060,606	1,196,416	11.8
Ascension Parish	37,086	11,879	32.0	25,207	27,927	9,334	18,593	32.8
Assumption Parish	19,654	-	-	19,654	17,991	-	17,991	9.2
Calcasieu Parish	145,415	108,713	74.8	36,702	145,475	107,459	38,016	-
Cameron Parish	8,194	-	-	8,194	6,909	-	6,909	18.6
East Baton Rouge Parish	285,167	247,869	86.9	37,298	230,058	195,780	34,278	24.0
Iberia Parish	57,397	36,469	63.5	20,928	51,657	34,630	17,027	11.1
Iberville Parish	30,746	10,245	33.3	20,501	29,939	7,689	22,250	2.7
Jefferson Parish	337,568	323,507	95.8	14,061	208,769	196,458	12,311	61.7
Lafourche Parish	68,941	26,753	38.8	42,188	55,381	22,962	32,419	24.5
Livingston Parish	36,511	6,752	18.5	29,759	26,974	5,991	20,983	35.4







## II. INDUSTRIAL AND COMMERCIAL ACTIVITY

### A. Commercial Fishing in the Gulf

The Gulf of Mexico estuarine zone is laden with a great variety of fish and shell fish. For some of these, the estuarine zone is their full life cycle habitat, while others remain in the zone only during certain periods of their life cycles, using the estuarine waters as nursery grounds or forage areas. An estimated 90 percent of the U.S. Gulf of Mexico commercial fishery catch is comprised of species that must spend all or part of their lives in near shore waters.

Most of the fishing in the Gulf is done in shallow, near shore waters. The only significant deep water fishing is for snappers and groupers on offshore banks at depths of 25 to 100 fathoms.

The importance of Gulf coast fishing in the U.S. has increased significantly over the past decades. Whereas the Gulf catch constituted only 12 percent of the total U. S. catch in 1940, this figure has risen to 26 percent in 1960 and 29 percent in 1967 (Thompson and Arnold, 1971). Table II-1 shows the historic growth of commercial fishing activity in the Gulf of Mexico.

Table II-1. History of Commercial Fishing in the Gulf of Mexico Coastal Zone (Thompson and Arnold, 1971).

<u>Year</u>	<u>Catch in Million Pounds</u>	<u>\$ value of Catch (millions)</u>
1880 (first survey)	23.6	1.2
1888	54.8	2.0
1918	131.0	6.5
1965	1,500.0	--
1967	1,200.0	--

Technological innovations in vessels and equipment have given fishermen the capacity to increase the size of their annual catch. On the demand side, automation of processing systems, such as the automatic peeler and the mechanical sucker in the shrimp and oyster industries, respectively, has allowed processors to serve larger markets while holding down production costs.

The future of the Gulf fishing industry will be largely dependent on resolutions of three major problems. The first problem relates to the maintenance of the supply of commercial species. Technological improvements and expanded fleets have given man the capability to catch some fish species faster than their natural regenerative capacity. The second problem concerns the question of fishing rights and involves conflicts between commercial fishermen, sport fishermen, and foreign fishermen. The final problem involves the alteration of estuarine waters by man which often eliminates spawning and forage areas for various species. The cumulative effects of many small projects such as dredging and filling activities can produce significant alterations of currents, water temperature, salinity, and other chemical properties. In addition, the impact of oil slicks and other adverse effects related to petroleum production could jeopardize the future of commercial fishing in the Gulf.

The most recent data pertaining to commercial fish landings in pounds and dollars for each of the coastal states is reproduced in Tables II-2 through II-6 and graphically displayed in Figure II-1. The commercial fishing activities of each state are summarized below.

#### 1. Alabama

In the State of Alabama, more shrimp by weight were landed in 1971 than the total of all other fish and shell fish. The two major species of fish caught by Alabama fishermen are croaker and mullet.

#### 2. Florida

In 1972, commercial fishing on the Florida Gulf Coast brought in approximately 100 million pounds of fish and shell fish amounting to approximately \$40 million. Based on weight, the largest catches were lisa, black mullet and all types of shrimp amounting to over 26 and 22 million pounds, respectively. The other major species of fish and shell fish in order of highest tonnage are: crab, Spanish mackerel, Grouper, Spiny Lobster (crawfish), Red Snapper, Oyster, all species of sea trout, blue runner, other species of snapper, and Pompano. The tonnages for all species by county are listed in Table II-3.

### 3. Louisiana

According to weight of annual catch, Louisiana is the major commercial fishing state along the Gulf Coast. The Menhaden catch by Louisiana fisheries amount to more than 1 billion pounds worth approximately \$20 million. While the shrimp catch was second in terms of weight (92 million pounds, 1971), it produced the greatest dollar value amounting to over \$43 million. Other major species caught by Louisiana commercial fishermen in order of greatest weight of 1971 landings include: crabs, oysters, herring (thread), catfish and bullheads, crawfish (fresh water), and sea trout. The commercial fish landings for all species by district for Louisiana are listed in both pounds and dollars in Table II-4.

### 4. Mississippi

The activities of the commercial fishing industry in Mississippi are detailed in Table II-5. Mississippi fishermen landed catches in excess of one million pounds for five types of fish and shell fish; in order of largest catch these are: Menhaden (almost 310 million pounds), shrimp, snapper (red), crabs, (blue, hard), and oysters. Other important catches include croaker, kingfish, sea trout, and lobsters. The Menhaden landings also led the Mississippi Coast in dollar value, with almost a five million dollar catch reported for 1971. This figure exceeded the shrimp dollar catch by some five hundred thousand dollars.

### 5. Texas

According to 1972 landing statistics for Texas as shown in Table II-6, over 90 percent of the Texas catch in pounds was shell fish. Of this catch, approximately 87 percent of those landed was from the very lucrative shrimp varieties. The other commercially important species, in order of weight of 1972 catch were blue crabs, oysters and red snapper. Of the seven major fishing bays on the Texas Coast, the Galveston/Trinity Bay Area was the 1972 leader with almost 10 million pounds landed, valued at nearly \$5 million.

## B. Tourism and Recreation

### 1. Alabama

Tables II-7 and II-8 and Figure II-2 offer some indication of the impact of the tourist industry on coastal Alabama. Table II-7 shows that almost 3,000,000 tourists visited the coastal area in 1969, spending \$30,500,000. This same table also shows that one out of every ten out-of-state visitors spent time and money on the Alabama coast. In Table II-8, economic data pertinent to service-related functions within the tourist industry are presented. These data, showing the number of employees, taxable payrolls, and total reporting units within both the hotel/motel and amusement center industries for coastal Alabama, indicate that in 1972, the lodging industry in both Baldwin and Mobile counties had over 600 employees and taxable payrolls in excess of two million dollars. There were a significantly larger number of employees in amusement center activities in Mobile County than in Baldwin County; Mobile County also had four times as many reporting Amusement Center facilities.

### 2. Florida

Tables II-7 and II-9 and Figure II-2 show that the western coast of Florida attracts a great many tourists annually. In fact, one of every four out-of-state tourists in Florida visits the state's Gulf Coast. Of greater economic significance, Table II-7 indicates that approximately 5,700,000 1969 out-of-state visitors to the west coast spent over one billion dollars. This same table also shows that the leading attractions for out-of-state tourists visiting the Florida Gulf Coast are likely to be found in Pinellas, Hillsborough, Bay and Sarasota counties.

Data from Table II-9 indicate that Pinellas County is the Gulf Coast leader in both the lodging and amusement center enterprises. The former industry employs some 7,000 persons with payrolls over 23 million at 518 facilities. By comparison, amusement centers in Pinellas County employ 2,328 persons with payrolls of almost 11 million dollars for 152 facilities. Data from this table also support data from Table II-7, demonstrating that Hillsborough, Sarasota, and Bay counties have well-developed tourist industries and are, hence, favorite spots for out-of-state tourists.

### 3. Louisiana

Data from Table II-10 and Figure II-2 indicate that the tourist industry is most successful in Orleans, Jefferson, and East Baton Rouge parishes. Of these three centers of tourism, Orleans County is strikingly ahead of the others with taxable payrolls of \$29,888,000 and \$13,624,000 for the lodging and amusement center industries, respectively.

Approximately 230,000 acres in Coastal Louisiana have been preserved as National Wildlife Refuges. These five refuge areas are depicted on Figure II-2 and described in Table II-11.

In similar fashion, the three wildlife refuges owned by the state and one privately-owned refuge are located on Figure II-2 and described in terms of recreational value on Table II-12. State (and private) wildlife refuges encompass over 200,000 acres of the Louisiana coastal zone.

The state of Louisiana has also set aside approximately 240,000 acres in seven coastal areas as wildlife management areas. These areas, which are described in Table II-13 and shown in Figure II-2 offer good waterfowl hunting and salt-water fishing to visiting sportsmen.

#### 4. Mississippi

Data from Table II-7 indicate that one of every five out-of-state tourists in Mississippi visited the coastal area in 1969. Statistics from this table also show that three of every four tourists who visited the Mississippi coastal area in that year spent some time in Harrison County, the apparent center for the state's coastal tourist industry. Study of Table II-14 discloses that hotel/motel industry in Harrison County alone employs 1,254 persons, with taxable payrolls exceeding 4.5 million dollars at 48 facilities.

#### 5. Texas

Economic statistics pertinent to Texas tourism are depicted on Figure II-2 and appear in Table II-15. Data in the table show Harris County, location of Houston, to be the coast's leader in the tourist industry, employing 8,319 and 4,793 persons in the lodging and amusement center industries, respectively. Other significant centers for tourism are Galveston, Jefferson, Nueces, and Cameron counties.

Table II-16 delineates popular recreational sites in the Texas coastal zone and identifies the attractions of each site. Included in the sites enumerated in this table are not only wildlife refuges in the state, but also cities, islands, beaches, and other areas of interest to visitors to the coast.

Attendance by activities at the national wildlife refuges described in Table II-16 is shown in Table II-17. Data from 1970 and 1971 indicate that the Aransas National Wildlife Refuge and Laguna Atascosa National Wildlife Refuge are the most frequently visited refuge areas along the

Texas coast. While Aransas reported an estimated 80,000 total visitors in 1971, Laguna Atascosa had approximately 40,000 visitors for the same period.

Table II-18 delineates coastal state parks administered by the Texas Parks and Wildlife Department. The seven state parks are described in this table in terms of the following parameters: location, acreage, and recreational opportunities.

County and city parks along the Texas coast are listed in Table II-19. In addition to outlining the acreage and waterfrontage for these parks, Table II-19 locates them in counties and provides information pertinent to the facilities available at the parks as well as activities most often engaged in by visitors (camping, fishing, boating, etc).

### C. Ship and Boat Building and Repairing

The number of employees, taxable payrolls, and number of reporting units for the ship/boat building and repairing industry in coastal counties is depicted in Figure II-3 and shown in Table II-20. Data show that, of the 23 coastal counties in which this industry is found, major centers of activity are counties with predominantly large urban populations which can support industry:

- (1) Mobile, Alabama (Mobile)
- (2) Orleans, Louisiana (New Orleans)
- (3) Harris, Texas (Houston)
- (4) Pinellas, Florida (St. Petersburg)

Mobile County, Alabama and Harris County, Texas, reporting 2,585 and 2,022 employees, respectively, for the industry, are the ostensible leaders as employment centers. Even though employment totals have been withheld in U. S. Census data to avoid individual disclosures, it is likely that Orleans Parish, Louisiana, with 21 reporting facilities also employs a sizeable contingent. It is significant to note that of the five coastal states, the least significant representation of the ship/boat building and repairing industry is in the state of Mississippi.

### D. Port Activities for Major Gulf Coast Ports

Data from Table II-21 and Figure II-3 show the short tons of various products handled by major Gulf ports. All tonnage figures reported include foreign imports/exports and coastwide shipments/receipts. In addition, tonnage for each port is delineated according to the following product categories:

1. Agricultural, food, and kindred products;
2. Minerals and kindred products;
3. Textiles, finished textiles, leather, and leather products;
4. Lumber, wood, and paper products;
5. Primary and fabricated metal products;
6. Machinery;
7. Chemical and allied products; and
8. Miscellaneous.

The following enumeration shows that the Texas, Louisiana, and Florida ports handle the most tonnage, and that port activities likely have a less significant impact on the economics of Alabama and Mississippi.

<u>State</u>	<u>Tonnage (short tons)</u>
Texas	119,650,602
Louisiana	87,890,851
Florida	43,353,402
Alabama	12,925,420
Mississippi	6,194,067

One should note, however, that lighter volumes of activity in Alabama and Mississippi are, to some degree, a function of smaller coastal areas and fewer ports.

The shipping activity of each state can be discussed in greater detail by consideration of port cities as follows:

1. Florida

The port of Tampa, Florida, is the third largest port on the Gulf Coast, handling almost 42 million short tons of goods in 1972. The majority of this volume is accounted for by the handling of minerals and kindred products and chemical and allied products. The ports of St. Petersburg, Panama City, and Pensacola play a much less significant role in Florida port activities.

2. Alabama

The port of Mobile, Alabama, is the only major port on the Alabama Gulf, handling almost 13 million short tons in 1972. Almost three-fourths of this activity involved the shipment and/or receipt of minerals and allied products.

3. Mississippi

Along the coast of Mississippi, Pascagoula and Gulfport are the major ports, with the former handling approximately 5 million short tons in 1972. More than half of the total involved the shipment and/or receipt of chemical and allied products, petroleum and coal products, and rubber and miscellaneous plastics products. Significantly, almost one third of the Mississippi port activity in 1972 involved handling of farm products, fresh fish and other marine products, food and kindred products, and tobacco products.

4. Louisiana

In the state of Louisiana, New Orleans and Baton Rouge are major ports, with approximately 57 and 25 million short tons handled, respectively, in 1972. A sizable portion of the New Orleans cargo for that year falls into the categories of agricultural, food, and kindred products; minerals and kindred products; and, chemical and allied products. The latter two categories, no doubt, are well represented because of the presence of a highly developed petroleum industry in the proximate area of the coast.

## 5. Texas

The eight major Texas Gulf ports in order of tonnage handled are: 1) Houston Ship Channel, 2) Sabine-Neches Waterway (Beaumont, Orange, Port Arthur, Sabine Pass Harbor), 3) Corpus Christi, 4) Texas City, 5) Galveston, 6) Matagorda Ship Channel, 7) Freeport, and, 8) Brazos Island Harbor (Brownsville and Port Isabel). Of these eight, Houston, Sabine-Neches, and Corpus Christi handled significantly larger volume and tonnage than the other five. More than one-half of the shipments/receipts at both the Houston Ship Channel and the Sabine-Neches Waterway involved chemical and allied products, petroleum and coal products, and rubber and miscellaneous plastics products. At Corpus Christi, these same products as well as minerals and kindred products were handled in significant tonnage during 1972.

## E. Heavy Manufacturing Industries in Gulf Coast Counties

The seven major heavy manufacturing industry categories reviewed in this section are enumerated below along with product categories for each industry :

### Textile Mill Products

- (1) weaving mills, cotton
- (2) weaving mills, synthetic
- (3) weaving and finishing mills, wool
- (4) knitting mills
- (5) women's hosiery, except socks
- (6) knit outerwear mills
- (7) knit underwear mills
- (8) floor covering mills
- (9) woven carpets and rugs
- (10) tufted carpets and rugs
- (11) yarn and thread mills
- (12) miscellaneous textile goods

### Paper and Allied Products

- (1) paper mills
- (2) miscellaneous converted paper products
- (3) paperboard containers and boxes
- (4) building paper and board mills

### Chemical and Allied Products

- (1) industrial chemicals
- (2) plastics materials and synthetics
- (3) drugs
- (4) soap, cleaners, and toilet goods
- (5) paints and allied products
- (6) gum and wood chemicals
- (7) agricultural chemicals
- (8) miscellaneous chemical products

### Petroleum and Coal Products

- (1) petroleum refining
- (2) paving and roofing materials
- (3) miscellaneous petroleum and coal products

### Primary Metal Industries

- (1) blast furnace and basic steel products
- (2) iron and steel foundries
- (3) primary nonferrous metals
- (4) secondary nonferrous metals
- (5) nonferrous rolling and drawing
- (6) nonferrous foundries
- (7) miscellaneous primary metal products

Machinery, except electrical

- (1) engines and turbines
- (2) farm machinery
- (3) construction and related machinery
- (4) metal working machinery
- (5) special industry machinery
- (6) general industrial machinery
- (7) office and computing machines
- (8) service industry machines
- (9) miscellaneous machinery, except electrical

Transportation Equipment

- (1) motor vehicles and equipment
- (2) aircraft and parts
- (3) ship and boat building and repairing
- (4) railroad equipment
- (5) miscellaneous transportation equipment

1. Alabama

a. Baldwin County

Of the seven primary heavy manufacturing industries examined in Table II-22 and Figure II-4, only three industries are reported for Baldwin County, Alabama. With the possible exception of one reporting unit in the textiles industry and four reporting facilities in the chemical and allied products industry, the only industry of any significance to the county is the primary metal industry which employs 140 persons with payrolls totaling approximately 1.3 million dollars at four reporting units.

b. Mobile County

While heavy manufacturing industry is not a dominant economic force in Baldwin County, its presence is felt to a considerable degree in neighboring Mobile County. In particular, the paper and allied products industry is larger in Mobile County than in any other county on the entire Gulf Coast. Table II-22 and Figure II-4 show that this industry is a major employer in this coastal county, providing jobs for 7,685 persons, with taxable payrolls exceeding 83 million dollars at 13 reporting facilities. Other major heavy manufacturing industries in Mobile County include chemical and allied products and transportation equipment, which employ 2,289 and 2,723 persons, respectively.

2. Florida

a. Florida Gulf Coast paper and allied products industries

This industry appears in Bay, Escambia, Gulf, and Hillsborough counties on Florida's Gulf coast. Data from Table II-23 and

Figure II-4 show that the industry is well established in both Escambia and Hillsborough counties, where the industry employs 2,061 and 1,037 persons, respectively.

b. Florida Gulf Coast chemical and allied products industries

Just as the paper/allied products industry is well developed in Escambia and Hillsborough counties, so is the chemical/allied products industry. In Escambia County, the industry employs 5,312 persons with taxable payrolls of almost 51 million dollars. By comparison, Table II-23 shows that in Hillsborough County the industry provides jobs for 3,156 people with payrolls exceeding 25.5 million dollars.

It should be noted that Pinellas County is also home base for other representatives of this industry. In the county, 434 persons are employed at 26 reporting units.

c. Petroleum/coal products industries in Gulf Coastal Florida

The only occurrence of this industry is in Hillsborough County where seven reporting facilities employ some 334 persons.

d. Primary metal industries on the Florida Gulf Coast

In a similar vein, Hillsborough County is the site of the Florida Gulf Coast's only primary metal industry. There, 549 people are employed by the industry and collect payrolls of approximately four million dollars.

e. Machinery (except electrical) industries in Florida Gulf Coast counties

While the machinery (except electrical) industry is located in Pinellas, Hillsborough, Manatee, and Lee counties, the industry is more firmly entrenched in the first two counties. In Pinellas, the industry employs 1,561 persons and, in Hillsborough, 986.

f. Transportation equipment industry on the Florida Gulf Coast

Pinellas, Hillsborough, and Manatee counties are the locations of a well developed transportation equipment industry on the Florida coast. Employing 2,427, 1,496, and 732 persons, respectively, the industry in the three counties has taxable payrolls of more than 4.5 million dollars.

### 3. Louisiana heavy manufacturing

#### a. Chemical/allied products industries

Figure II-4 shows that Louisiana and Texas are the major centers of activity for this industry. In Louisiana alone, the industry employs nearly 20,000 persons who receive taxable payrolls of around 170 million dollars. Key areas of activity for the chemical/allied products industries are St. Charles, St. James, Iberville, Calcasieu, and Ascension parishes, in each of which are employed more than 1,000 persons. In East Baton Rouge parish, the industry employs approximately 7,500 people at 23 reporting units.

#### b. Paper/allied products industries

These industries are located primarily in Jefferson and Orleans parishes. Table II-24 shows that Jefferson parish paper/allied products industries employ 1,095 persons, and Orleans parish industries, 961.

#### c. Petroleum/coal products industries

This industry in coastal Louisiana is involved in not only petroleum refining, but also in manufacturing of paving and roofing materials and other miscellaneous coal and petroleum products. Data from Table II-24 show that while this industry is found in seven coastal zone parishes, the focus of activity is in Jefferson parish, where 613 employees are employed at 7 facilities.

#### d. Primary metal industries

The primary metal industries in the Louisiana coastal region may be found in East Baton Rouge, Jefferson, Orleans, and St. Bernard parishes. However, this industry's presence is most evident in Jefferson parish, where 151 people are employed at 6 facilities.

#### e. Machinery (except electrical) industries

The machinery manufacturing industries (except electrical) are an important economic force in coastal Louisiana, spanning ten parishes, and employing at least 3,753 persons at 122 reporting units. Table II-24 shows that the industry's heaviest concentrations are in Terrebonne, Orleans, and Iberia parishes.

#### f. Transportation equipment manufacturing industries

These industries are located in ten Louisiana coastal zone parishes as shown in Table II-24. Orleans parish leads the entire

Gulf Coast as a center of activity for this industry, employing almost 4,000 persons with taxable payrolls of more than 32 million dollars. Significant concentrations of the transportation equipment manufacturing industry also appear in St. Mary, Terrebonne, La Fourche, and Plaquemines parishes.

#### 4. Mississippi heavy manufacturing

##### a. Harrison County

Chemical and allied products industries and primary metal industries are the only significant heavy manufacturing industries in Harrison County, Mississippi. Table II-25 shows that the former employs 207 persons at seven facilities, while the latter employs 391 at five reporting units.

##### b. Jackson County

Just as heavy manufacturing industries are not heavily concentrated in Harrison County, so are they conspicuously absent from Jackson County. Data from Table II-25 show that paper/allied products industries (2 reporting units), chemical/allied products industries (3 reporting units), petroleum/coal products industries (1 reporting unit), and transportation equipment industries (6 reporting units), are the only major heavy manufacturing industries located within the county.

#### 5. Texas heavy manufacturing

##### a. Textile products industries

Located only in Harris County, Texas, this industry employs 444 people at nine reporting facilities.

##### b. Paper/allied products industry

This industry is found in only Harris and Orange counties along the Texas coast. Table II-26 indicates that heaviest concentrations of the industry are in Harris County where taxable payrolls are in excess of 33 million dollars.

##### c. Chemical and allied products industries

The Texas coastal zone is a major center of activity for the chemical/allied products division. Along the Texas coast, the industry reports 272 units which employ at least 33 thousand persons

with taxable payrolls exceeding 412 million dollars. Heaviest concentrations of the industry are in Harris, Brazoria, Galveston, Orange, and Jefferson counties. Table II-26 shows that in Harris County alone, the industry employs 15,350 persons at 187 facilities with taxable payrolls of almost 180 million dollars.

d. Petroleum/coal products

Just as the Texas coastal region is a primary center of activity for the chemical/allied products industry, so is it a major center of activity for the petroleum/coal products industry. The industry is located in six Texas coastal counties, where 65 reporting units employ 29,450 persons. The industry's heaviest concentration is in Jefferson County where 14,037 persons work at 13 total reporting units for over 160 million taxable payroll dollars. Similarly, in Harris County 31 reporting units employ almost 10,000 persons with taxable payrolls totaling approximately 127 million dollars. Other key areas of activity for the industry are Galveston, Brazoria, and Nueces counties.

e. Primary metal industries

The focus of the primary metal industries along the Texas Gulf Coast is in Harris County where 73 reporting units employ nearly 12,000 persons. Other important areas of activity for the industry include Jefferson and Galveston counties.

f. Machinery (except electrical) manufacturing industries

Once again, Harris County is a major focus of activity for this industry, employing an excess of 22,000 persons at over 500 facilities with taxable payrolls exceeding 200 million dollars. As in primary metal industries manufacturing, Brazoria, Jefferson, and Nueces counties are also significant centers of activity for this industry.

g. Transportation equipment manufacturing industries

Table II-26 shows that 140 total reporting units in this industry may be found in nine Texas coastal counties. The industry's heaviest concentrations are in Harris, Jefferson, and Galveston counties, where 3,246, 2,741, and 2,134 persons, respectively, are employed.

## F. Forests in the Gulf Coast Region

### 1. Alabama

Figure II-5 shows that both Mobile and Baldwin Counties are heavily forested with Longleaf and Slash-Pine forest communities. In addition, scattered communities of Oak, Gum, and Cypress may be found in northeastern Mobile and northwestern Baldwin Counties.

### 2. Florida

Although scattered communities of Loblolly, Shortleaf Pine, Pine and Hickory may be found in Florida coastal counties, the major forest types in this region are Longleaf, Slash-Pine, Oak, Gum, and Cypress. Figure II-5 shows that representation of these latter communities, and especially Longleaf and Slash-Pine, may be seen in most of the counties along the Florida Gulf.

### 3. Louisiana

Figure II-5 shows that the coastal zone in immediate proximity to the Louisiana Gulf is largely devoid of any major forest communities. Nevertheless, representatives of the Oak, Gum and Cypress forest communities do appear in many of the portions of coastal parishes that are removed from the vicinity of coastal marshlands. In addition, Loblolly and Shortleaf Pine, as well as Longleaf and Slash-Pine, forest communities may be found in St. Tammany, Tangipahoa, and Livingston Parishes.

### 4. Mississippi

The three coastal counties of Mississippi are primarily dominated by members of the Longleaf and Slash-pine forest communities. In significantly fewer numbers, communities of Oak, Gum and Cypress are located in scattered sections of Hancock and Jackson Counties.

### 5. Texas

Not unlike coastal Louisiana, the proximate area of the Texas Coast has few major forest communities. Figure II-5 shows that Oak and Hickory forest communities may be found in much of Victoria County and in pockets in Refugio and Jackson Counties. Also depicted in Figure II-5 are smaller communities of Loblolly and Shortleaf Pine; Longleaf and Slash-Pine; and, Oak, Gum, and Cypress, which can be found in northern sections of eastern coastal Texas from Harris to Cameron Counties.

## G. Building Materials in the Coastal Zone

Figure II-5 shows that neither the Mississippi nor Louisiana coastal zones contain significant deposits of carbonate rocks or clays, and in Alabama, such deposits exist only in a single area on the eastern border of the Mobile Bay.

By contrast, southwestern Texas coastal counties contain significant deposits of refractory brick and tile clays. In Cameron, Willacy, Kleberg, Nueces, San Patricio, Refugio, and Jackson Counties, extensive deposits of clays are found.

Figure II-5 also shows that the central and north central Florida coastal area from Dixie to Pinellas Counties contains considerable deposits of carbonate rocks, including limestone, dolomite and marble. Extensive deposits of carbonate rocks may be found in the immediate coastal area of Manatee and Sarasota Counties and in a region east of Collier and Monroe Counties. Deposits of clay in coastal Florida are, by comparison, insignificant.

## H. Mineral Industries in the Coastal Zone

1. Bituminous Coal and Lignite Mining. In the entire coastal region, only Harris County, Texas, is reported to contain coal/lignite deposits that are being mined currently. Table II-27 shows that this county has three reporting units now involved in coal/lignite mining.

2. Oil and Gas Extraction. Table II-27 reveals that, with the exception of a small number of units in Alabama, which are extracting oil and gas, the entire industry is dominated in the Gulf Coast area by the states of Louisiana and Texas.

### a. Louisiana

The Louisiana gas and oil extraction industry is located in seventeen coastal area parishes with some 662 reporting units. Although complete data disclosures are not available for Plaquemines, East Baton Rouge, and Assumption Parishes, data from Table II-27 show that the industry in Louisiana employs over 28,000 people with taxable payrolls of over \$280,000,000. Parishes in which the industry is a dominant force are Jefferson, Lafayette, Orleans, St. Mary and Terrebone, with the industry in each parish employing in excess of 3400 persons.

b. Texas

Table II-27 also reveals that the Texas gas and oil extraction industry has over 800 reporting units located within 15 coastal counties. Examination of data for this area discloses that Harris, Nueces, and Brazoria counties are among the leaders in this industry. It is significant to note that of all Gulf Coast counties and parishes, Harris County, Texas, is the dominant force in the gas and oil extraction industry, with almost 12,000 employees working in 368 reporting units for taxable pay-rolls totaling almost \$136,000,000 per year.

3. Nonmetallic Mineral Industry (except fuels) in the Gulf Coast Area.

Nonmetallic minerals (except fuels) include:

- a. dimension stone
- b. crushed and broken stone
- c. sand and gravel
- d. clay and related minerals
- e. chemical and fertilizer minerals
- f. miscellaneous nonmetallic minerals

Table II-27 shows that in the Gulf Coast area centers of activity for this industry are East Baton Rouge and Orleans Parishes in Louisiana and Harris County, Texas. The nonmetallic mineral industry cannot be found in either Alabama or Mississippi, and in Florida is only found in Levy County.

I. Industrial Chemicals and Minerals

This section contains a brief identification of areas of mineral concentrations as well as mining and processing activities. Figure II-6 is the data base for this section, and, as such, depicts the following:

1. location of sabines and industrial chemicals;
2. salt domes and rock salt mines which are found extensively throughout the Evaporate Basin;
3. sulfur mining, which is concentrated principally in Matagorda, Brazoria, Harris, Galveston, Chambers, Jefferson, and Orange Counties, Texas; and, Calcasieu, Lafayette, St. Mary, Terrebonne LaFourche, and Plaquemine Parishes, Louisiana;
4. sulfuric acid plants found in the following counties: Refugio, Texas; Mobile, Alabama; and Hillsborough, Florida;

5. portions of Levy, Citrus, Hernando, Hillsborough, and Manatee Counties in Florida which are underlain by phosphate beds;
6. acid plants producing triple super phosphate and/or phosphoric acid which are located in Harris and Chambers Counties, Texas; Jackson County, Mississippi; and Gulf and Hillsborough Counties, Florida;
7. gypsum mines and plants in the vicinity of Orleans and St. Bernard Parishes, Louisiana, and Hillsborough County, Florida.

Table II-2. Alabama commercial fish landings by counties, 1971.

Species	COUNTY			
	Baldwin		Mobile	
Fish	Pounds	Dollars	Pounds	Dollars
Bluefish	5,156	431	7,879	531
Blue Runner	978	49	-	-
Cabio	4,506	255	3,419	189
Croaker	1,678,584	226,596	6,705,212	809,108
Drum, black	13,341	820	17,868	944
Drum, red (Redfish)	7,678	1,007	24,275	2,786
Flounders, unclassified	248,440	52,129	702,475	102,519
Groupers	13,049	1,906	166,955	21,416
Jewfish	7,891	786	33,657	3,419
King Whiting or "Kingfish"	126,527	7,907	390,337	22,831
Mullet	1,870,638	113,356	490,351	31,370
Pompano	1,968	1,117	3,242	1,458
Sea Catfish	19,167	1,161	71,877	3,659
Sea Trout, spotted	87,416	25,688	49,851	14,586
Sea Trout, white	204,626	13,203	775,426	46,243
Sheepshead, salt-water	84,041	4,581	236,609	12,341
Snapper, red	130,938	60,583	808,236	280,468
Spanish Mackerel	32,236	3,071	23,664	1,426
Spot	29,106	1,888	59,516	3,387
TOTAL FISH	4,566,286	516,534	10,570,849	1,358,681
Shellfish				
Crabs, blue, hard	74,763	8,004	1,922,527	203,793
Lobsters, spiny	-	-	132,630	121,281
Shrimp, salt-water (heads-on)	3,465,425	2,360,040	13,247,119	9,091,429
Oysters (meats)	25,434	15,822	224,039	135,798
Squid	4,708	419	3,993	345
TOTAL SHELLFISH	3,570,330	2,384,285	15,530,308	9,552,646
GRAND TOTAL	8,136,616	2,900,819	26,101,157	10,911,327

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Table II-3. Florida commercial fish landings by counties, 1972.

Species	COUNTY					
	Bay & Washington		Charlotte		Citrus	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Amberjack	1,735	101	-	-	-	-
Angelfish	-	-	-	-	-	-
Barracuda	-	-	-	-	-	-
Bluefish	97,677	8,536	11,234	1,643	8,351	1,001
Bluerunner	1,166,693	58,334	-	-	-	-
Bonito	200	10	-	-	-	-
Cobia	3,378	209	83	8	400	40
Catfish, fresh-water	3,579	1,154	77	19	-	-
Catfish, salt-water	16	1	56	6	1,400	140
Croaker	60,347	11,369	-	-	-	-
Dolphin	-	-	-	-	-	-
Drum, black	14,023	1,076	7,253	507	375	45
Eels	-	-	-	-	-	-
Flounder	31,503	9,873	2,715	417	26	6
Goatfish	-	-	-	-	-	-
Grouper (Scamp)	768,975	208,622	69,039	19,199	20,682	3,518
Grunt	-	-	-	-	4,258	560
Hogfish	-	-	-	-	-	-
Jack, common	212,696	6,338	43,397	1,679	60,858	3,042
Jewfish	265	18	1,381	177	-	-
Kingfish (Mackerel)	67,920	16,103	626	115	1,271	152
King Whiting	6,457	337	1,254	133	-	-
Lisa, Black Mullet	865,626	80,762	3,591,745	288,776	1,115,871	107,123
Mullet, silver	-	-	2,900	290	-	-
Permit	-	-	-	-	400	60
Pigfish	-	-	46	2	-	-
Pompano	10,659	11,604	41,803	49,685	1,408	1,800

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Bay & Washington		Charlotte		Citrus	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Redfish (Channel Bass)	2,540	367	93,497	18,718	40,560	8,874
Sandperch	-	-	71,207	7,120	92	11
Sea Bass, common	-	-	-	-	7,944	1,078
Sea Trout, gray	-	-	-	-	-	-
Sea Trout, spotted	107,887	33,337	133,537	47,191	115,695	35,240
Sea Trout, white	3,220	425	1,656	233	15	2
Shad	-	-	-	-	-	-
Sheepshead	1,993	190	32,269	3,226	5,374	606
Snapper, lane	-	-	1,030	309	80	20
Snapper, mangrove	3,307	1,026	6,351	1,270	2,029	310
Snapper, mutton	-	-	187	65	-	-
Snapper, red	1,652,701	1,116,564	3,567	2,327	52	36
Snapper, white	20,568	4,008	471	52	-	-
Snapper, vermillion	22,907	9,845	-	-	-	-
Snapper, yellowtail	127	32	2,903	870	-	-
Spanish Mackerel	1,042,224	114,853	93,125	12,078	-	-
Spot	8,609	562	4,232	423	303	35
Sturgeon	-	-	-	-	-	-
Swordfish	-	-	-	-	-	-
Tilefish	-	-	-	-	-	-
Triggerfish	236	23	-	-	-	-
Tripletail	-	-	-	-	-	-
Warsaw	22,731	2,843	100	10	-	-
Unclassified, Bottomfish & misc.	86	9	27,852	2,375	21,871	2,624
Alewife	36,835	1,473	-	-	-	-
Ballyhoo	1,310	222	-	-	-	-

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Bay & Washington		Charlotte		Citrus	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Cigarfish	221,943	29,474	-	-	-	-
Menhaden	91,175	2,297	-	-	-	-
Shark	-	-	-	-	-	-
Spanish Sardine	19,685	789	-	-	-	-
Tenpounder, Ladyfish	89,384	3,870	-	-	701	35
Thread Herring	152,898	5,427	-	-	-	-
Trash Fish	64,573	1,620	-	-	42,329	1,591
TOTAL FISH	6,878,688	1,743,703	4,244,873	458,923	1,452,345	167,949
<hr style="border-top: 1px dashed black;"/>						
<u>Shellfish</u>						
Shrimp, campeche (heads-on)	31,539	24,530	-	-	-	-
Shrimp, caribbean (heads-on)	-	-	-	-	-	-
Shrimp, central west coast (heads-on)	-	-	-	-	-	-
Shrimp, east coast (heads-on)	-	-	-	-	-	-
Shrimp, tortugas (heads-on)	-	-	178,192	159,436	-	-
Shrimp, upper west coast (heads-on)	1,265,388	1,017,122	3,389	2,842	-	-
Shrimp, rock (heads-on)	21,262	7,609	-	-	-	-
Clam (meats)	-	-	-	-	-	-
Conch	-	-	-	-	-	-
Crab, blue, hard	111,614	11,250	423,464	39,128	2,298,527	225,485
Crab, blue, soft	-	-	30	27	-	-
Crab, stone	-	-	-	-	35,872	24,159
Spiny Lobster, crawfish	-	-	-	-	-	-
Oyster (meats)	80,249	47,788	-	-	-	-
Scallop, bay	20,187	25,486	-	-	29	43
Scallop, calico	-	-	-	-	-	-
Sponges, glove	-	-	-	-	-	-
Sponges, grass	-	-	-	-	-	-

(contd.)

Table II-3. (contd.)

	COUNTY					
	Bay & Washington		Charlotte		Citrus	
	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
<u>Shellfish</u>						
Sponges, sheepwool	-	-	-	-	-	-
Sponges, yellow	-	-	-	-	-	-
Squid	3,384	490	98	27	-	-
Turtle, green	-	-	-	-	-	-
Turtle, loggerhead	-	-	-	-	-	-
TOTAL SHELLFISH	<u>1,533,623</u>	<u>1,134,274</u>	<u>605,173</u>	<u>201,460</u>	<u>2,334,428</u>	<u>249,687</u>
GRAND TOTAL	<u>8,412,311</u>	<u>2,877,978</u>	<u>4,850,046</u>	<u>660,383</u>	<u>3,786,773</u>	<u>417,636</u>

11-2A

(contd.)

Table II-3. (contd.)

	COUNTY					
	Collier		Dixie		Escambia	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Amberjack	-	-	-	-	9,972	522
Angelfish	710	14	-	-	3,410	286
Barracuda	5,400	270	-	-	-	-
Bluefish	9,481	949	7,617	761	71,729	6,491
Bluerunner	1,497	120	-	-	-	-
Bonito	402	21	-	-	5,666	283
Cobia	571	47	-	-	1,293	80
Catfish, fresh-water	167	37	2,870	588	-	-
Catfish, salt-water	164	16	-	-	17,249	1,190
Croaker	584	226	-	-	1,395,757	194,708
Dolphin	325	58	-	-	-	-
Drum, black	13,315	1,085	100	12	7,078	465
Eels	-	-	-	-	-	-
Flounder	319	47	1,947	389	65,539	17,525
Goatfish	-	-	-	-	-	-
Grouper (Scamp)	109,176	22,719	18	4	131,978	36,808
Grunt	10,341	1,801	1,275	153	-	-
Hogfish	182	46	-	-	-	-
Jack, common	87,878	3,497	-	-	9,132	325
Jewfish	1,461	118	-	-	46	2
Kingfish (Mackerel)	318,144	69,291	4,942	642	1,049	183
King Whiting	121	21	-	-	14,105	871
Lisa, Black Mullet	1,411,375	115,309	238,151	19,909	1,016,167	91,963
Mullet, silver	120,700	7,700	-	-	-	-
Permit	9,954	1,129	-	-	217	21
Pigfish	-	-	12,417	2,483	904	61
Pompano	167,494	202,600	422	506	7,368	8,701

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Collier		Dixie		Escambia	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Redfish (Channel Bass)	12,564	1,929	10,512	2,102	5,267	576
Sandperch	646	60	-	-	-	-
Sea Bass, common	-	-	5,010	651	-	-
Sea Trout, gray	-	-	-	-	-	-
Sea Trout, spotted	35,114	10,952	88,115	29,324	72,812	24,144
Sea Trout, white	341	35	100	15	211,359	15,682
Shad	-	-	-	-	-	-
Sheepshead	5,436	839	7,717	1,466	33,350	2,577
Snapper, lane	682	90	-	-	90	45
Snapper, mangrove	8,493	2,798	-	-	4,298	1,841
Snapper, mutton	9,453	4,602	-	-	100	50
Snapper, red	132	99	-	-	547,415	389,266
Snapper, white	343	34	-	-	15,646	3,637
Snapper, vermillion	-	-	-	-	63,390	30,858
Snapper, yellowtail	8,682	4,337	-	-	-	-
Spanish Mackerel	750,934	99,348	2,900	406	89,111	10,176
Spot	-	-	4,562	622	71,223	4,252
Sturgeon	-	-	-	-	2,631	243
Swordfish	-	-	-	-	-	-
Tilefish	-	-	-	-	-	-
Triggerfish	-	-	-	-	46,171	4,732
Tripletail	-	-	-	-	-	-
Warsaw	42	8	-	-	30,257	4,535
Unclassified, Bottomfish & misc.	94,613	9,574	3,010	310	1,383	135

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Collier		Dixie		Escambia	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Alewife	-	-	-	-	-	-
Ballyhoo	-	-	-	-	-	-
Cigarfish	-	-	-	-	584	44
Menhaden	42	5	64,314	2,257	400	12
Shark	2,427	96	-	-	-	-
Spanish Sardine	-	-	-	-	-	-
Tenpounder, Ladyfish	1,556	31	-	-	10,586	405
Trash Fish	22,407	710	95,357	4,767	2,413	161
TOTAL FISH	3,223,668	562,668	551,356	67,367	3,967,145	853,856
<hr style="border-top: 1px dashed black;"/>						
Shellfish						
Shrimp, campeche (heads-on)	-	-	-	-	-	-
Shrimp, caribbean (heads-on)	-	-	-	-	-	-
Shrimp, central west coast (heads-on)	-	-	-	-	8,258	8,292
Shrimp, east coast (heads-on)	-	-	-	-	-	-
Shrimp, tortugas (heads-on)	20,697	19,106	-	-	3,560	3,626
Shrimp, upper west coast (heads-on)	153	120	-	-	925,183	880,716
Shrimp, rock (heads-on)	-	-	-	-	134	48
Clam (meats)	-	-	-	-	-	-
Conch	-	-	-	-	-	-
Crab, blue, hard	-	-	925,073	80,943	48,483	4,479
Crab, blue, soft	-	-	-	-	-	-
Crab, stone	887,130	530,858	42,382	19,457	-	-
Spiny Lobster, Crawfish	14,224	15,781	-	-	-	-
Oyster (meats)	-	-	-	-	9,253	5,895
Spanish Lobster, Shovelnose	-	-	-	-	918	330

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Collier		Dixie		Escambia	
	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
<u>Shellfish</u>						
Scallop, bay	-	-	-	-	-	-
Scallop, calico	-	-	-	-	-	-
Sponges, glove	-	-	-	-	-	-
Sponges, grass	-	-	-	-	-	-
Sponges, sheepwool	-	-	-	-	-	-
Sponges, yellow	-	-	-	-	-	-
Squid	551	63	-	-	5,944	551
Turtle, green	-	-	-	-	-	-
Turtle, loggerhead	-	-	-	-	-	-
TOTAL SHELLFISH	922,755	565,928	967,455	100,400	1,001,733	903,937
GRAND TOTAL	4,146,423	1,128,596	1,518,811	167,767	4,968,878	1,757,793

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(contd.)

Table II-3. (contd.)

	COUNTY					
	Franklin		Gulf		Hillsborough	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Amberjack	-	-	-	-	-	-
Angelfish	102	5	100	7	54	5
Barracuda	-	-	-	-	-	-
Bluefish	2,925	276	82,968	8,014	446	69
Bluerunner	-	-	456,756	22,289	-	-
Bonito	-	-	2,875	143	-	-
Cobia	-	-	-	-	-	-
Catfish, fresh-water	2,432	768	-	-	-	-
Catfish, salt-water	10,063	630	315	15	-	-
Croaker	6,419	613	29,229	5,839	20	2
Dolphin	341	23	-	-	-	-
Drum, black	3,231	229	8,448	551	13,373	1,155
Eels	-	-	-	-	-	-
Flounder	96,860	29,135	5,154	1,383	103	26
Goatfish	-	-	-	-	-	-
Grouper (Scamp)	217,457	41,121	235,644	51,983	250,605	69,993
Grunt	-	-	-	-	790	142
Hogfish	-	-	-	-	-	-
Jack, common	886	18	107,132	2,142	14,088	422
Jewfish	-	-	202	10	-	-
Kingfish (Mackerel)	4,000	800	8,143	1,221	2,420	477
King Whiting	128,580	7,136	12,410	723	974	98
Lisa, Black Mullet	1,146,144	114,958	917,033	85,192	1,014,705	87,467
Mullet, silver	-	-	-	-	-	-
Permit	-	-	-	-	1,425	178
Pigfish	-	-	-	-	686	79
Pompano	185	168	5,787	6,137	4,079	5,301
Redfish (Channel Bass)	20,258	3,119	3,605	515	22,672	4,171
Sandperch	-	-	-	-	2,274	308

11-29

(contd.)

Table II-3. (contd.)

	COUNTY					
	Franklin		Gulf		Hillsborough	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Sea Bass, common	-	-	-	-	26	5
Sea Trout, gray	-	-	-	-	-	-
Sea Trout, spotted	123,870	39,303	24,308	7,430	32,164	11,292
Sea Trout, white	2,422	219	507	36	244	39
Shad	-	-	-	-	-	-
Sheepshead	10,959	1,050	1,085	108	11,926	1,507
Snapper, lane	-	-	-	-	-	-
Snapper, mangrove	-	-	1,196	538	365	109
Snapper, mutton	-	-	-	-	-	-
Snapper, red	12,356	7,750	154,196	101,275	51,943	36,360
Snapper, white	1,456	218	5,738	902	-	-
Snapper, vermillion	-	-	24,860	9,379	-	-
Snapper, yellowtail	-	-	-	-	-	-
Spanish Mackerel	1,080	116	650,268	72,830	878	189
Spot	28,873	1,798	4,292	269	35,275	4,539
Sturgeon	1,420	158	-	-	-	-
Swordfish	-	-	-	-	-	-
Tilefish	-	-	-	-	-	-
Triggerfish	-	-	-	-	-	-
Tripletail	-	-	-	-	-	-
Warsaw	353	53	18,475	2,536	856	128
Unclassified, Bottomfish & misc.	-	-	-	-	18,949	1,955
Alewife	29,575	1,183	-	-	-	-
Ballyhoo	-	-	-	-	-	-
Cigarfish	500	60	50,480	6,441	-	-
Menhaden	199,130	6,033	268,339	8,023	-	-
Shark	-	-	-	-	-	-

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Franklin		Gulf		Hillsborough	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Spanish Sardine	500	20	55,875	2,084	-	-
Tenpounder, Ladyfish	4,000	160	774,982	25,496	-	-
Thread Herring	-	-	497,715	16,822	-	-
Trash Fish	-	-	167,577	4,306	9,813	294
TOTAL FISH	2,056,377	257,120	4,575,694	444,639	1,491,153	226,310
<u>Shellfish</u>						
Shrimp, campeche (heads-on)	58,100	41,982	-	-	390,118	313,764
Shrimp, caribbean (heads-on)	-	-	-	-	68,110	36,086
Shrimp, central west coast (heads-on)	6,525	7,840	14,382	12,199	561,662	541,541
Shrimp, east coast (heads-on)	-	-	-	-	-	-
Shrimp, tortugas (heads-on)	2,914	2,451	2,525	2,555	446,902	409,974
Shrimp, upper west coast (heads-on)	1,873,736	1,444,663	538,744	381,287	281,289	242,824
Shrimp, rock (heads-on)	272,117	78,590	13,739	3,812	217,374	98,480
Clam (meats)	-	-	-	-	-	-
Clam (Sunray Venus)	-	-	214,962	26,956	-	-
Conch	-	-	-	-	-	-
Crab, blue, hard	2,156,235	206,351	-	-	324,280	27,044
Crab, blue, soft	-	-	-	-	107	109
Crab, stone	-	-	-	-	-	-
Spanish Lobster, Shovelnose	13,115	6,596	-	-	-	-
Spiny Lobster, Crawfish	-	-	-	-	56,121	56,121
Oyster (meats)	2,980,543	1,360,021	33,443	14,390	-	-
Scallop, bay	-	-	14,407	13,829	-	-
Scallop, calico	262	131	-	-	-	-
Sponges, glove	-	-	-	-	-	-
Sponges, grass	-	-	-	-	-	-
Sponges, sheepwool	-	-	-	-	-	-
Sponges, yellow	-	-	-	-	-	-

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Franklin		Gulf		Hillsborough	
<u>Shellfish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Squid	1,418	113	-	-	-	-
Turtle, green	-	-	-	-	-	-
Turtle, loggerhead	-	-	-	-	-	-
TOTAL SHELLFISH	7,364,965	3,148,738	832,202	455,028	2,345,963	1,725,943
GRAND TOTAL	9,421,342	3,405,858	5,407,896	899,667	3,837,116	1,952,253

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Lee		Levy		Manatee	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Amberjack	3,560	128	10,000	400	-	-
Angelfish	71	2	-	-	673	67
Barracuda	-	-	-	-	-	-
Bluefish	59,658	8,191	300	30	22,259	2,873
Bluerunner	-	-	-	-	39	4
Bonito	-	-	-	-	-	-
Cobia	58,747	4,658	-	-	821	80
Catfish, fresh-water	-	-	-	-	196	49
Catfish, salt-water	-	-	-	-	-	-
Croaker	-	-	-	-	-	-
Dolphin	-	-	-	-	-	-
Drum, black	736	51	-	-	4,171	429
Eels	-	-	-	-	-	-
Flounder	56,197	7,974	-	-	3,065	622
Goatfish	-	-	-	-	-	-
Grouper (Scamp)	736,790	170,935	10,643	2,064	977,503	286,212
Grunt	979	127	3,734	440	3,645	671
Hogfish	2,512	462	-	-	438	140
Jack, common	139,347	5,782	-	-	76,733	3,138
Jewfish	124,346	9,524	-	-	1,384	223
Kingfish (Mackerel)	692,586	107,420	250	32	5,635	1,207
King Whiting	-	-	-	-	1,938	347
Lisa, Black Mullet	6,018,094	580,746	528,833	44,897	3,748,190	302,104
Mullet, silver	48,722	3,946	-	-	36,554	3,289
Permit	27,529	4,429	-	-	22,462	4,121
Pigfish	-	-	-	-	963	96
Pompano	609,675	799,710	5,770	6,924	75,774	92,762
Redfish (Channel Bass)	366,329	66,964	27,222	4,878	179,658	28,403
Sandperch	11,875	1,392	-	-	5,096	761

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Lee		Levy		Manatee	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Sea Bass, common	-	-	300	36	229	50
Sea Trout, gray	-	-	-	-	-	-
Sea Trout, spotted	833,552	292,576	55,678	16,898	120,570	37,846
Sea Trout, white	9,774	1,157	2,550	327	3,049	388
Shad	-	-	-	-	-	-
Sheepshead	90,356	9,035	7,344	877	23,859	2,750
Snapper, lane	2,871	717	-	-	-	-
Snapper, mangrove	158,328	30,335	-	-	1,438	509
Snapper, mutton	76,791	31,960	-	-	11,369	5,595
Snapper, red	200,565	108,044	-	-	333,803	242,774
Snapper, white	3,400	340	-	-	11,303	1,443
Snapper, vermillion	188	84	-	-	1,722	1,007
Snapper, yellowtail	111,957	44,905	-	-	737	351
Spanish Mackerel	668,087	94,667	47,639	6,631	350,614	47,332
Spot	369	36	22,956	2,332	22,491	2,777
Sturgeon	-	-	-	-	-	-
Swordfish	-	-	-	-	-	-
Tilefish	-	-	-	-	1,381	168
Triggerfish	-	-	-	-	-	-
Tripletail	23	2	-	-	-	-
Warsaw	280	48	-	-	48,809	7,868
Unclassified, Bottomfish & misc.	564,037	65,541	25,077	2,580	120,424	14,426
Alewife	-	-	-	-	-	-
Ballyhoo	-	-	-	-	-	-
Cigarfish	-	-	-	-	-	-
Menhaden	4,396	527	-	-	1,357	165
Shark	-	-	-	-	-	-

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Lee		Levy		Manatee	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Spanish Sardine	-	-	-	-	-	-
Tenpounder, Ladyfish	-	-	-	-	27	1
Trash Fish	14,135	517	73,043	3,703	9,583	195
TOTAL FISH	11,696,862	2,452,932	821,339	93,049	6,229,962	1,093,243
Shellfish						
Shrimp, campeche (heads-on)	1,182,029	825,708	-	-	-	-
Shrimp, caribbean (heads-on)	-	-	-	-	-	-
Shrimp, central west coast (heads-on)	47,332	45,898	-	-	3,183	3,638
Shrimp, east coast (heads-on)	3,545,348	3,302,316	-	-	-	-
Shrimp, tortugas (heads-on)	-	-	-	-	-	-
Shrimp, upper west coast (heads-on)	97,583	92,275	2,475	2,310	52,049	52,463
Shrimp, rock (heads-on)	5,399	1,293	-	-	-	-
Clam (meats)	-	-	-	-	-	-
Conch	-	-	-	-	-	-
Crab, blue, hard	233,184	24,484	770,124	65,999	17,479	3,495
Crab, blue, soft	-	-	-	-	-	-
Crab, stone	12,948	9,341	62,170	29,083	11,238	7,493
Spiny Lobster, Crawfish	35,576	39,941	-	-	-	-
Oyster (meats)	2,926	1,957	63,896	39,155	-	-
Scallop, bay	-	-	538	941	-	-
Scallop, calico	-	-	-	-	-	-
Sponges, glove	-	-	-	-	-	-
Sponges, grass	-	-	-	-	-	-
Sponges, sheepwool	-	-	-	-	-	-
Sponges, yellow	-	-	-	-	-	-
Squid	-	-	-	-	-	-

(contd.)

Table II-3.(contd.)

Species	COUNTY					
	Lee		Levy		Manatee	
	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
<u>Shellfish</u>						
Turtle, green	-	-	2,260	678	-	-
Turtle, loggerhead	-	-	-	-	-	-
TOTAL SHELLFISH	5,162,315	4,343,213	901,463	138,166	83,949	67,089
GRAND TOTAL	16,859,177	6,796,145	1,722,802	231,215	6,313,911	1,160,332

(contd.)

Table II-3.(contd.)

Species	COUNTY					
	Monroe		Okaloosa		Pasco & Hernando	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Amberjack	4,721	374	3,286	188	-	-
Angelfish	-	-	-	-	-	-
Barracuda	-	-	-	-	-	-
Bluefish	38,601	4,222	57,694	5,238	1,976	222
Bluerunner	4,361	382	426,937	21,346	-	-
Bonito	-	-	137	7	-	-
Cobia	5,541	679	1,231	72	-	-
Catfish, fresh-water	-	-	1,300	260	-	-
Catfish, salt-water	-	-	1,663	102	-	-
Croaker	534	213	58,775	8,869	-	-
Dolphin	54,642	9,862	-	-	-	-
Drum, black	298	29	1,017	73	1,473	159
Eels	-	-	-	-	-	-
Flounder	301	75	22,239	7,370	2,652	983
Goatfish	-	-	-	-	-	-
Grouper (Scamp)	513,423	125,018	47,178	12,643	64,165	16,593
Grunt	39,167	4,680	-	-	104,899	17,046
Hogfish	16,133	3,802	-	-	-	-
Jack, common	4,618	342	8,321	170	-	-
Jewfish	18,974	3,125	242	12	-	-
Kingfish (Mackerel)	187,799	40,245	25,125	5,361	-	-
King Whiting	244	48	4,362	242	1,915	383
Lisa, Black Mullet	-	-	609,417	57,346	677,660	49,198
Mullet, silver	215,742	21,638	-	-	-	-
Permit	3,558	1,046	-	-	-	-
Pigfish	-	-	534	37	-	-
Pompano	88,772	123,792	13,827	16,369	4,497	6,328
Redfish (Channel Bass)	224	30	445	56	6,093	1,271
Sandperch	-	-	-	-	-	-

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(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Monroe		Okaloosa		Pasco & Hernando	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Sea Bass, common	-	-	-	-	55,647	6,800
Sea Trout, gray	-	-	-	-	-	-
Sea Trout, spotted	63,437	22,551	16,321	5,222	17,706	6,829
Sea Trout, white	-	-	611	54	-	-
Shad	-	-	-	-	-	-
Sheepshead	130	28	3,837	349	9,334	1,120
Snapper, lane	9,461	2,288	254	114	-	-
Snapper, mangrove	337,630	123,268	127	57	-	-
Snapper, mutton	139,148	58,915	-	-	-	-
Snapper, red	21,746	14,102	447,665	313,813	-	-
Snapper, white	11,585	931	6,816	1,389	-	-
Snapper, vermillion	-	-	4,316	1,824	-	-
Snapper, yellowtail	740,956	392,336	-	-	-	-
Spanish Mackerel	1,751,532	226,823	352,946	39,247	6,825	887
Spot	-	-	1,711	92	-	-
Sturgeon	-	-	10	1	-	-
Swordfish	-	-	-	-	-	-
Tilefish	8,785	2,059	-	-	-	-
Triggerfish	-	-	16,166	1,509	-	-
Tripletail	690	172	-	-	-	-
Warsaw	13,546	2,580	9,990	1,320	-	-
Unclassified, Bottomfish & misc.	162,743	12,466	-	-	1,114	133
Alewife	-	-	-	-	-	-
Ballyhoo	86,226	14,822	-	-	-	-
Cigarfish	-	-	235,700	32,290	-	-
Menhaden	-	-	2,525	74	-	-
Shark	11,515	710	-	-	-	-

(contd.)

Table II-3.(contd.)

Species	COUNTY					
	Monroe		Okaloosa		Pasco & Hernando	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Spanish Sardine	-	-	11,105	444	-	-
Tenpounder, Ladyfish	-	-	118,387	4,119	-	-
Thread Herring	-	-	154,350	5,541	-	-
Trash Fish	60,455	3,736	-	-	-	-
TOTAL FISH	4,617,238	1,217,389	2,666,557	543,220	955,956	107,952
-----						
<u>Shellfish</u>						
Shrimp, campeche (heads-on)	829,246	595,478	-	-	-	-
Shrimp, caribbean (heads-on)	-	-	-	-	-	-
Shrimp, central west coast (heads-on)	245	203	-	-	-	-
Shrimp, east coast (heads-on)	4,243	3,408	-	-	-	-
Shrimp, tortugas (heads-on)	9,164,422	6,075,545	-	-	-	-
Shrimp, upper west coast (heads-on)	90,901	80,476	218,816	204,013	-	-
Shrimp, rock (heads-on)	13,081	5,696	84	25	-	-
Clam (meats)	-	-	-	-	-	-
Conch	-	-	-	-	-	-
Crab, blue, hard	206	72	5,652	563	-	-
Crab, blue, soft	-	-	-	-	-	-
Crab, stone	826,262	533,186	-	-	-	-
Spanish Lobster, Shovelnose	1,809	1,740	-	-	-	-
Spiny Lobster, Crawfish	4,814,013	5,176,026	-	-	-	-
Oyster (meats)	-	-	1,361	920	-	-
Scallop, bay	-	-	-	-	-	-
Scallop, calico	-	-	-	-	-	-
Sponges, glove	-	-	-	-	-	-
Sponges, grass	614	875	-	-	-	-
Sponges, sheepwool	2,164	13,188	-	-	-	-
Sponges, yellow	4,541	7,037	-	-	-	-

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Monroe		Okaloosa		Pasco & Hernando	
<u>Shellfish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Squid	304	60	1,028	86	-	-
Turtle, green	125,821	31,455	-	-	-	-
Turtle, loggerhead	2,260	226	-	-	-	-
TOTAL SHELLFISH	15,880,132	12,524,671	226,941	205,607	-	-
GRAND TOTAL	20,497,370	13,742,060	2,893,498	748,827	955,956	107,952

(contd.)

Table II-3.(contd.)

Species	COUNTY					
	Pinellas		Santa Rosa		Sarasota	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Amberjack	1,142	45	-	-	125	12
Angelfish	-	-	-	-	150	15
Barracuda	-	-	-	-	-	-
Bluefish	1,160	165	840	84	23,033	3,252
Bluerunner	-	-	-	-	400	60
Bonito	-	-	-	-	80	6
Cobia	1,492	150	-	-	300	30
Catfish, fresh-water	-	-	806	257	-	-
Catfish, salt-water	-	-	152	10	-	-
Croaker	-	-	33,220	3,634	98	12
Dolphin	67	25	-	-	-	-
Drum, black	8,752	1,009	377	25	8,539	915
Eels	-	-	-	-	-	-
Flounder	5,431	1,421	2,419	851	790	142
Goatfish	-	-	-	-	-	-
Grouper (Scamp)	2,188,751	623,794	-	-	108,959	32,121
Grunt	104,194	18,452	-	-	-	-
Hogfish	339	107	-	-	-	-
Jack, common	99,188	3,828	122	4	31,141	1,121
Jewfish	2,388	254	-	-	-	-
Kingfish (Mackerel)	55,268	11,412	-	-	1,488	298
King Whiting	2,940	358	-	-	-	-
Lisa, Black Mullet	1,200,444	105,278	166,334	11,726	1,113,516	89,638
Mullet, silver	-	-	-	-	10,688	987
Permit	1,671	243	-	-	14,288	2,326
Pigfish	5,623	353	-	-	-	-
Pompano	10,313	13,295	-	-	48,971	65,528
Redfish (Channel Bass)	14,540	2,384	597	84	8,650	1,383
Sandperch	-	-	-	-	1,027	133

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Pinellas		Santa Rosa		Sarasota	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Sea Bass, common	52,039	7,191	-	-	70	7
Sea Trout, gray	-	-	-	-	-	-
Sea Trout, spotted	60,179	19,106	16,821	5,508	26,802	9,112
Sea Trout, white	6,613	829	125	9	896	115
Shad	-	-	-	-	-	-
Sheepshead	27,838	3,332	852	85	8,742	952
Snapper, lane	-	-	-	-	-	-
Snapper, mangrove	4,288	1,418	-	-	1,703	629
Snapper, mutton	865	415	-	-	50	18
Snapper, red	258,969	188,891	-	-	2,373	1,779
Snapper, white	6,059	845	-	-	132	19
Snapper, vermillion	-	-	-	-	-	-
Snapper, yellowtail	36	18	-	-	55	22
Spanish Mackerel	507,236	59,448	-	-	188,433	26,889
Spot	25,900	3,367	80	6	262	33
Sturgeon	-	-	-	-	-	-
Swordfish	-	-	-	-	-	-
Tilefish	-	-	-	-	-	-
Triggerfish	-	-	-	-	-	-
Tripletail	-	-	-	-	-	-
Warsaw	11,321	1,762	-	-	-	-
Unclassified, Bottomfish & misc.	68,164	6,836	-	-	20,870	2,335
Alewife	-	-	-	-	-	-
Ballyhoo	-	-	-	-	-	-
Cigarfish	-	-	-	-	-	-
Menhaden	2,666	474	366	36	-	-
Shark	-	-	-	-	-	-

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(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Pinellas		Santa Rosa		Sarasota	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Spanish Sardine	-	-	-	-	-	-
Tenpounder, Ladyfish	-	-	-	-	160	8
Thread Herring	-	-	-	-	-	-
Trash Fish	15,987	386	-	-	-	-
<b>TOTAL FISH</b>	<b>18,653</b>	<b>860</b>	<b>173,111</b>	<b>22,319</b>	<b>1,622,791</b>	<b>239,897</b>
<hr/>						
<u>Shellfish</u>						
Shrimp, campeche (heads-on)	-	-	-	-	-	-
Shrimp, caribbean (heads-on)	-	-	-	-	-	-
Shrimp, central west coast (heads-on)	204,078	181,927	-	-	-	-
Shrimp, east coast (heads-on)	-	-	-	-	-	-
Shrimp, tortugas (heads-on)	47,387	39,924	-	-	-	-
Shrimp, upper west coast (heads-on)	40,272	27,865	-	-	-	-
Shrimp, rock (heads-on)	73,597	26,921	-	-	-	-
Clam (meats)	-	-	-	-	-	-
Conch	-	-	-	-	-	-
Crab, blue, hard	-	-	20,678	2,404	427	64
Crab, blue, soft	-	-	-	-	-	-
Crab, stone	13,673	7,444	-	-	23,522	15,355
Spiny Lobster, Crawfish	229,368	229,368	-	-	-	-
Oyster (meats)	-	-	23,688	19,192	-	-
Scallop, bay	-	-	-	-	-	-
Scallop, calico	-	-	-	-	-	-
Sponges, glove	-	-	-	-	-	-
Sponges, grass	223	1,034	-	-	-	-
Sponges, sheepwool	12,064	118,561	-	-	-	-
Sponges, yellow	470	1,959	-	-	-	-

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(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Pinellas		Santa Rosa		Sarasota	
<u>Shellfish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Squid	-	-	-	-	-	-
Turtle, green	-	-	-	-	-	-
Turtle, loggerhead	-	-	-	-	-	-
TOTAL SHELLFISH	621,132	635,003	44,366	21,596	23,949	15,419
GRAND TOTAL	5,372,995	1,711,894	217,477	43,915	1,646,740	255,316

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Taylor		Wakulla		Walton	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Amberjack	-	-	10,000	300	-	-
Angelfish	-	-	-	-	-	-
Barracuda	-	-	-	-	-	-
Bluefish	8,729	1,099	2,458	373	2,115	205
Bluerunner	-	-	-	-	145	7
Bonito	-	-	-	-	-	-
Cobia	-	-	-	-	-	-
Catfish, fresh-water	160	32	-	-	-	-
Catfish, salt-water	-	-	-	-	-	-
Croaker	-	-	401	48	2,385	261
Dolphin	-	-	-	-	-	-
Drum, black	-	-	3,785	460	114	8
Eels	-	-	-	-	-	-
Flounder	815	323	1,351	528	4,582	1,869
Goatfish	-	-	-	-	-	-
Grouper (Scamp)	-	-	27,669	8,458	-	-
Grunt	-	-	3,229	454	-	-
Hogfish	-	-	-	-	-	-
Jack, common	3,035	169	4,217	506	153	3
Jewfish	-	-	-	-	-	-
Kingfish (Mackerel)	-	-	1,475	368	-	-
King Whiting	-	-	-	-	-	-
Lisa, black mullet	96,334	12,330	1,330,747	138,131	107,187	12,208
Mullet, silver	-	-	-	-	-	-
Permit	-	-	-	-	-	-
Pigfish	31	6	30	6	-	-
Pompano	20	15	1,542	2,086	676	777
Redfish (Channel Bass)	3,561	774	24,470	5,718	66	12
Sandperch	1,180	174	-	-	-	-

(contd.)

Table II-3. (contd.)

Species	COUNTY					
	Taylor		Wakulla		Walton	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Sea Bass, common	18	4	-	-	-	-
Sea Trout, gray	-	-	-	-	-	-
Sea Trout, spotted	31,233	10,700	112,372	36,992	51,954	16,443
Sea Trout, white	170	18	-	-	-	-
Shad	-	-	-	-	-	-
Sheepshead	1,379	222	10,401	1,361	-	-
Snapper, lane	-	-	-	-	-	-
Snapper, mangrove	-	-	-	-	-	-
Snapper, mutton	-	-	-	-	-	-
Snapper, red	-	-	3,714	3,156	-	-
Snapper, white	-	-	-	-	-	-
Snapper, vermillion	-	-	-	-	-	-
Snapper, yellowtail	-	-	-	-	-	-
Spanish Mackerel	20,798	2,903	7,535	1,058	135	16
Spot	905	120	13,724	1,583	126	9
Sturgeon	-	-	-	-	-	-
Swordfish	-	-	-	-	-	-
Tilefish	-	-	-	-	-	-
Triggerfish	-	-	-	-	-	-
Tripletail	-	-	-	-	-	-
Warsaw	-	-	-	-	-	-
Unclassified, Bottomfish & misc.	7,831	783	69	7	-	-
Alewife	-	-	61,500	1,845	-	-
Ballyhoo	-	-	-	-	-	-
Cigarfish	-	-	-	-	-	-
Menhaden	-	-	9,147	274	170	5
Shark	-	-	-	-	-	-

Table II-3. (contd.)

Species	COUNTY					
	Taylor		Wakulla		Walton	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Spanish Sardine	-	-	-	-	-	-
Tenpounder, Ladyfish	-	-	-	-	-	-
Trash Fish	12,655	632	-	-	-	-
<b>TOTAL FISH</b>	<b>188,854</b>	<b>30,304</b>	<b>1,629,836</b>	<b>203,712</b>	<b>169,808</b>	<b>31,823</b>
<u>Shellfish</u>						
Shrimp, campeche (heads-on)	-	-	-	-	-	-
Shrimp, caribbean (heads-on)	-	-	-	-	-	-
Shrimp, central west coast (heads-on)	-	-	-	-	-	-
Shrimp, east coast (heads-on)	-	-	-	-	-	-
Shrimp, tortugas (heads-on)	-	-	-	-	-	-
Shrimp, upper west coast (heads-on)	-	-	-	-	-	-
Shrimp, rock (heads-on)	-	-	-	-	-	-
Clam (meats)	-	-	-	-	-	-
Conch	-	-	-	-	-	-
Crab, blue, hard	425,393	36,541	2,912,311	230,363	-	-
Crab, blue, soft	-	-	-	-	-	-
Crab, stone	1,458	635	8,366	3,515	-	-
Spiny Lobster, Crawfish	-	-	-	-	-	-
Oyster (meats)	-	-	19,242	8,851	16,366	11,353
Scallop, bay	-	-	-	-	-	-
Scallop, calico	-	-	-	-	-	-
Sponges, glove	-	-	-	-	-	-
Sponges, grass	-	-	-	-	-	-
Sponges, sheepwool	-	-	-	-	-	-
Sponges, yellow	-	-	-	-	-	-

(contd.)

Table II-3. (contd)

Species	COUNTY					
	Taylor		Wakulla		Walton	
<u>Shellfish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Squid	-	-	-	-	-	-
Turtle, green	-	-	-	-	-	-
Turtle, loggerhead	-	-	-	-	-	-
TOTAL SHELLFISH	426,851	37,176	2,939,919	242,729	16,366	11,353
GRAND TOTAL	615,705	67,480	4,569,755	446,441	186,174	43,176

Table II-4 Louisiana commercial fish landings by districts, 1971.

Species	DISTRICT					
	Eastern		Central		Western	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Bluefish	35	2	-	-	-	-
Bowfin	10	-	4,083	118	-	-
Buffalofish	40,813	5,344	517,420	70,743	37,131	4,517
Cabio	101	5	3,326	275	150	6
Carp	10,169	840	4,194	176	3,238	125
Catfish and Bullheads	654,933	198,966	2,455,022	691,619	240,613	62,008
Croaker	106,146	12,548	187,936	27,234	260	8
Drum, black	231,856	19,547	272,620	16,129	1,194	103
Drum, red (Redfish)	417,407	86,365	293,117	47,580	12,267	2,636
Flounders, unclassified	143,249	28,208	289,120	43,641	30,771	5,588
Garfish	223,085	21,808	149,210	11,448	63,974	5,245
Groupers	194	17	2,414	186	316	53
Herring, Thread	3,221,360	51,542	-	-	502,500	7,602
Jewfish	65	3	2,338	210	-	-
King Whiting or "Kingfish"	171,534	17,954	252,195	14,112	7,322	424
Menhaden	*	*	603,212,400**	9,773,734**	633,880,300	10,241,189
Mullet	3,416	151	4,777	241	-	-
Paddlefish or Spoonbill	-	-	-	-	1,297	97
Pompano	1,480	1,472	17,764	15,280	-	-
Sawfish	165	8	35	2	-	-
Sea Catfish	26,890	3,852	38,303	2,219	-	-
Sea Trout, spotted	611,275	170,107	510,145	126,395	622	154
Sea Trout, white	58,708	7,139	72,853	8,341	-	-
Sharks	230	11	675	35	-	-
Sheepshead, fresh-water	8,356	1,026	184,839	16,006	7,272	870
Sheepshead, salt-water	103,022	6,222	135,845	7,395	247	17
Snapper, red	17,246	5,916	138,682	45,983	5,755	1,789
Spanish Mackerel	18,970	1,389	20,675	1,730	-	-
Spot	5,964	412	12,411	708	-	-
Tripletail	3,908	419	3,667	239	-	-
TOTAL FISH	5,080,587	641,273	608,786,066	10,921,779	634,795,229	10,332,431

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(contd.)

Table II-4 (contd.)

Species	DISTRICT					
	Eastern		Central		Western	
<u>Shellfish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Crabs, blue, hard	6,954,947	733,722	4,494,311	440,072	736,460	82,079
Crabs, blue, soft and peeler	120,541	122,313	6,168	3,457	-	-
Crawfish, fresh-water	574	126	1,541,474	328,885	-	-
Shrimp, fresh-water	-	-	4,881	1,220	-	-
Shrimp, salt-water (heads-on)	26,730,202	10,845,106	49,449,800	22,597,473	16,295,419	9,841,329
Oysters (meats)	5,716,938	2,703,673	4,810,444	1,933,622	-	-
Squid	1,010	80	2,088	126	-	-
Terrapin	372	141	250	88	-	-
Turtles, sea	7,723	1,843	130	13	-	-
Turtles, snapper	5,503	1,273	2,402	680	-	-
Frogs	-	-	5,905	3,082	-	-
TOTAL SHELLFISH	39,537,810	14,408,277	60,317,043	25,308,718	17,031,879	9,923,408
GRAND TOTAL	45,618,397	15,049,550	669,103,109	36,230,497	651,827,108	20,255,839

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\* Included with landings of another district

\*\* Includes landings of another district

Table II-5 Mississippi commercial fish landings by counties, 1971

Species	COUNTY					
	Hancock		Harrison		Jackson	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Bluefish	-	-	-	-	9,500	950
Croaker	-	-	38,810	3,165	458,920	56,513
Drum, black	2,520	151	2,000	120	16,150	964
Drum, red (Redfish)	11,420	1,715	5,460	712	41,700	4,912
Flounders, unclassified	3,870	573	54,520	7,965	113,530	14,871
Groupers	-	-	200	16	227,890	34,088
King Whiting or "Kingfish"	9,160	733	175,450	13,840	127,095	8,600
Menhaden	-	-	-	-	308,350,800	4,822,854
Mullet	14,000	830	27,950	1,671	134,700	7,319
Sea Catfish	850	51	14,360	737	45,150	2,259
Sea Trout, spotted	22,540	5,675	10,180	2,531	360,560	90,191
Sea Trout, white	1,800	111	72,950	4,673	87,980	5,405
Sheepshead, salt-water	3,030	236	12,320	902	43,240	2,864
Snapper, red	-	-	4,650	510	2,394,230	885,340
Spanish Mackerel	-	-	2,250	183	176,920	20,224
Spot	-	-	450	27	3,010	182
Unclassified for industrial	-	-	*	*	71,382,600*	1,400,334*
TOTAL FISH	69,190	10,075	421,550	37,052	383,973,975	7,357,870
<hr/>						
<u>Shellfish</u>						
Crabs, blue, hard	16,950	1,695	847,440	84,744	394,840	39,484
Lobsters, spiny	-	-	-	-	373,400	336,060
Shrimp, salt-water (heads-on)	50,301	32,972	6,586,677	2,608,603	2,951,262	1,720,314
Oysters (meats)	24,090	11,765	1,147,300	439,322	42,865	21,187
TOTAL SHELLFISH	91,341	46,432	8,581,417	3,132,669	3,762,367	2,117,045
GRAND TOTAL	160,531	56,507	9,002,967	3,169,721	387,736,342	9,474,915

\*Landings of unclassified industrial fish in Harrison County included in Jackson County.

Table II-6. Texas commercial fish landings by area, 1972.

Species	AREA					
	Gulf of Mexico		Sabine Lake		Galveston and Trinity Bays	
Fish	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Cabio (Ling)	22,600	2,645	-	-	-	-
Croaker	22,500	1,241	-	-	8,900	817
Drum, black	45,000	5,467	-	-	72,700	7,970
Drum, red (Redfish)	97,900	25,812	-	-	33,600	8,433
Flounders	331,900	83,296	-	-	21,100	6,186
Grouper	97,500	10,729	-	-	-	-
King Whiting	92,800	8,365	-	-	15,700	1,469
Mullet	18,300	922	-	-	59,400	2,849
Pompano	1,200	461	-	-	-	-
Sea Catfish	6,000	436	-	-	3,200	216
Sea Trout, spotted	261,800	68,739	-	-	128,400	32,764
Sea Trout, white	500	60	-	-	18,700	2,677
Sheepshead	81,500	8,162	-	-	27,900	3,000
Snapper, red	1,238,000	571,984	-	-	-	-
Unclassified for food	78,200	4,980	-	-	44,900	3,130
Unclassified for bait, reduction, and animal food	4,900	247	-	-	59,200	2,013
TOTAL FISH	2,400,600	793,546	-	-	493,700	71,524
<hr style="border-top: 1px dashed black;"/>						
Shellfish						
Crabs, blue	14,400	1,141	1,288,700	127,369	1,870,100	191,649
Oyster (meats)	-	-	-	-	3,259,700	2,114,613
Shrimp, brown and pink (heads-on)	78,095,200	64,355,036	-	-	1,398,500	430,982
Shrimp, white (heads-on)	10,849,800	10,287,414	9,300	4,698	2,956,700	2,132,363
Shrimp, other	24,500	6,161	-	-	-	-
Squid	2,700	375	-	-	2,400	334
TOTAL SHELLFISH	88,986,600	74,650,127	1,298,000	132,067	9,487,400	4,869,941
GRAND TOTAL	91,387,200	75,443,673	1,298,000	132,067	9,981,100	4,941,465

(contd.)

Table II-6.(contd.)

Species	AREA					
	Matagorda, East Matagorda and Lavaca Bays		San Antonio, Mesquite, Espiritu Santo Bays, and Green Lake		Aransas and Copana Bays	
	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
<u>Fish</u>						
Croaker	-	-	1,300	56	6,000	292
Drum, black	50,600	6,505	28,000	3,066	91,700	10,704
Drum, red (Redfish)	76,900	21,175	55,500	16,730	264,100	86,489
Flounders	23,900	7,414	6,700	2,035	36,800	11,942
King Whiting	-	-	-	-	-	-
Mullet	3,000	185	1,800	72	8,100	356
Pompano	-	-	-	-	300	122
Sea Catfish	6,300	470	2,600	198	9,200	1,176
Sea Trout, spotted	23,000	34,740	49,000	14,664	228,100	76,597
Sea Trout, white	800	122	-	-	-	-
Sheepshead	18,100	1,761	13,400	1,443	18,400	1,015
Unclassified for food	3,100	276	-	-	900	46
Unclassified for bait, reduction, and animal food	-	-	47,200	2,314	20,300	897
<b>TOTAL FISH</b>	<b>305,700</b>	<b>72,648</b>	<b>205,500</b>	<b>40,578</b>	<b>683,900</b>	<b>189,636</b>
<u>Shellfish</u>						
Crabs, blue	882,000	89,931	995,500	99,539	1,338,900	135,518
Oyster (meats)	214,900	132,703	398,000	219,031	60,600	40,145
Shrimp, brown and pink (heads-on)	238,100	44,345	91,800	16,812	137,500	18,667
Shrimp, white (heads-on)	1,294,300	965,150	959,100	592,144	1,072,600	897,170
Squid	200	35	100	19	-	-
<b>TOTAL SHELLFISH</b>	<b>2,629,500</b>	<b>1,232,164</b>	<b>2,444,500</b>	<b>927,545</b>	<b>2,609,600</b>	<b>1,091,500</b>
<b>GRAND TOTAL</b>	<b>2,935,200</b>	<b>1,304,812</b>	<b>2,650,000</b>	<b>968,123</b>	<b>3,293,500</b>	<b>1,281,136</b>

Table II-6.(contd.)

Species	AREA					
	Corpus Christi and Neuces Bays		Baffin Bay and Upper Laguna Madre		Central and Lower Laguna Madre	
<u>Fish</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
Croaker	1,200	67	1,700	84	16,700	857
Drum, black	102,900	11,897	493,500	62,999	280,500	26,776
Drum, red (Redfish)	101,500	31,497	244,300	72,761	594,000	145,902
Flounders	8,500	2,505	10,300	2,867	14,600	3,490
Mullet	400	51	700	60	-	-
Pompano	300	132	1,000	420	2,200	1,038
Sea Catfish	1,000	158	200	11	-	-
Sea Trout, spotted	88,900	27,317	272,900	80,906	347,300	84,341
Sheepshead	8,400	421	50,700	2,804	19,000	1,028
Unclassified for bait, reduction and animal food	3,700	158	-	-	-	-
<b>TOTAL FISH</b>	<b>316,800</b>	<b>74,203</b>	<b>1,075,300</b>	<b>222,912</b>	<b>1,274,300</b>	<b>263,432</b>
<u>Shellfish</u>						
Crabs, blue	70,700	7,065	4,100	427	-	-
Oyster meats	-	-	-	-	1,200	710
Shrimp, brown and pink (heads-on)	53,500	7,710	-	-	-	-
Shrimp, white (heads-on)	397,000	340,079	-	-	-	-
<b>TOTAL SHELLFISH</b>	<b>521,200</b>	<b>354,854</b>	<b>4,100</b>	<b>427</b>	<b>1,200</b>	<b>710</b>
<b>GRAND TOTAL</b>	<b>838,000</b>	<b>429,057</b>	<b>1,079,400</b>	<b>223,339</b>	<b>1,275,500</b>	<b>264,142</b>

Table II-7. Tourism during 1969 for 28 county, tri-state coastal area.

State County	1969 No. of Out-of-State Tourists	1969 Expenditures by Out-of-State Tourists X (\$1,000)	1969 % of Total Tourists in Each State
<u>Mississippi</u> (State totals)	(19,700,000)	(187,000)	
Hancock	153,090	1,458	0.10
Harrison	3,118,395	29,699	15.80
Jackson	904,000	8,611	4.60
Sub-Total	4,175,485	39,768	20.50
<u>Alabama</u> (State totals)	(30,200,000)	(310,000)	
Mobile ) Baldwin )	2,990,000	30,500	9.90
Sub-Total	2,990,000	30,500	9.90
<u>Florida</u> (State totals)	(21,965,910)	(5,242,164)	
Escambia	273,515	65,270	1.20
Santa Rosa	7,657	1,827	0.03
Okaloosa	172,244	41,100	0.80
Walton	25,736	6,141	0.12
Bay	664,196	158,500	3.00
Gulf	5,271	1,257	0.02
Franklin	4,700	1,121	0.02
Wakulla	3,887	927	0.02
Jefferson	9,654	2,303	0.04
Taylor	11,883	2,835	0.05
Dixie	7,162	1,709	0.03
Levy	9,295	2,218	0.04
Citrus	43,089	10,280	0.19
Hernando	18,344	4,377	0.08
Pasco	108,275	25,830	0.50
Pinellas	1,800,379	429,600	8.20
Hillsborough	720,883	172,000	3.30
Manatee	264,118	63,030	1.20
Sarasota	504,212	1,827	2.30
Charlotte	65,901	15,720	0.30
Lee	418,948	99,980	1.90
Collier	147,474	35,190	0.70
Monroe	384,945	91,860	1.80
Sub-Total	5,671,768	1,080,102	25.84
GRAND TOTAL	12,837,253	1,150,370	

Source: U.S. Army Corps of Engineers: Report on Gulf Coast Deep Water Port Facilities Texas, Louisiana, Mississippi, Alabama, and Florida.

Table II-8. The tourist industry in Alabama coastal counties, 1972.

<u>County</u>	<u>Lodging<sup>1</sup></u>			<u>Amusement Centers<sup>2</sup></u>		
	EMP	TP (\$)	RU	EMP	TP (\$)	RU
Baldwin	664	2408	29	92	1120	15
Mobile	601	2200	40	488	1836	60

1. includes hotels, tourist courts, motels, rooming and boarding houses, and trailer parks and camps
2. includes dance halls, studios, and schools; producers, orchestras, and entertainers; bowling and billiard establishments; miscellaneous amusement recreation services
3. EMP = number of employees mid-March pay period
4. TP = taxable payrolls X \$1,000
5. RU = total reporting units

D = denotes figures withheld to avoid disclosure of individual reporting units

Source: County Business Patterns, 1972

TABLE II-9. The tourist industry in Florida coastal counties, 1972.

<u>County</u>	<u>Lodging<sup>1</sup></u>			<u>Amusement Centers<sup>2</sup></u>		
	EMP	TP (\$)	RU	EMP	TP (\$)	RU
Bay	881	2020	95	332	952	33
Charlotte	165	600	15	-	-	-
Citrus	279	1116	16	-	-	-
Collier	859	3424	51	390	2244	22
Escambia	605	1660	50	387	1588	35
Hillsborough	2467	8328	132	1980	8036	104
Lee	490	4304	101	317	1164	33
Levy	22	64	10	-	-	-
Manatee	402	1440	88	152	632	19
Okaloosa	580	2240	52	147	348	16
Pasco	126	344	25	90	328	16
Pinellas	7012	23,052	518	2328	10,756	152
Santa Rosa	108	372	10	-	-	-
Sarasota	1950	6860	139	1119	5084	80
Taylor	135	240	15	-	-	-

1. includes hotels, tourist courts, motels, rooming and boarding houses, and trailer parks and camps

2. includes dance halls, studios, and schools; producers, orchestras, and entertainers; bowling and billiard establishments; miscellaneous amusement recreation services

3. EMP = number of employees mid-March pay period

4. TP = taxable payrolls X \$1,000

5. RU = total reporting units

D = denotes figures withheld to avoid disclosure of individual reporting units

Source: County Business Patterns, 1972

Table II-10 The tourist industry in Louisiana coastal parishes, 1972.

<u>Parish</u>	<u>Lodging<sup>1</sup></u>			<u>Amusement Centers<sup>2</sup></u>		
	EMP	TP (\$)	RU	EMP	TP (\$)	RU
Calcasieu	309	960	17	133	420	14
E. Baton Rouge	1,001	769	65	319	337	37
Jefferson	897	2,952	46	675	2,452	66
Lafayette	240	183	18	164	178	17
La Fourche	-	-	-	106	392	14
Orleans	6,676	29,888	124	2,670	13,624	113
St. Mary	126	344	15	172	367	17
St. Tammany	102	312	12	107	300	9
Tangipahoa	107	292	7	-	-	-

1. includes hotels, tourist courts, motels, rooming and boarding houses, and trailer parks and camps

2. includes dance halls, studios, and schools; producers, orchestras, and entertainers; bowling and billiard establishments; miscellaneous amusement recreation services

3. EMP = number of employees mid-March pay period

4. TP = taxable payrolls X \$1,000

5. RU = total reporting units

D = denotes figures withheld to avoid disclosure of individual reporting units

Source: County Business Patterns, 1972 .

Table II-11 Federal parks and wildlife refuges in Louisiana, 1974.

REFUGE/PARK	AREA	VALUE
BRETON NATIONAL WILDLIFE REFUGE	4,507 acres; long barrier island chain of Chandeleur Islands and Breton Island group; located in St. Bernard and Plaquemines parishes, offshore from the Mississippi River Delta approximately 25 air-miles from the cities of Gulfport and Biloxi, Mississippi.	Management of the refuge for use by nesting shorebirds; hunting not permitted.
SABINE NATIONAL WILDLIFE REFUGE	142,846 acres; located in extreme southwestern corner of Louisiana in Cameron Parish.	Fresh and brackish marshes interspersed with small, low prairie ridges; waterfowl hunting and sport fishing is permitted in selected areas.
LACASSINE NATIONAL WILDLIFE REFUGE	31,765 acres; in Cameron Parish, 11 miles southwest of Lake Arthur, La.	Wintering ground for many species of ducks, geese, and wading birds; waterfowl hunting and sport fishing permitted.
DELTA NATIONAL WILDLIFE REFUGE	48,800 acres; situated on east Mississippi River Delta in Plaquemines Parish, 75 air-miles southeast of New Orleans.	Sanctuary feeding and resting area for migratory waterfowl.

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(contd.)

Table II-11 (contd.)

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REFUGE/PARK	AREA	VALUE
SHELL KEYS REFUGE (under administration of the Lacassine Refuge)	8 acres; 3 miles south of the Marsh Islands	Colonial bird nesting island.
CHALMETTE NATIONAL HISTORICAL PARK	141 acres; in St. Bernard Parish on the east bank of the Mississippi River 6 miles from the heart of New Orleans.	Only national park in coastal Louisiana; monument commemorating the Battle of New Orleans; site of Chalmette National Cemetery.

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Table II-12 State wildlife refuges in Louisiana, 1974.

REFUGE	LOCATION	VALUE
MARSH ISLAND WILDLIFE REFUGE	79,000 acres; located in Iberia Parish	52,000 acres are intensively managed and improved for utilization by waterfowl; large concentration of alligators as well as shore and wading birds.
ROCKEFELLER WILDLIFE REFUGE	82,000 acres; southwest coastline between Pecan Island and Grand Cheniere south of Louisiana Highway 82.	Wintering ground for a large percentage of the total blue and snow geese in the Mississippi Flyway; major experimental grounds for many wildlife research projects.
STATE WILDLIFE REFUGE	15,000 acres; adjacent to the Paul J. Rainey Wildlife Refuge.	One of oldest refuges in North America; access only by boat.
PAUL J. RAINEY WILDLIFE REFUGE (privately owned)	26,161 acres of marshland; Vermillion Parish.	Area managed by the National Audubon Society.

Table II-13. State wildlife management areas in Louisiana, 1974.

AREA	LOCATION	VALUE
BILOXI AREA	40,000 acres; located along southeast shore of Lake Borgne.	Good waterfowl hunting and salt-water fishing.
BOHEMIA AREA	33,000 acres; Plaquemines Parish.	Rail and waterfowl hunting; sport fishing; excellent nature preserve area.
PASS a LOUTRE AREA	66,000 acres; south of the Delta National Wildlife Refuge at the terminus of the Mississippi River Delta.	Waterfowl hunting.
PEARL RIVER AREA	15,594 acres of river swamplands located in St. Tammany Parish between the east and west Pearl Rivers.	Habitat for deer, black bear, turkey, squirrels, rabbits, rails, alligators, nutria, mink, muskrats, otters, beavers, and raccoons.
POINTE au CHIEN AREA	27,000 acres; 15 miles southeast of Houma in Terrebonne and LaFourche parishes.	Waterfowl hunting marsh; trapping area.

(contd.)

Table II-13. (contd.)

AREA	LOCATION	VALUE
SALVADOR AREA	28,000 acres of fresh-water marshes; approximately 20 miles from New Orleans.	Accessible only by boat; waterfowl hunting and fresh-water fishing.
WISNER AREA	30,000 acres; southeast portion of LaFourche Parish between Leeville and Grand Isle.	Sport fishing area; waterfowl resting site and public hunting area.

Table II-14. The tourist industry in Mississippi coastal counties, 1972.

<u>County</u>	<u>Lodging</u> <sup>1</sup>			<u>Amusement Centers</u> <sup>2</sup>		
	EMP	TP (\$)	RU	EMP	TP (\$)	RU
Harrison	1254	4572	48	222	904	30
Jackson	218	684	16	-	-	-

1. includes hotels, tourist courts, motels, rooming and boarding houses, and trailer parks and camps
2. includes dance halls, studios, and schools; producers, orchestras, and entertainers; bowling and billiard establishments; miscellaneous amusement recreation services
3. EMP = number of employees mid-March pay period
4. TP = taxable payrolls X \$1,000
5. RU = total reporting units

D = denotes figures withheld to avoid disclosure of individual reporting units

Source: County Business Patterns, 1972

Table II-15. The tourist industry in Texas coastal counties, 1972.

<u>County</u>	<u>Lodging</u> <sup>1</sup>			<u>Amusement Centers</u> <sup>2</sup>		
	EMP <sup>3</sup>	TP <sup>4</sup> (\$)	RU <sup>5</sup>	EMP	TP (\$)	RU
Aransas	187	544	26	--	--	--
Brazoria	121	316	19	63	332	14
Cameron	602	1,980	61	98	316	19
Galveston	1,064	3,264	51	238	536	38
Harris	8,319	32,444	227	4,793	24,068	274
Jefferson	718	1,952	46	301	876	41
Matagorda	89	244	12	--	--	--
Nueces	714	2,444	75	521	1,836	47
Orange	127	408	7	--	--	--
San Patricio	68	204	13	38	72	10
Victoria	176	520	7	--	--	--
Wharton	32	56	10	--	--	--

1. includes hotels, tourist courts, motels, rooming and boarding houses, and trailer parks and camps

2. includes dance halls, studios, and schools; producers, orchestras, and entertainers; bowling and billiard establishments; miscellaneous amusement recreation services

3. EMP = number of employees mid-March pay period

4. TP = taxable payrolls X \$1,000

5. RU = total reporting units

D = denotes figures withheld to avoid disclosure of individual reporting units

Source: County Business Patterns, 1972

Table II-16. Popular recreational sites in the Texas Coastal Zone

SITE	LOCATION	ATTRACTIONS
ANAHUAC NATIONAL WILDLIFE REFUGE	18 miles southeast of Anahuac (9,837 acres)	Excellent opportunities to observe waterfowl and water birds in season. Sightseeing, nature observation and photographing. Visitor facilities limited to primitive roads. Public hunting pending approval.
ARANSAS NATIONAL WILDLIFE REFUGE	7 miles south of Austwell (47,261 acres)	Wintering ground for the rare whooping cranes (59 in the wild; 21 in captivity). A host of other attractions, including alligator, javelina, wild turkey, white-tail deer and assorted species of waterfowl. Sightseeing, nature observation, hiking and photography.
CORPUS CHRISTI	Located in the coastal bend area on the Gulf	<p>Leading recreational center because of the Gulf, Padre Island National Seashore Area and attractive climate.</p> <p>Population - over 286,000</p> <p>Other points of interest include:</p> <p>Ocean Drive, U.S. Navy's largest Air Station            Corpus Christi and South Texas Art Museums            Lake Corpus Christi            Goose Island State Park            Famed King Ranch            Port of Corpus Christi</p>

(contd.)

Table II-16(contd.)

SITE	LOCATION	ATTRACTIONS
CORPUS CHRISTI (continued)		Tourism generates over \$135 million annually.
		Lake Corpus Christi has more than 714,000 visitors annually.
GALVESTON	Upper coastal zone on the Gulf	Galveston ranks sixth in the State of Texas as a Convention Center.
		Galveston's population (over 172,000) is derived from:
		<ul style="list-style-type: none"> <li>Port of Galveston</li> <li>University of Texas Medical Branch</li> <li>Tourism</li> </ul>
		It is estimated that revenue from the Port amounts to \$61 million annually, and from the medical branch \$25 million annually. Revenues from tourism exceeded \$180 million in 1971.
		Marinas, fishing facilities, historical attractions, and beach sport facilities are among the main attractions at Galveston.
		During 1971, over 2.5 million tourists visited Galveston, 93,000 of which were convention delegates.

(contd.)

Table II-16.(contd.)

SITE	LOCATION	ATTRACTIONS
GOOSE ISLAND	Located in Corpus Christi Area	State operated; one of the more developed state parks.
HOUSTON	50 miles northwest of Galveston	<p>Largest city in Texas</p> <p>Its population exceeds 1.8 million, and its payroll exceeds \$1.9 billion in the metropolitan areas.</p> <p>Over 1.9 million tourists visited the city in 1971, spending approximately \$82.4 million dollars.</p> <p>In 1971, over 766,055 convention delegates visited, spending approximately \$116 million dollars.</p> <p>Has the largest total number of square footage of exhibition area in the state totaling over 1 million square feet available from:</p> <ul style="list-style-type: none"> <li>Albert Thomas Convention Center</li> <li>Astrohall</li> <li>Sam Houston Coliseum</li> </ul> <p>Four restored historic homes in the city; other historic sites include Allen's Landing Park where the first settlers in the Houston area landed, San Jacinto Monument - site of the famous battle for independence,</p>

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(contd)

Table II-16 (contd.)

SITE	LOCATION	ATTRACTIONS
HOUSTON (continued)		National Aeronautics and Space Administration Manned Spacecraft Center, and fishing and saltwater activities.  Contains over 22 universities and over 49,033 students within the county.  Houston also claims over 2,500 manufacturers in diversified fields, and over 200 firms active in underwater, offshore activities.
LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE	25 miles northeast of San Benito (44,700 acres)	Tour roads, trails and blinds for nature study, photography, sight-seeing, fishing, boating, and camping are among the main features. Because it is mainly a wintering area for ducks and geese, no hunting is permitted.
PADRE ISLAND	An 80-mile section of the 113-mile island, stretching from near Corpus Christi to Mexico is a National Seashore. (134,000 acres - 34,000 acquired as of 1965).	Classified as a National Seashore.  It is the largest of the nation's seven national seashores. Windformed sand dunes, shell beaches, wintering region for waterfowl are only a few of its attractions. Facilities include camping, picnicking, sanitation. Plans call for additional development of bathhouses,

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(contd.)

Table II-16.(contd.)

SITE	LOCATION	ATTRACTIONS
PADRE ISLAND (continued)		<p>beach safety patrols, marinas, interpretive devices, park ranger stations, and visitor centers.</p> <p>721,243 persons visited the National Seashore at Padre Island in 1970 with 64,335 of these visitors being campers. This represented an increase of 3% since 1969.</p> <p>During its first year of operation, more than 152,000 visits were made to this National Seashore.</p>
PORT ISABEL	Gateway to Padre Island	In 1968 Port Isabel registered 14,700 visitors.

Source: Texas and the Gulf of Mexico

Table II-17 Attendance by activities at the national wildlife refuges along the Texas coast. (From Texas A&M University, Sea Grant Program, W. P. James (ed.), 1972)

ACTIVITY	ATTENDANCE	
	1970	1971
<b>Anahuac National Wildlife Refuge*</b>		
Fishing: Saltwater	6,051	5,550
Wildlife Photography	133	204
Wildlife Observation	5,077	5,739
Wildlife Tours/Routes	200	264
Picnicking	5,605	6,162
Miscellaneous Wildlife	140	25
Camping	21	8
Actual Visits	11,576	18,552
<b>Aransas National Wildlife Refuge*</b>		
Total Registered Visitors	48,300	40,700
Visitors Using the Intra-Coastal Canal	8,200	13,100
Camping (groups)	103: 3,400	89: 3,500
Wildlife Tours	3,000	2,000
Commercial Visitors	22,600	24,000
Official Visitors	1,300	1,100
Total Visitors	94,000	80,000
<b>Brazoria National Wildlife Refuge*</b>		
Fishing: Saltwater	212	315
Environmental Education	11	15
Wildlife Photography	2	1
Wildlife Observation	40	41
Wildlife Tours/Routes	3	6
Miscellaneous Wildlife	77	145
Miscellaneous Non-Wildlife	117	127
Hunting	0	92
Actual Visits	524	797
<b>San Bernard National Wildlife Refuge*</b>		
Fishing: Saltwater	407	353
Environmental Education	7	0
Wildlife Observation	21	14
Miscellaneous Wildlife	15	32
Miscellaneous Non-Wildlife	88	109
Actual Visits	538	508
<b>Laguna Atascosa National Wildlife Refuge*</b>		
Hunting	1,440	1,848

(contd)

Table II-17(contd)

ACTIVITY	ATTENDANCE	
	1970	1971
Fishing: Saltwater	24,605	20,916
Environmental Education	298	1,520
Wildlife Photography	315	63
Conducted Programs	0	123
Wildlife Trails	1,086	624
Wildlife Tours/Routes	11,428	13,170
Visitor Contact Stations	41	288
Camping	521	1,375
Picnicking	3,055	1,800
On-Site Programs	826	693
Miscellaneous Wildlife	498	176
Group Camping	467	588
Horseback Riding	2	3
Bicycling	16	99
Miscellaneous Non-Wildlife	125	637
Actual Visits	39,846	40,002

\*From the Recreational Use Reports of the 1970 and 1971 Annual Narrative Reports of Anahuac, Aransas, Brazoria, San Bernard, and Laguna Atascosa National Wildlife Refuge.

Source: U. S. Army Corps of Engineers: Report on Gulf Coast Deep Water Port Facilities Texas, Louisiana, Mississippi, Alabama, and Florida.

Table II-18. Coastal state parks administered by Texas Parks and Wildlife Department, 1972.

Name	Location	Acres	Recreational Opportunities
Bentsen-Rio Grande Valley State Park	Near Mission	600	Area set aside to preserve native flora and fauna of Lower Rio Grande Valley. Offers camping, picnicking, rest rooms, showers, group shelter, fishing, bird watching and nature study.
Brazos Island State Park	Near Brownsville	216	Undeveloped beach on the Gulf of Mexico. No facilities but activities include camping, surfing, fishing, swimming, picnicking and nature study.
Velasco State Park	Near Freeport on Gulf Coast	15,000	Actually a shoreline on Gulf of Mexico; undeveloped beach has no facilities except chemical rest rooms, but offers opportunities for swimming, fishing and beach camping.
Port Lavaca Causeway State Recreation Park	Near Port Lavaca on Gulf Coast	2	Offers swimming, boating and saltwater fishing. Facilities include snack bar, bait stand and rest rooms. Boat ramp, camping and picnicking facilities also available.
Lake Corpus Christi State Park	Near Mathis	14,187	Facilities include trailer camps with electricity, water sports, swimming, fishing, boat rentals, groceries and snack bar, rest rooms and showers, campsites, picnicking and screened shelters.
Goose Island State Park	Near Rockport on Gulf Coast	307	Rest rooms, showers, picnic sites, open shelters, children's play area, fishing pier, fish cleaning table, boat ramp. Tent and trailer camping permitted.
Copano Bay Causeway State Park	Near Rockport	6	Fishing piers, concessions and public boat ramp.

Source: Texas and the Gulf of Mexico. (Texas. Texas Highway Department, Travel and Information Division, Austin, Texas. 1972. 208 pp.)

Table II-19 County and city parks along the Texas coast.

Parks and Recreation Areas by County	Waterfrontage	Acreage	Activities and Facilities*
Aransas County [2][3]	1.0 miles	[1]	
Rockport Beach		67 acres	2, 3, 5, 7, 8, 9
Navigation District #2		4 acres	2, 4, 5, 6, 8
Brazoria County [3]	[1]	[1]	
Quintana-Bryan Beach		157 acres	5, 6
Surfside Beach		304 acres	5, 6
Calhoun County [3][7][10]	2.6 miles	378 acres	
Indianola Park	1.0 miles	351 acres	1, 2, 3, 4, 5
City Parks	[1]		
Port Lavaca Fishing Pier		18 acres	1, 3, 4, 6, 8
Port O'Connor Park		5 acres	2, 4, 5
Seadrift Bayfront City Park		4 acres	2
Cameron County [3][8]	1.0 miles	[1]	
Isla Blanca Park No. 1		148 acres	1, 2, 3, 4, 5, 7, 8, 9
Andy Bowie Park No. 2		225 acres	1, 2, 3, 4, 5
Access Road and Parking Area No. 1		11 acres	1, 2, 3, 4, 5
Access Road and Parking Area No. 2		14 acres	1, 2, 3, 4, 5
Access Road and Parking Area No. 3		14 acres	1, 2, 3, 4, 5
Access Road and Parking Area No. 4		14 acres	1, 2, 3, 4, 5
Chambers County [3][2][10]	1,900 feet	[1]	
Double Bayou Park		20 acres	1, 2, 3, 4, 6, 8
Port Anahuac Park		26 acres	1, 2, 3, 4, 5, 6, 8
Job Beason Park		12 acres	1, 2, 3, 4, 8
McCollum Park		[1]	1, 2, 3, 4, 5, 6, 8

Table II-19 (Cont'd.)

Parks and Recreation Areas by County	Waterfrontage	Acreege	Activities and Facilities*
Galveston County [4]6	app. 60.0 miles	[1	
Public Beach		1300 acres	1, 2, 3, 4, 5, 8
Bay Shore Park		35 acres	1, 2, 3, 4, 5
Pelican Island and Seawolf Park		40 acres	1, 2, 3, 4, 5
Jefferson County [5	5.0 miles		
Public Beach		75 acres	1, 2, 3, 4, 5, 8
Kleberg County [2]6[10	7 miles	[1	
Kleberg County Park		[1	1, 2, 3, 4, 8
Loyola Beach		25 acres	1, 2, 3, 4, 8
Riviera Beach		[1	1, 2, 3, 4, 8
Matagorda County [2]6	1,200 feet	[1	
26 Palacios Park and Fishing Piers		[1	1, 3, 4
Nueces County [2]3[10	39,000 feet	[1	
County Parks		[1	
Padre Island Park		358 acres	1, 2, 4, 5, 7, 8
Port Aransas Park		137 acres	1, 2, 4, 5, 7, 8
Municipal Harbor (Port Aransas)		6 acres	3, 8
County Fishing Piers (2)			
(Port Aransas)		3 acres	4, 8
Breakwater Park		1 acre	4, 8
OSO Pier		1 acre	4, 7, 8
Corpus Christi City Park		3.0 miles	[1
Bayfront Park	11 acres		4, 5, 7
Cole Park	28 acres		4, 6
Refugio County [2]3	1,500 feet	[1	
Bayside Park and Pier		4 acres	2, 4
San Patricio County [2]9	[1	[1	
County Park		4 acres	2, 3, 4, 5
City Parks		1,200 feet	[1
Willacy County [2	800 feet	[1	[1

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Table II-19 (Cont'd.)

- [1 Incomplete.
- [2 From Land Ownership Patterns by Mike McKann, 1970.
- [3 From Inventory of Recreation Areas and Facilities by the Texas Parks and Wildlife Department, 1970.
- [4 From personal communication, County Judge, Galveston County, 1972.
- [5 From personal communication, County Judge, Jefferson County, 1972.
- [6 From Texas-Land of Contrast, Texas Highway Department.
- [7 From personal communication, Texas Parks and Wildlife Department, 1972.
- [8 From personal communication, County Judge, Cameron County, 1972.
- [9 From personal communication, County Judge, San Patricio County, 1972.
- [10 From Texas Public Campground Guide, Texas Highway Department.

\*Codes for Activities and Facilities.

<u>Code Number</u>	<u>Activity or Facility</u>
1	Camping
2	Picnicking
3	Boating and Water Skiing
4	Fishing
5	Swimming and Surfing
6	Playgrounds
7	Concessions (Restaurant, Bait Shops, Etc.)
8	Restrooms
9	Miscellaneous Park Facilities

Source: U.S. Army Corps of Engineers: Report on Gulf Coast Deep Water Port Facilities Texas, Louisiana, Mississippi, Alabama and Florida.

Table II-20 Ship and boat building and repairing in Gulf Coast counties, 1972.

County, State	No. of Employees mid-March pay period	Taxable Payrolls X \$1000.00	No. of Total Reporting Units
Mobile, Alabama	2,585	\$18,556	15
Hillsborough, Florida	818	\$ 6,684	9
Pinellas, Florida	1,342	\$ 8,300	28
Sarasota, Florida	D	D	7
Taylor, Florida	D	D	3
Calcasieu, Louisiana	D	D	3
Iberia, Louisiana	D	D	5
Jefferson, Louisiana	D	D	12
LaFourche, Louisiana	D	D	9
Orleans, Louisiana	D	D	21
Plaquemines, Louisiana	124	\$ 1,100	5
St. Mary, Louisiana	544	\$ 4,292	8
St. Tammany, Louisiana	D	D	4
Terrebonne, Louisiana	406	\$ 3,344	11
Jackson, Mississippi	D	D	6
Aransas, Texas	D	D	3
Brazoria, Texas	61	\$ 372	10
Cameron, Texas	192	\$ 1,020	11
Galveston, Texas	D	D	9
Harris, Texas	2,022	\$14,176	34
Jefferson, Texas	D	D	4
Nueces, Texas	D	D	2
Orange, Texas	D	D	8

D = Data not reported to avoid individual disclosures  
Source - County Business Patterns, U. S. Census, 1972

Table II-21 Port Activities for Major Gulf Coast Ports, 1972

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Products categories:

- A. Agricultural, food, and kindred products
  - (1) farm products
  - (2) fresh fish and other marine products
  - (3) food and kindred products
  - (4) tobacco products
  
- B. Minerals and kindred products
  - (1) metallic ores
  - (2) coal
  - (3) crude petroleum
  - (4) nonmetallic minerals, except fuels
  - (5) stone, clay, glass, and concrete products
  
- C. Textiles, finished textiles, leather, and leather products
  - (1) basic textiles
  - (2) apparel and other finished textile products, including knit
  - (3) leather and leather products
  
- D. Lumber, wood, and paper products
  - (1) forest products
  - (2) lumber and wood products, except furniture
  - (3) furniture and fixtures
  - (4) pulp, paper, and allied products
  - (5) printed matter
  
- E. Primary and fabricated metal products
  - (1) primary metal products
  - (2) fabricated metal products, except ordnance, machinery, and transportation equipment
  
- F. Machinery
  - (1) machinery, except electrical
  - (2) electrical machinery, equipment, and supplies
  - (3) transportation equipment
  
- G. Chemical and allied products
  - (1) chemical and allied products
  - (2) petroleum and coal products
  - (3) rubber and miscellaneous plastics products
  
- H. Miscellaneous
  - (1) instruments, photographic and optical goods, watches and clocks
  - (2) miscellaneous products of manufacturing
  - (3) waste and scrap materials
  - (4) special items
  - (5) ordnance and accessories

Table II-21(Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
Panama City, Florida	A	30,286
	B	10,062
	C	924
	D	265,110
	E	4,553
	F	981
	G	318,141
	H	69,585
	Total	699,642
Pensacola, Florida	A	84,081
	B	14,785
	C	9
	D	133,745
	E	4,244
	F	530
	G	392,435
	H	27
	Total	629,856

1 includes foreign imports and exports, coastwise shipments and receipts

Table II-21(Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
St. Petersburg, Florida	A	389
	B	22,226
	G	139,707
	Total	162,322
Tampa, Florida	A	732,709
	B	26,551,174
	C	1,037
	D	229,486
	E	416,583
	F	20,120
	G	13,822,556
	H	87,917
Total	41,861,582	

1 includes foreign imports and exports, coastwise shipments and receipts

Table II-21 (Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
Mobile, Alabama	A	1,773,668
	B	9,601,964
	C	7,586
	D	433,268
	E	650,703
	F	17,648
	G	351,741
	H	88,842
	Total	12,925,420
Pascagoula, Mississippi	A	1,494,287
	B	546,915
	C	20
	D	20,421
	E	209
	F	82,460
	G	3,018,678
	H	1
	Total	5,162,991

<sup>1</sup> includes foreign imports and exports, coastwise shipments and receipts

Table II-21(Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
Gulfport, Mississippi	A	433,755
	B	4,664
	C	15,259
	D	87,341
	E	3,208
	F	2,753
	G	483,955
	H	141
	Total	1,031,076
Baton Rouge, Louisiana	A	5,190,292
	B	9,218,012
	C	30
	D	159,154
	E	293,748
	F	47,405
	G	10,367,418
	H	95,865
	Total	25,371,924

<sup>1</sup> includes foreign imports and exports, coastwise shipments and receipts

Table II-21 (Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
New Orleans, Louisiana	A	26,656,567
	B	17,129,272
	C	129,001
	D	1,216,431
	E	3,109,537
	F	398,998
	G	8,285,625
	H	470,812
	Total	57,396,243
Lake Charles, Louisiana	A	439,304
	B	837,481
	C	10
	D	91,518
	E	322,436
	F	48,257
	G	3,383,645
	H	33
	Total	5,122,684

<sup>1</sup> includes foreign imports and exports, coastwise shipments and receipts

Table II-21(Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
Sabine-Neches Waterway, Texas (Beaumont, Orange, Port Arthur, Sabine Pass, Harbor)	A	2,848,320
	B	10,766,086
	C	923
	D	151,252
	E	918,605
	F	21,981
	G	22,591,544
	H	88,042
	Total	37,386,753
Galveston, Texas	A	2,104,830
	B	1,355,629
	C	2,289
	D	175,618
	E	35,050
	F	10,907
	G	105,576
	H	6,157
	Total	3,796,056

1 includes foreign imports and exports, coastwise shipments and receipts

Table II-21(Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
Texas City, Texas	A	45,045
	B	552,398
	C	122
	D	422
	E	17,961
	F	0
	G	7,196,520
	H	2,714
	Total	7,815,182
Houston Ship Channel, Texas	A	10,157,149
	B	4,260,635
	C	72,325
	D	289,302
	E	2,542,980
	F	514,532
	G	24,732,482
	H	176,572
	Total	42,745,977

<sup>1</sup> includes foreign imports and exports, coastwise shipments and receipts

Table II-21 (Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
Freeport, Texas	A	200,702
	B	34
	C	10
	D	59
	E	86
	F	1,168
	G	2,951,879
	H	240
	Total	3,154,178
Matagorda Ship Channel, Texas	A	1
	B	3,381,923
	C	0
	D	0
	E	855
	F	753
	G	213,016
	H	0
	Total	3,596,548

<sup>1</sup> includes foreign imports and exports, coastwise shipments and receipts

Table II-21(Contd)

Area	Products Category	Short Tons Handled <sup>1</sup>
Corpus Christi, Texas	A	2,476,075
	B	7,729,958
	C	148
	D	4,005
	E	175,640
	F	126
	G	8,399,835
	H	888
		Total
Brazos Island Harbor, Texas (Brownsville and Port Isabel)	A	306,059
	B	1,940,548
	C	776
	D	338
	E	45,186
	F	4,248
	G	70,835
	H	943
		Total
I		

<sup>1</sup> includes foreign imports and exports, coastwise shipments and receipts

Table II-22 Heavy manufacturing in Alabama coastal counties, 1972.

County	Textile products			Paper/allied products			Chemical/allied products		
	EMP. <sup>1</sup>	T.P. <sup>2</sup>	R.U. <sup>3</sup>	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Baldwin	D	D	1				D	D	4
Mobile				7,685	\$ 83,112	13	2,289	\$ 21,272	15

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(Contd.)

Table II-22 (contd)

County	Petroleum/coal products			Primary metal industries			Machinery, except electrical			Transportation equipment		
	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Baldwin				140	\$ 1,324	4						
Mobile	D	D	3				704	\$ 6,620	19	2,723	\$ 19,312	19

1 EMP. = number of employees, mid-March pay period.

2 T.P. = taxable payrolls X \$1,000.

3 R.U. = total reporting units.

D denotes figures withheld to avoid disclosure of individual reporting units.

Table II-23 Heavy manufacturing in Florida coastal counties, 1972.

County	Textile products			Paper/allied products			Chemical/allied products		
	EMP. <sup>1</sup>	T.P. <sup>2</sup>	R.U. <sup>3</sup>	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Bay				D	D	1	D	D	2
Dixie							D	D	1
Escambia				2,061	\$20,940	5	5,312	\$50,824	8
Gulf				544	\$ 4,048	3	D	\$ D	2
Hillsborough				1,037	\$ 8,196	15	3,156	\$25,660	55
Lee									
Manatee							160	\$ 1,156	9
Okaloosa									
Pinellas							434	\$ 3,244	26
Santa Rosa							D	D	2
Sarasota									
Taylor									
Wakulla							D	D	1

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(Contd)

Table II-23 (contd)

County	Petroleum/coal products			Primary metal industries			Machinery, except electrical			Transportation equipment		
	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Bay												
Dixie												
Escambia												
Gulf												
Hillsborough	334	\$ 2,104	7	549	\$ 4,036	9	986	\$ 7,668	48	1,496	\$ 11,200	23
Lee							68	\$ 472	10			
Manatee							185	\$ 1,204	12	732	\$ 5,976	13
Okaloosa										D	D	5
Pinellas							1,561	\$ 12,896	79	2,427	\$ 15,536	53
Santa Rosa												
Sarasota										750	\$ 4,928	13
Taylor										D	D	3
Wakulla												

1 EMP. = number of employees, mid-March pay period.

2 T.P. = taxable payrolls X \$1,000.

3 R.U. = total reporting units.

D denotes figures withheld to avoid disclosure of individual reporting units.

Table II-24 Heavy manufacturing in Louisiana coastal parishes, 1972.

Parish	Textile products			Paper/allied products			Chemical/allied products		
	EMP. <sup>1</sup>	T.P. <sup>2</sup>	R.U. <sup>3</sup>	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Ascension							2,139	\$ 29,888	17
Calcasieu							3,298	\$ 36,740	11
E. Baton Rouge				D	D	1	7,470	\$ 25,455	23
Iberia				D	D	1	201	\$ 1,596	4
Iberville							1,378	\$ 19,848	
Jefferson				1,095	\$ 9,952	5	D	D	12
LaFourche				D	D	1			
LaFayette									
Orleans	341	\$ 2,056	5	961	\$ 6,900	18	595	\$ 5,636	46
Plaquemines							D	D	4
St. Bernard									
St. Charles							1,834	\$ 24,144	9
St. James							1,077	\$ 14,024	5

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(Contd)

Table II-24 (contd)

Parish	Textile products			Paper/allied products			Chemical/allied products		
	EMP. <sup>1</sup>	T.P. <sup>2</sup>	R.U. <sup>3</sup>	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.

St. John the Baptist

D D 1

St. Mary

714 \$ 7,868 10

St. Tammany

Terrebonne

W. Baton Rouge

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(contd)



Table II-24 (contd)

Parish	Petroleum/coal products			Primary metal industries			Machinery, except electrical			Transportation equipment		
	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
St. John the Baptist												
St. Mary							374	\$ 3,456	13	544	\$ 4,292	8
St. Tammany										D	D	4
Terrebonne							979	\$ 7,768	12	406	\$ 3,344	11
W. Baton Rouge										D	D	1

1 EMP. = number of employees, mid-March pay period.

2 T.P. = taxable payrolls X \$1,000.

3 R.U. = total reporting units

D denotes figures withheld to avoid disclosure of individual reporting units.

Table II-25 Heavy manufacturing in Mississippi coastal counties, 1972.

County	Textile products			Paper/allied products			Chemical/allied products		
	EMP. <sup>1</sup>	T.P. <sup>2</sup>	R.U. <sup>3</sup>	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Harrison							207	\$ 1,536	7
Jackson				D	D	2	D	D	3

TT-06

(contd)

Table II-25 (contd)

County	Petroleum/coal products			Primary metal industries			Machinery, except electrical			Transportation equipment		
	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Harrison				391	\$ 3,000	5						
Jackson	D	D	1							D	D	6

1 EMP. = number of employees, mid-March pay period.

2 T.P. = taxable payrolls X \$1,000.

3 R.U. = total reporting units.

D denotes figures withheld to avoid disclosure of individual reporting units.

Table II-26 Heavy manufacturing in Texas coastal counties, 1972.

County	Textile products			Paper/allied products			Chemical/allied products		
	EMP. <sup>1</sup>	T.P. <sup>2</sup>	R.U. <sup>3</sup>	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Aransas									
Brazoria							6,382	\$ 80,004	14
Calhoun							D	D	4
Cameron							290	\$ 2,864	10
Galveston							4,541	\$ 56,160	13
Harris	444	\$ 2,028	9	3,711	\$ 33,524	35	15,350	\$179,848	187
Jefferson							3,059	\$ 38,112	18
Matagorda							D	D	3
Nueces							D	D	4
Orange				D	D	8	3,880	\$ 55,300	14
Refugio									
San Patricio							D	D	2
Victoria							D	D	3
Wharton									

(contd)

County	Petroleum/coal products			Primary metal industries			Machinery, except electrical			Transportation equipment		
	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.	EMP.	T.P. <sup>2</sup>	R.U.
Aransas										D	D	4
Brazoria	1,592	\$ 18,376	5	D	D	1	273	\$ 2,672	15	D	D	11
Calhoun				D	D	1						
Cameron							D	D	8	192	\$ 1,020	11
Galveston	2,678	\$ 31,788	5	247	2,500	3				2,134	\$19,128	10
Harris	9,764	\$127,336	31	11,533	\$120,792	73	22,209	\$208,040	514	3,246	\$22,964	78
Jefferson	14,037	\$161,908	13	417	\$ 3,724	6	636	5,476	22	2,741	\$23,808	10
Matagorda												
Nueces	1,379	\$ 15,848	10	D	D	3	266	\$ 1,884	21	157	\$ 964	6
Orange	D	D	1							D	D	8
Refugio												
San Patricio				D	D	1						
Victoria										D	D	2
Wharton				D	D	2						

1 EMP. = number of employees, mid-March pay period.

2 T.P. = taxable payrolls X \$1,000.

3 R.U. = total reporting units.

D denotes figures withheld to avoid disclosure of individual reporting units.

Table II-27. Mineral industries in Gulf Coast counties, 1972.

County/State	Bituminuous coal/lignite mining			Oil & gas extraction <sup>1</sup>			Nonmetallic minerals, except fuels <sup>2</sup>		
	EMP. <sup>3</sup>	T.P. <sup>4</sup>	R.U. <sup>5</sup>	EMP.	T.P. <sup>4</sup>	R.U.	EMP.	T.P. <sup>4</sup>	R.U.
Mobile, Al				D	D	8			
Levy, Fl							D	D	3
Assumption, La				D	D	3			
Calcasieu, La				1,515	\$13,160	48			
Cameron, La				1,424	\$11,944	33			
East Baton Rouge				D	D	7	195	\$1,172	10
Iberia, La				1,491	\$13,596	37	D	D	4
Iberville, La				189	\$1,784	12			
Jefferson, La				4,333	\$46,324	54	D	D	4
Lafayette				4,631	\$48,284	132			
LaFourche, La				1,302	\$11,820	38			
Orleans, La				3,895	\$46,736	75	509	\$4,592	6
Plaquemines, La				D	D	52	D	D	1
St. Bernard, La				114	\$1,076	5			

(contd)

Table II-27. (contd)

County/State	Bituminous coal/lignite mining			Oil & gas extraction <sup>1</sup>			Nonmetallic minerals, except fuels <sup>2</sup>		
	EMP. <sup>3</sup>	T.P. <sup>4</sup>	R.U. <sup>5</sup>	EMP.	T.P. <sup>4</sup>	R.U.	EMP.	T.P. <sup>4</sup>	R.U.
St. Charles, La				203	\$1,924	8			
St. Martin, La				902	\$6,396	19			
St. Mary, La				3,455	\$32,344	49	D	D	1
Terrebonne, La				3,977	\$40,340	69			
Vermillion, La				641	\$5,920	21			
Brazoria, Tx				1,030	\$9,372	32			
Calhoun, Tx				D	D	10			
Chambers, Tx				D	D	18			
Galveston, Tx				D	D	13			
Harris, Tx	D	D	3	11,839	\$135,860	368	D	D	18
Jackson, Tx				381	\$3,108	23			
Jefferson, Tx				757	\$6,668	38	D	D	3
Kleberg, Tx				D	D	15			
Matagorda, Tx				811	\$7,432	27			
Nueces, Tx				3,434	\$33,076	126			

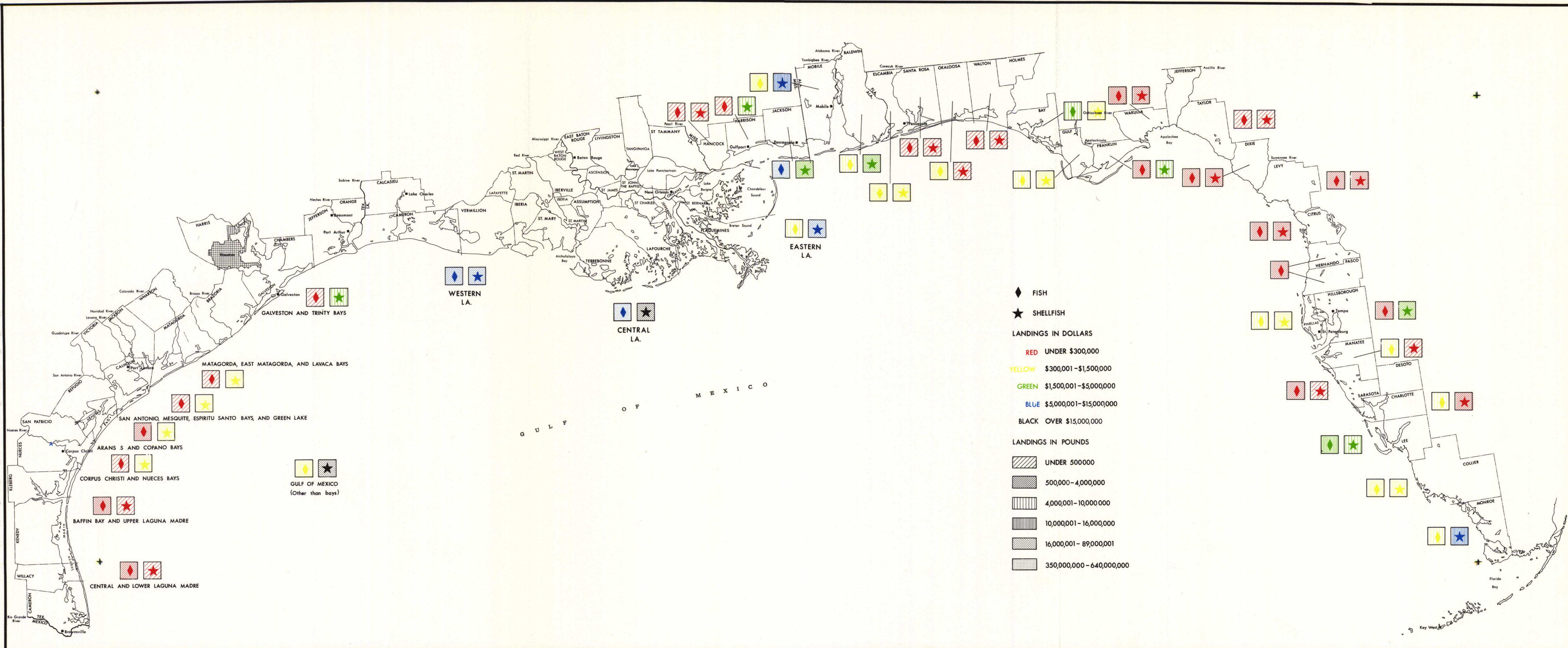
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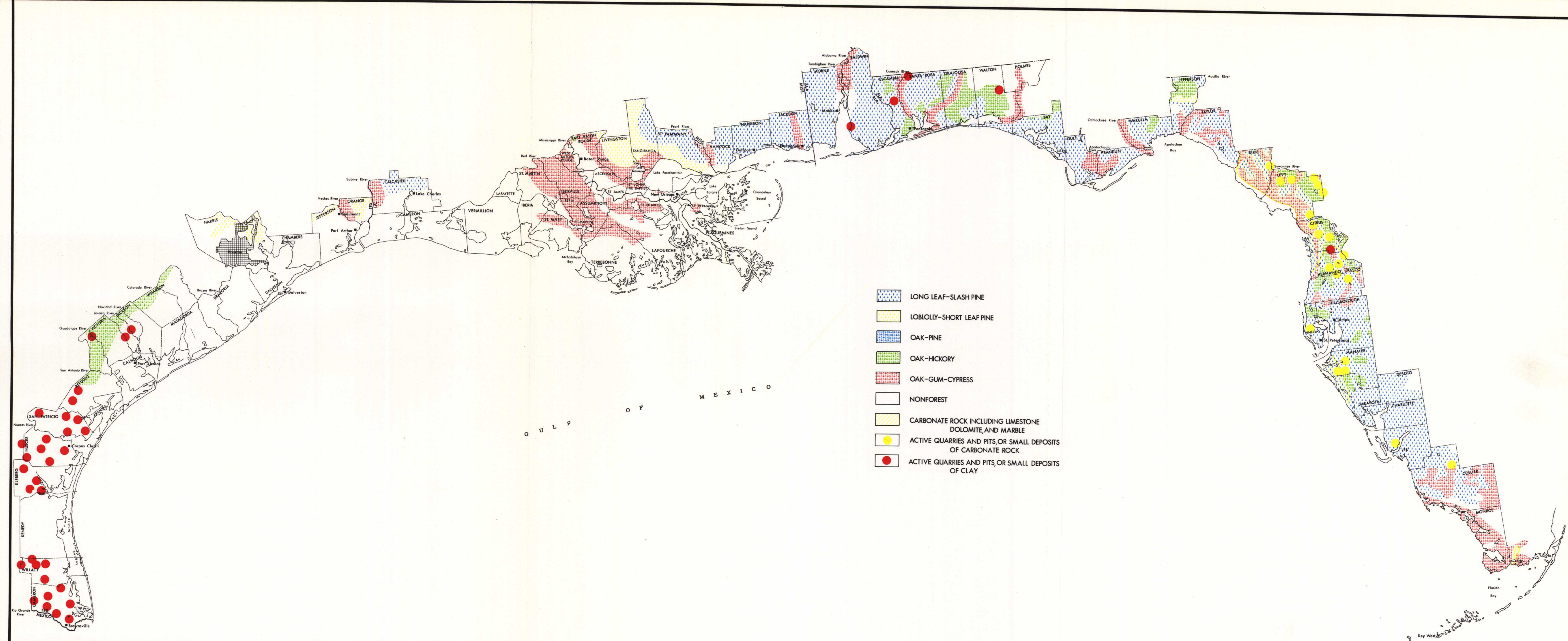
Table II-27. (contd)

County/State	Bituminuous coal/lignite mining			Oil & gas extraction <sup>1</sup>			Nonmetallic minerals, except fuels <sup>2</sup>		
	EMP. <sup>3</sup>	T.P. <sup>4</sup>	R.U. <sup>5</sup>	EMP.	T.P. <sup>4</sup>	R.U.	EMP.	T.P. <sup>4</sup>	R.U.
Orange, Tx				D	D	13			
Refugio, Tx				661	\$6,504	33			
San Patricio, Tx				D	D	32			
Victoria, Tx				402	\$3,668	35	D	D	3
Wharton, Tx				D	D	29	D	D	2

- 1 includes: crude petroleum and natural gas, natural gas liquids, and oil and gas field services.  
 2 includes: dimension stone, crushed and broken stone, sand and gravel, clay and related minerals, chemical and fertilizer minerals, and miscellaneous nonmetallic minerals.  
 3 EMP. - number of employees, mid-March pay period.  
 4 T.P. - taxable payroll X \$1,000.  
 5 R.U. - total reporting units.  
 D denotes: figures withheld to avoid disclosure of individual reporting units.

Source:  
 County Business Patterns, 1972.





UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 GULF COAST STUDY VOLUME III - 1974

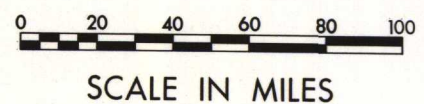
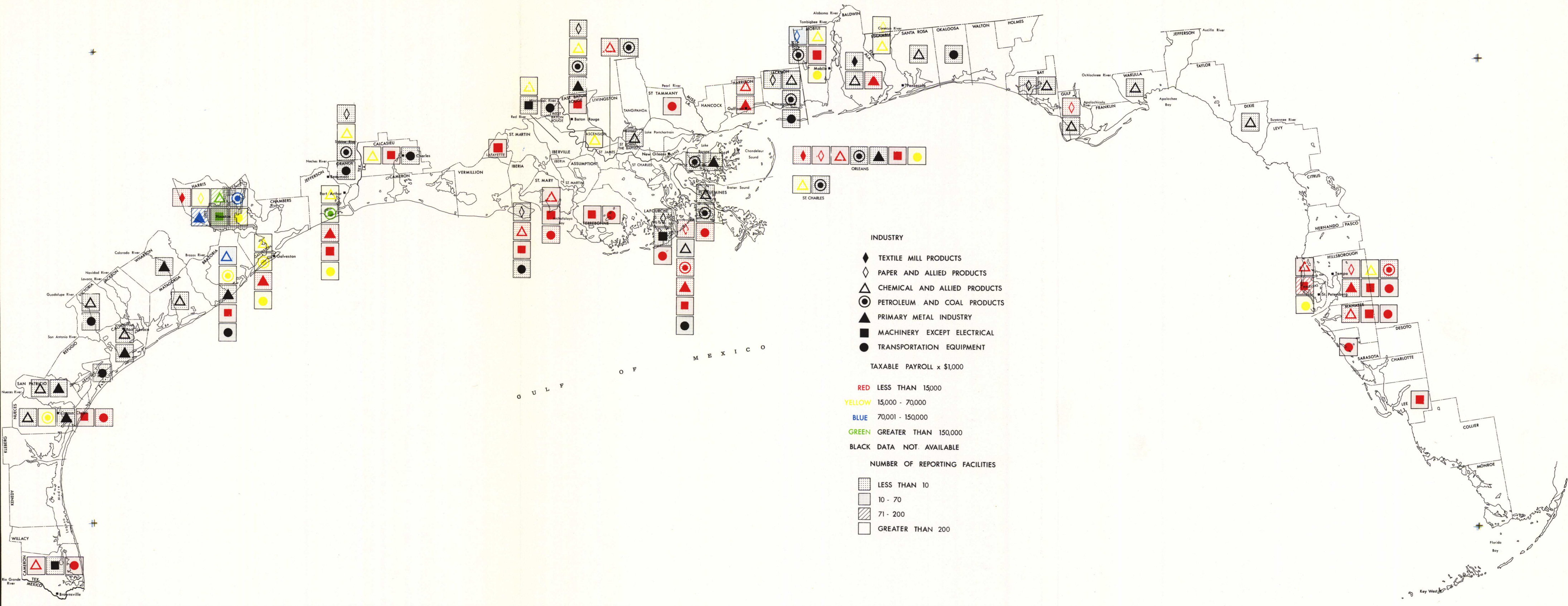
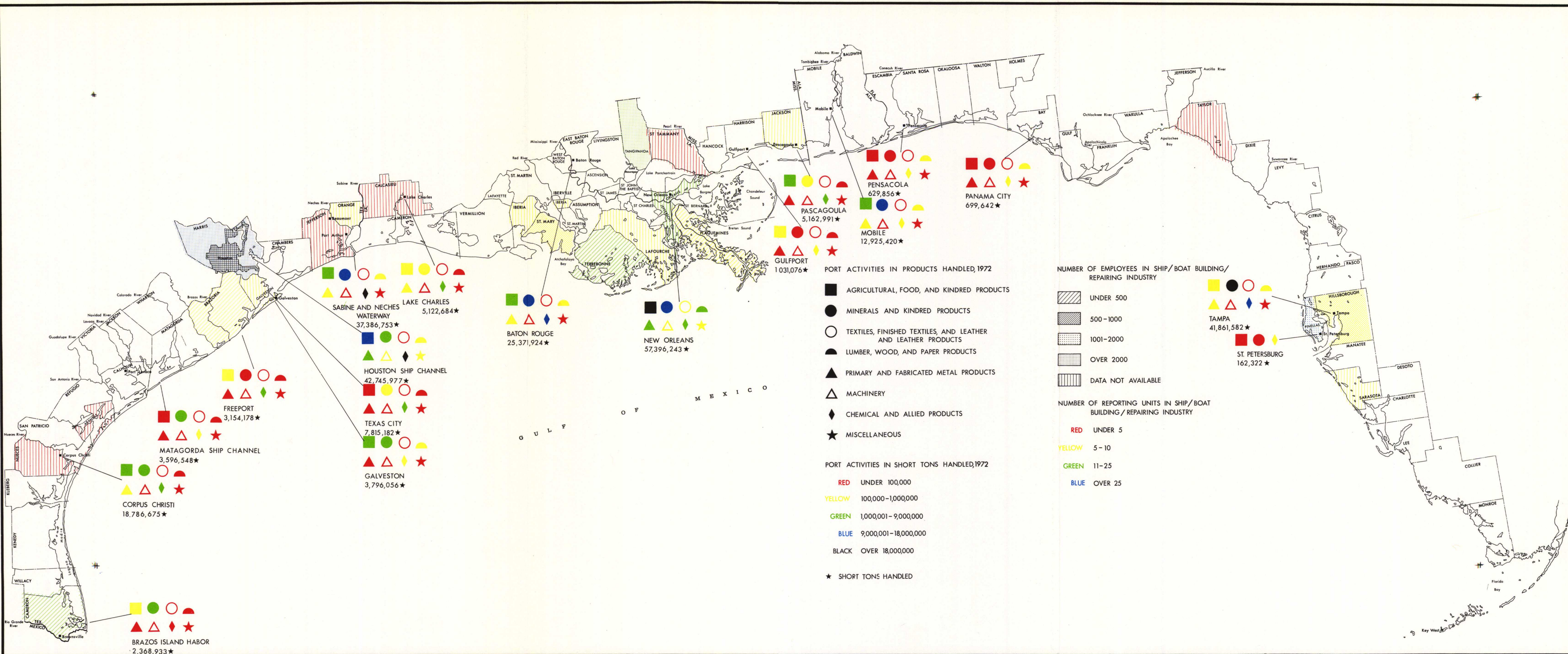
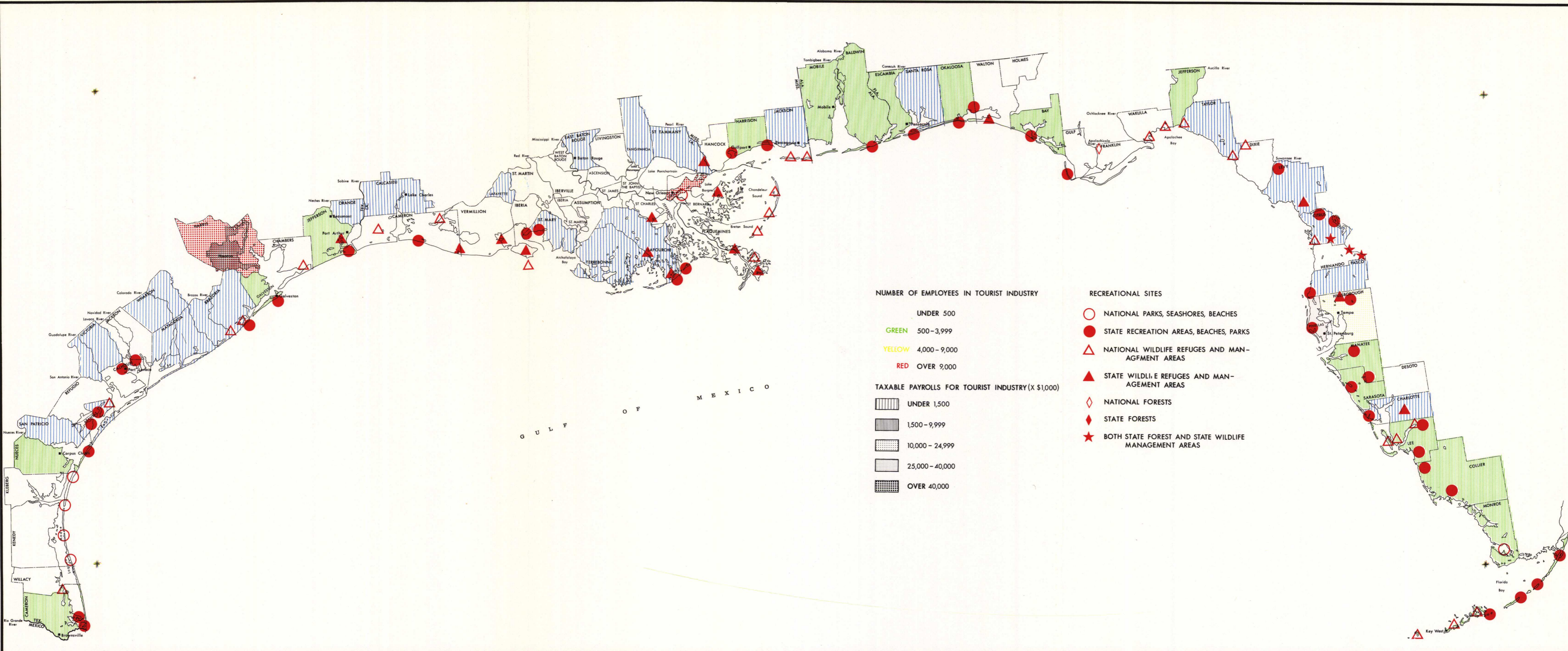
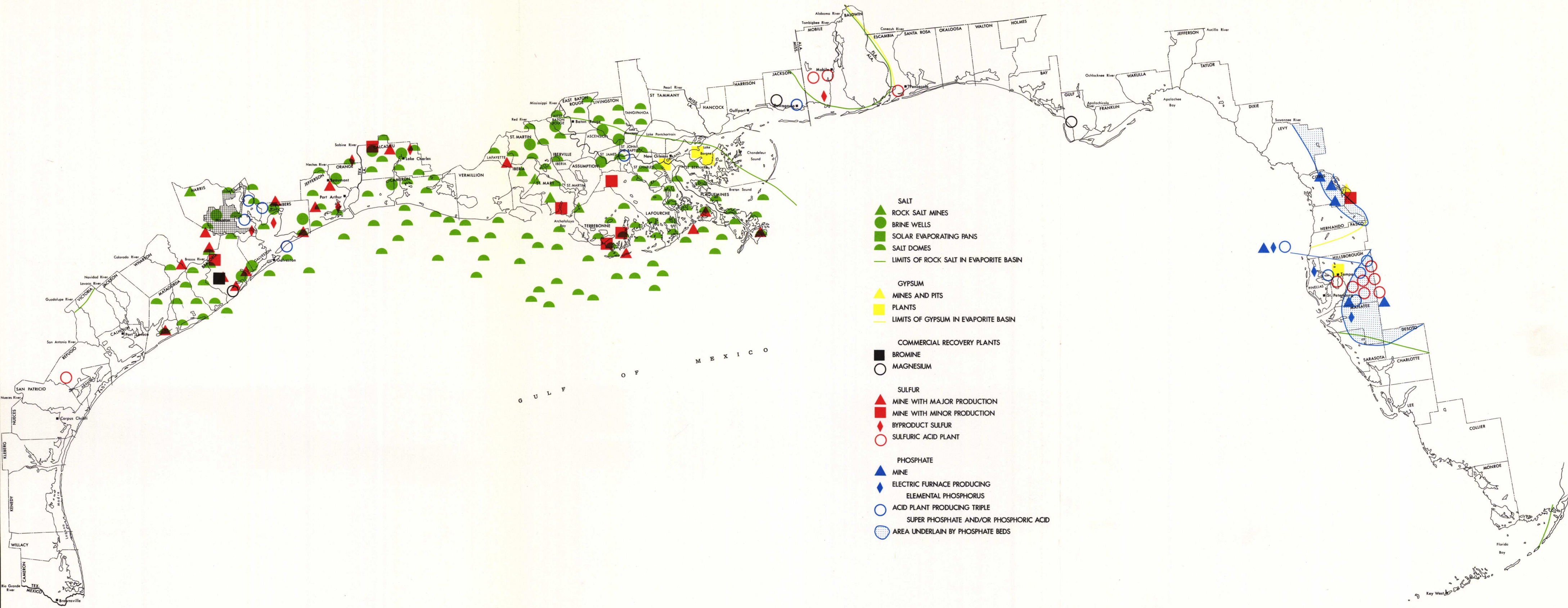


FIGURE II-5. MAJOR FOREST TYPES AND RAW MINERAL CONSTRUCTION MATERIALS. GULF OF MEXICO - COASTAL REGION









### III. PETROLEUM INDUSTRY

The western portion of the Gulf of Mexico is well recognized as an area of high concentration of oil and gas and related industries. Interest in oil and gas exploration and production in the eastern Gulf is high with the recent offering of Federal leases of off-shore submerged lands in that area. James E. Wilson, then president of the American Association of Petroleum Geologists, quoted in the Oil and Gas Journal, Volume 70, No. 50 (December 11, 1972), estimated a four to six year time lag from lease sale to significant production in the offshore area. The same article lists 21 billion barrels of oil and 169 trillion cubic feet of gas as "reasonable potentials" from the Outer Continental Shelf area. These figures compare with proved reserves of 5 billion barrels of oil and 37.8 trillion cubic feet of gas, also cited in the same report.

The May 1, 1973 issue of the Oil and Gas Journal, in "Offshore Report", gives 1,577,000 barrels per day in 1970 and 1,692,000 barrels per day in 1971 as the total daily Gulf offshore oil production. The annual Gulf of Mexico crude oil and condensate production has increased from less than one percent of the U. S. total in 1954 to more than eight percent in 1967, and an even greater percentage in 1973. It is estimated that by 1975, annual oil and condensate production from the Gulf of Mexico will be around 750 million to 1,150 million barrels and account for approximately twenty to thirty percent of the estimated total production.

Because of continuing high demand for fossil fuels and restricted supply from abroad, exploration and development efforts in the Gulf of Mexico will be maintained at an intense level. Competition for prime leases in the eastern Gulf is high. Increased production will require additional pipeline or other transportation facilities and increased refinery capacity. The same high demand has sparked the efforts for development of deep-draught ports and/or monobuoy facilities to receive crude oil and condensate transported by supertankers requiring deepwater ports. All of these developments in the petroleum industry will have significant impacts on the economic and physical environment of the Gulf of Mexico coastal area.

Existing oil and gas fields as well as pipelines are most heavily concentrated in an area ranging from Nueces County, Texas to Lake Ponchartrain, Louisiana. There is relatively little petroleum-related activity in Livingston, Tangipahoa, and St. Tammany Parishes and eastward. The locations of oil and gas fields, areas of exploration interest and pipelines are shown in Figure III-1. Major offshore lease areas are shown in Figure III-1-A.

Because of economic considerations and the historic pattern of development, refineries and petrochemical plants are typically located in the proximity of the point of extraction or import of the resources. Consequently, the areas of high concentrations of refineries and petrochemical plants correspond with the locations of oil and gas fields and pipelines. The locations of refineries (Table III-1) and petrochemical sites (Tables III-2 through III-5) have been graphically depicted in Figure III-1.

Table III-1. Refinery locations in the Gulf Coastal Region.

COMPANY AND LOCATION	CRUDE CAPACITY	
	b/cd	b/sd
<u>ALABAMA:</u> (State wide total)	38,800	40,650
Alabama Refining Co. - Theodore	12,600	14,000
Chevron Asphalt Co. - Mobile	6,000	6,500
<u>FLORIDA:</u>		
Seminole Asphalt Refining, Inc. - St. Marks	5,000	5,500
<u>LOUISIANA:</u> (State wide total)	1,551,292	1,606,200
Cities Service Oil Co. - Lake Charles	240,000	245,000
Continental Oil Co. - Westlake	83,000	85,000
Exxon Co. - Baton Rouge	420,000	434,000
Gulf Oil Co., Alliance Refinery - Belle Chasse	174,000	180,000
LaJet, Inc. - St. James	6,000	NR
Murphy Oil Corp. - Meraux	82,500	85,000
Shell Oil Co. - Norco	240,000	250,000
Tenneco Oil Co. - Chalmette	87,000	90,000
Texaco, Inc. - Convent	145,000	NR

(contd)

Table III-1. (contd)

COMPANY AND LOCATION	CRUDE CAPACITY	
	b/cd	b/sd
<u>MISSISSIPPI:</u> (State wide total)	306,300	328,700
Standard Oil Co. (Kentucky) - Pascagoula	NR	280,000
<u>TEXAS:</u> (State wide total)	3,487,605	3,645,550
Amoco Oil Co. - Texas City	320,000	NR
Atlantic Richfield Co. - Houston	210,000	220,000
BP Oil Corp. - Port Arthur	46,800	51,000
Champlin Petroleum Co. - Corpus Christi	62,000	63,000
Charter International Oil Co. - Houston	62,055	63,000
Coastal States Petrochemical Co. - Corpus Christi	130,000	NR
Crown Central Petroleum Corp. - Houston	93,000	96,000
Eddy Refining Co. - Houston	2,000	----
Exxon Co. - Baytown	350,000	365,000
Gulf Oil Co. - Port Arthur	312,100	319,000
Marathon Oil Co. - Texas City	55,000	58,000
Mobil Oil Corp. - Beaumont	335,000	350,000

Table III-1. (contd)

COMPANY AND LOCATION	CRUDE CAPACITY	
	b/cd	b/sd
<u>TEXAS</u> (contd)		
Phillips Petroleum Co. - Sweeny	85,000	NR
Shell Oil Co. - Deer Park	268,000	280,000
Southwestern Oil & Refining Co. - Corpus Christi	50,000	52,000
Texaco, Inc. - Port Arthur	400,000	NR
Texaco, Inc. - Port Neches	53,000	NR
Texas City Refining, Inc. - Texas City	60,000	63,000
Union Oil Co. of California - Nederland	107,000	NR
Union Texas Petroleum, Division of Allied Chemical Corp. - Winnie	9,000	9,500

b/cd - barrels per calendar day

b/sd - barrels per stream day

NR - no record

Source:

Oil and Gas Journal, April 4, 1973.

Table III-2. Locations of petrochemical plants in the Florida Gulf Coastal Region.

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Pace	Escambia Chemical Corp.	Natural gas	Alkylamines Ammonia Dinitrotoluene Methanol Mono-di-tri-methylamines Polyvinyl chloride Urea and other ammonia products
Pensacola	Ashland Chemical Co.	Rosin Glycerine Erythritol Maleic anhydride Fumaric glycols Phthalic anhydride Paraformalde phenol Vegetable oils Aliphatic	Rosin esters Alkyd resins Phenolic
Pensacola	Mobil Chemical Co.	Petroleum-base stocks	Nylon
Tampa	U. S. Phosphoric Products Div.	Natural gas	Ammonia

Source:

Oil & Gas Journal, September 1, 1969.

Table III-3. Locations of petrochemical plants in the Louisiana Coastal Region.

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Avondale	American Cyanamid Co.	Natural gas Propylene	Acrylonitrile Ammonia Hydrocyanic acid Methyl methacrylate monomer Urea
Baton Rouge	Allied Chemical Corp., Plastics Div.		High-density polyethylene
Baton Rouge	Allied Chemical Corp., Industrial Chemicals Div.	Ethylene	Vinyl chloride monomer
Baton Rouge	Copolymer Rubber & Chemical Corp.	Petroleum derived	Butadiene SBR rubber Nitrile rubber Latices Solution polymer rubber
Baton Rouge	Enjay Chemical Co.	Refinery streams	Aromatic distillates Aromatic tars Butadiene Butyl rubber Chlorinated butyl rubber Ethane Ethanol Ethyl ether Ethylene Ethylene-propylene rubber 2-ethylhexanol Hexadecyl alcohol

(contd)

Table III-3. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Baton Rouge	Enjay Chemical Co. (contd)	Ethane Ethylene	Hydrogen Isobutylene Isodecanol Iso-octanol Isoprene Isopropanol Isopropyl ether Linear olefins Methylcyclopentadiene dimer Neoacids Nonene Normal butanol and isobutanol Normal butylene Oxo alcohols Pentanol petroleum resins Polyisobutylene Propylene Reactive polymers Tetrapropylene Tridecanol Isononyl alcohol Low-density polyethylene Phthalate plasticizers
	Ethyl Corp.		Ethyl chloride Ethylene dichloride Methyl chloride Mixed lead alkyls (chemical and physical mixtures) Perchloroethylene Polyvinyl chloride resins and compounds TEL

(contd)

Table III-3. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
	Ethyl Corp. (contd)		Tetramethyl lead 1,1,1-trichloroethane Trichloroethane Trichloroethylene Trimethyl phosphate Vinyl chloride monomer Vinylidene chloride
Baton Rouge	Foster Grant Co., Inc.	Benzene Ethylene	Divinylbenzene Special chemicals Styrene
Baton Rouge	Pennsylvania Industrial Chemical Corp.	Petroleum-base stocks	Petroleum hydrocarbon resins
West Baton Rouge	Richardson Carbon Co., SID		Carbon black from oil
Baton Rouge	Stauffer Chemical Co., Industrial Chemical Div.	Refinery sludge acid Refinery H.S. gas stream	Sulfur Sulfur dioxide Sulfuric acid
Baton Rouge	Uniroyal Chemical	Styrene Butadiene Acrylonitrile	ABS resins N-type rubber Styrene copolymers Latices
Donaldsonville	Gulf Oil Co.-U.S.	Natural gas Phosphoric acid Phosphate rock	Ammonia Urea Diammonium phosphate Triple superphosphate Mixed fertilizers

(contd)

Table III-3. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Donaldsonville	Melchem, Inc.	Stream	Melamine from urea and ammonia
Donaldsonville	Triad Chemical Co.	Natural gas Ammonia Carbon dioxide	Ammonia Urea
Franklin	Ashland Chemical Co.		Carbon black nace
Franklin	Cabot Corp.	Gas Petroleum fractions	Carbon blacks
Geismar	Allied Chemical Corp.		Ammonia Urea
Geismar	Borden, Inc., Chemical Div.		Acetic acid Ammonia Methanol Urea Vinyl acetate
Geismar	Rubicon Chemicals, Inc.	Toluene Benzene	Aniline Diphenylamine Toluene diisocyanate for polyurethanes
Geismar	Shell Chemical Co.		Ethylene oxide Oxygen Mono-, di-, and triethanol amines Glycol ethers Primary detergent alcohols Non-ionic detergent

(contd)

Table III-3. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Geismar	Union Texas Petroleum		Ethylene
Geismar	Uniroyal Chemical		Ethylene-propylene rubber
Geismar	Wyandotte Chemicals Corp.	Ethylene Oxygen Carbon monoxide	Diethylene Ethylene glycol Ethylene oxide Isocyanates
Gretna	Sonneborn Chemical & Refining Co.	Petroleum fractions	High-alkalinity sulfonates Petrolatum White mineral oils
Iberville Parish	Hawkeye Chemical Co.		Methane
Lake Charles	Ancon Chemical Corp.		Methyl chloride
Lake Charles	Calcasieu Chemicals Corp.	Ethylene	Ethylene glycol Polyglycol
Lake Charles	Cities Service Oil Co.	Reformate Propane-propylene Stream	Benzene Paraxylene Orthoxylene Polymer grade propylene Mixed C7-C8 aromatics Highly paraffinic raffinate
Lake Charles	Continental Oil Co., Petrochemical Dept.	Aluminum Ethylene Naphtha fraction	Cyclohexane Propylene tetramer Straight-chain primary alcohols

(contd)

Table III-3. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Lake Charles	Continental Oil Co., Petrochemical Dept. (contd)	Propylene Sulfuric acid Ethane Chlorine Kerosine fractions	Ethylene Vinyl chloride monomer Toluene xylene mix Straight-chain paraffins Benzene
	Columbian Carbon Co.		Ethylene Propylene Butadiene Orthoxylene ammonia Butyl rubber Polyethylene
Lake Charles	Firestone Synthetic Rubber & Latex Co.		SBR rubber Polybutadiene SBR carbon-black master-batches Stereo SBR from butadiene styrene
Iberville Parish	Hercules, Inc.		Methane
Lake Charles	PG Industries, Inc., Chemical Div.	Ethylene	Ethylene dichloride Trichlorethylene Vinyl chloride monomer
Lake Charles	Olin Mathieson Chemical Corp.	Natural gas	Ammonia Hydrazine Urea
La Place	DuPont De Nemours & Co., E.I.	Butadiene	Neoprene

(contd)

Table III-3. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Luling	Mobil Chemical Co., Agricultural Div.	Natural gas Petroleum-derived fractions	Adipic acid Ammonia Ammonium nitrate Ammonium phosphate Nitrogen solutions Solid (dry ice) and liquid CO <sub>2</sub>
Near New Orleans	Air Products & Chemicals, Inc.	Natural gas	Ammonia Liquid hydrogen
Norco	Shell Chemical Co.	Petroleum hydrocarbons	Acetone Acrolein Allyl chloride Aqualin herbicide Glycerin Hydrogen peroxide MEK Sec-butyl alcohol Sulfolane Sulfur Ethylene Polymer grade propylene
Plaquemine	Dow Chemical Co.	LP-gas	Monia Carbon tetrachloride Polymers of ethylene and propylene Ethyl glycols Medium and high-density polyethyl perchloroethylene Propylene Trichloroethyl Vinyl chloride

(contd)

Table III-3. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Plaquemine	Georgia Pacific Corp.	Stream	Methanol from natural gas Phenol plus acetone by-product from cumene
Plaquemine	Goodyear Tire & Rubber Co.		Polyvinyl chloride

Source:  
Oil & Gas Journal, September 1, 1969.

Table III-4. Location of petrochemical plants in the Mississippi Coastal Region.

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Handsboro	Reichhold Chemicals	Petroleum unsaturates Benzene Phenol	Hydrocarbon resins
Pascagoula	Chevron Chemical Co., Ortho Div.	Natural and refinery gases	Ammonia
Pascagoula	Chevron Chemical Co., Industrial Chemicals Div.	Petroleum-base stocks	Paraxylene Toluene
Pascagoula	Coastal Chemical Corp.	Natural gas	Ammonia Phosphoric acid Sulfuric acid Fertilizers

Source:

Oil & Gas Journal, September 1, 1969.

Table III-5. Locations of petrochemical plants in the Texas Gulf Coastal Region.

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Alvin	Amoco Chemicals Corp.		Polyethylene
Aransas Pass	Ashland Chemical Co., Carbon Black and Synthetic Rubber Div.		Carbon
Beaumont	Du Pont De Nemours & Co., E.I.	Cyclohexane Ethylene Natural gas	Ammonia Chlorosulfonated polyethylene synthetic rubber Menthionine Methanol
Beaumont	Goodyear Tire & Rubber Co.		Isoprene Polybutadiene Polyisoprene
Beaumont	Mobil Chemical Co.	Petroleum fractions	Benzene Butadiene Cresylic acid Ethylene n-butane Nitrogen solutions Propane Propylene Terephthalic acid Toluene Urea Anhydrous ammonia Acetic acid Carbon-black oil Sodium acid sulfide

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Beaumont	Olin Mathieson Chemical Corp.	Spent refinery acids Hydrogen sulfide Natural gas	Sulfuric acid
Beaumont	PG Industries, Inc., Chemical Div.	Ethylene	Alkyl lead compounds Ethylene oxides Ethylene glycols Ethylene dibromide Glycol ethers
Beaumont	Union Oil of California	Petroleum fractions Propylene polymer	Aliphatic solvents Cyclohexane Heptane Hexane Nonene Tetramer
Beaumont	Union Oil of California	Reformate	Benzene Toluene Xylenes
Bay City	Celanese Chemical Co.	Ethylene Cyclohexane	Acetaldehyde Adipic acid Cyclohexanone 2-ethyl hexanol Hexamethylenediamine n-butanol n-butyraldehyde Vinyl acetate
Baytown	Ashland Chemical Co.		SBR rubber

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Baytown	Borg-Warner Corp., Marbon Div.	Ethylbenzene	Styrene monomer
Baytown	Enjay Chemical Co.	Refinery streams	Benzene Butadiene Butyl rubber Carbon-black feedstock Cyclohexane Ethylbenzene Ethylene High-purity linear paraffins Isobutylene Nonene Normal butylenes Orthoxylene Paraxylene Pentylene Concentrate Polypropylene Propylene Tetrapropylene Tridecene concentrate Orthoxylene Low molecular weight butyl
Baytown	Stauffer Chemical Co.	Refinery gas	Sulfur Liquid hydrogen sulfide
Baytown	Natural Gas Odorizing	H2S olefins	Mercaptans and other sulfur products
Bayport	FMC Corp., Organic Chemicals Div.		Glycerine

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Bayport	Oxirane Chemical Co.		Propylene oxide and other products
Bayport	Signal Chemical Co.		Hydroquinone
Big Spring	Cabot Corp.	Gas Petroleum fractions	Carbon blacks
Bishop	Celanese Chemical Co.	Natural gas LP-gases	Acetaldehyde Acetic acid Acetone 1,3-butylene glycol Butyraldehyde Crotonaldehyde Dipropylene glycol Formaldehyde Formaldehyde solutions in alcohol Isobutanol Methanol Methylal n-butyl acetate n-butyl alcohol n-propanol n-propyl acetate Paraformaldehyde Pentaerithrytol Propylene glycol Propylene oxide Sodium acetate Sodium propionate Special solvents Trimethylol propane Trioxane

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Bishop	Celanese Plastics Co.	Formalin	Polyacetal resin
Brownsville	Union Carbide Corp., Chemicals & Plastics Operations Div.	Natural gas	Acetic acid Acetic anhydride MEK
Channelview	Arco Chemical Co.	Isobutane n-butane butylenes styrene maleic anhydride	Alkylate Butadiene Butene-1 concentrate Butene-2 concentrate Low molecular-weight styrene Maleic anhydride resins MEK Odorless solvents Polybutadiene liquid resins Propylene concentrate Solvents Isophthalic acid Metaxylene
Clear Lake	Celanese Chemical Co.	Ethylene	Acetaldehyde Ethylene glycol Acetic acid Vinyl acetate Ethylene oxide
Conroe	Jefferson Chemical Co., Inc.		Ethylene carbonate Morpholine Piperazine Propylene carbonate Propylamines

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Corpus Christi	Coastal States Petrochemical Co.	From refinery	Benzene Toluene Xylenes o-xylene Cumene Propylene
Corpus Christi	Hess Oil & Chemical Corp.	Petroleum fractions	Aliphatic solvents Heavy aromatic solvents Xylene Resin former Toluene
Corpus Christi	Pontiac Refining Corp.	Naphtha fractions	Benzene Cyclohexane Orthoxylene Toluene Xylene
Corpus Christi	Southwestern Oil & Refining Co.	Naphtha	Aromatic platformate Orthoxylene
Corpus Christi	Suntide Refining Co.	Propylene Toluene Mixed xylenes	Benzene Cumene Ethylbenzene Orthoxylene Paraxylene Propylene Styrene
Deer Park	Lubrizol Corp.	Petroleum fractions	Lube oil Fuel additives

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Freeport	Dow Badische Co.	Acetylene Propylene	Acrylic acid and acrylics Butanol Callactam Oxo alcohol 2-ethyl n-butanol Isobutanol
Freeport	Dow Chemical Co.	Natural gas LP-gas Benzene	Allyl alcohol Butadiene Carbon tetrachloride Chloroform Dichloroethyl Epoxy resins Methyl methylene chlorides Ethylene Propylene Dipropylene Tetraethylene Tripropylene glycols Pyrene oxide Ethylenimine monomer Methyl chloroform Perchloroethylene Polyethylene Styrenebutadiene latex Vinyl Vinylidene chlorides
Freeport	Ethyl-Dow Chemical Co., Inc.	Ethylene	Ethylene dibromide

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Freeport	Nalco Chemical Co.		Antiknock compounds Motor mix
Groves	Petro Gas Producing Co.	Natural gas Refinery gas	Ethylene Propylene
Houston	Air Products & Chemicals, Inc.	Natural gas	Carbon monoxide
Houston	Arco Chemical Co.	Petroleum fractions	Aliphatic solvents Aromatic solvents Benzene Corrosion inhibitors Cresylic acids Orthoxylene Paraxylene Sulfur Toluene Xylenes
Houston	Avisun Corp.		Polypropylene
Houston	Celanese Plastics Co.	Ethylene Nylon salt	High-density polyethylene Nylon resins
Houston	Dixie Chemical Co.		Acetaldehyde 1 and dimethylhydrazone (ADH) Acetone Monochlorohydrin CLS Diethylene glycol DEG/TEG blends Tertiary butyl chloride Vinyl cyclohexane

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Houston	Goodyear Tire & Rubber Co.		High-potency anti-ozonants SBR and NBR copolymer
Houston	Merichem Co.	Refinery treating wastes	Cresols Cresylic acid Phenol Sodium sulfide
Houston	National Petro Chemical Corp.		High-density polyethylene
Houston	Occidental Chemical Co. of Texas		Ammonium sulfate
Houston	Pennwalt Corp.	Natural gas Butane Petroleum naphthas Methyl alcohol Ethyl alcohol Sulfur and various olefins	Butyl mercaptan Ethyl mercaptan Methyl mercaptan Propyl mercaptan Octyl mercaptan Tertiary butyl mercaptan Normal dodecyl mercaptan Tertiary dodecyl mercaptan Tertiary nonyl mercaptan Tetrahydrothiophene Thiophene
Houston	Petro-Tex Chemical Corp.	Petroleum-base stock	Aviation alkylate Butadiene Butene-1 Butene-2 Diisobutylene Fumar acid Isobutylene Maleic anhydride Neoprene rubber Polybutene-1

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Houston	Reichhold Chemicals, Inc.	Styrene Phthalic anhydride Synthetic glycerin Maleic anhydride Petroleum solvents	Alkyd resins Polyester resins
Houston	Shell Chemical Co.	Petroleum hydrocarbons	Acetone Aliphatic and aromatic solvents Allyl alcohol Allyl chloride Allyl glycidyl ether Aromatics (benzene, toluene, xylenes) Bisphenol A Diacetone alcohol Epichlorohydrin Epon Curing Agent catalysts Epoxy resins Ethyl alcohol Ethyl chloride 2-ethyl hexanol Ethylene Glycerin Glycerol allyl ether Glycidyl phenyl ether Hexylene glycol Isobutyl alcohol Isopropyl alcohol Isopropyl ether MEK Methyl isobutyl carbinol Methyl isobutyl ketone

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
	Shell Chemical Co. (contd)		Normal butyl alcohol Phenol Secbutyl alcohol Soil fumigant Sulfur Trichloropane Paraxylene Ethylene and epoxy resins
Houston	Signal Oil & Gas Co.	Refinery stream	Aliphatic solvents Aromatic solvents Benzene Ethylbenzene n-heptane n-octane Paraxylene Propylene Sulfur Toluene
Houston	Sinclair-Koppers Co.	LP-gas Gasoline fractions	Ethylene Styrene
Houston	Southern Petrochemicals Corp.		Polystyrene
Houston	Stauffer Chemical Co., Industrial Chemical Div.	Refinery sludge	Sulfuric acid Liquid hydrogen sulfide
Houston Ship Channel	U. S. Industrial Chemicals Co.	Ethylene	Low-density polyethylene Vinyl acetate

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
La Porte	Du Pont De Nemours & Co., E.I.	Methanol	Dimethyl formamide
La Porte	Upjohn Co.	Amines	Isocyanates Phosgene
Long Mott	National Starch & Chemical Corp.		Vinyl acetate monomer
Orange	Allied Chemical Corp., Plastics Div.	Ethylene	Polyethylene
Orange	Ameripol, Inc.	Butadiene	Cispolybutadiene rubber Polyisoprene rubber IR BR
Orange	Du Pont De Nemours & Co., E.I.	Natural gas Ethane Benzene Cyclohexane Adiponitrile	Adipic acid Ethylene Linear polyethylene Low-density polyethylene Methanol Vinyl polyethylene copolymers
Orange	Firestone Synthetic Rubber & Latex Co.		Butadiene Polybutadiene rubber

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Orange	Gulf Oil Co.-U.S.	Ethylene	Polyethylene
Orange	Matador Chemical Co., Inc.	Ethylene Ammonia	Ethylene oxide Ethylene glycols Polyethylene glycols Ethanolamines
Near Orange	Phillips Petroleum Co.	Gas Oil	Carbon black
Pasadena	Crown Central Petroleum Corp.	Petroleum fractions	Aromatic solvents Benzene Mixed xylenes Orthoxylene Toluene (used captively)
Pasadena (Deer Park)	Diamond Shamrock Chemical Co.	Ethylene Methane	Acetylene Ammonia Ethylene dichloride Paste resin Perchloroethylene Polyvinyl chloride Trichloroethylene Vinyl chloride monomer
Pasadena (Greens Bayou)	Diamond Shamrock Chemical Co.	Benzene Xylene	Benzene hexachloride DDT Xylene-based herbicide
Pasadena	Diamond Shamrock Chemical Co.		Polypropylene

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Pasadena (Deer Park)	Rohm and Haas Co.	Natural gas	Acetone cyanohydrin Acetylene Ammonia Carbon monoxide Higher alcohols Hydrogen Hydrogen cyanide Methanol Methyl and ethyl acrylate Methyl methacrylate Oil additives
Pasadena	Ethyl Corp.	Ethylene	Aluminum alkyls Ethyl chloride Ethylene dichloride Synthetic primary alcohols TEL Vinyl chloride monomer
Pasadena	Phillips Petroleum Co.	Ethylene Sulfuric acid	Ammonia Methyl vinyl pyridine Polyethylene Polypropylene
Port Arthur	Gulf Oil Co.-U.S.	Benzene Butane Ethane Propane Refinery gases Refinery streams	Aromatic distillate Benzene Butylenes Cyclohexane Ethylene Propylene Propylene tetramen Propylene trimer

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
	Gulf Oil Co.-U.S. (contd)		Sulfur Toluene Cumene Ethylene-propylene
Port Neches	Ameripol, Inc.	Arylenes Butadiene Styrene Butylenes	SBR copolymer Butadiene Isoprene
Port Neches	Neches Butane Products Co.		Butadiene
Port Neches	Sonford Chemical Co.	Phenol Toluene Chlorine	Pentachlorophenol Benzyl chloride
Seadrift	Union Carbide Corp., Chemicals & Plastics Operations Div.	Natural gas	Butadiene 2-ethyl hexanol Ethylene Ethylene glycol Ethylene oxide Glycol-ether solvents Polyethylene Styrene High-density polyethylene
Sweeny	Phillips Petroleum Co.	Crude oil NGL Benzene	Benzene Cyclohexane Ethylene Propylene Toluene Sulfur

(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Texas City	American Oil Co.	Refinery streams	Sodium cresylate Aromatics extraction unit Ammonia
Texas City	Amoco Chemicals Corp.	Petroleum fractions Refinery gases	Alkylated naphthalenes Aromatic solvents Hydrocarbon resins Methyl mercaptan Paraxylene Secondary vinyl plasticizer Styrene monomer Styrene-type resins
Texas City	Marathon Oil Co.		Benzene Cumene Propylene Toluene Xylene
Texas City	Mobil Chemical Co., Hydrocarbons & Polymers Div.	Natural gas Light crude oil Acetic acid Chlorine	Acetylene Acrylonitrile Ethylbenzene Ethylene High-density polyethylene Hydrogen cyanide Lactic acid Low-density polyethylene Methanol Styrene monomer Tertiary-butylamine Vinyl acetate Acetic acid from methanol

(contd)

Table III-5. (contd)

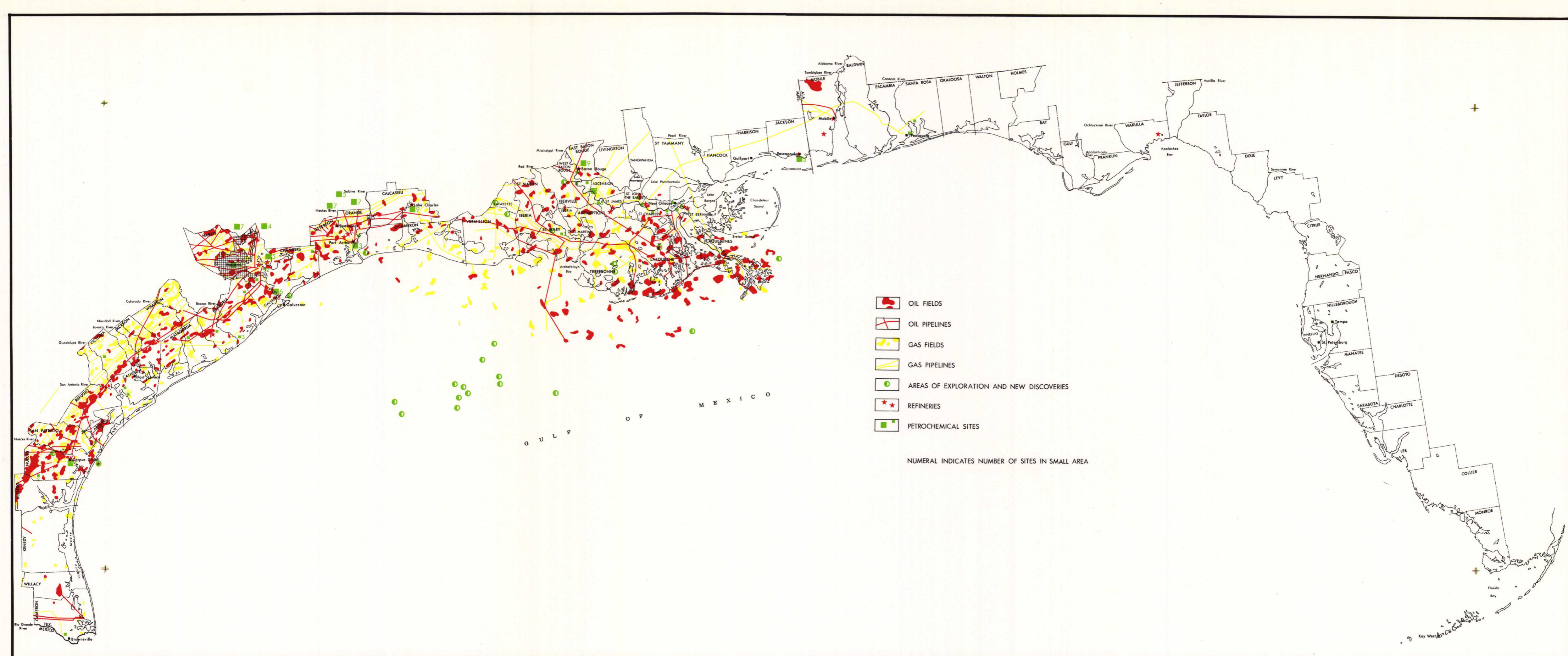
COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Texas City	Union Carbide Corp., Chemicals & Plastics Operations Div.	Natural gas Refinery gases	Acetaldehyde Acetic acid Acetic anhydride Acetone 2-aminoethyl ethanolamine Ammonia Biodegradable nonionic detergents Butadiene Diethylene glycol Diethylene triamine Ethanol Ethyl acetate Ethylene Ethylene diamine Ethylene dichloride Ethylene glycol Ethylene oxide Isobutanol Isopropanol Isopropyl acetate Low-density polyethylene Methanol Methyl acetone Methylisobutyl ketone n-butyl acetate n-butyl alcohol Polyethylene Straightchain paraffins Tetraethylene petamine Trichloroethane Triethylene tetramine Vinyl acetate Vinyl chloride Other vinyl resins and vinyl plastic materials Ethanol

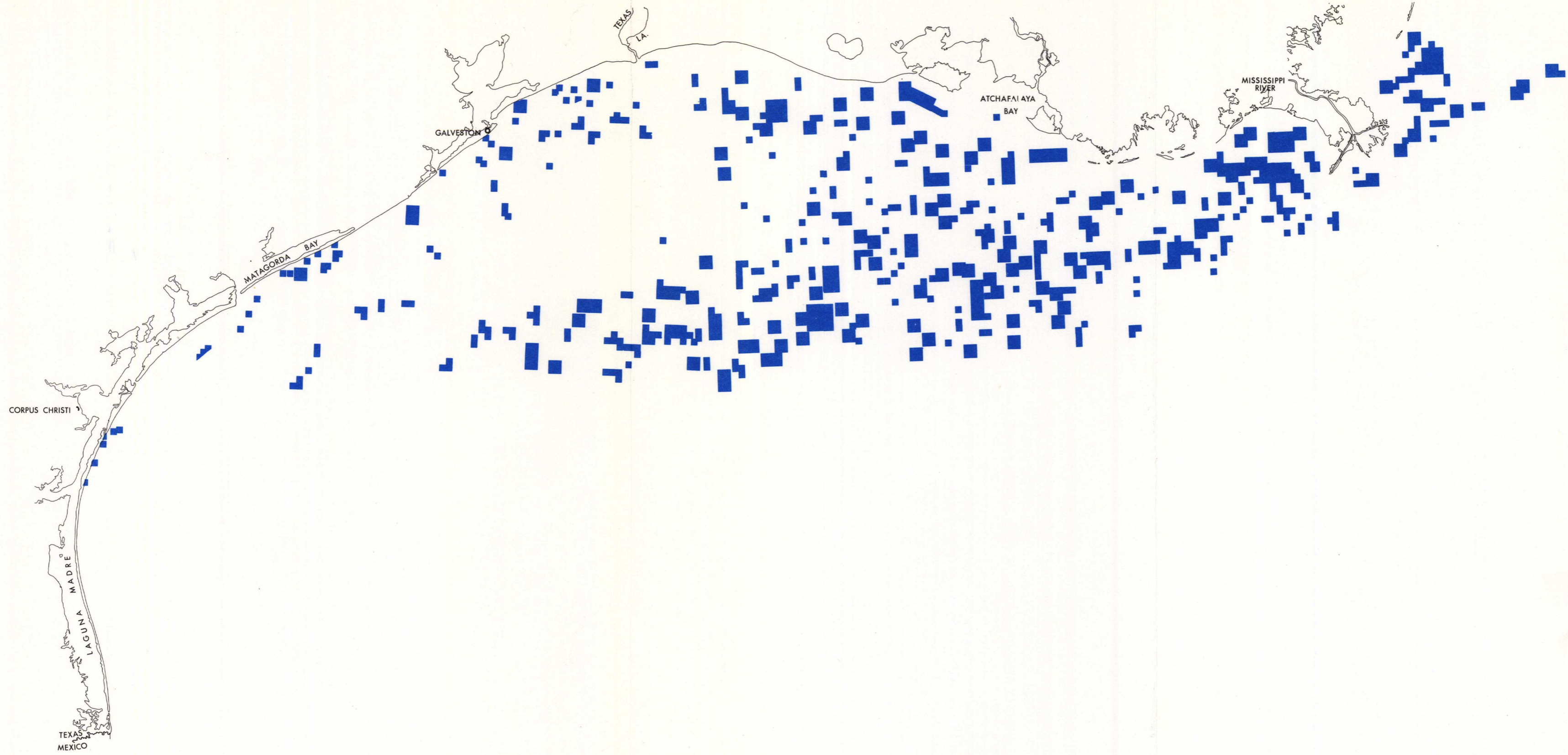
(contd)

Table III-5. (contd)

COASTAL LOCATION	COMPANY	FEED	PRODUCTS
Victoria	Du Pont De Nemours & Co., E.I.	Butadiene Ethylene Natural gas	Adiponitrile Ammonia High-pressure polyethylene
Winnie	Union Texas Petroleum	Natural gas	Benzene Hexane n-paraffins

Source:  
Oil & Gas Journal, September 1, 1969.





UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 GULF COAST STUDY VOLUME III - 1974

0 5 10 15 20 25  
 SCALE IN MILES

FIGURE III-1-A. OFFSHORE LEASES  
 GULF OF MEXICO - COASTAL REGION



#### IV. LAND USE, OWNERSHIP, AND REGULATION; SIGNIFICANT ARCHAEOLOGICAL/HISTORICAL SITES

##### A. LAND USE AND OWNERSHIP

The Gulf of Mexico Coastal Region of this report is defined as that area which includes all counties and parishes adjacent to the coastline or which include bay and estuary systems and coastal wetlands of the Gulf of Mexico.

This region encompasses an approximate area of 63,136 square miles. As shown in Table IV-1, approximately four percent of the coastal area, or 2,608 square miles, is considered urban. (Urban is defined as within the city limits of a city of population size 2,500 or greater, according to the 1970 census.) This urban area contains over 70 percent of the population of the coastal zone; in fact, 40 percent of the population resides in nine major cities encompassing less than one percent of the land area.

An estimated 40 percent of the land area of the coastal region is allotted to agricultural uses. This leaves, when other uses are taken into account, an estimated one-third of the area as either water or vacant land area. Figure IV-2 shows the use of land areas in the coastal region and identifies urban areas by population and area size. Figure IV-1 delineates areas of Federal, State, and local government ownership.

##### 1. Alabama

There are a total of 2,055,957 acres in the two coastal counties, Baldwin and Mobile, in Alabama. The distribution of land use for these counties is delineated in Table IV-2. Only 12 percent of this area is water, and almost 40 percent is vacant. There has been no assessment of the suitability of this vacant land for development. Land ownership maps and statistics are unavailable except on an individual basis through the county government offices.

##### 2. Florida

The Florida Gulf Coastal Region, comprised of 25 counties, contains a total land and water area of 12,548,450 acres. In conjunction with the National Inventory of Conservation Needs, the land of the state area was surveyed in 1969. According to this survey, 4.5 percent was classified as "urban and built up". Also, 9.4 percent of the area was federally-owned. The predominant land use was forest land encompassing 63 percent of the land area of the coastal region. Approximately 18 percent of the coastal region's land area was allotted to cropland, pasture and rangeland.

The only compiled ownership data available for the Florida Coastal Region are maps of a limited area along the coastline published by Florida Coastal Coordinating Council. This has been transposed to Figure IV-1. The Florida Coastal Coordinating Council published land use statistics and maps in 1973. In preparing this data, the Council sought to develop a performance-oriented rather than a means-oriented program for use in a comprehensive plan. Subsequently, a new and unique land use classification fitted to these purposes was developed. The state's coastal zone was surveyed and three basic land use zones were identified: Preservation, no development permitted; Conservation, limited development permitted; Development, suitable for intensive development.

The land use data from the 1969 study relative to coastal counties is published in Table IV-3 because it is more compatible with information for the other states.

### 3. Louisiana

The Louisiana Coastal region contains a total of 11,956,320 acres. Approximately 19 percent of this area is classified as water areas, and another 30 percent is classified as marsh lands, according to statistics published by the Louisiana State Planning Office.

Land ownership data for Louisiana is not available at this time. The State Planning Office has entered into a contract with the United States Geological Survey to obtain both ownership and land use information, and the completed report is expected to be available in October, 1974.

The 1968 Louisiana land use data has been published in Table IV-4. More recent data available for coastal parishes within the area of the Calcasieu Regional Planning Commission are shown in Table IV-5.

### 4. Mississippi

The Mississippi coastal region is the smallest of the five Gulf Coast states with a total area of 1,153,141 acres. Approximately three percent is water area. Forty-three percent is unclassified. Land use distribution statistics are shown in Table IV-6. Raw data pertaining to land ownership may be obtained from individual county records.

### 5. Texas

There are a total of 14,573,146 acres in the Texas Coastal Region. Upland acreage accounts for approximately 72 percent of this total, and the remaining 28 percent is considered submerged.

Private ownership accounts for 67.9 percent of the land in the Texas Coastal Region, and the State of Texas owns 27.7 percent. About 96 percent of the state-owned acreage is comprised of submerged lands and islands. The Federal Government owns 2.3 percent of the acreage. The majority of Federal lands consists of parks and refuges with military installations comprising most of the remainder. Finally, local governments own 2.1 percent of the land.

Land use statistics and maps of the Texas Coastal Region have been prepared by the Bureau of Economic Geology, University of Texas. These statistics are re-printed in Table IV-7. However, in many cases, data is for a partial county and the shoreline is drawn at the barrier beaches. Consequently, these statistics may not be comparable with data from other states.

Of the area surveyed by the Bureau of Economic Geology, 86 percent is land area and 14 percent is water area. The land areas are distributed as follows:

Agriculture	37.0 percent
Range - Ranch	32.0 percent
Woodland - Timber	11.6 percent
Marsh - Swamp	5.5 percent
Urban Industrial - Residential	7.0 percent
Recreational	0.2 percent
Sub-Areal Spoil and Made Land	0.9 percent
Wildlife Refuges	1.5 percent
Barren Land	4.2 percent

#### B. COASTAL ZONE MANAGEMENT

Until recently, state governmental action concerning the Gulf of Mexico Coastal Region has been mostly oriented toward resolving questions pertaining to ownership and promoting development. Relatively little attention had been given to the balancing of preservation and development activities.

While none of the five Gulf coast states has implemented a comprehensive coastal zone management program, all have initiated steps toward this end. Numerous single purpose controls have been initiated in fields such as navigation as well as protection against inappropriate development, over-exploitation of resources, and pollution.

The Coastal Zone Management Act of 1972 (PL 92-583) provides states with grants for planning and administering coastal zone management programs providing guidelines for land and water use, priority of use, laws ensuring state power, and possible implementation structures. The Federal Water Quality Act (PL 92-500) may also provide assistance for some aspects of coastal zone management planning.

A summary of the activities of each state relative to the development of coastal zone management programs follows.

## 1. Alabama

Alabama currently has no comprehensive coastal zone legislation. The responsibilities for management decisions are diffused among a variety of state and local agencies.

The Alabama Docks Authority supervises and controls activities landward of established "harbor lines." Where harbor lines do not exist, the Department of Conservation and Natural Resources exercises similar authority below the mean high tide-line and where the state's authority is established. The Department of Conservation and Natural Resources is also charged with promulgation and enforcement of laws and regulations to protect, conserve, and develop the marine resources of the state.

The Alabama Water Improvement Commission sets and enforces water quality regulations and regulates the location of industries and domestic sources of pollution in the state.

State-wide planning programs are coordinated through the State Planning Division of the Alabama Development Office. Acts 657 and 1126, passed by the Alabama Legislature in 1969, authorized the creation of the state agency and twelve (12) regional planning districts. The South Alabama Regional Planning Commission, located in Mobile, Alabama, encompasses the coastal counties, Baldwin and Mobile.

Act No. 119, passed in the third special session of the Legislature, 1971, provides for "a comprehensive land management and use program in flood prone areas.... and authorized the county governing body in each county to prescribe criteria for land management and use in such areas, including control measures, subdivision planning requirements, building and health code requirements." (Bradley, 1972) The act also provides that counties should require permits for all proposed construction in flood prone areas outside the corporate limits of municipalities of the county.

In the regular session of 1973, the Alabama Legislature passed Act No. 1274, "to provide for the preservation, enhancement, and development of the coastal areas of Alabama." This act authorized the establishment of a board with responsibility for developing, coordinating, and maintaining a coastal management program. The program was established to accomplish the following:

- identify boundaries of the coastal area;
- identify all of the state's coastal resources;
- evaluate these resources in terms of quantity, quality and capacity for use, both present and future;

- determine present and potential uses and conflicts in use of coastal resources;
- inventory and designate areas of particular concern; and,
- recommend broad guidelines for priority of use in particular areas.

## 2. Florida

In the state of Florida, coastal zone management decisions pertaining to the marine resources, navigable waters, and submerged lands of the state are the shared responsibility of the Governor and a six-member cabinet functioning as a coastal zone authority. The Florida Coastal Coordinating Council serves as advisory agency to the Governor and cabinet.

The Florida Coastal Coordinating Council was established within the Department of Natural Resources in 1970. The Council's designated functions are to coordinate programs and undertake comprehensive planning. The Council has developed a unique performance-oriented land use classification system for use in a comprehensive plan. The Escambia-Santa Nora (Escarosa) region in western Florida has been designated as a pilot study area for implementation.

The Florida Board of Trustees of the Internal Improvement Trust Fund passed a resolution establishing a system of aquatic preserves in November, 1969. This was the first significant act in recognizing the need for regulation of land and natural resources in the coastal zone. A preserve (only state-owned lands and water bottoms and private areas authorized for inclusion by the owner) may be one or a combination of three interrelated types: 1) biological (i. e. for the preservation of certain forms of animal or plant life), 2) scientific purposes, 3) aesthetic (i. e. to preserve amenities or scenic qualities).

Erection of structures, mineral exploration or excavation, and dredging and filling are generally prohibited in the preserves.

Act 280-1971 of the Florida Legislature authorized the Division of Marine Resources of the Department of Natural Resources to establish (on a county basis) coastal construction set back lines for the protection of upland areas and the control of beach erosion. While this act provides some protection against undue shore erosion, it should not be mistaken for general protection purposes.

The Land Conservation Act of 1972 provides for issuance of State bonds to finance the purchase of recreation lands.

The Florida Environmental Land and Water Management Act of 1972 provides that the Division of State Planning may recommend "areas of critical state concern" to the Administration Commission. Local governments with jurisdiction over an area of critical state concern must formulate and administer development regulations. If the local government fails to act, the State may implement regulations. This act also empowers the State to adopt guidelines for

determining whether land developments are "developments of regional impact." When plans are made to build, modify, or expand facilities in these developments, the development is subject to public hearings and the submission of impact statements.

This act also created:

- 1) Environmental Land Management Study Committee (as a temporary advisory body to Division of St. Planning),  
to:
  - a. study all facets of land management
  - b. recommend additional legislation
- 2) Land and Water Adjudicatory Commission to act on appeals in matters relevant to both Areas of Critical State Concern and Developments of Regional Impact.
- 3) Louisiana

The exploitation of non-renewable mineral resources and the neglect of renewable marine and estuarine resources in Louisiana have prompted the need for a coastal zone management program.

Public works projects pertaining to flood control, oil and gas production, and the development of port facilities (at New Orleans, Baton Rouge, and Lake Charles) have inhibited the flow of water through the state's wetlands, contributing to a salt water intrusion problem.

Also, levee boards, local state agencies with power to build levees and drain areas as a means of creating land for development purposes, in the process of their work have adversely affected the state's estuary regions. In addition, the wetlands have been harmed by a system of canals and waterways, allowing fresh water, which would normally mix with the brackish water of the wetlands, to flow out of these areas through the channels.

The responsibilities for management of the coastal region primarily lie with three agencies: Louisiana Wildlife and Fisheries Commission, Louisiana Department of Conservation, and the Department of Public Works. The Wildlife and Fisheries Commission has authority over most resource development and use in the coastal region (excluding mineral development and major water resources development). The Commission regulates shellfish harvesting, canal and waterway dredging, sport hunting and fishing, refuges and preserve management, water pollution abatement, and oil and gas exploration.

The Department of Conservation regulates oil and gas production and the extraction of other minerals. The Department of Public Works manages navigation, flood protection, and water resource programs in the state. Its activities

include construction of dams and reservoirs as well as water diversion projects for navigation and water supply, digging canals and harbors, providing flood control assistance to local levee boards, and technical assistance to local governments.

In the middle and western parishes (but not the eastern parishes) the Louisiana Coastal Commission carries on activities related to: 1) the construction and operation of the Intracoastal Seaway and other canals, levees, locks, etc. to improve navigation; 2) increasing the fresh water supply; 3) preventing salt water intrusion; 4) promoting flood control; and 5) abatement of water pollution.

The State Planning Office is in the process of preparing a coastal zone management plan. Until the completion of this management plan and designation by the legislature of an agency responsible for such jurisdiction, land use regulation in Louisiana is accomplished essentially through zoning. The ten coastal zone parishes vested with authority to enforce parish-wide zoning ordinances are Ascension, Calcasieu, East Baton Rouge, Jefferson, St. Bernard, St. Charles, St. John, St. Tammany, Tangipahoa, and West Baton Rouge.

In December 1970, Louisiana State University established the Center for Wetland Resources to coordinate the University's activities in this field and promote research into the land management techniques for the state's wetlands. The Center brought together three formerly separate entities: Coastal Studies Institute, Office of Sea Grant Development, and the Department of Marine Sciences.

The Coastal Studies Institute has conducted coastal research throughout the world and particularly in the Louisiana wetlands and delta region. Current projects include studies of vegetation and fauna distributions, hydrography, sedimentology, interactions of physical, chemical, and biological marshlands processes, water turbidity, and application of remote sensing techniques in coastal research.

The Office of Sea Grant Development oversees the University's Sea Grant Program. This office also supplies information pertaining to social, economic, and legal factors involved in coastal zone management. The office is compiling a comprehensive list of laws pertaining to the coastal zone for all coastal states. In addition, other studies address such topics as: 1) the legal, political, and financial implication of diverting water from the Mississippi River into adjoining salt water areas to create new estuarine areas; 2) the development of a system whereby ecological considerations could be included in the decision-making of local levee boards; 3) the development of less intrusive methods of oil extraction of marsh areas; 4) the study of various maricultural techniques; and 5) a survey of the state's port needs. (Bradley, 1972)

The Louisiana Legislature by Senate Concurrent Resolution No. 84 in 1970 created the Joint Legislative Committee on Environmental Quality. Based on recommendations of the Joint Legislative Committee, HB 118 (Act 35-1971) was passed establishing the Coastal and Marine Resources Commission.

The Commission was established to propose guidelines for a coastal zone management plan and recommend an existing, permanent state agency as most appropriate to implement the plan. As set forth in the original legislation, the Commission ceased to exist effective September 15, 1973. Although not a comprehensive plan, the Commission report did cover many broad issues related to a coastal zone management plan for Louisiana. The Governor's Office has directed the State Planning Office to utilize a variation of the proposed guidelines in the development by 1974 of a coastal zone management plan.

#### 4. Mississippi

Three major recent legislative actions were designed to promote coastal zone management in Mississippi. The Mississippi Marine Resources Council was created (Act 2034-1970) to coordinate plans to insure the efficient, effective, and economic development of the marine resources of the state through the development of a coastal zone management plan. The Coastal Wetlands Protection Act (H. B. 140-1973) further expanded the Marine Resources Council by designating the Council as the regulatory agency for activities conducted on State-owned public wetlands.

The Mississippi Marine Resources Council coordinates its activities with several other agencies. Mississippi's sea grant research programs, administered by the Universities Marine Center, are oriented toward suggesting solutions to marine problems. Work done at the Gulf Coast Research Laboratory, an arm of Mississippi's institutions of higher learning, provides a data base for coastal zone management.

Other state agencies involved in coastal zone management in Mississippi include: the Marine Conservation Commission (regulates commercial fishing); the State Port Authority; the State Oil and Gas Board; and the State Mineral Lease Commission.

After hurricane Camille in August, 1969, the State Legislature (Act 517-1971) established a Gulf Regional District to encourage:

the voluntary association of local communities and political entities of the state within a region, and to aid as a unified coordinating unit structured to solve common area-wide problems... (Bradley, 1972)

In response to local appeals, the legislature provided for continuation of the district as a permanent organization to provide a regional basis for undertaking rehabilitation efforts from such disasters and general comprehensive planning for the state's coastal areas. The Gulf Regional District would have become permanent if three cities and/or counties had joined the District prior to February 1, 1972. Since three local governments failed to join, there is some question as to whether the District can be reorganized without further legislation.

The Gulf Regional Planning Commission encompassing Hancock, Harrison, Jackson, and Pearl River Counties, coordinated long-term planning in the areas of land use, transportation, recreation, water, and sewage disposal for the coastal region. The Commission published a Regional Land Use Plan in 1973.

Comprehensive plans have also been completed for the coastal cities of: Picayune, Poplarville, Waveland, Bay St. Louis, Pass Christian, Long Beach, and Ocean Springs. In addition, the cities of Gulfport and Biloxi are in the process of preparing land use plans. The Hancock and Harrison county governments have adopted sub-division regulations and are considering county zoning proposals. A zoning ordinance adopted by Harrison County in 1968 will likely be superceded by a new ordinance. Jackson County has adopted both county-wide zoning and subdivisions.

The Mississippi Marine Resources Council has received from a contractor a draft coastal zone management program. This proposal includes an inventory of resources, a study of coastal zone users, and objectives for future planning and development. The Council is currently in the process of reviewing and evaluating this proposal. A three-year planning program has already been developed.

## 5. Texas

The State of Texas has taken initial steps toward developing a comprehensive coastal resources management program. Principal responsibility for planning is being shared by the Texas Council on Marine-Related Affairs and the Interagency Natural Resources Council, Division of Planning Coordination, in the Governor's office.

The Governor's office has prepared a conceptual report, The Management of Bay and Estuarine Systems Phase I & II, identifying guidelines for a model to be developed later. This report will list activities affecting Texas bays and estuaries. The Governor's staff has also completed technical reports in the areas of waste management, air pollution, transportation, and economic considerations. At present, several state agencies carry out traditional line functions which include water pollution control programs, fish and game management, and permit issuance for oil and gas explorations. The last legislature gave the General Land Office responsibility for state-owned land and designated the Land Office as lead agency to coordinate with NOAA and the Office of Coastal Environment.

The Texas Open Beaches Bill, 1959 recognizes public ownership of beach areas up to the vegetation line and guarantees to the public:

free and unrestricted right to ingress and egress to and from the state owned beaches bordering on the seaward shore of the Gulf of Mexico...

The Public Beaches Bill provides for the state to bring suit upon the occurrence of any obstruction of public access to beaches or prescription areas (state title as established by common law on use). The cost of removal of the obstruction is to be borne by the responsible party or parties. Also, the respective county commissioners courts are authorized to control motor vehicle traffic and littering on the beaches.

The Public Beaches Bill was tested in 1964 in the case of Seaway Co. vs Attorney General. The court's decision favored the state's position but was based mostly on public use of the beach as a roadway rather than on the general prescription of the use of upland beaches.

The state legislature by Act 417-1967 reorganized the planning operations of the state and created a series of Inter-Agency Planning Councils to coordinate the efforts of the state government.

By Senate Concurrent Resolution No. 39, 1969 the Natural Resources Inter-Agency Council was mandated to undertake "a comprehensive study of the state's submerged lands, beaches, islands, estuaries, or estuarine areas including but not limited to coastal marsh lands, bays, sounds, seaward areas, and lagoons." (Bradley, 1972)

In 1969, the Texas Legislature created a committee to study the feasibility of establishing an Institute of Oceanography. This committee recommended that the question of an Institute of Oceanography be deferred and current efforts directed toward developing mechanisms for coping with more pressing problems of coastal and marine management. The committee recommended the establishment of a Texas Council on Marine-Related Affairs as a continuing source of expertise on marine and coastal matters. The Council was established by Act 279 of the Texas Legislature in May, 1971. Functions assigned to the Council include:

- a. holding public hearings
- b. establishing liaison with appropriate federal agencies
- c. accepting funds from various sources
- d. holding quarterly or more frequent meetings

Another significant act in Texas is the moratorium on the sale or leasing of any of the state-owned submerged lands, beaches, and islands (Texas Legislature, 1969). The purpose of the moratorium is to protect the coastal resources of the state from exploitation during the completion of the Council's study. Although there have been exceptions to this moratorium, the amount of land and significance of these exceptions is not known.

### C. ARCHAEOLOGICAL AND HISTORICAL SITES

The Gulf of Mexico coastal area, including the barrier beaches, contains numerous sites of archaeological and historical significance. Within the limits of available funding and qualified personnel, most Gulf Coast archaeo-

logical survey efforts have been directed to areas threatened with destruction by inundation or development. Indeed, much further research is required in the coastal area. It should be noted that any identification of archaeological sites rapidly becomes incomplete and obsolete because ongoing research and excavation activities are constantly uncovering new sites.

Only major archaeological sites or areas of numerous sites are identified on Figure IV-3. Historical sites are also identified on Figure IV-3 with numbers corresponding to the sites listed in Table IV-8. Table IV-9 lists unmapped pre-Civil War landmarks in East Baton Rouge, Iberville, Livingston, West Baton Rouge, and Ascension Parishes.

Table IV-1 Total and urban land area of the coastal region.

Coastal Region by State	Total Area (sq. mi.)	Urban Area (sq. mi.)	% Urban Area	Total Population	Urban Population	% Urban Population
Alabama	3,212.4	184.6	5.7	376,690	271,216	72.0
Florida	19,656.9	635.8	3.2	2,075,935	1,367,922	65.9
Louisiana	15,695.0	494.2	3.1	2,238,033	1,549,823	69.2
Mississippi	1,801.7	101.1	5.6	239,944	178,735	74.5
Texas	22,770.6	1,192.4	5.2	2,990,639	2,445,589	81.8
TOTALS	63,136.6	2,608.1	4.1	7,921,241	5,813,285	73.4

Table IV-2  
Alabama Land Use Distribution By County and Coastal Region, 1968.

Classification	Mobile Cty		Baldwin Cty		Coastal Region	
	Acres	%	Acres	%	Acres	%
Total Area	987,202	100	1,068,755	100	2,055,957	100
Residential	57,242	5.8	9,212	.9	66,454	3.2
Commercial	2,423	.2	569	2.1	2,992	.2
Industrial	3,164	.3	444	2.1	3,608	.2
Public & Semi-Public	9,720	1.0	10,342	.9	20,062	1.0
Roads	15,274	1.6	17,071	1.6	32,345	1.6
Recreation and Open Space	3,037	.3	6,563	.6	9,600	.5
Resource Production	131,184	13.3	724,629	67.8	855,813	41.6
Vacant	562,188	56.9	255,149	23.9	817,337	39.7
Water	202,970	20.6	44,776	4.2	247,746	12.0

Table IV-3 Florida Land Use Distribution, 1967.\*

County	Total Acres	Non-Inventoried Acres				Inventoried Acres					
		Total	Federal New Cropland	Urban Built- Up	Small Water Areas	Total	Crop- Land	Pasture	Range	Forest	Other
Bay	481,920	57,998	30,000	26,000	1,998	423,922	4,823	5,394	0	399,000	14,705
Charlotte	451,200	47,916	246	44,730	2,940	403,284	18,206	33,586	37,932	279,300	34,260
Citrus	364,800	25,017	10,984	10,500	3,533	339,783	14,150	33,762	31,542	233,300	27,029
Collier	1,300,480	54,731	28,064	26,374	293	1,245,749	70,174	30,000	195,132	886,436	64,007
DeSoto	414,720	3,902	12	3,405	485	410,818	34,569	54,296	152,153	168,800	1,000
Dixie	440,320	7,960	74	4,021	3,865	432,360	7,735	6,672	20,354	395,600	1,999
Escambia	420,480	64,793	9,750	54,648	395	355,687	51,480	5,106	0	289,291	9,810
Franklin	348,160	31,458	21,828	7,517	2,113	316,702	80	350	4,000	290,700	21,572
Gulf	356,480	10,762	962	6,460	3,340	342,913	1,786	1,500	4,100	329,000	9,332
Hernando	312,320	22,948	11,003	7,800	4,145	289,372	17,796	37,295	15,794	209,000	9,487
Hillsborough	665,600	82,439	5,982	68,226	8,231	583,161	101,307	110,579	35,788	288,400	47,087
Holmes	309,120	7,017	109	5,714	1,194	302,103	67,945	38,660	0	190,800	4,698
Jefferson	382,720	16,293	8,183	5,598	2,512	366,427	88,784	25,000	0	248,700	3,943
Lee	503,040	52,396	2,542	43,646	6,208	450,644	51,732	35,103	15,030	303,300	45,479
Levy	705,920	9,450	0	1,605	7,845	696,470	68,125	72,090	16,082	528,300	11,873
Manatee	448,640	45,931	67	38,360	7,504	402,709	31,311	50,430	13,879	286,000	21,089
Monroe	636,160	389,701	355,399	32,302	2,000	246,459	0	0	0	127,643	118,816
Okaloosa	604,160	257,360	246,068	7,816	3,476	346,800	36,058	10,242	0	295,000	5,500
Pasco	480,640	14,864	0	6,500	8,364	465,776	58,174	62,439	70,290	264,900	9,973
Pinellas	168,960	71,600	570	69,229	1,801	97,360	10,890	5,797	4,500	59,400	16,773
Santa Rosa	655,360	80,479	70,080	9,200	1,199	574,881	65,952	6,943	0	492,875	9,111
Sarasota	375,040	47,383	49	46,430	904	327,657	5,400	40,199	25,076	227,300	29,682
Taylor	660,480	14,328	1,201	7,869	5,258	646,152	13,900	22,000	0	589,300	20,952
Wakulla	392,960	228,755	221,918	5,013	1,824	164,205	30,788	10,000	0	103,182	20,235
Walton	668,770	172,425	151,446	19,479	1,500	496,345	43,718	17,256	0	419,454	15,917
Florida Coastal Region	12,548,450	1,817,906	1,176,537	558,442	82,927	10,730,544	894,883	714,699	641,652	7,904,981	574,329

\*Source: Conservation Needs Inventory, Florida Department of Agriculture and Consumer Services, 1967.

Table IV-4. Louisiana land use distribution by parish and coastal region in acres, 1968.

Parish	Total area	Water areas	Marsh-land	Forest land	Agricul-tural land	Urban land	Transpor-tation land	Unaccounted area
Ascension	197,120	7,120	1,740	103,700	70,057	1,920	3,546	9,037
Assumption	243,200	21,820	463	143,000	61,267	580	2,736	13,334
Calcasieu	714,880	12,418	68,164	244,200	418,436	30,690	16,800	(75,828)
Cameron	1,087,360	194,101	739,474	-	269,492	180	2,332	(118,219)
East Baton Rouge	302,080	8,800	296	130,900	104,661	31,600	8,004	17,819
Iberia	414,080	49,050	115,164	115,000	129,618	5,210	4,805	(4,767)
Iberville	411,520	17,378	616	280,800	85,694	2,680	3,342	21,010
Jefferson	382,720	136,960	157,237	-	7,379	24,030	2,838	54,276
Lafayette	181,120	833	-	14,100	123,575	8,970	5,372	28,270
Lafourche	865,920	168,239	390,742	156,000	179,339	3,320	3,884	(35,604)
Livingston	443,520	21,920	1,306	358,400	34,034	2,780	5,783	19,297
Orleans	232,320	112,460	59,930	-	1,055	37,995	30,941	(10,061)
Plughemines	895,360	322,788	494,101	-	53,658	4,515	2,321	17,977
St. Bernard	517,120	220,915	275,499	-	11,838	3,065	609	5,194
St. Charles	269,440	84,870	79,348	68,800	39,486	5,140	2,542	(10,746)
St. James	165,760	7,216	951	85,500	53,138	2,390	1,717	14,848
St. John the Baptist	250,240	109,015	9,332	93,800	21,810	3,840	1,678	10,765

(contd)

Table IV-4. (Cont'd.)

Parish	Total area	Water areas	Marsh-land	Forest land	Agricultural land	Urban land	Transportation land	Unaccounted area
St. Martin	514,560	60,857	3,102	310,000	94,887	1,800	4,282	39,632
St. Mary	453,760	87,147	172,308	143,000	107,276	5,440	3,549	(64,960)
St. Tammy	758,240	193,120	47,196	404,700	57,384	11,120	9,128	35,592
Tangipahoa	531,200	24,980	3,602	345,600	112,952	5,660	10,021	28,385
Terrebonne	1,144,320	314,883	621,118	122,400	73,183	5,730	5,027	1,979
West Baton Rouge	135,680	8,322	-	69,300	40,043	1,660	2,220	14,135
Vermillion	844,800	79,927	402,807	31,600	372,439	3,520	8,214	(53,707)
Totals	11,956,320	2,265,139	3,644,496	3,220,800	2,522,701	203,835	141,691	(42,342)

Source: Louisiana State Plan; Dept. of Public Works 1968.

Table IV-5. Louisiana land use distribution for selected parishes, 1972.

Use category	Parish					
	Ascension Acres	East Baton Rouge Acres	Iberville Acres	Livingston Acres	Tangipahea Acres	West Baton Rouge Acres
Total area	197,632	302,147	408,971	440,920	517,936	133,760
Residential	2,096	21,156	1,783	2,377	4,140	988
Commercial	194	2,199	112	110	304	88
Industrial	9,809	6,046	10,964	2,200	2,395	1,824
Public & Quasi-Public	556	6,732	686	384	1,553	131
Parks and Recreation	215	2,150	88	177	467	180
Transportation, communications and utilities	4,515	14,593	3,886	7,420	13,566	2,870
Agriculture	68,013	103,025	91,151	52,973	155,907	38,383
Wet lands	42,214	6,579	164,224	65,766	66,637	4,045
Vacant & wooded	59,780	130,867	111,757	283,913	235,207	76,929
Water area	10,240	8,800	24,320	25,600	37,760	8,322

Source: Calcasieu Regional Planning Commission Land Use Study No. 5:  
Existing Land Use, March 1972.

**Table IV-6. Mississippi land use distribution by county and coastal region, 1972.**

Classification	Hancock Cty		Harrison Cty		Jackson Cty		Coastal Region	
	Acres	%	Acres	%	Acres	%	Acres	%
Total Area	307,912	100	379,342	100	465,887	100	1,153,141	100
Residential	3,866	1.2	14,230	3.8	11,403	2.4	29,499	2.6
Commercial	232	.1	1,434	.4	939	.2	2,605	.2
Industrial	4,493	1.4	2,399	.6	5,182	1.1	12,074	1.0
Public & Semi-Public	1,480	.5	5,367	1.4	6,401	1.4	13,248	1.2
Right of Way* (Streets & Roads)	6,836	2.2	10,193	2.7	10,407	2.2	27,436	2.4
Resource Production*	59,018	19.2	187,449	49.4	178,230	38.3	424,697	36.8
Federal and/or Military	109,821	35.7	2,802	.7	0	0.0	112,623	9.8
Water & Unclassified*	122,166	39.7	155,468	41.0	253,325	54.4	530,959	46.0

\*Components Available

Source: Regional Land Use Plan for Hancock, Harrison, Pearl River and Jackson counties, Mississippi 1973. Gulf Regional Planning Commission

Table IV-7a Texas land use distribution by county and coastal region in square miles, 1970.\*

Use*	Totals	Aransas	Brazoria	Calhoun	Cameron	Chambers	Galveston	Harris	Jackson	Jefferson
Total Area	22,770.6	626.5	1,764.4	1,278.1	1,487.6	910.0	1,265.0	1,718.8	835.5	1,386.8
Inventoried Area	16,128.0	464.0	1,520.0	960.0	1,200.0	896.0	696.0	544.0	576.0	1,024.0
Total Land Area	13,818.0	281.0	1,443.0	536.0	1,082.0	625.0	431.0	522.0	572.0	946.0
Total Water	2,310.0	183.0	77.0	424.0	118.0	271.0	265.0	22.0	4.0	78.0
<u>Land Areas*</u>										
Agriculture	5,117.0	21.0	620.0	117.0	704.0	345.0	246.0	285.0	250.0	442.0
Range-Ranch	4,425.0	132.0	84.0	262.0	132.0	51.0	40.0	---	257.0	24.0
Woodland-Timber	1,609.0	---	502.0	42.0	---	70.0	16.0	56.0	42.0	81.0
Marsh-Swamp	762.7	22.0	56.0	75.0	0.1	101.0	55.0	16.0	13.0	220.0
Urban Industrial-Residential	969.7	10.0	128.0	18.0	7.1	37.0	58.0	160.0	10.0	168.0
Recreational	23.3	1.2	1.8	2.3	1.7	0.1	3.2	---	---	2.0
Subaerial Spoil	84.7	1.6	4.8	8.0	8.2	2.5	8.3	4.8	---	1.3
Made Land	33.8	---	3.2	---	---	---	3.9	---	---	6.1
Wildlife Refuge	213.4	77.0	43.0	4.0	69.0	18.0	---	---	---	---
Barren Land	579.4	16.0	---	8.0	96.0	---	1.0	---	---	1.6

Table IV-7a (Cont'd.)

Use *	Kenedy	Kleberg	Matagorda	Nueces	Orange	Refugio	San Patricio	Victoria	Willacy
Total Area	2,192.6	1,200.2	2,010.3	1,281.8	377.4	809.0	750.4	922.2	883.2
Inventoried Area	1,824.0	960.0	1,408.0	1,024.0	392.0	832.0	600.0	440.0	768.0
Total Land Area	1,757.0	812.0	1,157.0	739.0	378.0	792.0	590.0	438.0	717.0
Total Water Area	67.0	148.0	251.0	285.0	14.0	40.0	10.0	2.0	51.0
<u>Land Areas *</u>									
Agriculture	---	32.0	593.0	450.0	77.0	117.0	363.0	119.0	336.0
Range-Ranch	1,186.0	704.0	180.0	86.0	---	640.0	166.0	240.0	241.0
Woodland-Timber	245.0	24.0	245.0	22.0	159.0	11.2	12.8	73.0	8.0
Marsh-Swamp	---	2.4	87.0	14.4	71.0	68.0	19.0	3.2	0.8
Urban Industrial-Residential	0.5	12.0	37.0	138.0	69.0	15.0	28.0	3.2	7.0
Recreational	3.3	1.4	3.6	1.9	---	---	---	---	0.8
Subaerial Spoil	18.0	4.8	11.0	8.0	16.0	---	---	---	1.8
Made Land	---	---	---	19.0	---	---	1.6	---	---
Wildlife Refuge	---	---	---	---	---	1.6	---	---	0.8
Barren Land	304.0	31.0	0.8	---	---	---	---	---	121.0

Source: Land-Use Patterns in the Texas Coastal Zone, 1970; prepared by: Bureau of Economic Geology, The University of Texas at Austin.

\*County Areas in square miles for barrier beaches

†Square miles.

Table IV-7b. Land ownership in the Texas Coastal Region.

COUNTY (Texas Coastal Region)	Total acres	Total submerged acres	Total upland acres	OWNERSHIP									
				FEDERAL		PRIVATE		STATE				LOCAL GOVERNMENTS	
				Acres	%	Acres	%	Submerged acres	Upland acres	Total acres	%	Acres	%
Aransas	400,939	236,960	163,979	54,523	13.6	106,763	26.6	235,337	1,548	236,885	27.7	2,768	.7
Brazoria	1,129,220	223,837	905,383	21,311	1.9	830,042	73.5	223,837	48,514	272,351	24.1	5,515	.5
Calhoun	817,981	494,599	323,382	19,900	2.4	299,312	36.6	444,214	3,264	447,478	54.7	51,291	6.3
Cameron	952,084	335,822	616,262	45,690	4.8	520,652	54.7	326,753	9,781	336,534	35.4	49,208	5.2
Chambers	582,385	167,383	415,002	24,605	4.2	340,009	58.4	130,221	6,725	136,946	23.5	80,825	13.9
Galveston	809,621	554,643	254,978	2,458	.3	240,192	29.7	553,988	6,168	560,156	69.2	6,815	.8
Harris	1,100,045	3,799	1,096,246	30,126	2.7	1,026,962	93.4	---	13,060	13,060	1.2	29,897	2.7
Jackson	534,695	7,904	526,791	---	.0	518,657	97.0	6,821	15,804	12,625	2.4	3,413	.6
Jefferson	887,548	277,569	609,979	1,165	.1	587,761	66.2	266,245	14,836	281,081	31.7	17,541	2.0
Kenedy	1,403,269	464,084	939,185	93,646	6.7	868,398	61.9	440,438	758	441,196	31.4	29	< .1
Kleberg	768,114	226,078	542,036	35,183	4.6	509,322	66.3	218,013	3,451	221,464	28.8	2,145	.3
Matagorda	1,286,622	571,438	715,184	75	< .1	707,978	55.0	564,820	7,098	571,918	44.5	6,651	.5
Nueces	820,340	289,665	530,675	3,054	.4	513,845	62.6	267,875	6,138	274,013	33.4	29,428	3.6
Orange	241,513	1,855	239,658	---	.0	234,193	96.9	1,852	4,182	6,034	2.5	1,286	.5
Refugio	517,762	16,800	500,962	240	< .1	495,219	95.6	16,800	4,680	21,480	4.2	823	.2
San Patricio	480,238	66	480,172	---	.0	456,811	95.1	66	19,826	19,892	4.1	3,535	.7
Victoria	590,176	---	590,176	4	< .1	578,818	98.1	---	5,330	5,330	.9	6,024	1.0
Wharton	685,339	---	685,339	---	.0	672,074	98.1	---	8,571	8,571	1.3	4,694	.7
Willacy	565,255	166,372	398,883	7,278	1.3	388,246	68.7	161,242	2,797	164,039	29.0	5,692	1.0
TOTAL:	14,573,146	4,038,874	10,534,272	339,258	2.3	9,895,254	67.9	3,858,522	172,531	4,031,053	27.7	307,581	2.1

Table IV-8. Archaeological and historic sites in the Gulf Coast region

<u>Site (Map Number)</u>	<u>Location</u>
TEXAS:	
Mathias, Thomas H. House, 1867 (9)	Aransas County 612 Church Street Rockport, Texas
Fort Brown, 1848 (1)	Cameron County Brownsville, Texas
Resaca De La Palma Battlefield, 1846 (2)	Cameron County Brownsville, Texas
Palo Alto Battlefield, 1846 (3)	Cameron County Junction Farm Roads 1847 & 511, 6.3 mi. north of Brownsville
Shipwreck Area* (4)	Cameron County
Supposed Site Black Cloud Steamboat* (26)	Chambers County
Spanish Presidio San Agustin du Ahumada* (25)	Chambers County
Ashbel Smith Building, Old Red, 1891 (16)	Galveston County 912-914 Avenue B Galveston, Texas
Ashton Villa (El Mina Shrine Temple), 1858 (17)	Galveston County 2328 Broadway St. Galveston, Texas
Bishop's Palace (Gresham House), 1887 (18)	Galveston County 1402 Avenue J (Broadway) Galveston, Texas
Sealy, George, House, 1887 (19)	Galveston County 2424 Broadway Galveston, Texas
The Strand Historic District, 1850-1900 (20)	Galveston County Bounderies Avenue A, 20th Street, alley between Avenue C & D, and railroad passenger depot Galveston, Texas

\* Non-registered

Table IV-8. (contd)

<u>Site (Map Number)</u>	<u>Location</u>
TEXAS (contd):	
U. S. Customhouse (Old Galveston Customhouse), 1858 (21)	Galveston County Southeast corner 20th and Post Office (Ave. E) Streets Galveston, Texas
Shipwreck Area, includes entire Galveston Bay* (22)	Galveston County
Houston Cotton Exchange Building, 1884 (23)	Harris County 202 Travis Street Houston, Texas
San Jacinto Battlefield, 1836 (24)	Harris County 22 mi. east of Houston, Texas, on 134.
"Camp Independence"* (11)	Jackson County
Old townsite of Texana* (13)	Jackson County
Historic Brick House* (14)	Jackson County
Historic Brick Factory* (12)	Jackson County
French Home Trading Post, 1845 (27)	Jefferson County 2995 French Road Beaumont, Texas
McFaddin House Complex, 1906 (28)	Jefferson County 1906 McFaddin Beaumont, Texas
Lucas Gusher, Spindletop Oil Field, 1901 (29)	Jefferson County 3 mi. south of Beaumont on Spindleton Avenue
Shipwreck Area* (5)	Kenedy County
King Ranch, 1852 (7)	Kenedy, Kleberg, Nueces, & Willary Counties in and around Kingsville
Shipwreck Area* (6)	Kleberg County

Table IV-8. (contd)

<u>Site (Map Number)</u>	<u>Location</u>
TEXAS (contd):	
Shipwreck Area includes entire Matagorda Bay and Island area* (15)	Matagorda County
Shipwreck Area* (8)	San Patricio County
Fort St. Louis Site, 1865 (10)	Victoria County about 13 mi. south of Inez in Garcitas Creek
LOUISIANA:	
The Cubildo, 1795 (36)	Orleans Parish Jackson Square, Chartres & St. Peter Streets New Orleans
Cable, George Washington House, 1874 (37)	Orleans Parish 1313 - 8th Street New Orleans
The Garden District, 19th & 20th Centuries (38)	Orleans Parish Boundaries: Carondelet Street, Josephine Street, Magazine Street and Louisiana Avenue New Orleans
Girod, Nicholas, House (Mayor Girod House), 1797 Service Wing, 1814 Main House (39)	Orleans Parish 500 Chartres Street New Orleans
Jackson Square (Place D'Armes), 18th, 19th, and 20th Centuries (40)	Orleans Parish Boundaries: Decatur, St. Peter, St. Ann & Chartres Streets New Orleans
Lafitte's Blacksmith Shop, late 18th Century (41)	Orleans Parish 941 Bourbon Street New Orleans
Madame John's Legacy, 1722-1728, 1788 (rebuilt) (42)	Orleans Parish 632 Dumaine Street New Orleans

Table IV-8. (contd)

<u>Site</u> (Map Number)	<u>Location</u>
LOUISIANA (contd):	
Old Ursuline Convent, 1748-1752 (43)	Orleans Parish 1114 Chartres Street New Orleans
Fort Macomb* (49)	Orleans Parish
Fort Leon* (50)	Orleans Parish
Spanish Fort* (46)	Orleans Parish
Vieux Carré Forts* (47)	Orleans Parish
Fort Balize* (57)	Orleans Parish
Fort Baton Rouge* (33)	East Baton Rouge Parish
Fort Bute* (34)	East Baton Rouge Parish
Battery Bienvenue* (51)	St. Bernard Parish
Fort Beauregard* (52)	St. Bernard Parish
The Presbytierre, 1791-1813 (44)	Orleans Parish 713 Chartres Street New Orleans
Vieux Carré Historic District, 18th & 19th Centuries (45)	Orleans Parish Boundaries: Mississippi River, Rampart Street, Canal Street & Esplanade Avenue
Fort De La Boulaye Site, 1700 (54)	Plaquemine Parish Near Phoenix on Mississippi River, near La. 50
Fort Jackson, 1822 (55)	Plaquemine Parish 2.5 mi. southeast of Triumph City on La. 23; west bank of Mississippi River
Fort St. Phillip, 1795 (56)	Plaquemine Parish 2.5 mi. southeast of Triumph Ci on La. 23; east bank of Missi sippi River

Table IV-8. (contd)

<u>Site (Map Number)</u>	<u>Location</u>
LOUISIANA (contd):	
Fort Livingston* (58)	Plaquemine Parish 6 mi. south of New Orleans
Chalmette National Historical Park, 1815, (Battle of New Orleans, Jan. 1815, between American & British troops) (48)	St. Bernard Parish
Homeplace Plantation House, 1801 (35)	St. Charles Parish 5 mi. south of Hahnville Post Office on La. 18
Battle of Irish Bend, Apr. 14, 1863 (31)	St. Mary Parish
Shadows-on-the-teche, 1831-1834 (32)	St. Martin Parish New Theria vicinity
Battlesize Sabine Pass, 1863* (30)	Cameron Parish
Fort Pike (53)	St. Tammany Parish
ALABAMA:	
Fort Morgan, 1833-1834 (69)	Baldwin County Gasque vicinity Western terminus of Ala. 18'
Barton Academy, 1836 (61)	Mobile County 504 Government Street Mibile
Bishop Portier Home, 19th Century (62)	Mobile County 307 Conti Street Mobile
Fort Condé - Charlotte, 1717 (63)	Mobile County Church & Royal Streets Mobile
Horst, Martin, House, 1867-1868 (64)	Mobile County 407 Conti Street
Mobile City Hall, mid-19th Century (65)	Mobile County 111 South Royal Street Mobile

Table IV-8. (contd)

<u>Site (Map Number)</u>	<u>Location</u>
ALABAMA (contd):	
Mobile City Hospital (old City Hospital), 1830 (66)	Mobile County 900-950 St. Anthony Street Mobile
Oak Leigh, 1831-1832 (67)	Mobile County 350 Oakleigh Street Mobile
Semmes, Raphael, House, 19th Century (68)	Mobile County 804 Government Street Mobile
MISSISSIPPI:	
Fort Massachusetts, c. 1859-1863 (59)	Harrison County South of Gulfport on Ship Island
Old Spanish Fort* (60)	Jackson County
FLORIDA:	
Fort San Carlos De Barrancas, 1787 (70)	Escambia County U. S. Naval Air Station Pensacola
Lavalle House, early 19th Century (71)	Escambia County 203 East Church Street Pensacola
Pensacola Historic District, 18th & 19th Centuries (72)	Escambia County Boundaries: Chase Street, 9th Avenue, Pensacola Bay, and Pala Lox Pensacola
Plaza Ferdinand VII, 1821 (73)	Escambia County Pala Lox Street between Government & Zaragossa St.
De Soto National Memorial, 1539-1543 (79)	Manatee County 5 mi. west of Bradenton Bradenton vicinity

Table IV-8. (contd)

<u>Site (Map Number)</u>	<u>Location</u>
FLORIDA (contd):	
Gamble, Robert, House (Judah P. Benjamin Memorial), 1845-1850 (78)	Manatee County on U. S. 301 Ellenton
Madira Bickel Mound, pre-Columbian (79)	Manatee County off U. S. 19 Tena Ceia Island
Fort Jefferson National Monument, 1846 (84)	Monroe County 68 mi. west of Key West in the Gulf of Mexico Dry Tortugas Islands
The Armory, 1901 (80)	Monroe County 600 White Street Key West
Fort Zachary Taylor, 1844-1846 (81)	Monroe County U. S. Naval Station Key West
Hemingway, Ernest, House, 1931-1940 (82)	Monroe County 907 Whitehead Street Key West
Key West Historic District (83)	Monroe County Boundaries are roughly: White Street on Northeast; Angela, Windsor & Passover Streets on southeast; Thomas & Whitehead Streets on southwest; & the Gulf of Mexico to the north
Fort Walton Mound, late pre-historic (74)	Okaloosa County U. S. 98 Fort Walton Beach
Safety Harbor Site, late pre-historic (76)	Pinellas County Philippe Park, 1 mi. northeast of Safety Harbor

Table IV-8. (contd)

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Site (Map Number)

Location

FLORIDA (contd):

Fort San Marcos De Apalache, 1660 (75)

Wakulla County  
18 mi. south of Tallahassee  
on U. S. 319 & Fla. 363

Table IV-9. Pre-Civil War landmarks in East Baton Rouge, Iberville, Livingston, West Baton Rouge, and Ascension Parishes, La. (unmapped)\*

Site	Date
<u>EAST BATON ROUGE PARISH</u>	
1. Prince Murat House, Magnolia Mound	1780
2. LaFayette Building	1762
3. French Settler's Cabin	1760-90
4. Mount Hope	Late 18th
5. Duplantier Home	Early 19th
6. Nunnally Home	1803
7. Old Arsenal	1820
8. Pentagon Barrachs	1819-29
9. Cottage Ruins	1824
10. Santa Maria Plantation	1835
11. Warden's House	1837-40
12. Prescott-Dougherty Home	1840
13. Hart Home	1840
14. Longwood Plantation	Mid 19th
15. Goodwood Home	1852
16. Bailey-Sutter Home	Mid 19th
17. Alva Brunfield Office	Mid 19th
18. Port Hudson Battlefield	July 1862
19. Old State Capitol	1847

(contd)

Table IV-9. (contd)

Site	Date
<u>IBERVILLE PARISH</u>	
1. Cottage	Late 18th
2. Home Place	Early 19th
3. Dunboyne Plantation	Early 1800's
4. Tallyho	Mid 19th
5. Mulberry Grove	1836
6. Camp Plantation	Mid 19th
7. Nottoway	1857
8. St. Louis	1858
9. El Dorado	Mid 19th
10. Mound	1840's
11. Live Oaks	1828
12. Shady Grove Site	1828-30
13. Trinity	1840
<u>LIVINGSTON PARISH</u>	
1. Old Courthouse	

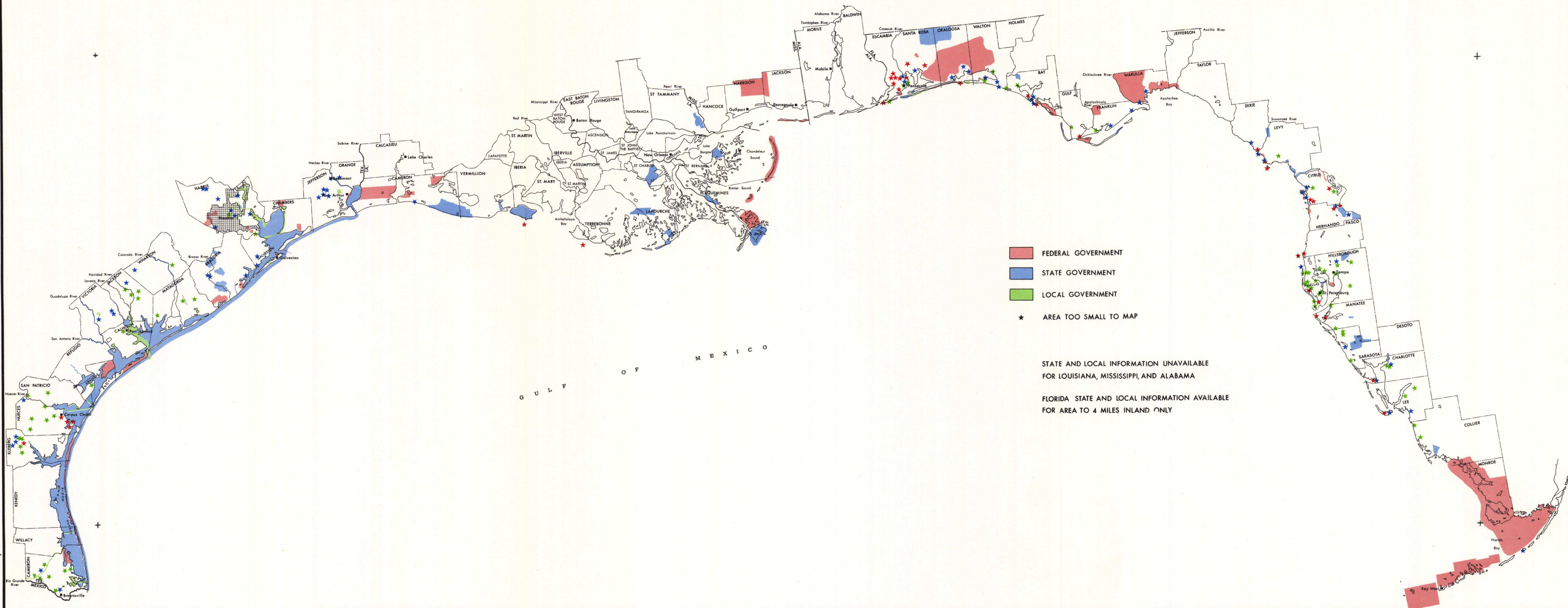
(contd)

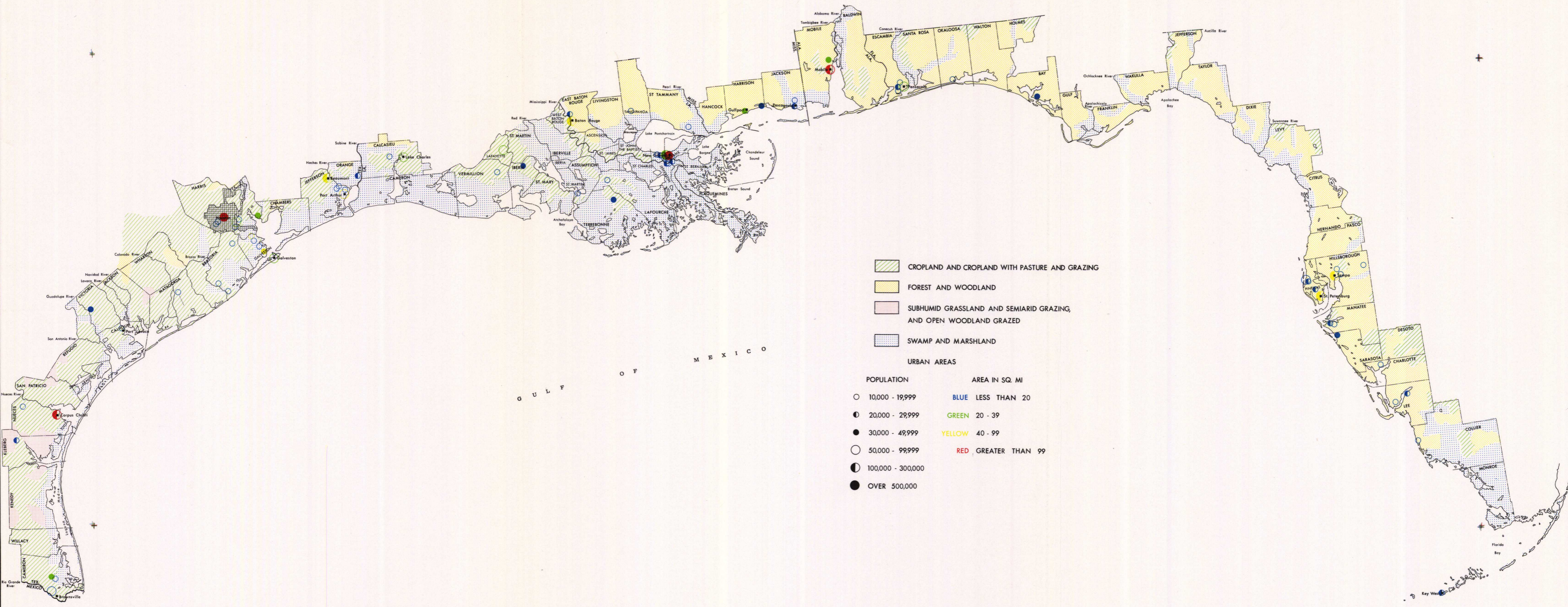
Table IV-9. (contd)

Site	Date
<u>WEST BATON ROUGE PARISH</u>	
1. Antonio	Early 19th
2. Cazenave	Mid 19th
3. Monte Vista	1850
4. Sand Bar	1850
<u>ASCENSION PARISH</u>	
1. Bocage	1801-40
2. Hermitage	1812
3. Houmas House	1840
4. Ashland-Belle Helene	1841
5. Old State Capitol	Mid 19th
6. Tezcuco	1855

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\* Source: Calcasieu Regional Planning Commission  
Major Land Use Recommendation 1968 Land Use Report #2:  
Historic Landmarks in the Capitol Region, April 1968.





- CROPLAND AND CROPLAND WITH PASTURE AND GRAZING
- FOREST AND WOODLAND
- SUBHUMID GRASSLAND AND SEMIARID GRAZING, AND OPEN WOODLAND GRAZED
- SWAMP AND MARSHLAND
- URBAN AREAS

POPULATION	AREA IN SQ. MI
○ 10,000 - 19,999	BLUE LESS THAN 20
● 20,000 - 29,999	GREEN 20 - 39
● 30,000 - 49,999	YELLOW 40 - 99
○ 50,000 - 99,999	RED GREATER THAN 99
● 100,000 - 300,000	
● OVER 500,000	



UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 GULF COAST STUDY VOLUME III - 1974

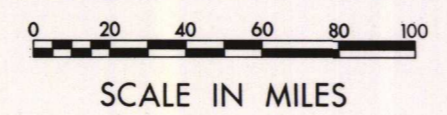
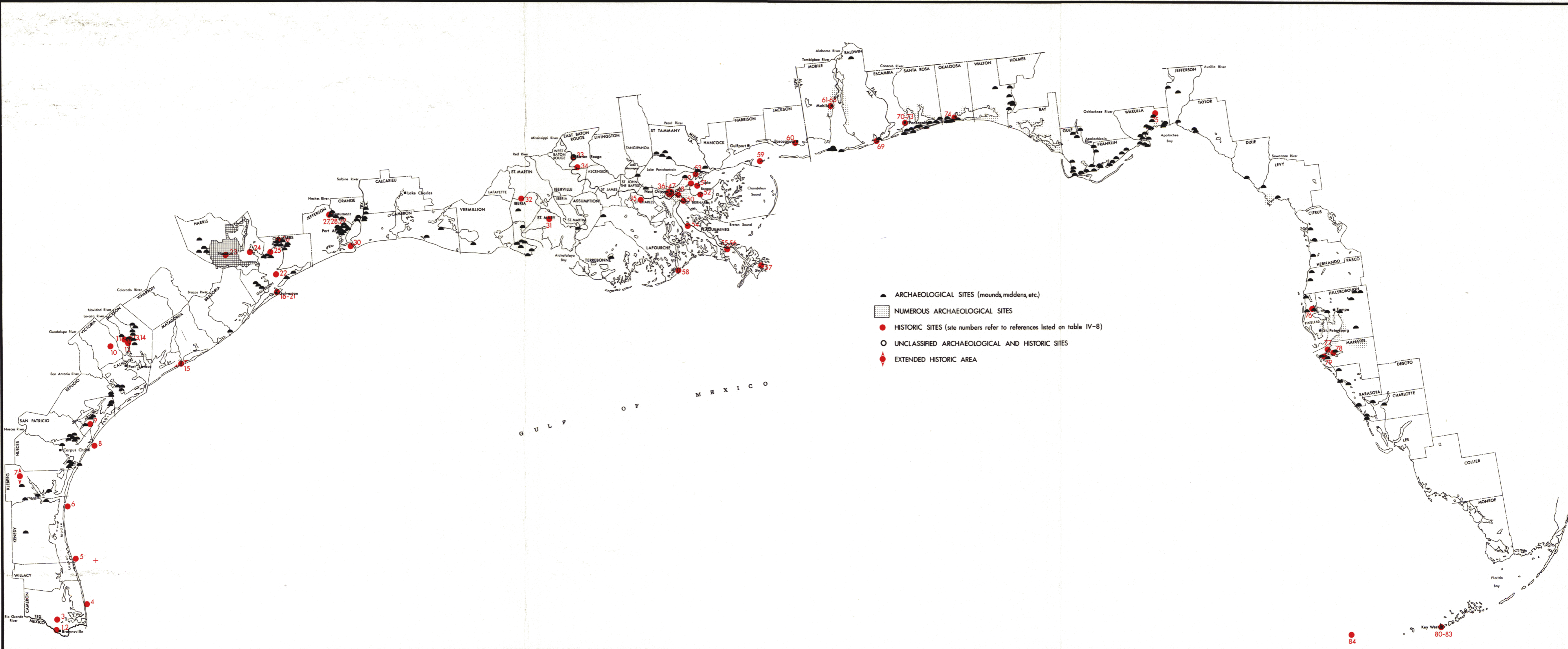


FIGURE IV-2. LAND USE  
 GULF OF MEXICO - COASTAL REGION



UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 GULF COAST STUDY VOLUME III - 1974

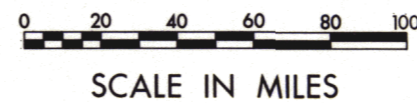


FIGURE IV-3. ARCHAEOLOGICAL AND HISTORIC SITES  
 GULF OF MEXICO - COASTAL REGION

## V. POLLUTION

The other sections in this volume discuss the concentrations of people and their activities, many of which are pollution sources. Water quality and water pollution sources in the Gulf Coast region will be discussed herein, followed by a review of the air quality of the region and the legal constraints affecting air pollution regulation.

### A. Water

Water pollution data for this report has been obtained from both federal and state sources. The federal agencies responsible for this data are the Environmental Protection Agency (EPA), formerly the Federal Water Quality Administration (FWQA), and the U. S. Army Corps of Engineers. The Corps of Engineers has authority to issue permits for industrial dischargers and dredge disposal areas for marine water bodies. Unfortunately almost all of the water quality data that has been collected by the Corps has not yet been quantified and is not available in a usable form. The EPA, now the primary federal pollution control agency, is presently issuing discharge permits to industries and municipalities and has begun to quantify the data through its Data Retrieval Program (RAPP). The two regional offices for the Gulf Coast area are Atlanta, Georgia (Region IV) serving Mississippi, Alabama and Florida; and Dallas, Texas (Region VI) serving Texas and Louisiana. However, only scant preliminary data is now available (and only from the Atlanta regional office).

At present very little data is available from state sources for Louisiana, Mississippi, and Alabama. Most of the data available from these states pertain to point sources of pollution and amount of discharge. Texas and Florida, however, have extensive data available, dealing not only with point sources and amount of discharge, but BOD (biochemical oxygen demand), TSS (total suspended solids), etc. The various agencies responsible for water pollution control in each of the states are: Alabama - Alabama Water Improvement Commission; Florida - Florida Department of Pollution Control; Louisiana - Louisiana Wildlife and Fisheries Commission, Department of Pollution Control (industrial), and the Louisiana Department of Health, Bureau of Environmental Health (municipal); Mississippi - Mississippi Air and Water Pollution Control Commission; and Texas - Texas Water Quality Board and Texas Water Development Board.

Depicted on Figure V-1 are locations of known point sources of water pollution along the Gulf Coast, including industrial and municipal dischargers. Tables V-1 through V-5 summarize water pollution data for all coastal counties of Alabama, Florida, Louisiana, Mississippi and Texas, respectively, including such parameters as BOD and TSS for both municipal and industrial sources. In all cases, the amount of discharge

per county is expressed in millions of gallons per day(MGD). This figure is merely an expression of the amount of liquid water the dischargers in each coastal county are contributing to the Gulf of Mexico or to streams leading to the Gulf. BOD (biochemical oxygen demand) is a measure of the amount (in pounds per day per county) of dissolved oxygen (DO) consumed during the breakdown of organic matter in water by biological processes and organisms. TSS (total suspended solids) is simply an indication of the amount of solid, particulate matter suspended in water and is also measured here in pounds per day per county. Measurements of BOD and TSS are the most widely utilized parameters of water quality of a body of water. Water with excessive BOD and TSS amounts are considered to be polluted because of adverse effects to normally-occurring aquatic organisms.

As can be seen from Figure V-1 and Tables V-1 through V-5, the areas of heaviest water pollution are, of course, in major metropolitan areas of the coast and, furthermore, in areas of concentrated petrochemical industries. Other less important sources of water pollution are fish oil processing plants, pulp and paper mills, and foundries and smelters. As might be expected, municipal pollution is a major source of pollution in several major metropolitan areas - Houston, New Orleans, Mobile.

## B. Air

Multiple or massive use of air for waste disposal (emissions) in a limited area temporarily degrades the quality (defined as availability for general use) of the air. Evaluation of the potential impact of a proposed additional use of air involves knowledge of the restrictions on additional impacts, the capability of the air to receive additional impacts, and the extent of the proposed additional impacts. The remainder of this section examines the first two factors in terms of the legal constraints involved, and the existing air quality.

### 1. Legal Constraints

Figure V-2 shows the overlapping air pollution control authorities with jurisdiction over the Gulf Coast area. In some cases, these do not correspond to political jurisdictions. Thus, the interstate air quality control regions define areas in which specific controls and standards are applied, but which are administered by Federal or State jurisdictions. The air quality criteria to be met by a potential pollution source can be complex, in that each air quality jurisdiction may have differing criteria. Thus, conceivably, a source in the Houston, Texas area would have to meet separate criteria imposed by the Federal Standards (through EPA Region VI), Texas Air Control Board (Texas Region

Seven), Harris County Pollution Control Department, and Houston City Pollution Control Division. Table V-6 lists the current addresses of these various jurisdictions. Table V-7 lists the Federal ambient air standards. All individual states are required to adopt standards as stringent as or more stringent than the Federal standards. Table V-8 lists the current regulations in force in the various states.

## 2. Air Quality

Estimates of air pollution emissions for the counties in the Gulf Coast region have been given in the implementation plans prepared by the various states (LACC, 1972; TACB, 1972; FDPC, 1972; MAWPCC, 1972). These data are compiled in Tables V-9 through V-13 and are combined with isopleths of air pollution potentials (Holtzworth, 1972) in a graphic presentation in Figure V-3.

The emission data give quantities of pollutants being emitted into the air, and the air pollution potential gives some indication of the likelihood that the emissions will not be satisfactorily dispersed. Theoretically, air quality data should provide a direct measure of the extent of air pollution in a given area. In fact, coverage is incomplete. Most of the data available are from urban centers. Measurements are only now being initiated in non-urban areas, with a few exceptions.

Rather than detail such data as is available at the time of this report, the potential user is referred to the SAROAD system of EPA. This provides access to all current and past air quality data, and may be accessed through a specific geographic location.

In general, air quality in the study area is good. It is continuously replenished with high quality air from the unimpeded movement and interaction of the Tropical Gulf and Polar Continental air masses. Population and industrial-chemical centers are, however, isolated problem areas. Table V-14 lists the Air Quality Control Regions which have exceeded the national ambient air quality standards. In almost every case, as shown in Table V-15, the data are from sampling points located in urban or industrial areas. The trends shown in Table V-14 are based on very limited data. More extensive, although still limited, are the data available from SAROAD. However, the emission estimates in Table V-9 through V-13 are most useful for estimating air quality. Thus, a high carbon monoxide emission level is indicative of high automotive density; and a high hydrocarbon level may indicate petroleum, storage, refining, etc. Used with the maps in other sections of the report, a reasonable estimate of actual existing problems in the coastal counties can be obtained.

Table V-1 Municipal and industrial effluents for Alabama coastal counties.

County	M.G.D.	Industrial B.O.D.	T.S.S.	Municipal M.G.D.
Baldwin	5.5	1,223	557	1.3
Mobile	47.5	151,055	162,729	41.3

M.G.D. = million gallons per day

B.O.D. = biological oxygen demand, pounds per day

T.S.S. = total suspended solids, pounds per day

Source: Environmental Protection Agency Region IV, Data Bank, 1974.

Table V-2 Municipal and industrial effluents for Florida coastal counties.

County	Industrial			Municipal		
	M.G.D.	B.O.D.	T.S.S.	M.G.D.	B.O.D.	T.S.S.
Bay	302	241,701	150,606	5.7	1,694	794
Charlotte	---	---	---	2.1	415	415
Citrus	---	2	3	1	229	229
Collier	---	11	7	3	1,225	1,277
DeSoto	1.2	940	278	.9	343	343
Dixie	.03	18	5	.05	25	28
Escambia	367.2	416,466	38,716	8.7	944	1,737
Franklin	---	---	---	1	306	361
Gulf	---	---	---	1	---	---
Hernando	.5	2	---	.7	204	101
Hillsborough	29.5	816	903	54.4	35,826	65,940
Jefferson	.2	---	---	.2	48	43
Lee	---	23	23	8.5	2,828	3,721
Levy	118	---	---	.4	63	128
Manatee	1.1	5,226	61	13.2	2,745	3,345
Monroe	---	---	---	.02	1,043	1,056
Okaloosa	3.4	548	999	6.2	1,557	1,266
Pasco	38.3	6,065	708	2.9	194	200
Pinellas	567	640	5,759	79.7	14,843	16,571
Santa Rosa	5.5	7,710	990	1.4	1,027	1,115
Sarasota	.002	5	5	11.7	3,024	3,390
Taylor	7.1	111,700	28,570	2.1	51	40
Wakulla	202	75	90	.2	14	14
Walton	---	1,042	1,021	.3	78	41

M.G.D. = million gallons per day

B.O.D. = biological oxygen demand, pounds per day

T.S.S. = total suspended solids, pounds per day

Source: State of Florida, Department of Pollution Control, State Water Pollution Work Plan for 1974.

Table V-3 Municipal and industrial effluents for Louisiana coastal parishes.

Parish	Industrial M.G.D.	Municipal M.G.D.
Calcasieu	419.2	10.7
Cameron	0.2	0.2
Iberia	--	0.2
Jefferson	288.0	3.5
La Fourche	266.0	--
Orleans	81.5	80.5
Plaquemines	161.0	3.0
St. Bernard	7.2	12.8
St. Mary	--	4.1
St. Tammany	--	1.3
Terrebonne	0.7	5.6
Vermillion	--	1.2

M.G.D. = million gallons per day

T.S.S. = total suspended solids, pounds per day

Source: Cooperative Gulf of Mexico Estuarine Inventory and Study, Louisiana, 1971.

Table V-4 Municipal and industrial effluents for Mississippi coastal counties.

County	M.G.D.	Industrial B.O.D.	T.S.S.	Municipal M.G.D.
Hancock	.09	---	---	---
Harrison	3.6	12,933	6,101	10.1
Jackson	75.4	292,529	636,531	8.6

M.G.D. = million gallons per day

B.O.D. = biological oxygen demand, pounds per day

T.S.S. = total suspended solids, pounds per day

Source: State of Mississippi Air and Water Pollution Control Commission, 1973.

Table V-5 Municipal and industrial effluents for Texas coastal counties.

County	Industrial			Municipal		
	M.G.D.	B.O.D.	T.S.S.	M.G.D.	B.O.D.	T.S.S.
Aransas	---	---	---	1.4	564	867
Brazoria	26.4	2,327	1,112	9.9	2,902	2,970
Calhoun	20.1	2,152	15,823	2.3	707	693
Cameron	88.1	2,636	20,678	15.2	8,705	8,243
Chambers	3.9	847	462	.2	86	197
Galveston	125.2	112,767	300,620	15	16,283	11,257
Harris	336	554,260	555,831	197.4	75,443	128,721
Jackson	---	---	---	.7	130	166
Jefferson	210	183,174	130,801	66	23,258	12,575
Kenedy	---	---	---	---	---	---
Kleberg	---	---	---	2.1	685	633
Matagorda	6.2	9,846	2,812	2.7	1,215	440
Nueces	197	65,106	76,935	28.5	11,825	5,980
Orange	130.2	151,395	91,919	7.3	4,345	1,406
Refugio	.04	1	4	.9	476	664
San Patricio	.3	24	35	3.3	1,753	2,373
Victoria	35.8	6,755	13,010	3.9	951	3,078
Wharton	1.6	34	336	1.8	751	649
Willacy	---	---	---	1	76	54

8-A

M.G.D. = million gallons per day

B.O.D. = biological oxygen demand, pounds per day

T.S.S. = total suspended solids, pounds per day

Source: Texas Water Quality Board, Texas Water Development Board.

Table V-6 Air pollution control jurisdictions in the Gulf coastal region.

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U. S. Environmental Protection Agency

Region IV, (includes Alabama, Florida, Mississippi)  
1421 Peachtree Lane, N.E., Atlanta, GA 30309

U. S. Environmental Protection Agency

Region VI, (includes Louisiana, Texas)  
1600 Patterson, Suite 1100, Dallas, TX 75201

Alabama

Division of Air Pollution Control  
Environmental Health Administration,  
Alabama Department of Health  
645 S. McDonough Street, Montgomery, AL 36104

Mobile County

Bureau of Environmental Health  
Mobile County Board of Health  
248 Cox Street, Mobile, AL 36604

Florida

Department of Pollution Control  
2562 Executive Center Circle, Tallahassee, FL 32301

West Central Region

P. O. Box 944  
Winter Haven, FL 33881

Southwest Region

3201 Golf Course Boulevard  
Punta Gorda, FL 33950

Southeast Region

Suite 602, Courthouse Square Building  
Ft. Lauderdale, FL 33301

(contd)

Table V-6 (contd)

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Hillsborough County

Hillsborough County Pollution Control Commission  
906 Jackson Street  
Tampa, FL 33602

Manatee County

Manatee County Air and Water Pollution Control Department  
202 Sixth Avenue East  
Bradenton, FL 33505

Sarasota County

Sarasota County Pollution Control Board  
P. O. Box 2658  
Sarasota, FL 33578

Louisiana

Air Control Section, Bureau of Environmental Health  
Louisiana Health and Social Rehabilitation Services  
Administration (LHSRA)  
Division of Health Maintenance and Ambulatory Patient Services  
P. O. Box 60630  
New Orleans, LA 70160

Mississippi

Mississippi Air and Water Pollution Control Commission  
Robert E. Lee Building  
Jackson, MS 39205

Texas

Texas Air Control Board  
8520 Shoal Creek Boulevard  
Austin, TX 78758

Corpus Christi-Neuces

Corpus Christi-Neuces County Department of Health and Welfare  
1811 N. Shoreline  
P. O. Box 79  
Corpus Christi, TX 78403

(contd)

Table V-6 (contd)

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Harris

Pollution Control Department  
107 N. Munger  
Pasadena, TX 77506

Houston

Pollution Control Division  
Department of Public Health, City of Houston  
1115 N. MacGregor  
Houston, TX 77025

Jefferson

Jefferson County Environmental Control Department  
325 Franklin Street  
Beaumont, TX 77701

Table V-7 Federal ambient air quality standards.

<u>Parameter</u>	<u>Standard</u>	
	<u>Primary</u>	<u>Secondary</u>
Particulate Matter		
Annual geometric mean	75 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
24-hour maximum	260 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$
Sulfur Oxides		
Annual arithmetic mean	80 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
24-hour maximum	365 $\mu\text{g}/\text{m}^3$	260 $\mu\text{g}/\text{m}^3$
3-hour maximum	--	1.300 $\mu\text{g}/\text{m}^3$
Carbon Monoxide		
8-hour maximum	10 $\text{mg}/\text{m}^3$	10 $\text{mg}/\text{m}^3$
1-hour maximum	40 $\text{mg}/\text{m}^3$	40 $\text{mg}/\text{m}^3$
Photochemical Oxidants		
1-hour maximum	160 $\mu\text{g}/\text{m}^3$	160 $\mu\text{g}/\text{m}^3$
Hydrocarbons		
3-hour maximum	160 $\mu\text{g}/\text{m}^3$	160 $\mu\text{g}/\text{m}^3$
Nitrogen Dioxide		
Annual arithmetic mean	100 $\mu\text{g}/\text{m}^3$	100 $\mu\text{g}/\text{m}^3$

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter  
 $\text{mg}/\text{m}^3$  = milligrams per cubic meter

Table V-8. State ambient air quality standards.

	Florida	Alabama	Mississippi	Louisiana	Texas
Suspended Particulate Matter					
Annual Geometric Mean	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>
Maximum 24 hour Mean	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>
Maximum Consecutive 5 hour Mean	---	---	---	---	100 µg/m <sup>3</sup> (a)
Maximum Consecutive 3 hour Mean	---	---	---	---	200 µg/m <sup>3</sup> (a)
Maximum Consecutive 1 hour Mean	---	---	---	---	400 µg/m <sup>3</sup> (a)
Dustfall	---	---	5.25 gms/meter <sup>2</sup> /mo	20 tons per square mile per month	---
Coefficient of Haze					
Annual Geometric Mean	---	---	---	0.6 COH/1000 lin ft	---
Annual Arithmetic Mean	---	---	---	0.75 COH/1000 lin ft	---
Maximum 24 hour Mean	---	---	---	1.50 COH/1000 lin ft	---
Sulfur Dioxide (SO <sub>2</sub> )					
Annual Mean	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>
Maximum 24 hour Mean	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>
Maximum 3 hour Mean	II <sup>0</sup>	II <sup>0</sup>	II <sup>0</sup>	---	II <sup>0</sup>
Maximum 30 minute Mean	---	---	---	---	0.4 ppm (b)(c)
Sulfuric Acid Mist					
Sulfur Trioxide, or any combination thereof					
Maximum Annual Mean	---	---	---	4 µg/m <sup>3</sup>	---
24 hour Mean (not>1%)	---	---	---	12 µg/m <sup>3</sup>	---
1 hour Mean (not>1%)	---	---	---	30 µg/m <sup>3</sup>	---

(contd)

Table V-8. (Contd)

	Florida	Alabama	Mississippi	Louisiana	Texas
Carbon Monoxide (CO)	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>
Hydrocarbons (other than Methane)	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>
Total Oxidants	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>
Nitrogen Dioxide (NO <sub>2</sub> )	II <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>	II <sup>0</sup>	I <sup>0</sup>	I <sup>0</sup> /II <sup>0</sup>

I<sup>0</sup> and II<sup>0</sup> refer to the Primary and Secondary Federal Standards.

(a) solid fossil fuel fired steam generators excepted

(b) 0.28 ppm for Harris and Galveston counties

(c) 0.32 ppm for Jefferson and Orange counties

Table V-9. Air pollution emissions estimates for the Alabama Gulf Coastal Region.

County	Emissions in tons/year				
	Nitrogen oxides	Sulfur oxides	Hydrocarbons	Carbon monoxide	Particulate matter
Baldwin	7,860	9	13,026	51,900	162
Mobile	92,484	193,084	40,984	156,732	84,711

Sources: EPA Region IV Data Bank, 1974.

Table V-10. Air pollution emissions estimates for the Florida Gulf Coastal Region.

County	Emissions in tons/year				
	Nitrogen oxides	Sulfur oxides	Hydrocarbons	Carbon monoxide	Particulate matter
Bay	11,400	17,000	10,540	52,340	14,620
Charlotte	1,946	162	4,089	20,130	2,114
Citrus	20,268	57,189	2,794	12,234	4,031
Collier	2,902	115	5,190	25,120	1,711
DeSoto	1,630	259	3,557	17,531	2,121
Dixie	826	24	1,073	784	207
Escambia	22,930	17,700	23,270	120,200	18,920
Franklin	831	25	1,132	5,520	280
Gulf	2,480	14,600	1,100	3,920	3,700
Hernando	1,506	8,611	1,843	8,899	776
Hillsborough	80,003	314,146	84,346	385,900	20,125
Holmes	880	30	1,240	6,070	350
Jefferson	748	24	1,570	7,746	751
Lee	15,510	20,093	13,433	75,538	1,397
Levy	2,230	497	2,573	12,240	2,020
Manatee	6,054	8,146	8,663	42,252	2,476

Table V-10. (contd)

County	Emissions in tons/year				
	Nitrogen oxides	Sulfur oxides	Hydrocarbons	Carbon monoxide	Particulate matter
Monroe	5,093	1,483	3,882	18,637	321
Okaloosa	6,780	940	11,800	47,690	3,010
Pasco	4,687	7,732	5,015	24,217	1,955
Pinellas	40,410	31,842	43,821	250,121	4,358
Santa Rosa	3,720	9,940	4,570	20,400	1,660
Sarasota	6,957	280	13,228	75,398	2,000
Taylor	4,094	3,270	3,132	24,304	9,841
Wakulla	2,461	1,706	1,527	6,721	826
Walton	1,820	54	2,680	12,640	730

Source: Florida Dept. of Pollution Control: Air Implementation Plan, 1972.

Table V-11. Air pollution emissions estimates for the Louisiana Gulf Coastal Region.

Parish	Emissions in tons/year		
	Sulfur oxides	Hydrocarbons	Particulate matter
Ascension	12,330	13,200	534,400
Assumption	86	5,960	4,360
Calcasieu	57,380	55,100	7,860
Cameron	25	480	38
East Baton Rouge	35,200	118,300	38,080
West Baton Rouge	5,980	3,430	2,690
Iberia	4,760	24,800	8,160
Iberville	4,660	57,300	2,690
Jefferson	21,900	20,900	6,470
La Fourche	220	9,900	4,790
Lafayette	620	8,700	2,460
Livingston	110	1,930	160
Orleans	6,110	24,300	7,260
Plaquemines	20,800	5,780	1,830
St. Benness	3,150	2,840	680
St. Charles	11,300	27,500	2,330

Table V-11. (Contd)

Parish	Emissions in tons/year		
	Sulfur oxides	Hydrocarbons	Particulate matter
St. James	26,300	5,250	25,700
St. John the Baptist	2,170	3,420	1,460
St. Martin	150	3,870	2,440
St. Mary	5,340	82,400	7,790
St. Tammany	220	3,550	5,850
Tangipahoa	220	3,400	750
Terrebonne	200	9,140	4,450
Vermillion	140	1,890	400

Source: Louisiana Control Commission: Louisiana Implementation Plan, 1972.

Table V-12. Air pollution emissions estimates for the Mississippi Gulf Coastal Region.

County	Emissions in tons/year				
	Nitrogen oxides	Sulfur oxides	Hydrocarbons	Carbon monoxide	Particulate matter
Hancock	1,490	97	1,850	13,150	490
Harrison	34,630	28,920	15,930	101,780	5,280
Jackson	16,920	3,460	10,420	78,400	9,020
Pearl River	2,700	160	3,280	23,260	760

Source: Mississippi Air and Water Pollution Control Commission: Mississippi Implementation Plan, 1972.

Table V-13. Air pollution emissions estimates for the Texas Gulf Coastal Region.

County	Emissions in tons/year				
	Nitrogen oxides	Sulfur oxides	Hydrocarbons	Carbon monoxide	Particulate matter
Aransas		247	5,010	120,660	340
Brazoria	4,395	8,124	116,658	169,006	3,930
Calhoun	1,375	263	23,209	258	9,313
Cameron			12,422	5,174	640
Chambers	70		1,038	3,348	1,710
Galveston	2,558	10,643	65,167	114,128	6,712
Harris	11,962	119,473	156,058	436,418	57,727
Jackson			3,992		420
Jefferson	6,449	71,370	130,366	326,603	11,368
Kenedy			685		
Kleberg			7,616		92
Matagorda	1,715	1	7,225	1,931	820
Nueces	244	2,274	49,736	156,423	4,838
Orange	1,505	4,267	24,157	79,212	5,360

Table V-13. (contd)

County	Emissions in tons/year				
	Nitrogen oxides	Sulfur oxides	Hydrocarbons	Carbon monoxide	Particulate matter
Refugio			660		179
San Patricio		1,409	843	1	5,088
Victoria	1,930		14,122	13,503	211
Willacy			199		744

Source: Texas Air Control Board: Texas Implementation Plan, 1972.

Table V-14 Summary of Air Quality Control Regions (AQCR's) exceeding national ambient air quality standards.\*

		NUMBER OF OCCURRENCES WHEN LEVELS EXCEEDED THE AIR QUALITY STANDARDS																													
		AQCR #005			AQCR #049			AQCR #050			AQCR #051			AQCR #052			AQCR #106			AQCR #213			AQCR #214			AQCR #216					
		Mobile-Pensacola-Panama City-S. Miss. (Ala-Fla-Miss) (Includes Alabama State Region 5)			Jacksonville-Brunswick (Fla-Ga)			Southeast Florida			Southwest Florida			West Central Florida			Southern Louisiana-Southeast Texas (Louisiana-Texas) (Includes Texas State Region 10)			Brownsville-Laredo (Texas) (Includes Texas State Region 4)			Corpus Christi-Victoria (Texas) (Includes Texas State Region 5)			Metropolitan Houston-Galveston (Texas) (Includes Texas State Region 7)					
POLLUTANTS		1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971
<u>SUSPENDED PARTICULATES</u>																															
<u>Annual</u>																															
No. greater than the secondary standard (60 µg/m <sup>3</sup> )		2	0	0	5	5	8	3	1	1	0	0	0	2	1	0	4	4	2	1	3	0	0	1	0	4	3	0	4	3	2
No. greater than the primary standard (75 µg/m <sup>3</sup> )		2	0	0	4	3	4	0	0	0	0	0	0	0	1	0	0	1	0	1	3	0	0	0	0	0	0	0	3	2	2
<u>24-hour mean</u>																															
No. greater than the secondary standard (150 µg/m <sup>3</sup> )		3	1	1	4	5	7	0	0	0	0	0	0	0	0	1	0	0	0	2	3	3	0	0	0	1	1	8			
No. greater than the primary standard (260 µg/m <sup>3</sup> )		0	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0
<u>SULFUR DIOXIDE</u>																															
<u>Annual</u>																															
No. greater than the secondary standard (60 µg/m <sup>3</sup> = 0.02 ppm)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. greater than the primary standard (80 µg/m <sup>3</sup> = 0.03 ppm)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table V-14 (contd)

		NUMBER OF OCCURRENCES WHEN LEVELS EXCEEDED THE AIR QUALITY STANDARDS																																
		AQCR #005			AQCR #049			AQCR #050			AQCR #051			AQCR #052			AQCR #106			AQCR #213			AQCR #214			AQCR #216								
		Mobile-Pensacola-Panama City-S. Miss. (Ala-Fla-Miss) (Includes Alabama State Region 5)									Jacksonville-Brunswick (Fla-Ga)			Southeast Florida			Southwest Florida			West Central Florida			Southern Louisiana-Southeast Texas (Louisiana-Texas) (Includes Texas State Region 10)			Brownsville-Laredo (Texas) (Includes Texas State Region 4)			Corpus Christi-Victoria (Texas) (Includes Texas State Region 5)			Metropolitan Houston-Galveston (Texas) (Includes Texas State Region 7)		
POLLUTANTS		1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971
<u>SULFUR DIOXIDE (contd)</u>																																		
<u>24-hour mean</u>																																		
No. greater than the secondary standard (260 µg/m <sup>3</sup> = 0.1 ppm)		0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. greater than the primary standard (365 µg/m <sup>3</sup> = 0.14 ppm)		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>3-hour mean</u>																																		
No. greater than the standard (1300 µg/m <sup>3</sup> = 0.5 ppm)		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>CARBON MONOXIDE</u>																																		
<u>1-hour standard</u>																																		
No. greater than the standard (40 mg/m <sup>3</sup> = 35 ppm)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>8-hour standard</u>																																		
No. greater than the standard (10 mg/m <sup>3</sup> = 9 ppm)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(contd)

Table V-14. (contd)

		NUMBER OF OCCURRENCES WHEN LEVELS EXCEEDED THE AIR QUALITY STANDARDS																													
		AQCR #005			AQCR #049			AQCR #050			AQCR #051			AQCR #052			AQCR #106			AQCR #213			AQCR #214			AQCR #216					
		Mobile-Pensacola-Panama City-S, Miss. (Ala-Fla-Miss) (Includes Alabama State Region 5)			Jacksonville-Brunswick (Fla-Ga)			Southeast Florida			Southwest Florida			West Central Florida			Southern Louisiana-Southeast Texas (Louisiana-Texas) (Includes Texas State Region 10)			Brownsville-Laredo (Texas) (Includes Texas State Region 4)			Corpus Christi-Victoria (Texas) (Includes Texas State Region 5)			Metropolitan Houston-Galveston (Texas) (Includes Texas State Region 7)					
POLLUTANTS		1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971
<u>OXIDANTS</u>																															
<u>1-hour standard</u>																															
No. greater than the standard (160 $\mu\text{g}/\text{m}^3 = 0.08 \text{ ppm}$ )		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

\* Adapted from Table 3-9 (EPA, 1973).  
 $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter.  
 $\text{mg}/\text{m}^3$  = milligrams per cubic meter.  
 $\text{ppm}$  = parts per million (by volume).

Table V-15. Air quality trends at NASN stations by pollutant, 1967-1971.\*

NASN URBAN TOTAL SUSPENDED PARTICULATE MATTER																		
ANNUAL GEOMETRIC MEANS														TRENDS				
County	Location		A			B				C				A : C	A : B	B : C	C	
			60	61	62	63	64	65	66	67	68	69	70	71	60-71	60-67	64-71	68-71
<b>Florida</b>																		
Hillsborough	Tampa	002A01	0	0	0	0	0	0	0	0	87	71	87	0	-	-	-	-
Pinellas	St. Petersburg	002A01	0	0	0	0	0	0	0	0	0	36	43	43	-	-	-	-
<b>Louisiana</b>																		
East Baton Rouge	Baton Rouge	001A01	113	0	124	0	80	86	0	0	0	70	65	68	DOWN	DOWN	DOWN	-
Orleans	New Orleans	002A01	0	0	0	66	90	90	82	79	84	71	74	70	UP	UP	DOWN	-
<b>Texas</b>																		
Harris	Houston	001A01	103	85	79	94	96	119	92	105	74	85	87	95	-	-	DOWN	UP
Harris	Pasadena	002A01	0	0	0	0	0	0	0	0	0	77	74	83	-	-	DOWN	-
<b>NON-URBAN TOTAL SUSPENDED PARTICULATE MATTER</b>																		
ANNUAL GEOMETRIC MEANS														TRENDS				
County	Location		A			B				C				A : C	A : B	B : C	C	
			60	61	62	63	64	65	66	67	68	69	70	71	60-71	60-67	64-71	68-71
Texas	Matagorda	001A03	0	0	0	0	0	35	30	32	25	27	30	37	-	-	-	UP

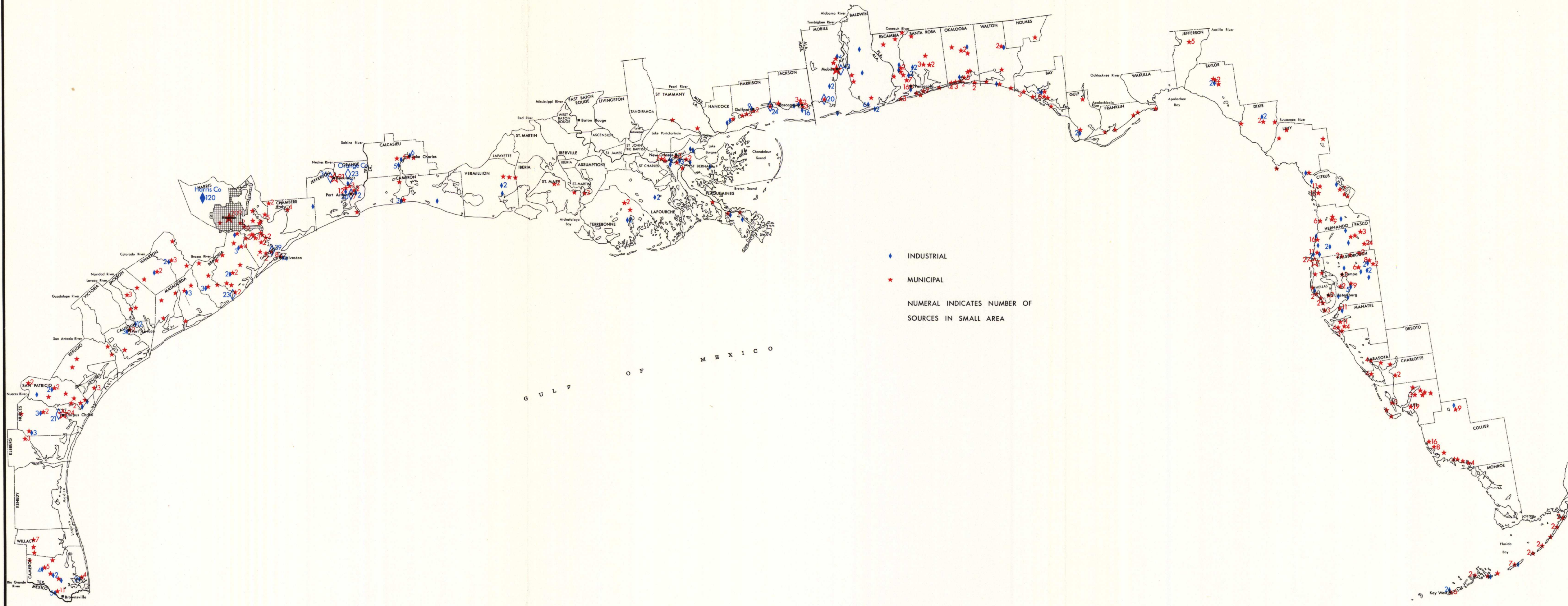
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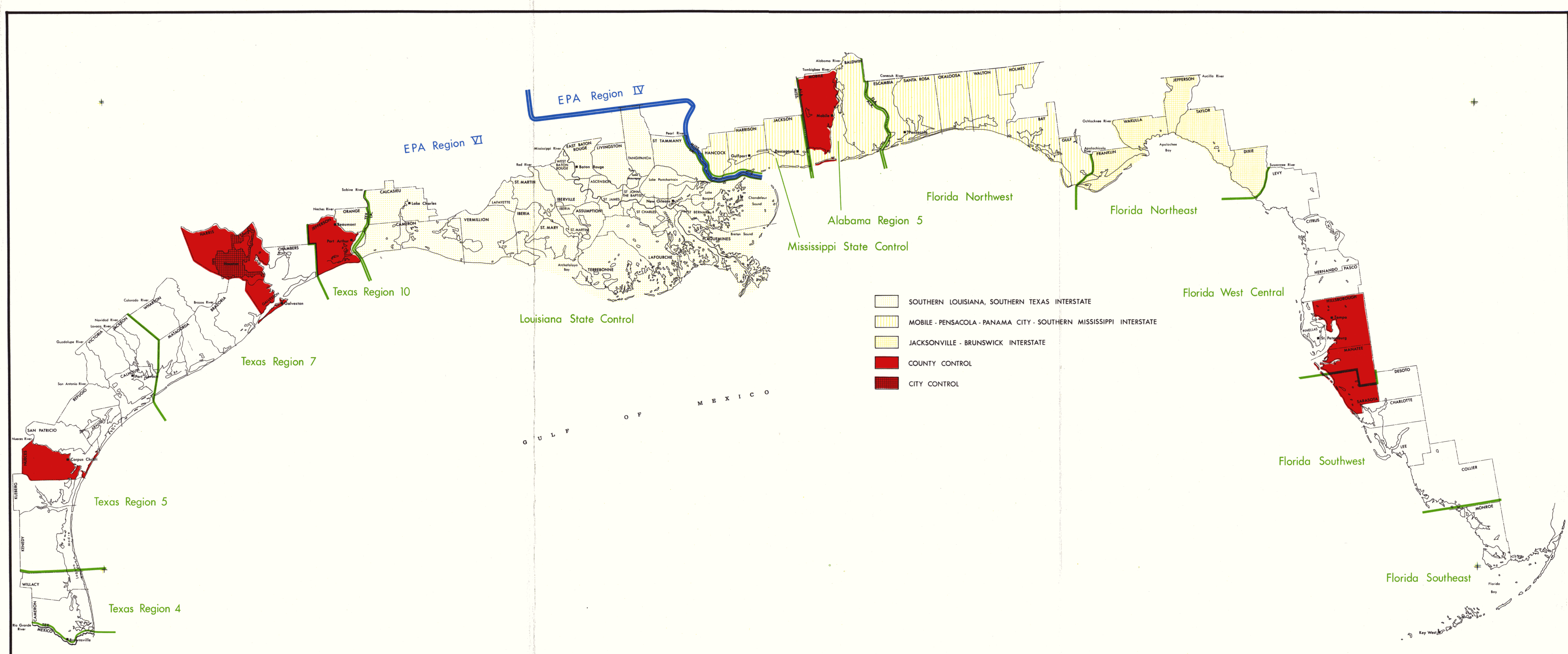
Table V-15. (Cont'd.)

		URBAN SULFUR DIOXIDE																	
		ANNUAL ARITHMETIC MEANS									ANNUAL GEOMETRIC MEANS						TRENDS		
County	Location		B			C			64	65	B			C			68-71		
			64	65	66	67	68	69			70	71	64	65	66	67		68	69
<u>Florida</u>																			
Hillsborough	Tampa	002A01	0	0	0	0	20	23	17	20	0	0	0	0	14	17	9	11	-
Pinellas	St. Petersburg	002A01	0	0	0	0	0	26	17	16	0	0	0	0	0	18	10	9	DOWN
<u>Louisiana</u>																			
Orleans	New Orleans	002A01	0	0	0	0	11	9	7	6	0	0	0	0	8	8	6	5	LOW

\* Adapted from Table F-1 (EPA, 1973).

NASN: National Air Sampling Network







## VI. TRANSPORTATION SYSTEMS

As is shown on Figure VI-1, the Gulf Coastal Zone is well served by all forms of transportation. An extensive network of highways and rail lines connect all major ports with inland areas. Transportation throughout the coastal counties is primarily over roads and highways. The following table gives total roads and highways mileage by state and total number of motor vehicle registrations (autos, trucks and buses) by state.

	Road and highway mileage - 1971	Motor Vehicle Registrations - 1972
Alabama	79,036	2,227,000
Florida	93,310	4,836,000
Louisiana	53,340	1,942,000
Mississippi	66,766	1,249,000
Texas	248,340	7,316,000

(Registration figures  
rounded to nearest  
thousand)

From U. S. Federal Highway Administration, Highway Statistics, 1971.

Regional and/or local mass transportation planning is in the early stages in almost all of the Gulf coastal area. Exceptions are the Houston-Galveston, New Orleans and the Tampa-St. Petersburg areas. Even there, mass transit planning is oriented toward motor vehicle transit. A recent bond election in the Houston area failed, possibly because of conflict over administration of a proposed system.

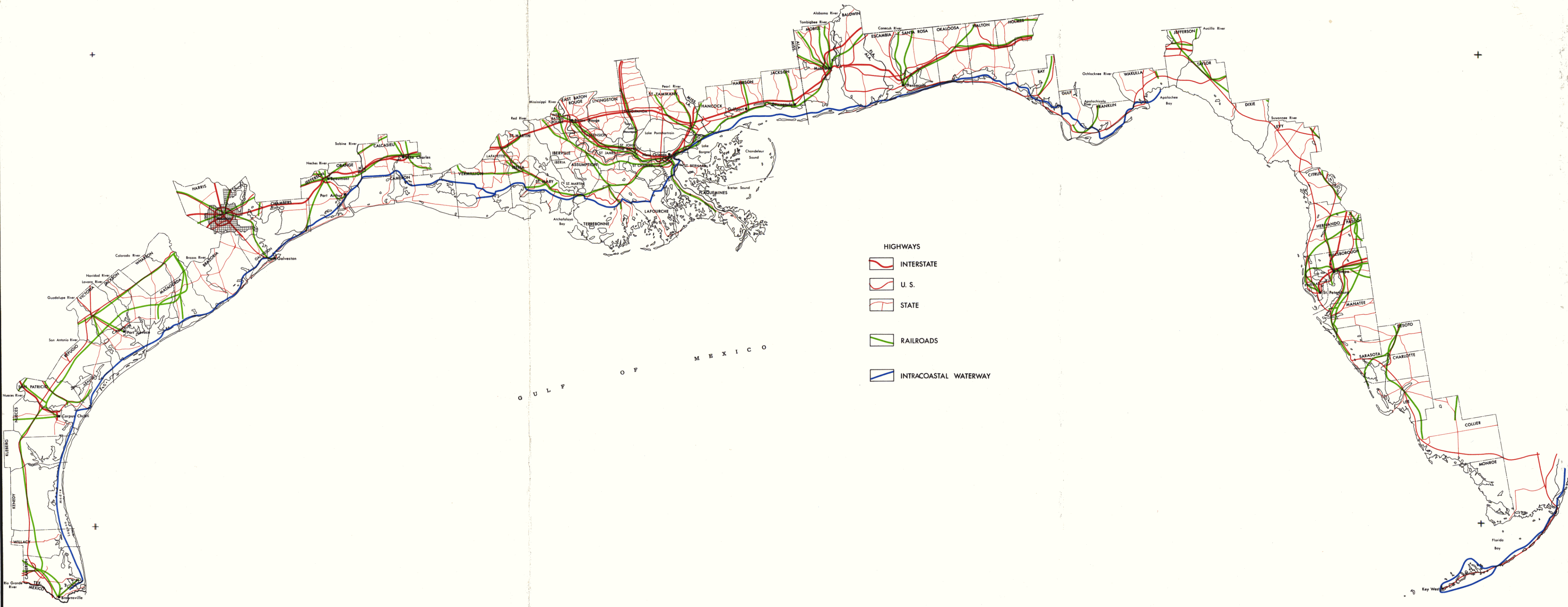
Because of their geographic location, the coastal counties are also served extensively by waterborne transportation systems. A number of important U. S. ports are within the Gulf of Mexico coastal area.

The Port of New Orleans is the second largest port in the nation. Houston is the third largest port and the largest inland port in the nation, and the Port of Corpus Christi is the ninth largest U. S. port. The deep water ports along the Texas coastline are Beaumont, Brownsville, Corpus Christi, Freeport, Galveston, Houston, Orange, Port Arthur, Port Isabel, Port Lavaca, Point Comfort, Texas City and Sabine Pass Harbor.

Alabama's only seaport is located in Mobile. By contrast, Mississippi has four ports which are located at Pascagoula, Biloxi, Gulfport, and Pass Christian. Florida ports include: Cedar Keys, Charlotte, Fort Meyers, Key West, Panama City, Pensacola, Port St. Joe, St. Petersburg, and Tampa.

The ports are connected by the Gulf Intracoastal Waterway consisting of 1,113 miles of canals which extend from Brownsville, Texas to Apalachee Bay, Florida. By way of the Intracoastal Waterway which is depicted on Figure VI-1, all ports on the Gulf are also connected to 6,000 miles of inland waterway. However, recent congestion may be an indication that the waterway's capacity for handling the increasing load is being tested. A more complete discussion of waterborne transportation and port activities is contained in Port Activities for Major Gulf Coast Ports, p. II-7.

The major air service needs are met by airport facilities located in the proximity of the following cities: Brownsville, Beaumont and Port Arthur, Corpus Christi, Freeport, Galveston, Houston, Port Lavaca - Point Comfort, Orange, and Texas City, Texas; Baton Rouge and New Orleans, Louisiana; Mobile, Alabama; and Tampa, St. Petersburg, Clearwater, Sarasota, Brandeton, and Pensacola, Florida.



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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 **Minerals Revenue Management** 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.