AN ECONOMIC INVENTORY OF RECREATION AND TOURISM WITHIN THE TEXAS COASTAL ZONE

Prepared by

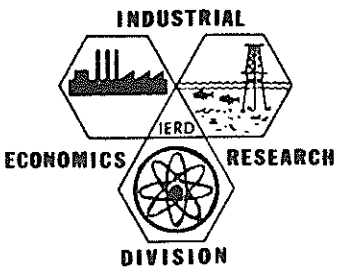
Billie I. Ingram, Ph.D

Texas A&M University

August, 1973

Sea Grant Program

TAMU-SG-73-209



FOREWORD

The challenge has been issued to Texas through current literature to protect her coast from the exploitation which has occurred on other state's coastal shores. From Maine around to Texas and from California to Washington, development has for the most part monopolized the coastal zone. Texas' coast is, as yet, virtually undeveloped and is the last major source for recreation and tourism left in the 48 contiguous states. Due to the demand of individuals for recreation and tourism it appears that the coast is Texas' most valuable asset from both aesthetic and economic points of view.

This investigation purported to undertake an economic inventory of existing and available proposed public and private recreation and tourism units within the Texas Coastal Zone in order to be able to determine the present economic status of these industries. The manuscript includes a comprehensive literature review, a concise description of basic data for each of the 36 counties which comprise the Texas Coastal Zone, an explanation of methodology, the presentation of the public and private economic data, and a bibliography.

The Industrial Economics Research Division is grateful for the assistance of numerous public officials and private executives who provided the pertinent data utilized in the research. Particular appreciation is acknowledged to Gail Anderson, Graduate Assistant; Frank Hildebrand, Texas Tourist Development Agency; and Tommy Barrow, Texas Employment Commission.

This project was supported partially by an institutional grant 04-3-158-18 made to Texas A&M University through the National Sea Grant Program, National Oceanic and Atmospheric Administration, United States Department of Commerce

August, 1973

James R. Bradley, Head
Industrial Economics Research Division
Texas A&M University
College Station, Texas

TABLE OF CONTENTS

TABLE OF CONTENTS--continued

TABLE OF CONTENTS--continued

LIST OF TABLES

LIST OF TABLES--continued

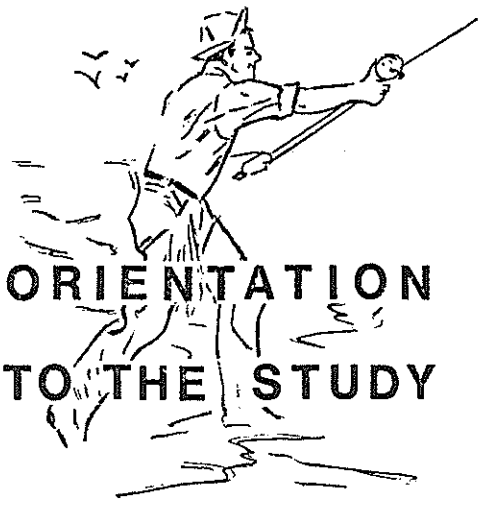
LIST OF TABLES--continued

LIST OF TABLES--continued

LIST OF FIGURES

LIST OF FIGURES continued

LIST OF FIGURES continued



ORIENTATION TO THE STUDY

CHAPTER I

ORIENTATION TO THE STUDY

JUSTIFICATION

Introduction

Man's need for recreation has been prevalent throughout his American heritage. Even when time was at its highest premium in the history of the United States, Americans found ways to permeate work with play. As the country progressed in its development, energy and time-saving devices joined other significant factors to bring leisure within the reach of all individuals. Unobligated time coupled with the growth of cities forced the need for wholesome leisure activities. As the value of the program grew, its acceptance as a governmental function was supported by the citizens. Today, citizens demand parks and recreational services at all governmental levels--local, state, and federal. And the private sector of recreation and tourism has enjoyed phenomenal growth.

As a profession less than a century old, recreation has grown into a multibillion dollar operation. Reports indicate that in 1969 Americans spent over $83 billion dollars on individual recreation, which was a 42 percent increase over the figure of 1965. This figure excluded the capital input from many private and most governmental agencies.[1]

Recent years have certainly provided higher incomes with greater purchasing power for most of the people of the United States. Likewise, more leisure has been made available through the shortened work week. The coupling of these two factors has resulted in consumer spending of 6.3 percent of total personal expenditures on leisure activities.[2] In 1940, the American consumer spent about $3.7 billion for recreation and tourism. By 1959, this figure reached nearly $40 billion,[3] and by 1969, it had climbed to $83 billion.[4] Projections show the figure will far surpass the $100 billion mark by the year 1980.

Along with the increase in per capita income and leisure, there has become evident a marked rise in the amount of travel per person. Superhighways have made heretofore difficult-to-reach areas more accessible to an ever-increasing number. Revolutionary changes, resulting in improvements in comfort and convenience, have made the private automobile the prime method of transportation to recreational areas.

Urbanization, an outgrowth of industrialization, has experienced phenomenal growth. Prior to the age of machinery seven out of 10 Americans lived on farms and in small cities. According to the Census Bureau, today seven out of every 10 (73.5 percent) citizens in the United States live in urban areas.[5] The figures have reversed!

Reliable sources indicate that a further decline in the work week with shorter hours is inevitable. Incomes will be higher. Megalopolic growth will continue. The result--a greater need to

escape from overcrowded population centers, more leisure than ever before, and more money to spend enjoying it.

The fact that recreation has become an important part of our culture and life style is well documented. It has become one of the largest and fastest growing industries in the country, "supporting thousands of workers directly and providing a powerful push for business of all kinds."[6]

Outdoor Recreation

Since World War II, the demand for outdoor recreation has increased by five times the rate of increase of population and income. Available statistical information reveals that millions of Americans are spending a large portion of discretionary funds--$50 billion annually--as well as unobligated time for outdoor recreational pursuits.[7] In fact, one out of every two Americans participates in some kind of outdoor activity--hiking, swimming, fishing, hunting, sightseeing, and picnicking. Projections by the Bureau of Outdoor Recreation reveal that by 1980, participation will increase nearly two-fold over 1965[8] and that expenditures will reach $100 billion.[9]

It was estimated that spendings in the "leisure boom" for 1972 will reach $105 billion.[10] The major factors behind this steady increase are: (1) increased population, (2) higher per capita incomes, (3) more leisure, (4) greater mobility, and (5) urbanization. Two pertinent questions are answered pertaining to the $105 billion estimate:

"Where does the money go?"

	Dollars (Billions)	Percent
Recreation, sports equipment and activities	50.0	48
Vacation, recreation trips in the United States	40.0	38
Travel abroad	7.5	7
Vacation land and lots	5.5	5
Second homes	2.0	2

And,

"Which are the most popular activities?"[11]

	Share of Population (Percent)		Share of Population (Percent)
Picnicking	49	Boating	24
Swimming	46	Bicycling	22
Playing outdoor sports	36	Camping	21
Attending outdoor sports	35	Nature walks	18
Walking for pleasure	30	Hunting	12
Fishing	29	Horseback riding	10
		Bird watching	4
		Wildlife photography	3

Increased Population

The population explosion is gaining momentum. It has been estimated that from 1 A. D. until 1650, the population of the world doubled. From 1650 to 1830 it redoubled to a total of one billion. From 1830 to 1960, it tripled to a total of three billion. Reliable sources estimate that by 2000, the population will double again, reaching a total of six billion.[12]

In the United States the predicted rate of growth is similarly comparable to that of the world. There were less than five million people in the United States in 1800. By 1850, the population had

increased five times to 25 million; in 1900 to 85 million; in 1950 to 151 million; and by 1970 to 203 million. Predictions are that by 1980 there will be 245 million people in the United States, and by the year 2000 it may well be twice what it was in 1965 (380 million).[13]

Higher Per Capita Incomes

"In terms of purchasing power per capita, today's consumer is more than two and one-half times as well off as the consumer in the mid-1930's. And he is 18 percent better off than the consumer in the best economic years during World War II."[14] In 1930, the average income per man, woman and child was $1,224. By 1950, per capita income had increased to $1,676; and in 1965 it had increased to $2,300; and is predicted to reach $3,000 in the 70's.[15]

As incomes have increased, a greater percentage of the total sum has become discretionary funds. The amount required for personal needs normally does not increase proportionally to income. Recent statistics indicate that from 7 to 8 percent of net income is being spent for recreational pursuits.[16] Kazickas, Associated Press writer, ended a series of articles on "The Leisurely Americans" by stating, "They spend more for recreation than for necessities."[17]

More Leisure

Another major factor affecting the demand for outdoor recreation has been the increase in leisure. Aristotle said, "We

labor in order to have leisure." Today, the average worker enjoys a shorter work week than ever before.

In the latter part of the 19th Century, the non-farm worker averaged between 70 and 84 hours per week. Farmers often worked even longer hours. As a result of industrialization, the work week has continued to grow shorter. Currently, some occupational groups, through efforts of unions, have achieved a 35-hour week while other specialized forces are demanding an even shorter week--32 hours.

Directly related to the shortened work week is the growth in the amount of unobligated time--leisure. This additional free time occurs in size increments: longer paid vacations, longer weekends as the result of the Monday Holiday Bill, and additional hours either preceding or following the work day. The Discover America Travel Organizations, Inc., which campaigned for the federal Monday-holiday law, makes this prediction: "The addition of long weekends will help boost the $150 billion-a-year leisure industry to $250 billion by 1975."[18] It is estimated that in the year 2000, the average work week will be 30.7 hours, the average paid vacation will be 3.9 weeks, and the average number of holidays will be 10.1 days.[19] Articles on the four-day then three-day work week, more money for leisure, present markets, and activity preferences were featured recently, along with an attractive front cover for a leading magazine, signifying even another dimension of the interest pertaining to this new way of life.[20] The "all-year schools" are functioning in 12 states and Texas is one of those states. The terminology may be misleading, but the concept is

spreading in the nation. The schedule of four terms within a school year will have an effect upon recreational demands and tourist facilities within the State of Texas.

"The amount of leisure, length of the leisure-time periods, and how often they occur have great influence on the kind of recreation people pursue and are important in planning for outdoor recreation."[21]

Greater Mobility

It is generally agreed that the average American is becoming more mobile. In 1900, total travel per capita was around 480 miles annually. In 1956, the average annual mileage had increased to 5,000 miles and may well reach the 9,000 mile mark by the year 2000.[22] According to the Outdoor Recreation Resources Review Commission (ORRRC) report,

> The forecasts of travel suggest an enormous expansion . . . The number of passenger cars is projected at 100 million by 1976--an increase of nearly 80 percent above the number registered as of 1959--and by 2000 the number is expected to grow by as much again. The new degree of mobility should be impressive indeed, and among other effects, this will inevitably increase the pressure on recreation sites that now seem remote.[23]

More and more affluent Americans are using the airways as a means of travel to and from recreational and tourist experiences. The Aircraft Owners and Pilots Association stated that there are 600,000 pilots in the United States; 120,000 private aircraft; 13,567 aircraft sold in 1968 for $450 million; and that the cost of flying is usually less than other modes of travel since it is

faster.[24] This factor has caused the demand for airstrips on and near recreation areas to become a part of the planning process.

Boating, another mode of transportation, is experiencing rapid growth. It is fairly common for Americans to spend weeks, months and even seasons motoring or sailing on and through native as well as foreign waters. The Boating Industry[25] provided these statistics:

> 46,000,000 Americans participated in recreational boating, using the waterways more than once or twice during 1972.
>
> 9,200,000 pleasure craft for all types and sizes plied United States waters in 1972.
>
> 3,790,000 boat trailers, both home-made and factory-produced, were rolling in 1972.
>
> 16,500 boating dealers served the industry and the public.
>
> 5,900 marinas, boatyards, yacht clubs, and fishing stations met the waterfront needs of boatmen.
>
> $3,900,000,000 spent at the retail level for new and used equipment, services, insurance, fuel, mooring and launching fees, repairs, and boat club memberships.
>
> An estimated 1,300,000,000 gallons of gasoline were consumed by pleasure craft. About half was sold through marine outlets.
>
> An estimated $29,000,000 worth of marine electronic gear was shipped by manufacturers to the boating market.
>
> $13,500,000 worth (wholesale) of safety equipment was sold.
>
> Texas leads all other states in outboard motor distribution. Florida is second and New York is third.

One of the major problems in the boating industry is the need for more and better facilities (marinas and boatyards) in some localities.

Bicycles, motorized bikes, walking, and horseback riding are popular factors in travel in today's society, for both recreational and nonrecreational uses. The recreational uses far outweigh the nonrecreational uses.

Urbanization

Another outcome of industrialization has been the growth of cities. Industrial societies became urban societies. Whereas, at the time of the Revolutionary War, 92 percent of our nation's population was agrarian, today the rural figure has dropped to 26.5 percent. Economic experts predict that by the year 2000, urban areas will increase 141 percent over what they were in the middle of the 20th Century and that approximately 85 percent of all Americans will live in metropolitan areas.[26]

When the nation was rural in character, there was ample space for recreational purposes. Spacious yards, favorite swimming and fishing holes, and hunting areas were readily available. However, with the shift to urban living, these features disappeared. "The growth of cities made streets crowded and unsafe for play; vacant lots were built upon, and the habitual recreation spaces were used for other purposes."[27] In order to compensate for the loss of adventure, excitement and relaxation, families have turned to the out-of-doors for recreational opportunities.

Marine Recreation

Lawyer stated that: "Water--whether surging or placid, clear or turbid, fresh or saline, cold or warm, liquid or frozen--has an

unrelenting attraction for people, and when it's for recreation it's like a magnet."[28] Clawson[29] predicted that outdoor recreational interests are growing and may be expected to grow until by the year 2000, there will be undreamed of demands for use of so-called "resource-based" vacation lands. According to the ORRRC report, "water is the largest single attraction for outdoor recreation activities."[30] Other national studies reveal that visitations to water-based recreational areas are increasing more rapidly than the population of the United States, and every indication is that this increase is only beginning. Marine recreational activities hold far greater potential for growth and profits at this time than do most of the "glamour oceanographic businesses,"[31] and may soon become the leading leisure pursuit. The demand to preserve the nation's shorelines for recreational pursuits grows daily. Hartzog[32] stated, "Preserving shorelines is one of our most urgent goals." According to the Industry Advisory Group to the House of Representatives Interim Study Committee on Oceanography, the marine tourism and recreation industry, with an estimated 1970 market of $14.5 billion, would exceed by far transportation--$8.6 billion, fisheries and mariculture--$3.1 billion, ocean construction--$3.9 billion, oil and gas--$5.0 billion, high technology--$1.5 billion, waterfront development--$1.7, and chemicals and minerals--$.4 billion.[33] The total United States market is $38.7 billion. Economists anticipate an increase of at least $100 million a year in national expenditures for marine recreation over the next two decades.[34]

The lure of water is indisputable! People seek water "to sit by, to swim and to fish in, to ski across, to dive under, and to run their boats over."[35] Of greatest attraction are the 60,000 miles of shoreline of the 48 contiguous states. "Surfing, sailing, swimming, sun-bathing, scuba diving, water skiing, sport fishing, and motor boating are rapidly growing recreational uses of our shores and marginal seas."[36] However, of the total shoreline mileage, only one-third can be considered as a possible recreational supply, of which less than 1,200 miles is in public ownership and is available for public recreational use.[37]

Texas

With its many inland ports, beaches and estuaries, the Texas coastline ranks second only to Florida in terms of overall miles of beach for recreational purposes. According to the ORRRC report, there are 1,081 miles, 301 of which are beach shoreline.[38] In addition, paralleling the long, curving coast are numerous barrier islands. In all, Texas offers more than 600 uncluttered miles of sunny surf and sand.[39] To this natural "resource-base" with its warm, semi-tropical sun in winter and Gulf breezes in summer, are drawn countless numbers of Texans as well as out-of-state visitors. With all of this diversified coastline available, residents and visitors alike are bound to find some of the activities for which they are searching.

Residents

According to the 1970 Census of Population, the final statistics on the number of inhabitants of the State of Texas totals 11,196,730, or 5.5 percent of the nation's population. In 1940, the state represented approximately 4.8 percent of the national total and in 1960, 5.3 percent. Indications are that during the next 30 years, the population of Texas can be expected to continue to grow more rapidly than that of the nation as a whole.

During the past several decades, urbanization has been the dominant population process. From the year 1950 to 1970, the state's urban population jumped from 4,838,000 to 8,920,946--an increase of 4,082,946 persons, or 84 percent. In 1970, New York, California, and Illinois were the only states which exceeded Texas in total number of people living in urban areas.[40] As the shift from rural to urban areas of population concentration occurs, rapidly increasing demands upon outdoor recreation facilities are becoming evident.

The ORRRC study found that of all the factors affecting the level of outdoor recreation activity, two were particularly outstanding--location and accessibility. As indicated in the proceedings of a recent workshop for Texas marine tourism-recreation development, more than 4.5 million people reside in the Texas Gulf Coast area, and "better than 75 percent of Texas' population lives within four or five hours' drive of the coast."[41] As a result, in keeping with the national trends, more Texans are spending their summer hours

near or in the water than in the traditional ball park. Recent studies completed by the Texas Parks and Wildlife Department confirm this fact. According to their statistics, Texans show a decided preference (60 percent) for water-related recreational activities over other outdoor activities.[42] These pursuits include boating, fishing, hunting, picnicking, camping, swimming, and other water sports.

Current Trends Affecting Coastal Development

Land buying and the building of second homes for recreational purposes[43] are current trends which directly cause concern for coastal developers and conservationists. Such developments are springing up all along our Texas coast.

In 1971, Governor Peterson of Delaware "signed into law a bill barring heavy industry from Delaware Bay and the state's Atlantic Ocean coastline to prevent pollution and protect them for recreation and tourism."[44] Examples of industries which were specifically affected are steel mills, petrochemical complexes, paper mills and off-shore bulk transfer terminals. The state planner and a 10-man board passes judgment upon other applicants according to the new law. "The governor explained his position was to retain the area's natural beauty, to serve millions of vacationers from the East and to thrive on tourism, a major industry. He said that heavy industry along the coast conflicted with recreation."[45]

Industry and government are both very much aware of ecological and environmental problems and pressures. Many of the nation's leading industrial firms are entering some phase of recreation and tourism development, utilizing many of the same sophisticated techniques employed in industrial development. Most of these industries are already experiencing financial success in these endeavors. Likewise, state governments are forming agencies which actually promote investments in the tourist industry, rather than simply competing for the tourist dollar.[46]

Table 1 shows the classification of gulf bay and estuary shoreline by lengths in miles and Table 2 shows the classification of gulf shoreline exposure by lengths in miles, according to ownership and use. The shoreline is owned primarily by the private sectors, claiming 82 percent. The remaining 18 percent is under public ownership with the federal government claiming 16 percent and local governments claiming 2 percent. While the bays and estuaries are predominantly nonrecreational, the gulf shoreline is predominantly recreational. These statistics are better understood with the knowledge that Texas passed the "open beach law" in 1958.[47] (See Appendix C.)

In 1970, McAndrew[48] presented a broad overview of leisure and related the issues involving Texans. Those issues especially significant to this report were: (1) Texans own more boats per capita than residents of any other state and the market continues to grow. Sailboats and houseboats are two of the most in demand;

(2) owning the second home is comparable to the status of owning the second car of the previous generation; and (3) by 1975, the leisure-market may reach $250 billion.

TABLE 1

CLASSIFICATION OF GULF SHORELINE EXPOSURE
(LENGTHS OF SHORELINE IN MILES)

CATEGORY	ZONES A	B	C	D	E	F	G	H	TOTAL
SHORE OWNERSHIP (AT MEAN HIGH TIDE)									
Federal	1	1	0	0	0	27	1	66	96
Public (Non-Federal).	0	7	0	0	0	0	1	4	12
Private	34	57	12	41	27	9	33	52	265
SHORE USE (1970)									
Recreational-Public .	20	65	12	35	1	0	15	122	270
Recreational-Private.	0	0	0	0	6	25	10	0	41
Non-recreational Development	0	0	0	0	0	0	0	0	0
Undeveloped	15	0	0	6	20	11	10	0	62

SOURCE: National Shoreline Study: Texas Coast Shore Regional Inventory Report, U.S. Army Engineer District, Corps of Engineers, Galveston, Texas, 1971.

Recreational Boating

As a result of the increased interest in recreational boating, and because of the emphasis placed upon aesthetic and ecological values of open and impounded waters, the 92nd Congress of the United States enacted legislation cited as the "Federal Boat Safety Act of 1971."

TABLE 2

CLASSIFICATION OF BAY AND ESTUARY SHORELINE EXPOSURE
(LENGTHS OF SHORELINE IN MILES)

CATEGORY	ZONES A	B	C	D	E	F	G	H	TOTAL
SHORE OWNERSHIP (AT MEAN HIGH TIDE									
Federal	10	35	0	8	0	93	40	106	292
Public (Non-Federal).	2	23	0	0	2	1	12	3	43
Private	21	415	22	76	352	126	355	423	1,790
SHORE USE (1970)									
Recreational-Public .	19	32	0	0	16	17	17	15	116
Recreational-Private.	0	52	0	0	35	6	17	9	119
Non-recreational Development	0	51	0	0	19	4	28	5	107
Non-recreational Undeveloped	14	338	22	84	284	193	345	503	1,783

SOURCE: National Shoreline Study: Texas Coast Shores Regional Inventory Report, U.S. Army Engineer District, Corps of Engineers, Galveston, Texas, 1971.

The purpose of the Act is as follows:

> Sec. 2. It is hereby declared to be the policy of Congress and the purpose of this Act to improve boating safety and to foster greater development, use, and enjoyment of all the waters of the United States, the boating industry, and the boating public in development of more comprehensive boating safety programs; by authorizing the establishment of national construction and performance standards for boats and associated equipment; and by creating more flexible regulatory authority concerning the use of boats and equipment. It is further declared to be the policy of Congress to encourage greater and continuing uniformity of boating laws and regulations as among the several States and the Federal Government, a higher degree of reciprocity and comity among the several jurisdictions, and closer cooperation and assistance between the Federal Government and the several States in development, administering, and enforcing Federal and State laws and regulations pertaining to boating safety.[49]

In compliance with Section 25 of the "Federal Boat Safety Act of 1971,"--

State Boating Safety Programs

> Sec. 25. Establishment and Acceptance: In order to encourage greater State participation and consistency in boating safety efforts, and particularly greater safety patrol and enforcement activities, the Secretary may accept State boating safety programs directed at implementing and supplementing this Act. Acceptance is necessary for a State to receive full rather than partial Federal financial assistance under this Act. The Secretary may also make Federal funds available to an extent permitted by subsection 27(d) of this Act to national non-profit public service organizations for national boating safety programs and activities which he considers to be in the public interest.[50]--

the Texas legislature enacted the "Texas Water Safety Act of 1971."

> Section 1. Declaration of Policy. This Act shall be referred to as the "Water Safety Act." It is the duty of this state to promote recreational water safety for persons and property in and connected with the use of all recreational water facilities, within the state, to promote safety in the operation and equipment of facilities, and to promote uniformity of laws related thereto.[51]

As of December, 1971, there were 310,226 recreational boats registered with the Texas Parks and Wildlife Department, an increase of 53,894 over December, 1970.

RELATED LITERATURE

A survey of related literature disclosed that the proposed study did not duplicate that of any other investigation. The review of literature which follows includes information related both directly and indirectly to the proposed study.

Marine and/or Coastal Recreation

In 1956, Shearer[52] reported that according to a seashore recreation survey of the National Park Service, Texas beaches have the greatest public recreational potential of any area of the American coastline from Mexico to Canada.

In 1965, Texas Parks and Wildlife Department[53] completed a comprehensive planning study of the Texas Gulf Coast recreational problems which indicated that the demand for activities and attractions on the coast will far exceed the rapid growth of the present population predictions, even though recreational resources are diminished annually. The loss of recreational areas from nonrecreational development and the lack of public access to bays and public recreational areas were the major problems cited.

In 1969, Gunn[54] completed an annotated bibliography of the Texas Gulf Coast resource use which revealed a critical lack of documented research in the field of recreation.

In 1970, Fenter[55] undertook a study to determine significant factors relating to the Texas Gulf Coast. The recreation and tourism data revealed:

The total United States market for recreation and tourism in 1969 was $14.5 billion, of which Texas' share yielded $1.6 billion. The State's expenditure for promotion of tourism was $1.2 million, which brought 22,307,000 out-of-state tourists who paid $141 million in taxes with an investment return to the

state of $188 to $1. It is estimated that each tourist dollar turns over seven times in a community. The total market growth is expected to continue at a minimum of five percent annually and tourism potential is expected to double each decade. Requirements which will enhance this growth potential were:

Protection of Coastal wildlife refuges from encroachment of commercial activities.
Evolve a State/Regional matching fund program for tourism development and promotion.
Development of natural advantages into balanced and specialized areas.
Attraction of large scale investment and development.
Regional land use management plans and enforcement.
Intelligent promotion of natural advantages.
Improve information and direction services.
Establish and enforce strict building codes.
Development of non-seasonal attractions.
Severe weather protection and environmental planning.

Anticipated problems were:

Difficulty in establishing property boundaries and ownership.
Conflicts between recreational and non-recreational users.
Unavailability of insurance for beach front areas.
Conflicts between developers and preservationists.
Lack of potable water in many coastal areas.
Poor image as a tourist attraction.
Insufficient parks and recreation areas.
Poor highway access to many coastal areas.
Excessive low quality development.
Conflicts of social goals.
Environmental pollution.

In 1970, the Association of Bay Area Governments[56] undertook a study of the ocean shoreline of California for the purpose of considering coastline problems, issues and opportunities as part of the overall regional planning process. Regional goals and policies concerning the conservation, development, utilization

and management of the 300 mile stretch of California's coastline were presented.

Research revealed that the coastline offered a great potential for a variety of recreational experiences. However, due to the paucity of compiled data, it was difficult for the investigators to quantitatively describe the full recreational utilization of the shore. It was noted, however, that portions of the coastline, where scenic and recreational values were high, were being modified and public access was being denied; and that little coordination existed between governmental agencies which had interests and responsibilities in the coastal zone.

The Association recommended, therefore, that regional goals, objectives, principles and standards related to the coastline needed to be defined and adopted, and that a comprehensive regional inventory analysis and evaluation of the existing environmental and ecological resources and processes of the coastal zone be undertaken. From the data compiled a comprehensive regional development and conservation plan should emerge.

In 1970, Gunn[57] conducted a study to provide a cursory assessment of the present resource management of the Texas gulf coast for tourism and recreation. The research identified numerous factors as contributing to the desire for greater utilization of the Texas gulf coast in the immediate and long-range future, one of which was user pressure on coastal resources as a result of population growth, the development of more recreation and tourism

attractions, the influence of increased promotion and publicity, and the improved image of the South.

Two questions, posed and discussed with regard to coastal recreation, were: (1) What is unique about coastal recreation generally?" and (2) "How does the Texas gulf coast compare with others?"

Problems which were identified as the result of the study were: (1) the variety of activities presently available appears to be extremely low; (2) the demand for recreation-tourism activity appeared to be greatest where the resource quality had degenerated the most; (3) transportation and access were difficult; (4) minimal plans for development have been integrated between decision-makers; and (5) no guidelines were available to accept the new growth which is inevitable.

The following special study needs were an outgrowth of the study: (1) an assessment of tourism-recreation management roles; (2) an evaluation of the potential of the resource base; (3) the location of areas of critical need for protection and redevelopment; and (4) interrelationships and social costs of alternatives.

In 1971, Lemmon[58] undertook an investigation of the Texas coast. The findings of the committee, pertaining to recreation and tourism, were:

> As the Committee surveyed the future potential of the Texas coast, however, it discovered that the relatively new industry of coastal tourism and recreation offers one of the largest and most attractive economic bases for future development of the entire Texas coast. Great

> stretches of coastline in its natural state with miles of sandy beaches and an attractive climate throughout most of the year offer the opportunity for coastal development of the highest possible quality.
>
> Thus, the Committee finds that the State of Texas should seek to specifically nurture coastal tourism and recreation as soon as possible. In the opinion of the Committee, the state can accomplish these important ends while enjoying growth of conventional coastal industry if multiple-use plans are well conceived and universally adopted by involved local governments.
>
> In order to create a recreational atmosphere along the Texas coast, the Committee finds that development of high quality park areas by Federal, State and local governments, as well as private interest, should be supported and encouraged.
>
> Experts testifying before the Committee indicated that improved transportation systems were a necessary prerequisite to development of tourism and recreation on the Texas coast.

In 1972, Ditton[59] published a technical report on the social and economic significance of recreation activities in the marine environment. Automation, more discretionary time, population growth, increased mobility and per capita disposable income were identified as significant factors contributing to the increased demand for water-created recreational experiences. Ditton restated the need to establish a valid standard of measurement whereby an accurate economic evaluation of recreational experiences could be measured.

In 1972, Ducsik[60] completed a study of shoreline recreation. The research stressed the critical shortage of the nation's shores remaining for public recreation. The shortage has resulted from "imperfections in our present allocative mechanisms of the private

markets and local political decision-making."[61] The solution for the problem posed by the investigator coupled state control of shoreline regulation with federal support.

Land Use

The Commission on Marine Science[62] discussed and reported issues related to existing and future uses of coastal areas. Recognizing the fact that outdoor recreation "increasingly is becoming a massive rush to the water," the Commission identified the need for preservation and development of seashore lands for recreational purposes. The following recommendations based upon the results of the study were proposed: (1) that a definitive inventory of existing recreational facilities and of potential resources in coastal areas be undertaken; (2) that governmental agencies should give primary emphasis to acquiring access to the shores for recreational purposes; and (3) that necessary legislative authority be provided to support safety requirements for coastal recreational areas.

In 1969, the Urban Land Institute[63] held its first land use symposium devoted to recreation and leisure for the purpose of analyzing the new and rapidly expanding recreation industry in relation to land development. Emphasis was placed upon the significance of the new era characterized by the short work week, increased income, faster modes of transportation, and a population with a desire to get away from metropolitan areas for relaxation on beaches, golf courses, mountains, and other recreational areas. Discussions

included the growth of the second home market, development of recreational facilities, communities designed for leisure, and the financing of such land development.

Economic Benefits

In 1966, Nathan Associates[64] conducted a study for the Appalachian Regional Commission in order to determine the role which recreation as an industry could play in the economic development of an area through the creation of jobs, generation of incomes, and stimulation of public and private investment.

The document established the tourism-recreation industry as being resource-based, with enterprises which were mainly trades and services and which alone could rarely provide a base for a viable economy. However, the tourism industry could provide supplementary benefits to a local economy based upon manufacturing, mining or agriculture. The report examined the direct and indirect economic effects of expenditures arising from tourism-recreation, and developmental effects as to the establishment of tourist attractions.

In 1968, the Ozarks Regional Commission[65] undertook a project to develop a strategy whereby the optimum economic benefits of the leisure industry growth could be realized. The primary focus of the program was to identify specific steps through which the leisure industry could contribute to closing the income gap of the region. Of major significance was the recognition of the leisure industry

as an industry, classifiable as such, even though dimensions of the industry within the state were merely estimated.

Development goals included five basic elements: (1) a market analysis, (2) problems and opportunities, (3) income gap and leisure industry goals, (4) strategies and objectives, and (5) implementation programs and tactics. The major conclusion drawn from the findings was that approximately $300 million annually in new income could be added to the region's economy through development of the leisure industry.

In 1970, Floyd, Heyl and Barnes[66] conducted a study for the Coastal Plains Regional Commission for the purpose of determining the economic profile of the Coastal Plains region. The development of commercial tourism and recreation was regarded as an integral part of the overall plan. The objective of the study was to encourage private investment in enterprises which would develop the Region's natural and historical attractions in order to offer the greatest potential in balanced-season activity and employment. Economic data listing 12 major tourism projects which would be appropriate for location in the study area were made available to potential private tourism investors. Special emphasis was placed upon the potential for the Intracoastal Waterway, a valuable yet undeveloped asset for the Region.

In 1971, Patterson[67] completed a study of the marine manufacturing and service companies of New England, a portion of which pertained to marine recreation. As a result of an economic slowdown

and the decline in Defense Department expenditures, the New England marine economy which had depended upon government funding or research programs was forced to pare operations to marginal levels. The recreational resource industry was one of only two within the region which provided a measure of relief. The purpose of the study was to compile marine industry information for project evaluation and to make such data available to management.

A profile of the industry which was drawn from the survey data enabled the investigator: (1) to compare the regional industry to the national industry; (2) to project the regional, domestic, and international market trends and developments in light of the strengths of the local marine concerns; (3) to analyze the current business difficulties from a management standpoint; and (4) to draw conclusions and make recommendations.

Tourism

In 1967, Pinson[68] completed a study of tourism development in the Coastal Plain area. The purpose of the project was: (1) to measure vacation/recreation travel in the area; (2) to determine its economic importance; (3) to identify and define the major potentials of the area; and (4) to recommend programs through which the area could expand its travel industry, thereby realizing additional economic benefit from the increase in vacation/recreation travel.

The findings indicated that in 1966 nearly seven million travelers within the area spent $12 million. Total spending

generated by these direct expenditures was estimated to range between $18 to $24 million. A detailed development program was generated for implementation.

In 1969, Belden Associates[69] conducted a nationwide survey for the Texas Tourist Development Agency in an attempt to measure the market for tourist travel in Texas. The specific objectives of the study were to determine trends in: (1) the size of the American tourist market, (2) the proportion of the tourist market coming into Texas during the previous year, (3) the popularity of Texas for a future vacation, and (4) respondents' familiarity with tourist attractions in Texas.

The findings of the study revealed: (1) a possible significant increase in the percentage of American families who took vacation trips, (2) no significant difference in the percentage who said they had traveled in Texas, (3) an increase of interest in future visits to Texas more than any other state except Colorado, and (4) a steady increase in an awareness of tourist attractions in Texas.

In 1969, Leisure Systems, Incorporated,[70] undertook a study for the Coastal Plains Regional Commission in order to develop a program for optimizing the commercial tourist industry as an integral part of the economic growth of the area. This project resulted in: (1) the identification of supporting programs necessary for the full development of an effective, competitive tourist industry; (2) recommendation and complete financial analysis of 12 primary commercial projects which could be implemented immediately;

(3) the listing of 14 secondary projects worthy of further consideration; and (4) the outlining of a program for implementing assistance. Specific reference was made to the Intracoastal Waterway, one of the finest natural recreational resources, which was not being used at even a fraction of its potential.

In 1969, Checchi[71] undertook a study of tourism in the South Texas Triangle, the objective being the building of an analytical framework and action program for the development of a "quality" tourist industry. The major conclusion of the report was that the South Texas Triangle needed more and better tourist attractions. Feasibility studies for new types of tourism projects which would help create a better image and encourage quality resorts were recommended.

In 1970, Perkins[72] addressed himself to the value of the tourist industry to a community. He stated that tourism is an industry well worth the "tender loving care necessary to its growth and that the development of a well-defined 'product' and a strong consumer market orientation were among the most important ingredients of this tender loving care."[73] Perkins concluded that effective cooperation and sound planning on the part of private and governmental agencies could result in a thriving tourist industry for many communities.

Intracoastal Waterway

In 1969, Leisure Systems, Incorporated[74] prepared a study for the Coastal Plains Regional Commission which evaluated the

recreational potential of the Intracoastal Waterway in North Carolina, South Carolina, and Georgia. The objectives of the study were: (1) to determine volume and type of present recreational users of the Intracoastal Waterway, (2) to indicate existing problems inhibiting recreational use, (3) to provide specific recommendations to eliminate or alleviate those problems, (4) to provide detailed feasibility analyses as applicable to recommendations, and (5) to stimulate entrepreneurial interest in implementing specific projects.

The findings indicated: (1) recreational utilization of the waterway was minimal, and (2) several interrelated factors contributed to the activity lag. Recommendations for the elimination or alleviation of hindering factors were listed in order of priority.

Vacation Homes

In 1966, the Department of the Interior, Bureau of Outdoor Recreation[75] undertook a study to determine the present and potential role of vacation homes in the northern New England states relative to outdoor recreation. The objectives of the study were: (1) to determine the extent to which vacation homes supplied recreational opportunities, (2) to assay the recreational behavior of their inhabitants, and (3) to evaluate their economic impact upon the local area.

The findings of the study indicated: (1) that the vacation homes were predominantly utilized for recreational purposes (90

percent plus), (2) that positive recreational behavior resulted from the inhabitants' participation in a large variety of activities, and (3) the economic impact of money flow and the creation of jobs indicated was $470 million.

Critical Texas Coastal Recreational Issues

The pertinent data reported in the literature survey have revealed several issues which must be classified by researchers as urgent, with regard to immediate investigation of the Texas coastal recreational issues.

General introductory data stressed the significant demands now being made upon outdoor and marine recreation and tourism. The related studies data yielded examples for comparison. The most significant were: Ducsik,[76] presenting a comprehensive view of the problem, and Fenter,[77] Lemmon,[78] and Gunn[79] presenting the Texas picture. The specific coastal recreation issues which are vitally in need of research are:

(1) Availability of recreational land and its use;

(2) User and nonuser;

(3) Access;

(4) Available and potential activities and facilities;

(5) Conflicts of purposes, management, users, and land use;

(6) Assessment of tourism; and

(7) Guidelines and/or legislation aiding growth and development.

Based upon these issues, a disciplined and methodical program of research is proposed.

SUMMARY

The increased population, mobility, economy, and leisure have greatly enlarged the demand for recreational areas and activities. Predictions for the future strongly indicate that this present trend will continue with a multiplicative effect resulting in the tripling of the demand for outdoor recreation by the year 2000. The emphasis upon water-related activities has surpassed expectations causing an added dilemma to another resource--the nation's shoreline. Statistics indicate that only 6 percent of the United States' shoreline is available for public use and of that only 5.5 percent is suitable for recreation.

The entire Texas coastline, at the present, is open to the public according to the open beach law. With 1,081 miles of shoreline--301 of which is sandy beach--in a climate which ranges from tropical to semi-tropical, boasting five unique Standard Metropolitan Statistical Areas, the Texas Coastal Zone could be the greatest single asset for recreation and tourism in the nation.

DEVELOPMENT OF THE STUDY

CHAPTER II

DEVELOPMENT OF THE STUDY

METHODOLOGY

Statement of the Problem

The challenge has been issued to Texas through current literature to protect her coast from the exploitation which has occurred on other states' coastal shores. From Maine around to Texas and from California to Washington, development has monopolized the coastal zone. Texas' coast is, as yet, virtually undeveloped and is the last major source for recreation and tourism left in the 48 contiguous states. Due to the demand of individuals for recreation and tourism it appears that the coast is Texas' most valuable asset from both aesthetic and economic points of view. The following figures should put the value in better perspective. Texas' share of the 1970 ocean market was estimated to be: recreation and tourism--$1.6 billion; ocean construction--$790 million; oil and gas--$640 million; and fisheries and mariculture--$220 million.[80]

Since research economists in outdoor recreation have warned against accepting biased, existing and potential assessments placed upon recreation and tourism expenditures which can not be validated statistically, there is a critical need for some type of systematic

and disciplined approach to determine the status of recreation and tourism in the Texas Coastal Zone.

Scope

The investigator would like to point out at the onset of this research that there are several studies which are needed in the area of recreation and tourism in the coastal zone. Since it was not feasible to undertake a full scale investigation of the overall problem, a series of projects is recommended. The initial research involved the collection and analyzation of status data--an economic inventory of recreation and tourism for a duration of eleven months.

Purpose of the Study

The investigator purported to undertake an economic inventory of existing and available proposed public and private recreation and tourism units within the Texas Coastal Zone in order to be able to determine the present economic status of these industries.

Objectives

The objectives of the study were:

1. To conduct an economic inventory of existing and available proposed public and private recreation and tourism units located within the Texas Coastal Zone,
2. To determine a total market price for these units within the designated area, and
3. To suggest recommendations for further research.

Delimitations

The delimitations of the study were:

1. The designated Texas Coastal Zone comprised of 36 counties: Aransas, Austin, Bee, Brazoria, Brooks, Calhoun, Cameron, Chambers, Colorado, DeWitt, Duval, Fort Bend, Galveston, Goliad, Harris, Hidalgo, Jackson, Jefferson, Jim Wells, Kenedy, Kleberg, Lavaca, Liberty, Live Oak, McMullen, Matagorda, Montgomery, Nueces, Orange, Refugio, San Patricio, Victoria, Walker, Waller, Wharton, and Willacy.
2. The existing and available proposed economic data--acreage, number of units, average employment, wages, expenditures, capital improvements, sales, receipts and value added.

Sources

Human and documentary sources were utilized throughout the duration of the research. The investigators made an extensive search of available published sources from which were obtained the documentary data appearing in the manuscript, as well as information leading to human sources, who in turn made available the primary data also appearing in the manuscript. The documentary sources appear in the bibliography. The human sources are comprised of numerous local, state, regional and federal governmental officials associated with the public sector and executives, educators, entrepreneurs, and individuals associated with the private sector of recreation and tourism. Since the Industrial Economics Research Division compiled and calculated the data appearing in most figures and tables, the Division is documented as the source.

Procedures

The following procedures were adhered to:

1. Complete a literature search;
2. Determine the study area;
3. Observe the study area to determine existing conditions and to determine the type and amount of available data;
4. Contact public and private authorities for data;
5. Collect, analyze and present data; and
6. Determine findings, draw conclusions, and make suggestions for further research.

Anticipated Values

The values which were anticipated are:

1. The identification of marine-related recreation and tourism industries through a formal, unbiased and objective research study;
2. The establishment of a figure which will serve as a basis for placing a dollar price on the recreation-tourism industry in the Texas Coastal Zone and which will also serve as a basis for comparison within the State of Texas and with other regions;
3. The identification of various research;
4. The improvement of the quality of marine advisory services through the dissemination of information and the identification of problems which are revealed in particular areas of recreation and tourism;

5. And finally, the data could help prevent the exploitation of the Texas Coastal Zone which has dominated similar areas.

ORIENTATION TO THE DATA

Overview of Selected Leisure Industries

Introduction

Urbanization and automation literally created the "Leisure Industry." More free time, a greater economy, increased mobility and the inescapable need for recreational activities have resulted in making LEISURE the fastest growing industry in the nation--destined to become the largest and most influential in this decade. The leisure industry is the third largest in the nation, probably the nation's largest single employer, growing at a rate four times greater than the gross national product and estimated to reach $250 billion by 1975. The outlook for the Seventies is an intensified drive toward more leisure as a result of a shorter work week, more paid holidays, job sabbaticals, and earlier retirement, coupled with the forecast of a continued rise in the economy. The recreation and tourism industries will be the principle economic beneficiaries of this trend.

These leisure industries are considered to be "ideal" since each is not classified as a "smokestack" type industry which usually depletes natural resources and pollutes the environment. Two more positive characteristics of the industry are the rise

of social and cultural benefits within areas of influence and the fact that each is regarded as an "export" industry.

Even though recreation and tourism are considered to be "ideal" industries, they are far from being a panacea. The investigator would like to point out that the recreation and tourism businesses are complexed and competitive, usually having sizeable investments which are totally dependent upon demand from individuals or groups. The critical need for planning is evident.

Since recreation and tourism are regarded as resource-based industries relying upon services and trades, rarely providing a viable economy within themselves, it is necessary to determine the whole economic assessment of an area prior to initiating such investments. When added to agriculture, manufacturing or mining, the industry can generate a sizeable supplemental economic base. In fact, in most cases, the broader the economic base of a community is, the greater the turnover of the recreation and tourism dollar. In Texas, for example, the tourist dollar turns over approximately seven times,[81] whereas the national turnover is estimated at 2.2.[82] This is illustrated by the location of several major attractions in or near the larger metropolitan areas which generate broad economic bases.

The purpose of this project was to complete an economic inventory of recreation and tourism within the Texas Coastal Zone. The data were categorized into three groups--recreation, tourism, and entertainment--in order to be able to complete a more

comprehensive and in depth study. These three categories are the major components of the leisure industry.

Recreation

Recreation may be defined as an industry created by individuals engaging in a refreshing leisure experience. Recreation values occur within an individual. Richer personality, improved citizenship, better health, spiritual inspiration, intellectual growth, economic change, crime prevention, and character development are the principally accepted values of recreation resulting in the manifestation of a positive by-product to an individual's environment. Prior to automation and urbanization, the greater portion of these values were learned primarily within the home. With the population and leisure booms, decision-makers have been faced with social and economic problems, and recreation began to play a major role in solving these problems through the provision of well-planned programs which helped develop these principle values. Ideally, public recreation programs should meet the interest and needs of all the people.

The economic by-products of a quality recreation program are increased property values, job opportunities and business incomes. The elements of a quality recreation program which bring about these economic benefits are people, leadership, activities, facilities and finances--in that order. Well-planned, frequently scheduled evaluations of these elements will determine the effectiveness and quality of the total program.

Even though the government must assume a major responsibility for recreation, other provisions are afforded by private, commercial, quasi-public and public enterprises. A comprehensive knowledge of the leisure opportunities, recreational and otherwise, is a major planning tool.

For the purpose of this investigation, recreation has been separated into two categories--public sector and private sector. The public sector includes economic data from local, county, state, and federal units which were operated under some type of governmental authority. The private sector includes data from units which were purchased and/or utilized for a fee by individuals. The private sector includes economic data on categories including boats, travel, horses, and selected Standard Industrial Classification statistics.

Tourism

Tourism may be defined as an industry created by people traveling and spending money away from home. Tourism is the "ultimate" export industry in that few or no natural resources are depleted; the quality of life and domestic and international relations are usually enhanced; facilities and programs often improve; and most important, new money is brought into the area. Tourism is one of the fastest growing and most influential industries in our present economy. Two dozen tourists per day, per year are equivalent to acquiring an annual manufacturing payroll of $100,000.[83] As a result, many economic and environmental-minded

officials are looking to the tourist industry for solutions to local pressures, thus creating an extremely competitive market.

The components of the tourist industry are clientele, attractions, facilities, transportation, publicity, labor and capital.

Entrepreneurs most successful in the tourist industry have learned that the more they know about the likes and dislikes of their clientele, the more lucrative their enterprise. A knowledge of what people are willing to spend money for is the answer.

Man has an inexhaustible supply of alternatives for his leisure. To be classified as a tourist, he must travel and spend time and money away from home. Other important economic considerations of the tourist are point of origin, level of income, length of stay, size of party and mode of transportation.

The attraction is the component which brings the clientele. It is either a site, natural or man-made, or an event, e.g., World's Fair. The attraction has various levels of significance--universal, national, regional, state or local--and is in operation on a year-round or seasonal basis.

Facilities must be available if any sizeable economic benefits are to be realized. People are interested in a specific attraction, but the facilities and services usually determine the length of stay and the amount of money spent.

Capital and labor often determine the price, image and quality of the attractions and the facilities. Tourist attractions and

facilities usually require very large investments, and the labor to operate the attractions and facilities is usually classified as low-paid services.

Tourism was presented in two major categories of primary data--eating and drinking and lodging; travel was estimated from secondary data.

Entertainment

Entertainment may be defined as an industry created by individuals engaged in activities for the purpose of amusement or escape. As a society becomes more affluent, complexed and leisurely, the need for entertainment becomes more paramount. Since entertainment is a major component of the leisure industry, it was presented separately in order to be able to indicate its significance, and is combined with recreation and tourism in order to present the overall inventory status.

Selected Public Sector Data

Data were arbitrarily selected from the public sector at the local, state, and federal levels. Available significant economic data were obtained from each governmental authority and categorized first by governmental level and next as acreage, employment, wages, cost of operation, and capital improvements. The governmental authority level was broken down into three major units--federal, state, and local. An explanation of the data categories is as follows:

Acreage--The category "acreage" indicates the amount of designated owned or leased property within each county utilized for recreation and tourism.

Employment--The category "employment" indicates the total number of individuals--part-time and full-time--posted on the payrolls for the fiscal year.

Annual Wages--The category "annual wages" indicates the total salaries budgeted for the fiscal year.

Operation Expenditures--The category "operation expenditures" indicates the total budget for the fiscal year including wages, excluding capital improvements.

Capital Improvements--The category "capital improvements" indicates the total amount budgeted for the fiscal year for major expenditures such as buildings, land, major equipment and vehicles.

The data were tabulated and presented by county and as a combined total for the coastal zone. The public sector data were then combined with the private sector data to present the overall economic inventory. For the purpose of this investigation, the fiscal year was determined as of April 30, 1973, due to the variations within the public sector annual budgets.

Selected Private Sector Data

Four major areas of significant data were available for the private sector--Standard Industrial Classification (S.I.C.), boats, horses, and travel. S.I.C. data included most of the information

pertaining to recreation and tourism within the coastal zone, with the exception of boating, horse activities and travel. Therefore, a special effort was initiated in order to be able to obtain statistics in these areas.

Standard Industrial Classification

The Standard Industrial Classification, hereafter referred to as S.I.C., is a system of categorizing economic units or establishments by the type of business activity in which each is engaged. The Bureau of the Budget publishes a volume entitled, Standard Industrial Classification Manual, which contains a classification of all economically significant industries. An update is published every five years. Therefore, the data presented in this manuscript utilized the 1972 edition.

Units were separated into the following classifications: Division, Major Group--2 digits, Minor Group--3 digits, and Industry--4 digits. For example, the division is Manufacturing; Major Group 39--Miscellaneous Manufacturing Industries; Major Number 394--Toys and Amusements, Sporting, and Athletic Goods; and Industry Number 3942--Dolls.

Pertinent units incorporated within this study are presented in the 3-digit classification. A list of those applicable were:

Selected S.I.C. Divisions and Numbers

Manufacturing

319 Leather Goods
365 Radio and Television Receiving Equipment

379 Miscellaneous Transportation Equipment
394 Toys and Amusements, Sporting and Athletic Goods
395 Pens, Pencils and other office and Artist materials

Wholesale Trade

504 Sporting, Recreational, Photographic, and Hobby Goods, Toys and Supplies

Retail Trade

559 Automotive Dealers, not elsewhere classified
573 Radio, Television, and Music Stores
581 Eating and Drinking Places
592 Liquor Stores
593 Used Merchandise Stores
594 Miscellaneous Shopping Stores
595 Sporting Goods Stores and Bicycle Shops
599 Retail Stores, not Elsewhere Classified

Services

701 Hotels, Motels, and Tourist Courts
703 Camps and Trailering Courts
704 Organization Hotels and Lodging Houses, on membership basis
729 Miscellaneous Personal Services
781 Motion Picture Production and Allied Services
782 Motion Picture Distribution and Allied Services
783 Motion Picture Theaters
791 Dance Halls, Studios, and Schools
792 Theatrical Producers (except motion pictures), Bands, Orchestras and entertainers
793 Bowling Alleys and Billiard and Pool Establishments
794 Commercial Sports
841 Museums and Art Galleries
842 Arboreta, Botanical, and Zoological Gardens
864 Civic, Social, and Fraternal Associations
869 Membership Organizations, not elsewhere classified

Data for each of these S.I.C. numbers were presented by county according to the number of units, average employment, estimated annual wages, and estimated annual economic significance. An explanation of these data is as follows:

Number of units--A unit or establishment was a single

physical location where goods or services are produced. It is not necessarily identical with the business concern or firm which may consist of one or more units. Data were based upon actual units reported for the first quarter of 1972.

Average Employment--The average employment was based upon the actual employment reported for the first quarter of 1972.

Estimated Annual Wages--Estimated annual wages were based upon the actual wages reported for the first quarter of 1972. The quarterly figure was multiplied by four to arrive at the estimated annual figure. Wages include all forms of compensation--salaries, wages, commissions, bonuses, vacation allowances, sick leave pay, payments in kind, and reported tips and gratuities--as reported before deductions for social security, income tax, insurance dues, and similar payments.

Estimated Annual Economic Significance--Estimated annual economic significance was comprised of three components: sales, receipts, and value added. These components are further explained as follows: (1) The sales component of estimated annual economic significance was calculated for those S.I.C. numbers representing wholesale and retail trade. Sales include merchandise sold and receipts from repairs and other services to customers. Sales are net of deductions for refunds and allowances for returned

merchandise, although trade-in allowances are not deducted from total sales. Local and state sales taxes and federal excise taxes collected by the store from customers are included in sales. The figures for estimated annual sales were calculated from the payroll to sales ratios[84] for S.I.C. categories 504, 559, 573, 581, 592, 594, 595, and 599. (2) The receipts component of estimated annual economic significance was calculated for those S.I.C. numbers representing services. Receipts include all payments from customers for services rendered and merchandise sold. Receipts also include local and state sales taxes and federal excise taxes collected by the establishment from the customers. The figures for estimated annual receipts were calculated from the payroll to receipts ratios[85] for S.I.C. categories 701, 703, 704, 729, 781, 782, 791, 792, 793, and 794. (3) The value added component of estimated annual economic significance was calculated for those S.I.C. numbers representing manufacturing industries. Value added by manufacture was derived by subtracting the total cost of materials from the value of goods produced. It was considered to be the best available measure of economic significance in manufacturing. The figures for estimated annual value added were calculated from the payroll to value added ratios[86] for S.I.C. categories 319, 365, 379, 394, and 395.

The payroll figure of the first quarter of 1972 for each S.I.C. classification was divided by the appropriate ratio, yielding an estimate of sales, receipts, or value added. These figures were multiplied by four to yield an estimate of annual sales, receipts, or value added which was presented as estimated annual economic significance.

Boats, Horses, and Travel

Since boating--other than sales for boats during the current (1972) year--horse activities, and travel were not included in the S.I.C. data, each will be discussed and treated separately in the presentation of the data. Figures will include the number of boats and horses within the coastal zone and an annual estimate of expenditures for horse activities. Travel estimates were tabulated from estimates published by the Texas Highway Department.

Summary

The public and private sector data utilized were scrutinized, and only those significant were included in the investigation. The data were tabulated and presented by county, by major and combined industries, by Councils of Governments, and as a total for the coastal zone. Public and private sector data were combined to conclude the economic inventory of recreation and tourism within the Texas Coastal Zone.

THE STUDY AREA

CHAPTER III

THE STUDY AREA

Introduction

The Texas coast is probably the most valuable resource for the citizens of the state, containing the most diverse grouping of natural resources within the state. Recent emphasis upon this area has resulted in the identification of numerous complexed problems such as imprecise boundaries, increased population, pollution, and depletion of natural resources which demand some form of management and/or solution.

Most of these problems have occurred primarily around the large urban complexes, leaving a major portion of the coast unspoiled. With the proper development and conservation, the coastal zone can be preserved to serve future generations.

In order to be able to present the most complete and concise description of the study area, the data in this chapter were obtained and compiled from: Texas Almanac;[87] Goals for Texas;[88] Handbook of Texas;[89] New Geography of Texas;[90] Parks, Open Space and Recreation Plan: South East Texas Regional Planning Commission;[91] Parks, Recreation and Open Space Plan: Houston-Galveston Area Council;[92] Open Space Plan and Program: Coastal Bend Regional

Planning Commission;[93] and Open Space Plan: Lower Rio Grande Valley Development Council.[94] Discrepancies may appear between the written text and the information contained within the county maps due to the fact that the maps present a county average, whereas the text presents the average for all reporting stations within the designated councils of governments.

Description of the Area

The coastal zone as defined by the Texas Coastal Zone Management Program, Office of the Governor of Texas, is composed of 36 counties, comprising a total of 33,223 square miles. From Sabine Pass southward to Brownsville there are 1,081 miles of shoreline--301 miles of beach shoreline, 421 miles of bluff shoreline, and 359 miles of marshy shore. In addition, Texas has an almost continuous strip of barrier islands (80 percent of the coast) which parallels the main shoreline. These are Matagorda, St. Joseph, Mustang, and Padre--the longest barrier island in North America, extending 113 miles. Including the islands' shoreline, there are 373 miles which front on the open Gulf.

Within the coastal area there are 14 bays--East, Trinity, Galveston, West, Matagorda, Lavaca, Espirito, San Antonio, Aransas, Copano, Corpus Christi, Nueces, Baffin, and Laguna Madre. Ranging in depth from four to 18 feet, these bays and inlets to the Gulf of Mexico cover 1,537,000 acres or 2,402 square miles. In all, there are more than 1.8 million acres of wetlands within the coastal area.

The temperature within the coastal zone is generally humid, ranging from 30° Fahrenheit during the winter months to 100° Fahrenheit during the summer months. Mean annual precipitation is 33.56 inches.

The elevation of the area rises from sea level along the coast to an altitude of more than 800 feet inland, with the terrain ranging from flat coastal plains to rolling hills. A diversity of soils includes beach sand, light and dark sandy loam, alluvial soils, and clay. The topography ranges from prairies, brushy plains, to heavily forested areas of pines and hardwood timbers.

According to the Bureau of Census, the population of the 36 county area of the coastal zone increased 21.48 percent, from 2,885,026 in 1960, to 3,504,886 in 1970. Indications are that the population within the same area will increase to 5,060,700 by 1990, or 75.41 percent over that of 1960. Census statistics reveal that 50 percent of the residents of Texas live within a radius of less than 100 miles from the coastline, and that more than 75 percent reside within a four and one-half hours' drive of the coast.

Major industries within the area include agriculture, forestry and lumbering, fisheries, manufacturing, shipbuilding and port activities, dairying and cattle ranging, sulphur mining, sugar refining, petroleum and natural gas drilling and refining, and tourism.

Since the major source of transportation is the automobile, highway access is paramount. Texas is most fortunate to have an

outstanding highway department. There are interstate, state, farm to market and private roads available within the coastal zone, and constant improvement and development are underway. Air, rail, and waterways to and within the coastal area are also numerous.

Predominant recreational activities include water sports, fishing, hunting, and horse racing, as well as those activities common to large metropolitan areas. Attractions such as historical sites, local events, special celebrations, wildlife refuges, and commercial entertainment are abundant.

The total income for the coastal zone was $10,803,872,000; the per capita income was $3,083; the total employment was 874,469; and the total wages were $6,221,184,016 for 1970.

Figure 1 illustrates the Texas Coastal Zone and Table 3 indicates the economic status of the 36 county area.

Texas State Planning Regions and Regional Councils of Governments

In December, 1968, the Governor of Texas established 21 State Planning Regions in conjunction with a national movement toward innovative patterns in governmental structure. Based mainly upon common geographic and socio-economic characteristics, natural resources, agriculture, manufacturing, and a common relationship to a metropolitan focal point, these regions serve as a framework for the coordination of functional planning of state agencies and regional organizations. Within the 36 county coastal area of the State of Texas, there are five planning regions: South East Texas State Planning Region, Gulf Coast State Planning Region, Golden

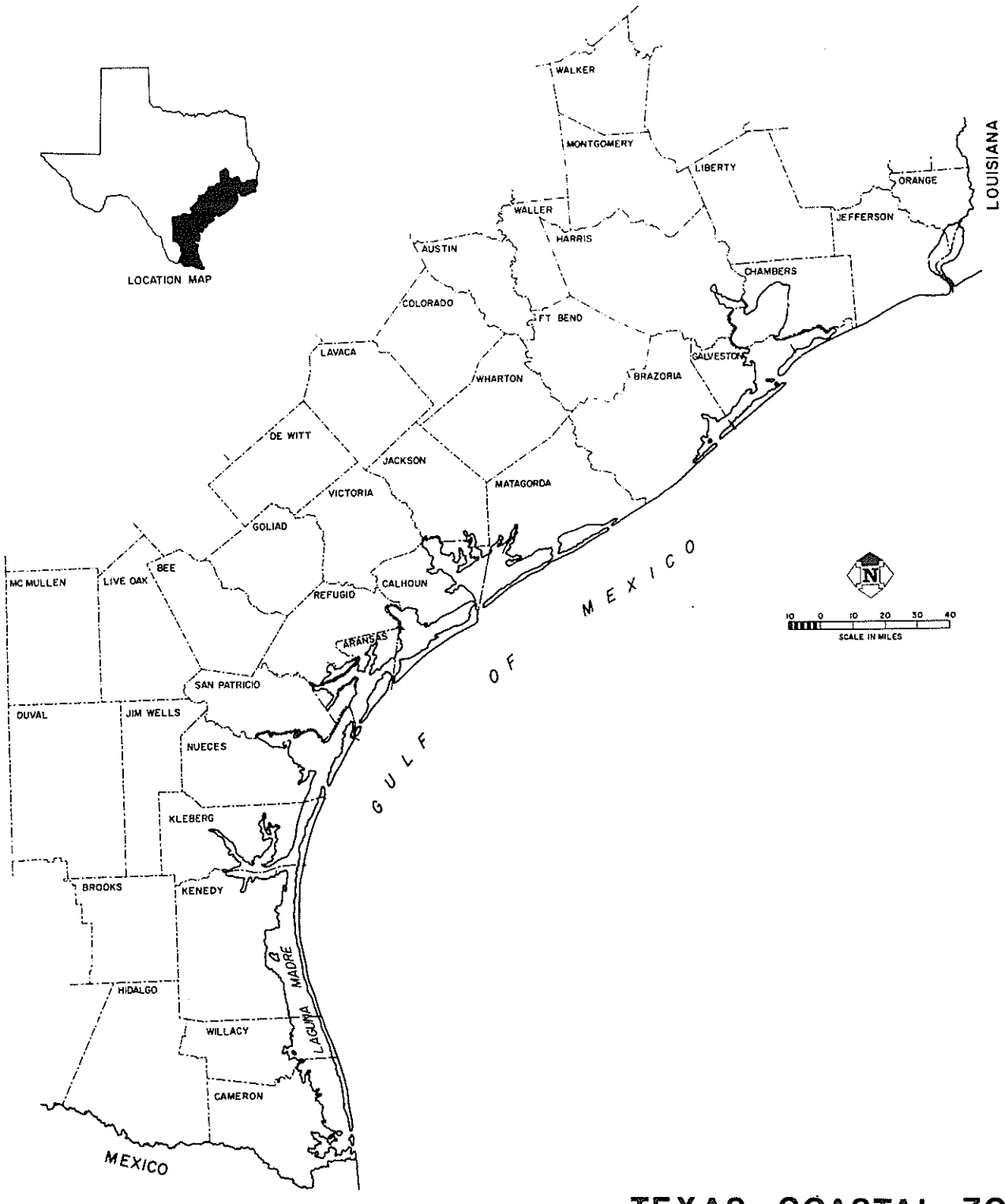


Figure 1

TEXAS COASTAL ZONE

TABLE 3

COUNTY ECONOMIC DATA
WITHIN
TEXAS COASTAL ZONE
1970

COUNTY	POPULATION	EMPLOYMENT	PER CAPITA INCOME[a]	TOTAL WAGES (000)	TOTAL INCOME (000)
Aransas	8,902	1,829	$3,030	$ 10,984	$ 26,973
Austin	13,831	1,622	2,297	7,404	31,771
Bee	22,737	2,446	2,514	11,455	57,172
Brazoria	108,312	23,262	3,056	187,133	331,053
Brooks	8,005	685	2,102	3,624	16,831
Calhoun	17,831	5,550	2,789	43,629	49,726
Cameron	140,368	22,162	1,908	98,432	267,778
Chambers	12,187	1,739	3,207	15,959	39,079
Colorado	17,638	2,508	2,596	11,442	45,789
DeWitt	18,660	2,824	2,404	11,014	44,861
Duval	11,722	786	2,124	4,132	24,895
Fort Bend	52,314	7,786	2,286	52,938	119,618
Galveston	169,812	35,478	2,880	251,049	489,049
Goliad	4,869	240	2,088	995	10,168
Harris	1,741,912	559,242	3,601	4,169,136	6,272,750
Hidalgo	181,535	19,619	1,648	91,556	299,120
Jackson	12,975	1,392	2,681	6,726	34,783
Jefferson	244,773	68,767	3,201	522,452	783,467
Jim Wells	33,032	5,592	2,448	30,638	80,851
Kenedy	678	87	2,004	1,499	1,359
Kleberg	33,166	3,488	2,730	18,002	90,530
Lavaca	17,903	2,215	2,266	9,164	40,573
Liberty	33,014	4,250	2,465	22,410	81,388
Live Oak	6,697	925	2,648	4,332	17,731
McMullen	1,095	107	3,637	691	3,982
Matagorda	27,913	3,995	2,708	23,967	75,579
Montgomery	49,479	4,653	2,247	26,857	111,194
Nueces	237,544	50,679	2,763	307,419	656,428
Orange	71,170	14,170	2,779	110,685	197,792
Refugio	9,494	1,025	2,651	6,262	25,169
San Patricio	47,288	5,998	2,041	40,110	96,492
Victoria	53,766	10,033	2,802	58,955	150,652
Walker	27,680	1,992	2,693	8,649	74,554
Waller	14,285	856	2,567	4,997	36,674
Wharton	36,729	5,027	2,436	27,637	89,476
Willacy	15,570	1,440	1,835	8,852	28,565
TOTALS	3,504,886	874,469	$3,083	$6,211,186	$10,803,872

[a]Per Capita Income calculated by Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

SOURCE: 1970 Census Data: Texas Almanac 1972-73. The Dallas Morning News.

Crescent State Planning Region, Coastal Bend State Planning Region, and the Lower Rio Grande Valley State Planning Region.

The Regional Councils of Governments--voluntary associations of local political entities, conforming to the boundaries established by the planning regions--"pursue common opportunities, seek common solutions to problems which may be shared by more than one local government, and promote economy and efficiency among political jurisdictions in a region."[95] The Councils of Governments (COG's) organized within the above mentioned five state planning regions are: South East Texas Regional Planning Commission, Houston-Galveston Area Council, Golden Crescent Council of Governments, Coastal Bend Regional Planning Commission, and the Lower Rio Grande Valley Development Council. Figure 2 presents the councils of governments.

Within these five planning regions and councils of governments are incorporated 33,223 square miles; five Standard Metropolitan Statistical Areas (SMSA's); 3,504,886 population; 874,469 employment; per capita income $3,083; $6,211,184,016 total wages; and $10,803,872,000 total income, as presented in Table 4.

South East Texas State Planning Region--
South East Texas Regional Planning Commission

The South East Texas Regional Planning Commission consists of only two counties, Jefferson and Orange. Beaumont, Port Arthur, and Orange--the three major cities within the region--with a combined population of 197,747, form the core of the sixth largest SMSA

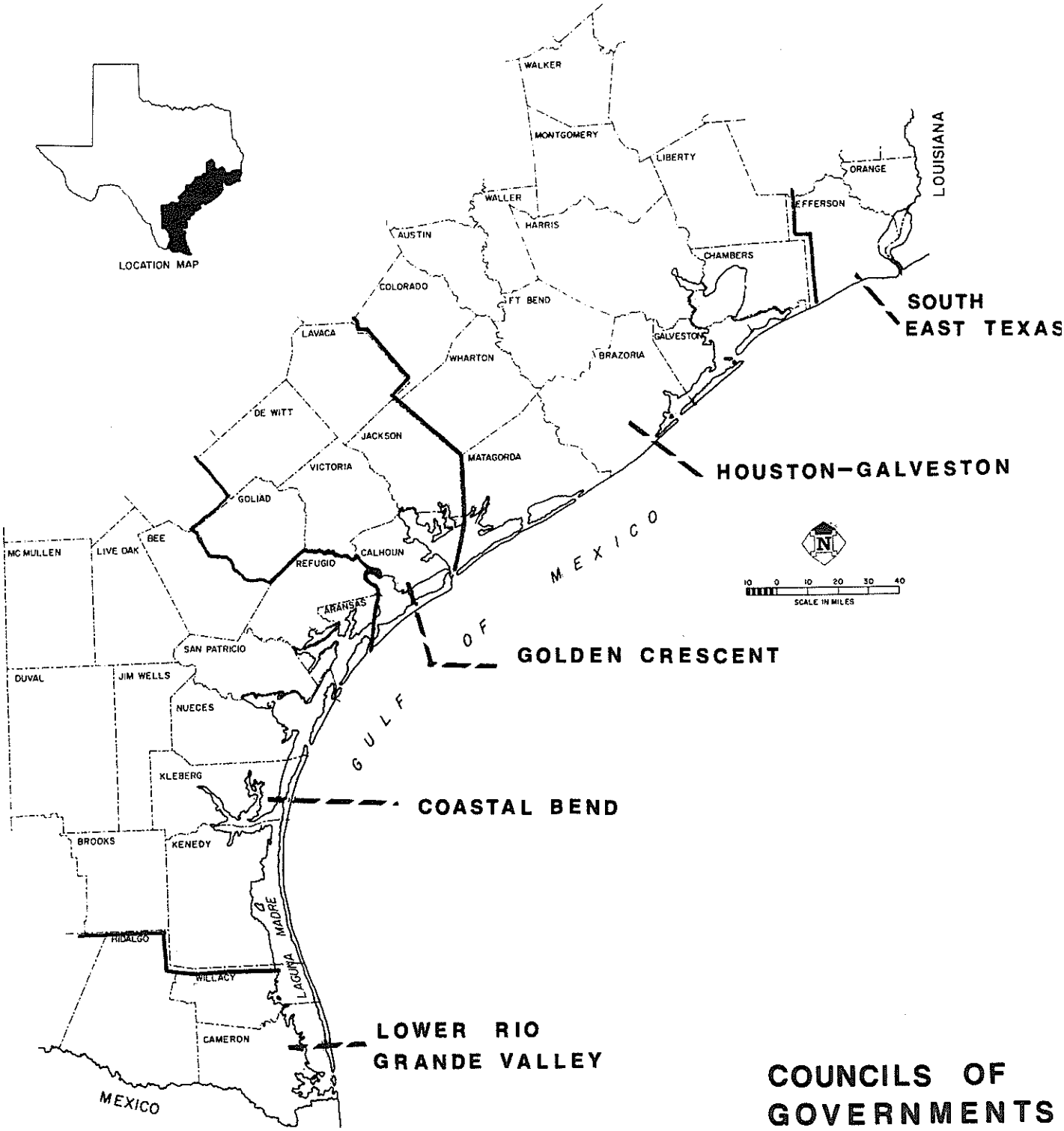

LOCATION MAP
WALKER
MONTGOMERY
LIBERTY
ORANGE
LOUISIANA
WALLER
HARRIS
JEFFERSON
AUSTIN
CHAMBERS
COLORADO
FT BEND
SOUTH EAST TEXAS
LAVACA
GALVESTON
WHARTON
BRAZORIA
DE WITT
JACKSON
MATAGORDA
HOUSTON–GALVESTON
VICTORIA
GOLIAD
BEE
MC MULLEN
LIVE OAK
CALHOUN
REFUGIO
ARANSAS
GULF OF MEXICO
SAN PATRICIO
GOLDEN CRESCENT
DUVAL
JIM WELLS
NUECES
KLEBERG
COASTAL BEND
BROOKS
KENEDY
HIDALGO
WILLACY
LAGUNA MADRE
CAMERON
LOWER RIO GRANDE VALLEY
MEXICO
10 0 10 20 30 40
SCALE IN MILES
COUNCILS OF GOVERNMENTS

Figure 2

TABLE 4

COUNCILS OF GOVERNMENTS ECONOMIC DATA
WITHIN
TEXAS COASTAL ZONE
1970

COUNCILS OF GOVERNMENT	POPULATION	EMPLOYMENT	PER CAPITA INCOME[a]	TOTAL WAGES (000)	TOTAL INCOME (000)
South East Texas Regional Planning Commission	315,943	82,937	$3,105	$ 633,137	$ 981,259
Houston-Galveston Area Council	2,305,106	652,410	3,383	4,809,579	7,797,974
Golden Crescent Council of Governments	126,004	22,254	2,625	130,481	330,763
Coastal Bend Regional Planning Commission	420,360	73,647	2,613	439,147	1,098,413
Lower Rio Grande Valley Development Council	337,473	43,221	1,764	198,840	595,463
TOTAL	3,504,886	874,469	$3,083	$6,211,184	$10,803,872

[a] Per Capita Income caluclated by Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

SOURCE: 1970 Census Data: Texas Almanac 1972-73. The Dallas Morning News.

within the state. In 1970, the total population of the two counties was 315,943; the population density of the 1,301 square miles of the region was 242.8.

The surface of the area is flat, rising from sea level on the southern coastal border to approximately 50 feet on the northern county boundaries. Grassy plains predominate, except across the northern section which is densely forested in hardwood and short leaf pine forests. Beach sands, sandy loams, and black waxy clays support varied agriculture and adapt to the production of beef cattle and rice.

Temperatures ranging from 44^{o} Fahrenheit in January to 91^{o} Fahrenheit in July, with an average of 68^{o}-69^{o} Fahrenheit, combined with an annual rainfall of 50 to 53 inches result in a mild and humid climate.

Oil production, petrochemical plants, port activity, and shipbuilding provided a major portion of the total income in 1970 of $981,259,000, wages paid in the amount of $633,136,940, and a total employment of 82,937. The resultant per capita income was $3,106.

Recreational activities include hunting, fishing, water sports, and sightseeing.

An illustration of the South East Texas Regional Commission and a comprehensive description of the two counties within the COG, compiled primarily from the Texas Almanac 1972, appear in Appendix A, pages 122-124.

Gulf Coast State Planning Region--
Houston-Galveston Area Council

Houston--the largest city in Texas, Galveston--a tourist city, and Texas City--a major seaport and petrochemical center, share urban leadership in the Houston-Galveston Area Council. The 13 counties--Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton--cover an area of 12,428 square miles and had a combined resident population in 1970 of 2,305,106, resulting in a population density of 185.5.

Rising from sea level at the Gulf coast to an altitude of 400 feet in the most inland county, the terrain varies from level to rolling hills, partly forested, partly prairie. The temperature of the region varies from 40° Fahrenheit in January to 95° Fahrenheit in July, with a mean annual temperature of 69° Fahrenheit. Normal yearly rainfall approximates 45 inches.

Major businesses include the petroleum and petrochemical industries, port activities, manufacturing, lumbering, agribusiness, cattle ranching, sulphur and sugar refining, and tourism. According to the Texas Almanac 1972, 652,410 persons were employed, drawing gross wages in the amount of $4,809,578,888, per capita income being $3,383 with a total income of $7,797,974,000.

Galveston-Texas City with a combined population of 169,812 and metropolitan Houston with a population of 1,985,031 comprise the two Standard Metropolitan Statistical Areas (SMSA's) within the region.

An illustration of the Houston-Galveston Area Council and a comprehensive description of the 13 counties within the COG, compiled primarily from the Texas Almanac 1972, are presented in Appendix A, pages 125-138.

Golden Crescent State Planning Region-- Golden Crescent Council of Governments

Traditions and mutual pride in their land unite the people in the six-county Golden Crescent Council of Governments. German and Irish forebears drew together in an almost clannish society as a result of pioneer hardships from attacks by Indians and crop destructions by droughts. This attitude prevails today.

Calhoun, DeWitt, Goliad, Jackson, Lavaca, and Victoria cover 5,039 square miles and had a total population of 126,004 in 1970, or a population density of 25.0. The city of Victoria serves as the urban center for the region.

Income is derived from various agribusinesses, manufacturing, fishing, petroleum and natural gas production, cattle ranching, and petrochemicals. Statistics revealed that 22,254 were employed drawing gross wages in the amount of $130,481,448, per capita income being $2,625 and a total income of $330,763,000.

Mild climate, ranging from 44^{o} Fahrenheit in January to 96^{o} Fahrenheit in July, and the region's proximity to the Gulf Coast, make it an ideal tourist area offering fishing and diverse water sports.

An illustration of the Golden Crescent Council of Governments and a comprehensive description of the six counties within the COG which were in the study area appear in Appendix A, pages 139-145. The descriptive data were compiled primarily from the Texas Almanac 1972.

Coastal Bend State Planning Region--
Coastal Bend Regional Planning Commission

The Coastal Bend Regional Planning Commission located on the Gulf Coast includes 12 counties--Aransas, Bee, Brooks, Duval, Jim Wells, Kenedy, Kleberg, Live Oak, McMullen, Nueces, Refugio, and San Patricio. Encompassing 11,436 miles, the Region had a resident population in 1970 of 420,360, with a population density of 36.8. (A report prepared by the Coastal Bend Council of Governments includes a 13th county--Karnes--with a total population of 13,462, and 757 square miles).

A common interest in cotton, oil, gas, and ranching unites the area in a unified effort of planning and implementing programs of advancement. Seafood is a principal industry of the coastal counties. While oil and gas production contribute approximately one-half of the region's economy, tourism makes a significant contribution. Ranching is the largest single user of land resources.

The climate of the region is semi-arid, annual precipitation varying from 24 to 35 inches. Temperatures range from a low of 44^{o} Fahrenheit in January to a high of 98^{o} Fahrenheit in July. Rising from sea level at the coastal margin to 500 feet in the

hintermost counties, the terrain is relatively featureless--vast coastal plains and low hills.

Statistics revealed that in 1970, 73,647 persons were employed, drawing gross wages in the amount of $439,146,680, per capita income being $2,613 with a total income of $1,098,413,000.

Corpus Christi, the eighth largest Texas Standard Metropolitan Statistical Area (SMSA) had a resident population in 1970 of 284,832.

An illustration of the Lower Rio Grande Valley Development Council and a comprehensive description of the three counties within the COG, compiled primarily from the Texas Almanac 1972, appear in Appendix A, pages 159-162.

Lower Rio Grande Valley State Planning Region--
Lower Rio Grande Valley Development Council

The Lower Rio Grande Valley Development Council is comprised of three counties, Cameron, Hidalgo, and Willacy. According to the Bureau of Census in 1970, 337,473 persons resided within the 3,019 square miles encompassed by three county lines, equalling a population density of 111.8. Three cities--Brownsville, Harlingen, and McAllen--share importance as centers of primary influence. Brownsville-Harlingen-San Benito with a combined total population of 140,368, and McAllen-Pharr-Edinburg with a combined population of 181,535 form the two Standard Metropolitan Statistical Areas (SMSA's) within the region.

Brownsville, the southmost incorporated city in the United States boasts the largest fleet of fishing trawlers in the nation and the largest annual haul of shrimp of any port in the world. Other major industries of the region include agribusinesses--truck farming and citrus fruit orchards--international trade, oil and gas production, and tourism--a winter resort for retirees. According to the Texas Almanac 1972, there were 43,221 persons employed, drawing gross wages in the amount of $198,840,060. Per capita income for the area was $1,764 with a total income of $595,463,000.

The region enjoys a semi-tropical climate with a mean annual temperature in the low seventies and average annual precipitation between 20 and 24 inches.

An illustration of the Coastal Bend Regional Planning Commission and a comprehensive description of the 12 counties within the COG, compiled primarily from the Texas Almanac 1972, appear in Appendix A, pages 146-158.

PRESENTATION OF THE DATA

CHAPTER IV

PRESENTATION OF DATA

The data pertaining to the economic inventory of recreation and tourism within the Texas Coastal Zone were compiled and presented by sector, by county, by councils of governments, by S.I.C. Number, and by a consolidation within the coastal zone according to available and selected data categories. The compilation of data resulted from the analysis of voluminous published and unpublished documents obtained from a variety of public and private sector sources. Therefore, these data were presented primarily in tabular form.

Public Sector Data

The public sector data were obtained via personal and telephone interviews; correspondence with local, state, and federal governmental officials; and published and unpublished sources. The two basic significant elements pertinent to the public sector data were acreage statistics and specific economic indicators which included employment, wages, cost of operation and capital improvements. The methodology and an explanation of the data categories utilized in the presentation of the public sector data were incorporated within Chapter II.

Table 5 presents the available data of existing recreation and tourism acreage by county within the Texas Coastal Zone as of April 30, 1973 according to federal, state, county, city, and private agencies. Padre Island National Seashore, located within the Kenedy and Kleberg County boundaries, comprises over half of the coastal zone federal acreage with national wildlife refuges utilizing the significant majority of that remaining. The larger percentage of the acreage tabulated was purchased with tax dollars within the past decade and was located on or near the gulf or near large urban centers. The federal, state, and local public acreage was reported to a significantly accurate degree; however, there is reason to doubt that the private figure is accurate since much privately owned property utilized for recreational purposes was not statistically reported. Many individuals and groups lease and/or own both small and large tracts of land for such uses as hunting clubs, fishing camps, dude ranches, riding clubs, archery and rifle ranges, bike and motorcycle trails, and drag strip parks. Kenedy County is an excellent example of the contradiction within the reported acreage statistics, inasmuch as no acreage is reported for recreation within the table total. However, Padre Island National Seashore, a major national recreational area, is located within the county boundaries and runs parallel to the mainland and the gulf. Furthermore, the county is recognized as one of the best private hunting areas within the state.

TABLE 5

AVAILABLE DATA OF EXISTING
RECREATION AND TOURISM ACREAGE
WITHIN
TEXAS COASTAL ZONE
AS OF APRIL 30, 1973

COUNTY	EXISTING ACRES					
	FEDERAL	STATE	COUNTY	CITY	PRIVATE	TOTAL
Aransas	47,261	313	67	11	164	47,816
Austin	0	664	0	14	1	679
Bee	0	0	0	52	162	214
Brazoria	6,525	2,121	461	549	3,211	12,867
Brooks	0	0	0	46	0	46
Calhoun	0	92	0	22	80	194
Cameron	41,600	526	373	215	165	42,879
Chambers	9,837	0	159	0	525	10,521
Colorado	3,500	0	0	232	0	3,732
DeWitt	0	0	10	56	N.A.	66
Duval	0	0	0	6	0	6
Fort Bend	0	0	0	83	111	194
Galveston	172	1,951	1,797	683	107	4,710
Goliad	0	1,142	0	0	N.A.	1,142
Harris	0	2,973	3,071	4,340	1,782	12,166
Hidalgo	2,000	648	229	398	11	3,286
Jackson	0	0	35	6	N.A.	41
Jefferson	0	25,748	0	3,000	1,171	29,919
Jim Wells	0	0	0	212	202	414
Kenedy	[a]	0	0	0	0	0
Kleberg	133,918[a]	0	245	16	165	134,344
Lavaca	0	0	0	364	N.A.	364
Liberty	0	0	0	13	955	968
Live Oak	0	31	0	36	81	148
McMullen	0	0	0	0	0	0
Matagorda	0	0	0	301	136	437
Montgomery	0	1,725	0	24	484	2,233
Nueces	0	3,575	686	1,166	486	5,913
Orange	0	0	449	102	0	551
Refugio	0	0	0	54	0	54
San Patricio	0	350	0	515	302	1,167
Victoria	0	0	0	421	23	444
Walker	11	2,154	0	0	303	2,468
Waller	0	0	0	17	527	544
Wharton	0	0	0	11	75	86
Willacy	0	35	0	3	5	43
Other (leased for wildlife)	0	1,630	0	0	0	1,630
Total	244,824	45,678	7,582	12,968	11,234	322,286

[a]Acreage combined for two counties.

N.A.: Not Available

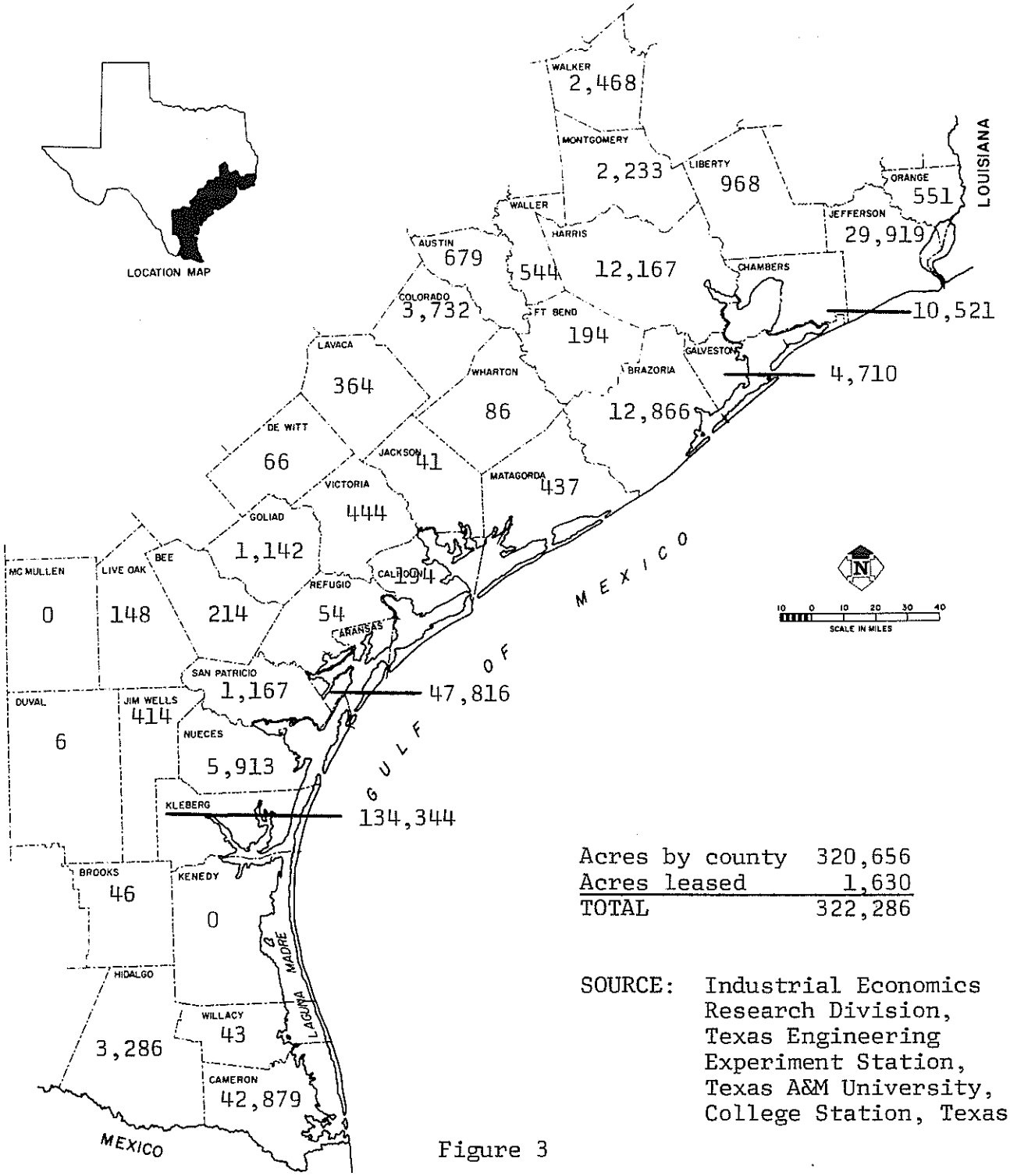
SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 3 illustrates the available data of existing recreation and tourism total acreage by county within the Texas Coastal Zone. Counties contingent with the gulf or coastal zone bays and major urban centers contain a significant majority of the acreage reported for recreation and tourism use. The councils of governments within the coastal zone have been instrumental in developing open space plans which propose additional recreation acreage for most counties in the near future.

Table 6 presents additional significant data pertaining to recreational and tourism acreage within the Texas Coastal Zone as of April 30, 1973. Since inland or protected waters are a favorite recreational area, water acres within public acres were tabulated and Jefferson County contains, by far, the major portion of water acres. Public acres contiguous to bays or the gulf were also tabulated since these acres are significant to various types of fishing. Perhaps the most paramount statistic within the table is that of proposed acres which indicated an increase of 47.5 percent--153,225 acres added to the present 322,386 acres--in total recreation and tourism acreage. The 47.5 percent increase did not include any additional acres proposed for the Golden Crescent Council of Governments or Houston-Galveston county or city.

Table 7 presents the selected public sector annual economic data of recreation and tourism units within the Texas Coastal Zone as of April 30, 1973. Data were tabulated according to four categories--employment, wages, operation expenditures and capital

AVAILABLE DATA OF EXISTING RECREATION AND TOURISM ACREAGE BY COUNTY WITHIN TEXAS COASTAL ZONE AS OF APRIL 30, 1973



Acres by county	320,656
Acres leased	1,630
TOTAL	322,286

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 3

TABLE 6

ADDITIONAL SIGNIFICANT DATA PERTAINING TO
RECREATION AND TOURISM ACREAGE
WITHIN
TEXAS COASTAL ZONE
AS OF APRIL 30, 1973

COUNTY	PUBLIC ACRES	PUBLIC ACRES CONTIGUOUS TO BAYS OR THE GULF	PROPOSED ACRES[a]	PROPOSED COST (000)
Aransas	0	1,027	382	$ 100
Austin	0	0	0	N.A.
Bee	0	0	478	269
Brazoria	0	461	27,326	N.A.
Brooks	0	0	0	N.A.
Calhoun	0	23	N.A.	N.A.
Cameron	50	164	3,061	2,595
Chambers	0	10,031	6,380	N.A.
Colorado	0	0	0	N.A.
DeWitt	0	0	N.A.	N.A.
Duval	0	0	350	165
Fort Bend	0	0	3,963	N.A.
Galveston	0	3,597	14,309	N.A.
Goliad	0	0	N.A.	N.A.
Harris	48	276	25,213	N.A.
Hidalgo	919	0	736	940
Jackson	0	0	N.A.	N.A.
Jefferson	4,365	17,620	1,711	N.A.
Jim Wells	0	0	204	412
Kenedy	0	0	0	N.A.
Kleberg	15	25	748	27
Lavaca	0	0	N.A.	N.A.
Liberty	0	0	23,959	N.A.
Live Oak	0	0	69	110
McMullen	0	0	0	N.A.
Matagorda	0	3	N.A.	N.A.
Montgomery	2	0	30,660	N.A.
Nueces	24	788	1,432	15,637
Orange	0	0	988	N.A.
Refugio	0	8	51	95
San Patricio	10	25	328	1,965
Victoria	0	0	N.A.	N.A.
Walker	251	0	0	N.A.
Waller	0	0	5,857	N.A.
Wharton	0	0	4,979	N.A.
Willacy	0	0	41	N.A.
TOTAL	5,684	34,048	153,225	$22,315

[a] Does not include Golden Crescent Council of Governments or Houston-Galveston county or city figures.

N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 7

SELECTED PUBLIC SECTOR ANNUAL ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
TEXAS COASTAL ZONE
AS OF APRIL 30, 1973

	EMPLOYMENT				WAGES				OPERATION EXPENDITURES				CAPITAL IMPROVEMENTS				
COUNTY	FED.	STATE	CITY/ COUNTY	TOTAL	FED.	STATE	CITY/ COUNTY	TOTAL	FED.	STATE	CITY/ COUNTY	TOTAL	FED.	STATE	CITY/ COUNTY	TOTAL	TOTAL EXPENDITURES
Aransas	N.A.	8	N.A.	8	$	$ 50,892	N.A.	$ 50,892	$ 0	$ 50,892	N.A.	$ 50,892	$	$ 1,285,650	$ N.A.	$ 1,285,650	$ 1,336,542
Austin	0	6	N.A.	6		43,524	N.A.	43,524	0	43,524	N.A.	43,524		1,021,947	N.A.	1,021,947	1,065,471
Bee	0	0	N.A.	0		0	N.A.	0	0	0	142,500	142,500		0	N.A.	0	142,500
Brazoria	3	5	55	63		30,192	110,200	140,392	58,000	30,192	183,721	271,913		208,409	66,000	274,409	546,322
Brooks	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Calhoun	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		1,273	N.A.	1,273	1,273
Cameron	10	1	174	185		7,080	458,576	465,656	105,000	7,080	725,843	837,923		137,683	152,716	290,399	1,128,322
Chambers	6	0	N.A.	6		0	N.A.	N.A.	95,000	0	N.A.	95,000		0	N.A.	0	95,000
Colorado	N.A.	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	1,500	1,500	1,500
DeWitt	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Duval	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Fort Bend	0	0	4	4		0	25,998	25,998	0	0	40,844	40,844		0	N.A.	0	40,844
Galveston	0	6	174	180		35,628	592,301	627,929	0	35,628	1,116,935	1,152,563		4,485,358	239,000	4,724,358	5,876,921
Goliad	0	6	N.A.	6		38,316	N.A.	38,316	0	38,316	N.A.	38,316		487,480	N.A.	487,480	525,796
Harris	0	9	1,476	1,485		60,240	6,194,261	6,254,501	0	60,240	10,399,392	10,459,632		2,575,046	5,024,920	7,599,966	18,059,598
Hidalgo	3	6	228	237		38,580	848,324	886,904	45,000	38,580	1,546,524	1,630,104		677,278	579,008	1,256,286	2,886,390
Jackson	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Jefferson	0	0	155	155		0	431,901	431,901	0	0	1,391,236	1,391,236		2,672,577	81,225	2,753,802	4,145,038
Jim Wells	0	0	19	19		0	61,684	61,684	0	0	99,359	99,359		0	10,775	10,775	110,134
Kenedy	0	0	0	0		0	0	0	0	0	0	0		0	0	0	0
Kleberg	44	0	52	96		0	125,650	125,650	449,500	0	175,715	625,215		0	1,525,000	1,525,000	2,150,215
Lavaca	0	0	8	8		0	19,072	19,072	0	0	42,222	42,222		0	45,455	45,455	87,677
Liberty	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Live Oak	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		3,580	N.A.	3,580	3,580
McMullen	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Matagorda	0	0	13	13		0	32,186	32,186	0	0	60,939	60,939		0	163,000	163,000	223,939
Montgomery	0	0	1	1		0	5,510	5,510	0	0	6,000	6,000		0	9,000	9,000	15,000
Nueces	0	0	368	368		0	1,484,211	1,484,211	0	0	2,187,783	2,187,783		3,697,891	766,396	4,464,287	6,652,070
Orange	0	0	25	25		0	97,234	97,234	0	0	160,000	160,000		0	22,000	22,000	182,000
Refugio	0	0	20	20		0	8,590	8,590	0	0	15,648	15,648		0	N.A.	0	15,648
San Patricio	0	8	2	10		54,420	15,000	69,420	0	54,420	34,500	88,920		438,930	N.A.	438,930	527,850
Victoria	0	0	42	42		0	114,500	114,500	0	0	150,901	150,901		0	18,100	18,100	169,001
Walker	0	9	N.A.	9		61,524	N.A.	61,524	0	61,524	N.A.	61,524		953,364	N.A.	953,364	1,014,888
Waller	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Wharton	0	0	N.A.	0		0	N.A.	0	0	0	N.A.	0		0	N.A.	0	0
Willacy	0	0	2	2		0	3,320	3,320	0	0	4,171	4,171		0	N.A.	0	4,171
TOTAL	66	64	2,818	2,948	N.A.	$420,396	$10,628,518	$11,048,914	$752,500	$420,396[a]	$18,484,233	$19,657,129	N.A.	$18,646,466	$8,704,095	$27,350,561	$47,007,690

N.A.: Not Available.

[a] State wages included.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

improvements--for the federal, state, and county/city agencies. The data were obtained from incorporated municipalities, counties, state, and federal authorities reporting acreage.

The employment figure includes full and part-time positions, with part-time employees comprising a large percentage (approximately 70) of total employment. The amount of wages paid indicates that many of the public sector positions were filled by professionals with specific educational and experience qualifications and that the majority of those jobs remaining were filled from the labor ranks. The reported total employment within the public sector was 2,948.

Wages for the part-time employees are usually seasonal--for the three summer months. Total employment and total wages are not indicative of the true employment to wages ratio. The investigator would like to point out that several local governments utilize the employees of the Public Works Division or Department in maintaining and improving recreational areas and that the cost of this function is, therefore, absorbed into the budget of that agency. The reported total wages paid the public sector employees were $11,048,914.

The operation expenditures included wages but excluded capital improvements. The total operation expenditures were $19,657,129 and the total reported capital improvements were $27,350,561. The reported total amount spent by the public sector for recreation and tourism within the coastal zone was $47,007,690 for the fiscal year. These data revealed that most of the employment and financial activity of the public sector occurred in or near the urban centers.

Private Sector Data

The private sector data were obtained from the Texas Employment Commission S.I.C. records for the first quarter of 1972, and the annual figures were computed as explained in Chapter II. The data were compiled from selected S.I.C. information by county and established into categories--number of units, average employment, estimated annual wages and estimated annual economic significance. Units with less than five employees were combined in order to avoid disclosure of pertinent economic data. The number of units was revealed; however, the employment, wages, and economic significance data were withheld from presentation by S.I.C. number as indicated by an asterisk (*) and then combined to yield a total in order to be able to present a more complete status of each industry.

Table 8 presents the selected private sector economic data of recreation and tourism units by county within the Texas Coastal Zone for 1972. These data indicate by county the total compilation of: (1) the number of units, (2) the average employment, and (3) the estimated annual wages--(a) within the county, (b) within the recreation and tourism industry, and (c) as a simple percentage indicating the relationship of the selected recreation and tourism units to all the units within the county--and the estimated annual economic significance of recreation and tourism as computed for the private sector within the coastal zone was $2,740,518,696. The recreation and tourism S.I.C. data revealed that in a six place ranking of all categories for all counties: Harris, Nueces,

TABLE 8

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
BY COUNTY
WITHIN
TEXAS COASTAL ZONE
1972

COUNTY	NUMBER OF UNITS			AVERAGE EMPLOYMENT			ESTIMATED ANNUAL WAGES			ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
	COUNTY	REC. & TOUR.	PERCENT	COUNTY	REC. & TOUR.	PERCENT	COUNTY	REC. & TOUR.	PERCENT	
Aransas	309	70	23	2,398	569	24	$ 13,523,156	$ 2,112,680	16	$ 15,941,879
Austin	320	45	14	2,167	286	13	11,132,135	644,357	6	3,401,910
Bee	381	56	15	3,665	398	11	20,836,587	1,228,500	6	5,370,683
Brazoria	1,552	209	13	24,696	1,279	5	220,126,178	4,115,528	2	25,212,501
Brooks	153	22	14	838	128	15	4,675,152	388,095	8	3,741,860
Calhoun	302	49	16	5,714	398	7	51,055,473	1,126,416	2	10,324,151
Cameron	2,302	371	16	30,389	4,050	13	158,860,935	14,943,344	9	97,741,051
Chambers	204	17	8	1,687	168	10	12,147,688	371,848	3	2,191,313
Colorado	396	53	13	3,377	403	12	18,319,674	1,389,625	8	14,403,946
DeWitt	456	72	16	3,933	709	18	18,466,871	2,876,134	16	10,752,761
Duval	161	10	6	957	35	4	5,531,108	75,879	1	298,021
Fort Bend	711	100	14	10,475	760	7	76,761,352	2,474,548	3	13,533,401
Galveston	2,427	485	20	44,257	3,977	9	344,126,771	13,764,399	4	72,184,719
Goliad	92	10	11	572	54	9	2,744,359	82,974	3	325,536
Harris	27,439	3,363	12	663,289	57,420	9	1,626,649,887	269,754,416	17	1,780,551,762
Hidalgo	2,530	428	17	32,283	6,461	20	164,749,227	23,438,842	14	240,089,823
Jackson	246	26	11	1,800	104	6	9,735,228	217,679	2	1,377,625
Jefferson	3,816	550	14	77,676	5,534	7	641,690,141	20,211,559	3	137,226,833
Jim Wells	592	69	12	6,196	600	10	38,659,329	2,387,518	6	15,328,121
Kenedy	0	0	0	0	0		0	0		0
Kleberg	404	63	16	6,035	558	9	34,820,724	1,440,163	4	6,593,456
Lavaca	317	41	13	3,172	875	28	14,736,866	4,139,822	28	8,571,609
Liberty	587	60	10	5,063	286	6	30,968,548	830,122	3	4,054,722
Live Oak	135	19	14	806	128	16	3,686,735	264,735	7	1,094,870
McMullen	16	1	6	100	*	*	703,703	*	*	*
Matagorda	529	79	15	4,654	571	12	31,926,417	1,612,086	5	10,967,031
Montgomery	745	96	13	6,554	621	9	40,230,753	1,996,941	5	11,245,326
Nueces	4,151	637	15	67,516	6,689	10	468,892,287	25,489,874	5	165,028,216
Orange	786	117	15	15,525	782	5	132,113,180	2,676,006	2	16,485,664
Refugio	207	25	12	1,501	129	9	9,129,277	270,586	3	1,208,901
San Patricio	530	59	11	6,618	397	6	50,268,819	1,237,622	2	6,918,450
Victoria	1,076	127	12	13,458	1,327	10	89,203,605	5,095,926	6	31,849,085
Walker	357	64	18	6,717	559	8	38,340,054	1,782,703	5	11,441,745
Waller	174	22	13	2,840	103	4	13,068,359	213,154	2	1,044,701
Wharton	683	87	13	6,379	423	7	37,201,736	1,226,682	3	7,680,692
Willacy	181	28	15	1,162	228	20	4,917,486	634,420	13	6,336,332
TAL	55,267	7,530		1,064,469	97,009		$4,439,999,800	$410,515,183		$2,740,518,696

Omitted to Avoid Disclosure.

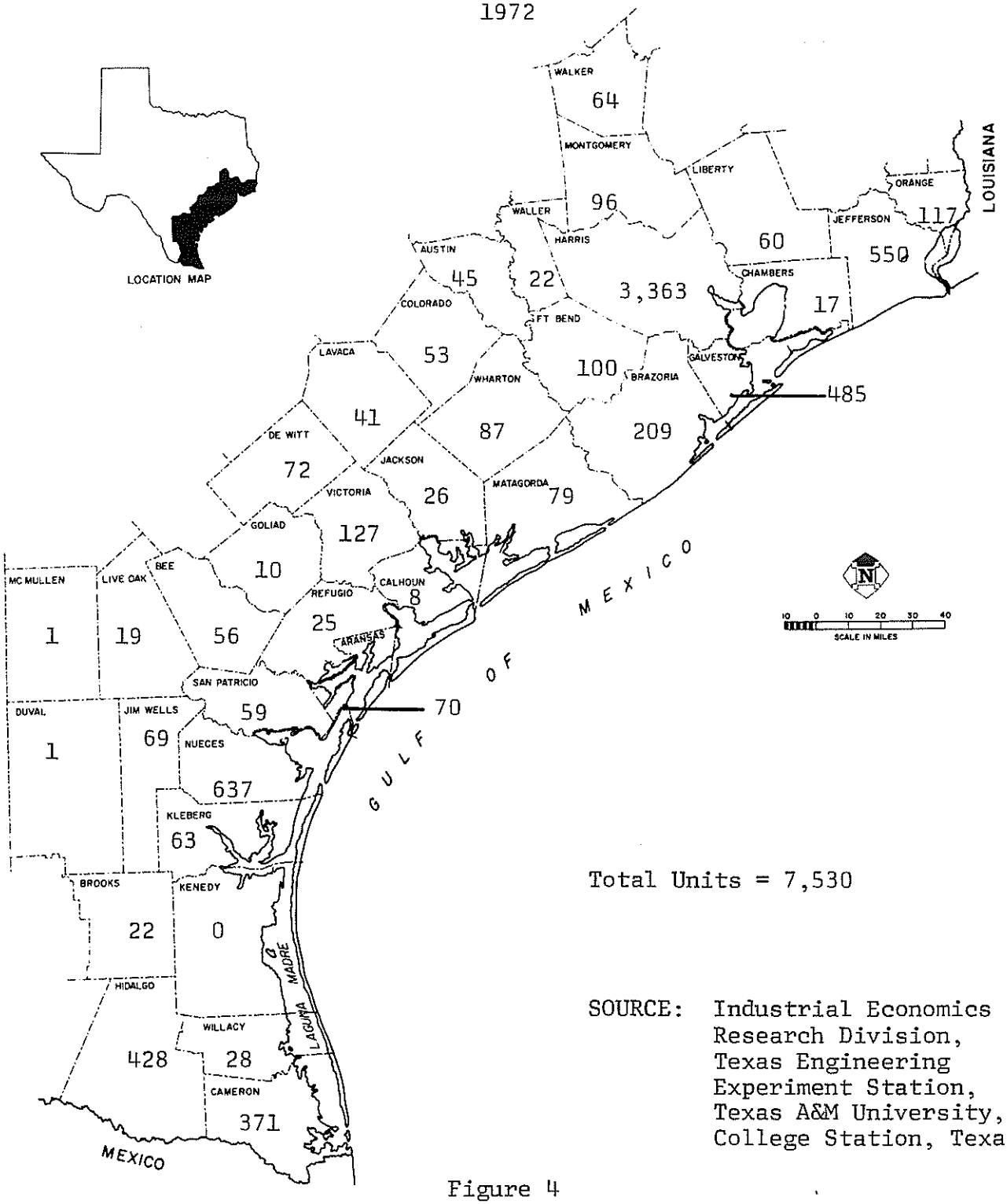
URCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Hidalgo, Jefferson, Cameron, and Galveston--placed in that order. The investigator would like to emphasize the fact that the Lower Rio Grande Valley is highly accepted as a winter resort and that a changed ranking could occur if another quarter or a full year had been available for data analysis. It is doubtful that any ranking difference would occur for Harris County; however, a change could easily occur among the next five ranked counties because of the slight difference in the ranges posted. These same counties are dominant when compared with an analysis of a total of all the county units within each county within the coastal zone. The percentage comparison bears out the fact that many recreation and tourism industries, especially, services, support low paying wages. The one exception to this fact is indicated in Harris County, which was most likely raised by S.I.C. number 504.

Figure 4 illustrates the total number of selected private sector recreation and tourism units by county within the Texas Coastal Zone; Figure 5 illustrates the combined public and private sector employment for recreation and tourism units by county within the Texas Coastal Zone; and Figure 6 illustrates the selected private sector recreation and tourism units as a percentage of total county units by county within the Texas Coastal Zone. Each of these three illustrations signifies the importance of the recreation and tourism industry within the coastal zone.

The selected S.I.C. data were separated into three major categories which comprise the major components of the leisure

TOTAL SELECTED PRIVATE SECTOR RECREATION AND TOURISM UNITS BY COUNTY WITHIN TEXAS COASTAL ZONE 1972

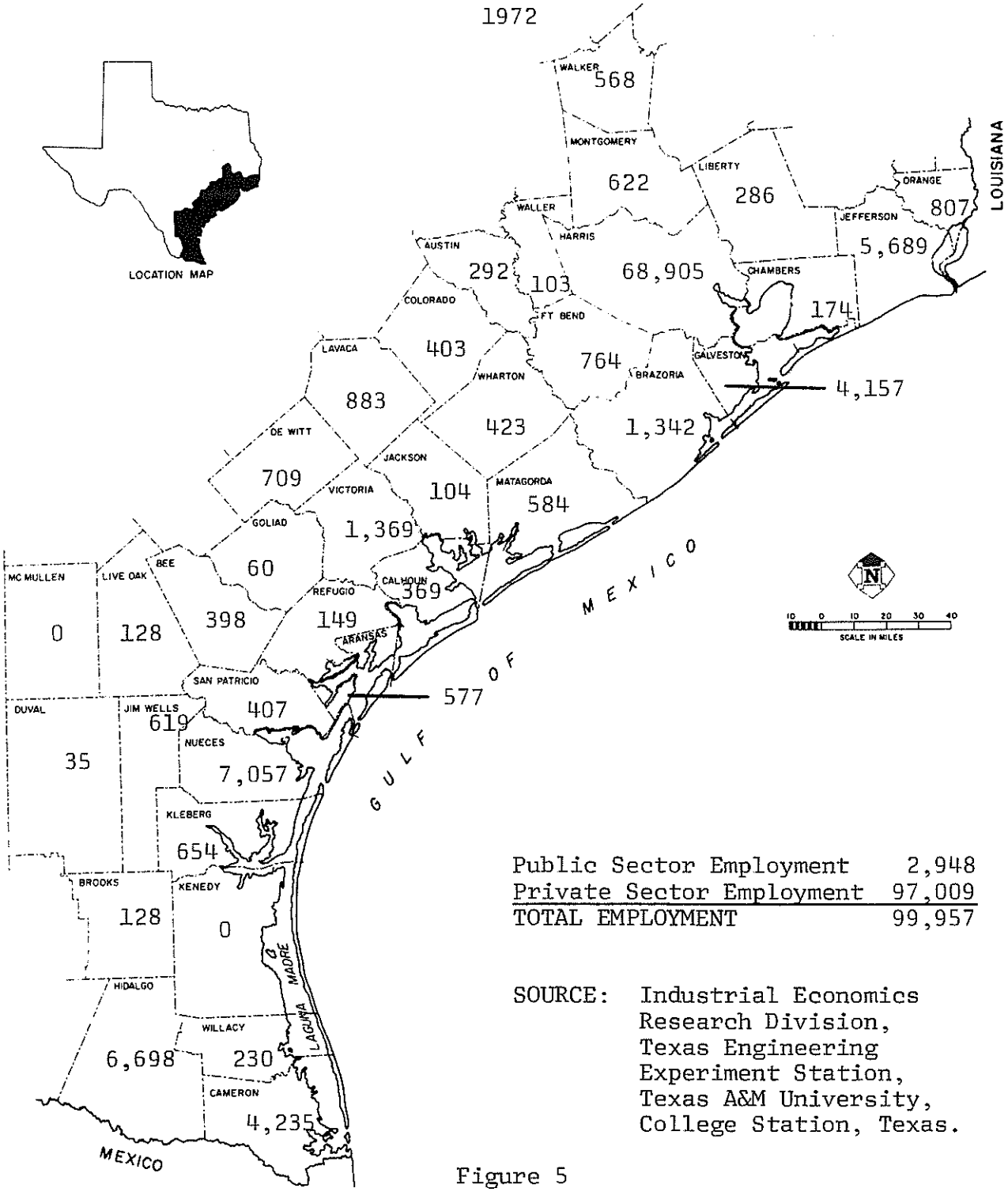


Total Units = 7,530

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 4

COMBINED PUBLIC AND PRIVATE SECTOR EMPLOYMENT
FOR RECREATION AND TOURISM
BY COUNTY
WITHIN
TEXAS COASTAL ZONE
1972

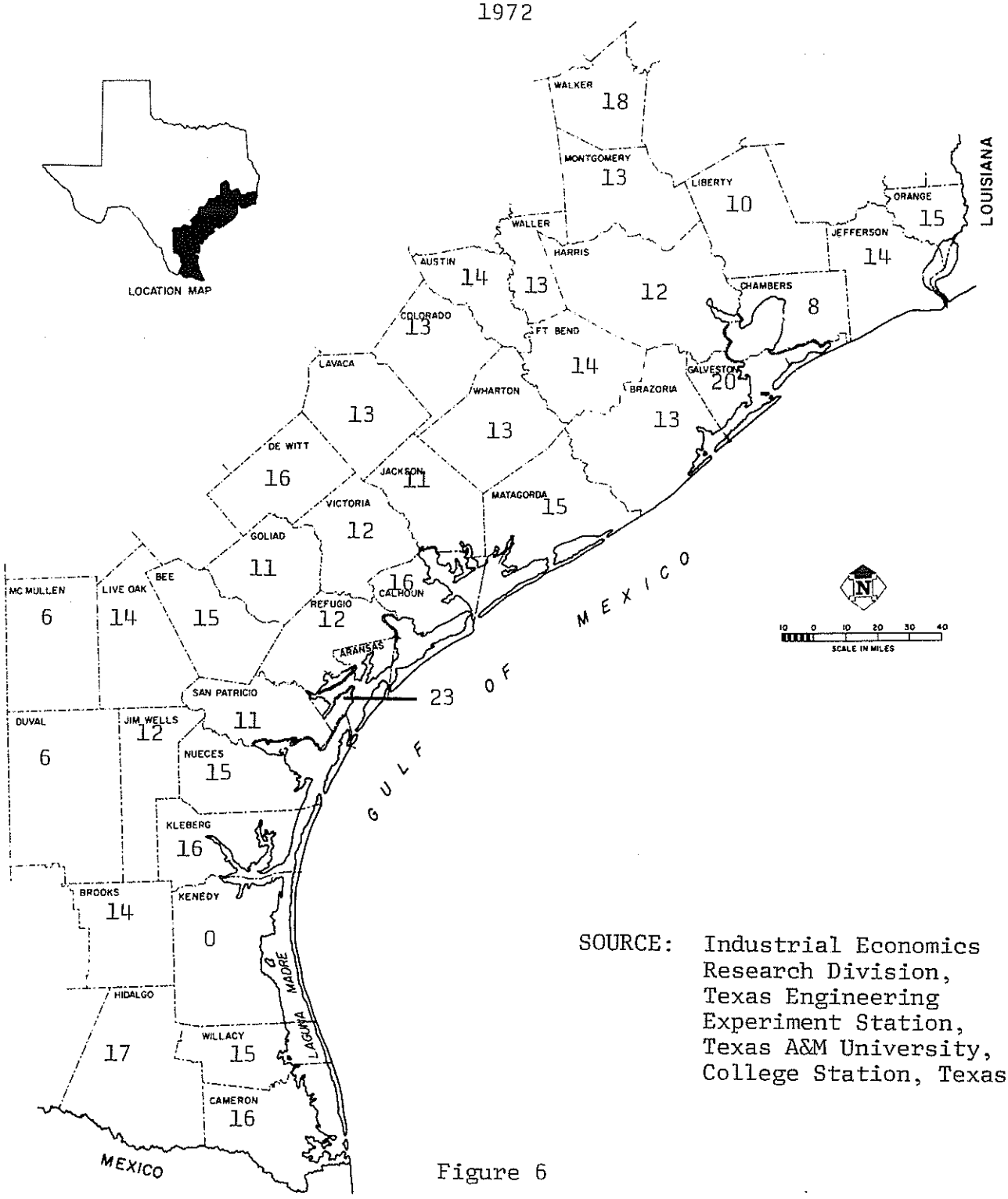


Public Sector Employment	2,948
Private Sector Employment	97,009
TOTAL EMPLOYMENT	99,957

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 5

SELECTED PRIVATE SECTOR RECREATION AND TOURISM UNITS
AS A PERCENTAGE OF TOTAL COUNTY UNITS
BY COUNTY
WITHIN
TEXAS COASTAL ZONE
1972



SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 6

industry--recreation, tourism, and entertainment. A list of each category and the S.I.C. numbers arbitrarily placed in that category follows:

Recreation

319 Leather Goods
379 Miscellaneous Transportation Equipment
394 Toys and Amusements, Sporting and Athletic Goods
395 Pens, Pencils and other office and artists materials
504 Sporting, Recreational, Photographic, and Hobby Goods, Toys and Supplies
559 Automotive Dealers, not elsewhere classified
593 Used Merchandise Stores
594 Miscellaneous Shopping Stores
595 Sporting Goods Stores and Bicycle Shops
599 Retail Stores, not elsewhere classified
791 Dance Halls, Studios, and Schools
793 Bowling Alleys and Billiard and Pool Establishments
794 Commercial Sports
841 Museums and Art Galleries
842 Arboreta, Botanical, and Zoological Gardens
864 Civic, Social, and Fraternal Associations
869 Membership Organizations, not elsewhere classified

Tourism:

581 Eating and Drinking Places
701 Hotels, Motels, and Tourist Courts
703 Camps and Trailering Courts
704 Organization Hotels and Lodging Houses, on membership basis

Entertainment:

365 Radio and Television Receiving Equipment
573 Radio, Television, and Music Stores
592 Liquor Stores
729 Miscellaneous Personal Services
781 Motion Picture Production and Allied Services
782 Motion Picture Distribution and Allied Services
783 Motion Picture Theaters
792 Theatrical Producers (except motion pictures), Bands Orchestras and Entertainers

The S.I.C. data included in the study were analyzed and those units listed under each industry number were utilized

only if they were applicable. For example, under 593--Used Merchandise Stores--the units considered were antique stores, book stores, musical instruments, and phonograph and phonograph record stores.

Table 9 presents the selected private sector economic data of recreation related units by S.I.C. number within the Texas Coastal Zone. S.I.C. number 504--Sporting, Recreational, Photographic, and Hobby Goods, Toys and Supplies--was the most significant economic contributor within the recreation category; followed by 559--Aircraft, Dunebuggies, Go-carts and Snowmobiles; 599--Coin Shops, Fireworks, Pet Food Stores, Pet Shops, Stamps, Swimming Pools, Tent Shops, and Theater programs; and 794--Professional Sports Clubs and Promoters.

One of the most significant, if not the most significant, Group Number, 799--Miscellaneous Amusements and Recreation Services--was not yet incorporated for the reported data. Industry numbers under 799 include such divisions as: Public Golf Courses; Coin-Operated Amusement Devices; Amusement Parks; Membership Sports and Recreation Clubs; and Amusement and Recreation Services--including nearly 100 industries within that one industry number, such as, boat rentals, riding schools and academics, carnivals, circus operations, animal exhibits and shows, beaches, pools, gymnasiums, instruction in various activities, bicycle and motorcycle rentals, gardening, fairs and expositions, art galleries and many such items. The fact that this important data was not available was a detriment to this investigation.

TABLE 9

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION UNITS
WITHIN
TEXAS COASTAL ZONE
1972

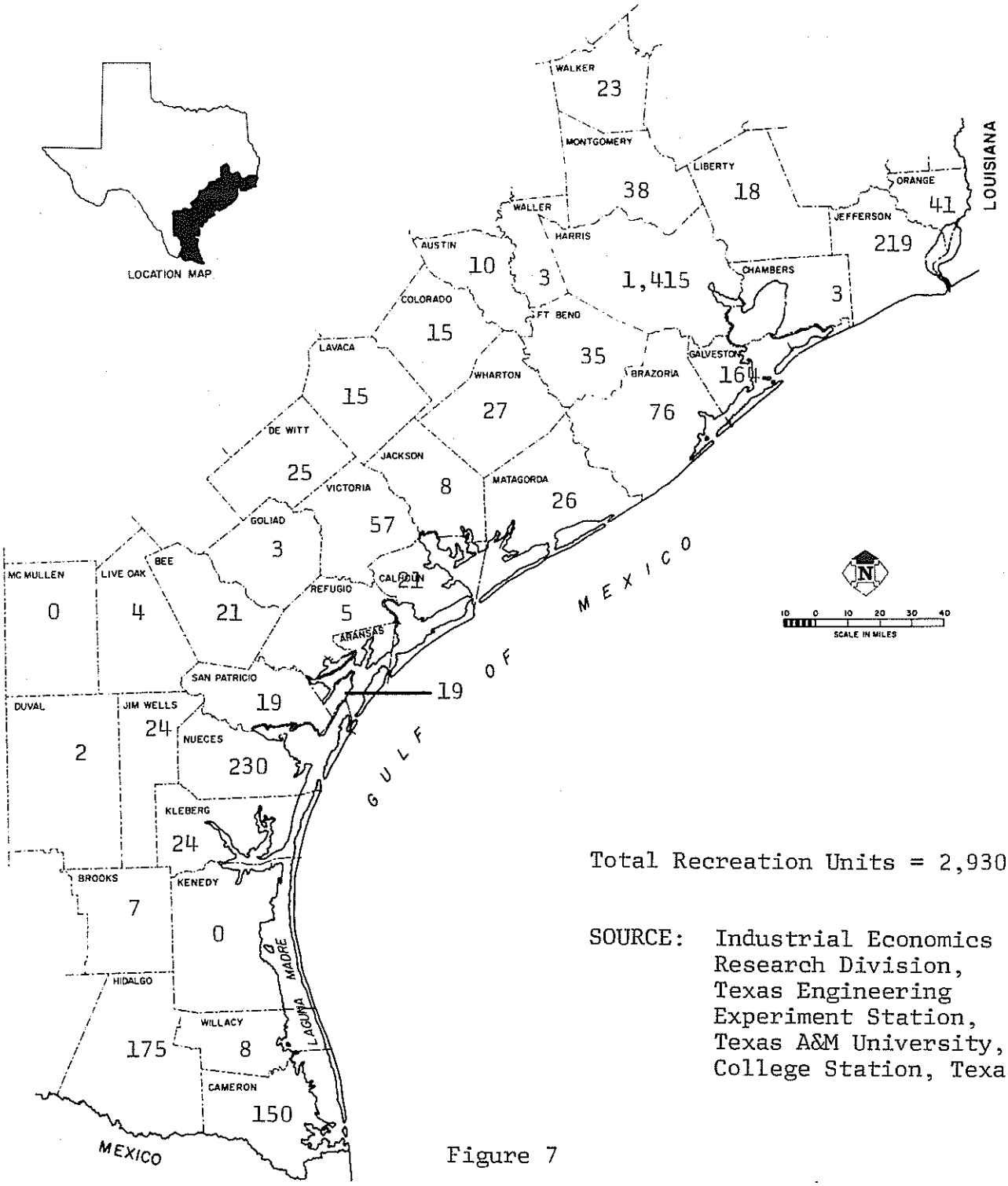
S.I.C. NUMBER	RECREATION RELATED			
	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
319	5	1,104	$ 5,912,912	$ 10,194,676
379	20	398	2,523,602	4,853,077
394	16	298	1,705,160	3,706,872
395	13	142	1,129,420	2,304,936
504	564	13,721	87,710,456	1,253,006,444
559	248	2,058	15,072,396	157,004,132
593	192	694	3,048,192	26,738,556
594	96	1,162	7,548,469	66,214,659
595	154	1,286	7,273,897	63,807,186
599	813	3,915	17,149,540	150,434,564
791	47	323	1,601,388	5,428,093
793	82	1,019	3,943,467	15,109,079
794	351	4,494	24,895,824	91,866,488
841	13	191	1,026,751	N.A.
842	3	68	338,601	N.A.
864	246	2,341	10,143,140	N.A.
869	67	2,595	12,102,252	N.A.
Total	2,930	35,809	$203,125,367	$1,850,668,762

N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 7 illustrates the selected private sector recreation units by county within the Texas Coastal Zone for 1972.

SELECTED PRIVATE SECTOR RECREATION UNITS BY COUNTY WITHIN TEXAS COASTAL ZONE 1972



Total Recreation Units = 2,930

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 7

Table 10 presents the selected private sector economic data of tourism related units by S.I.C. number within the Texas Coastal Zone for 1972. McMullen County had one tourism related unit, therefore the economic data pertaining to employment, wages, and economic significance was omitted to avoid disclosure.

The wages to employment ratio is significantly indicative of the "low-paid" services. A total of 55,134 employees earning $179,755,670 yields a wages to employee ratio of $3,260.

The Texas Restaurant Association indicated that a minimum of 60 percent of the business conducted by eating and drinking establishments within the coastal zone was attributable to recreation and tourism. Therefore, the adjusted eating and drinking figure for estimated annual total wages could read $78,092,688, and the estimated annual economic significance could read $321,369,084.

The Texas Hotel and Motel Association indicated that a minimum of 65 percent of the business conducted by lodging establishments within the coastal zone was attributable to recreation and tourism. Therefore, the adjusted lodging figure for estimated annual total wages could read $32,240,774 and the estimated annual economic significance could read $107,828,667.

The combined adjusted total for tourism estimated annual total wages was $110,333,462 and estimated economic significance was $429,197,751.

A major component of the tourism industry--travel--will be treated separately in this chapter.

TABLE 10

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF TOURISM UNITS
WITHIN
TEXAS COASTAL ZONE
1972

S.I.C. NUMBER	TOURISM RELATED			
	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
581	3,259	42,267	$ 130,154,480	$ 535,615,140
701	541	*	*	*
703	92	*	*	*
704	2	*	*	*
*		12,867*	49,601,190*	165,890,257*
Total	3,894	55,134	$ 179,755,670	$ 701,505,397

* Combined to Avoid Disclosure.

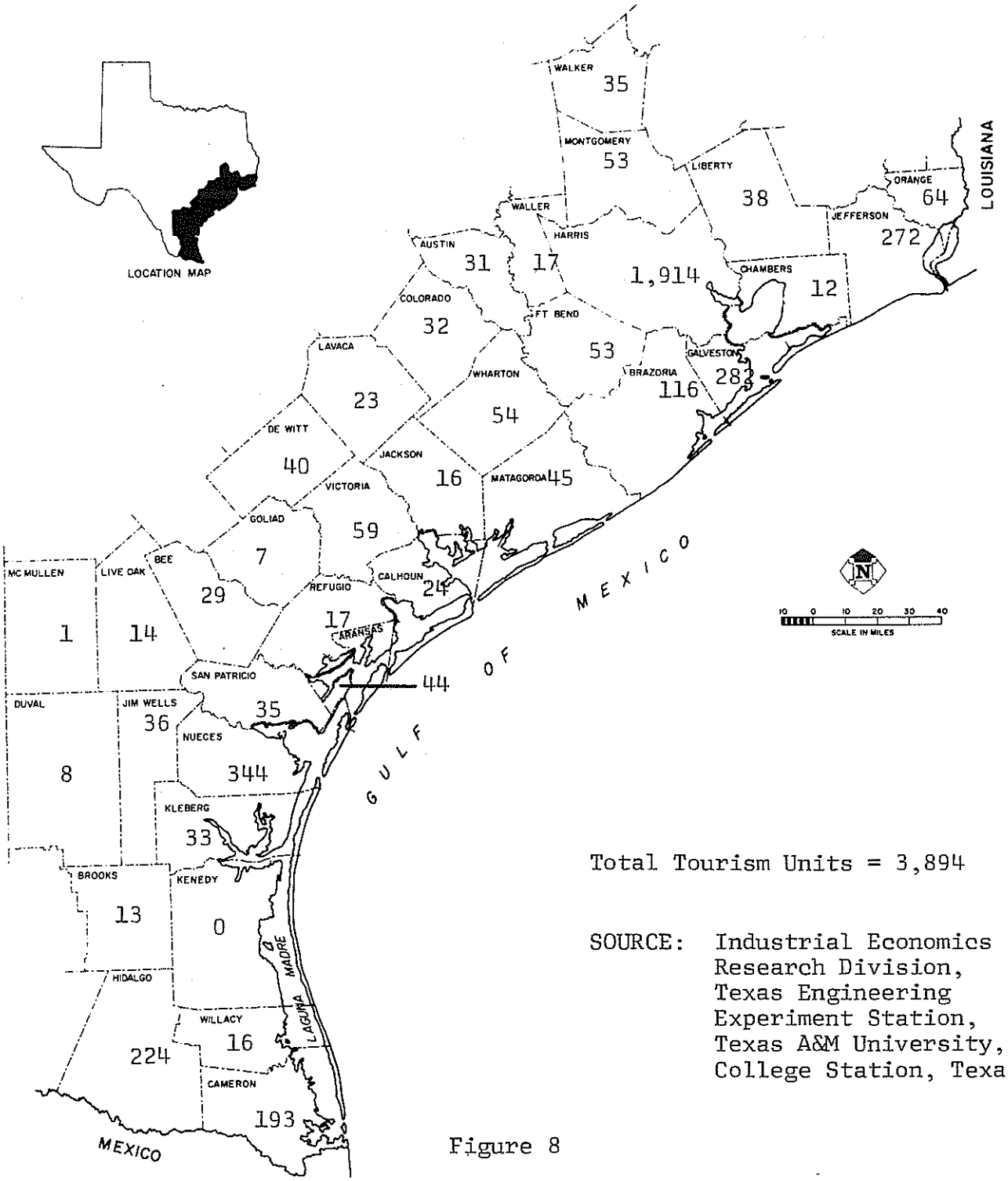
SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 8 illustrates the selected private sector tourism units by county within the Texas Coastal Zone for 1972.

Figure 9 illustrates the selected eating and drinking units by county within the Texas Coastal Zone for 1972 and Figure 10 illustrates the selected lodging units by county within the Texas Coastal Zone for 1972.

Table 11 presents the selected private sector economic data of entertainment units by S.I.C. numbers within the Texas Coastal

SELECTED PRIVATE SECTOR TOURISM UNITS BY COUNTY WITHIN TEXAS COASTAL ZONE 1972

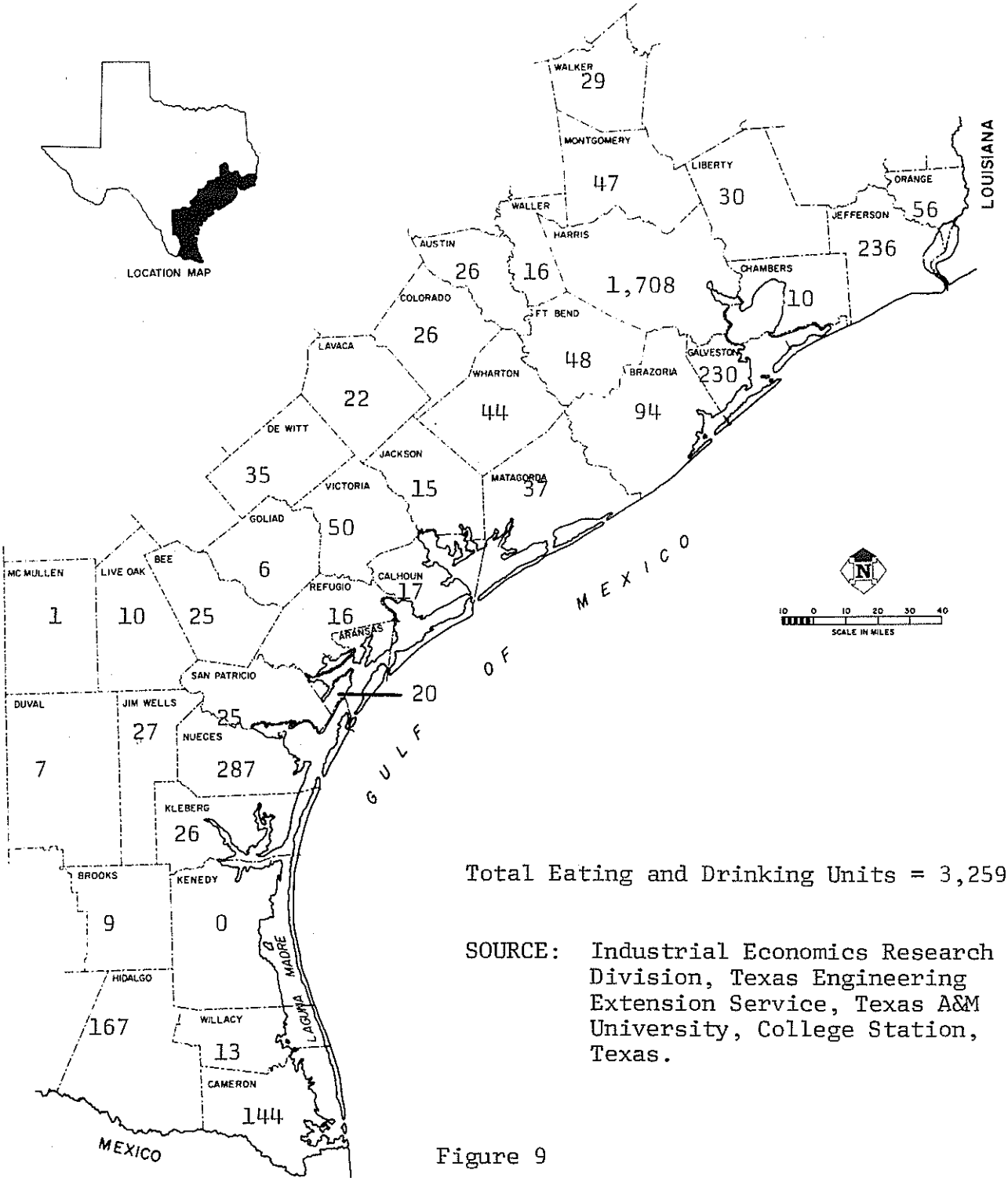


Total Tourism Units = 3,894

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 8

SELECTED EATING AND DRINKING UNITS BY COUNTY WITHIN TEXAS COASTAL ZONE 1972

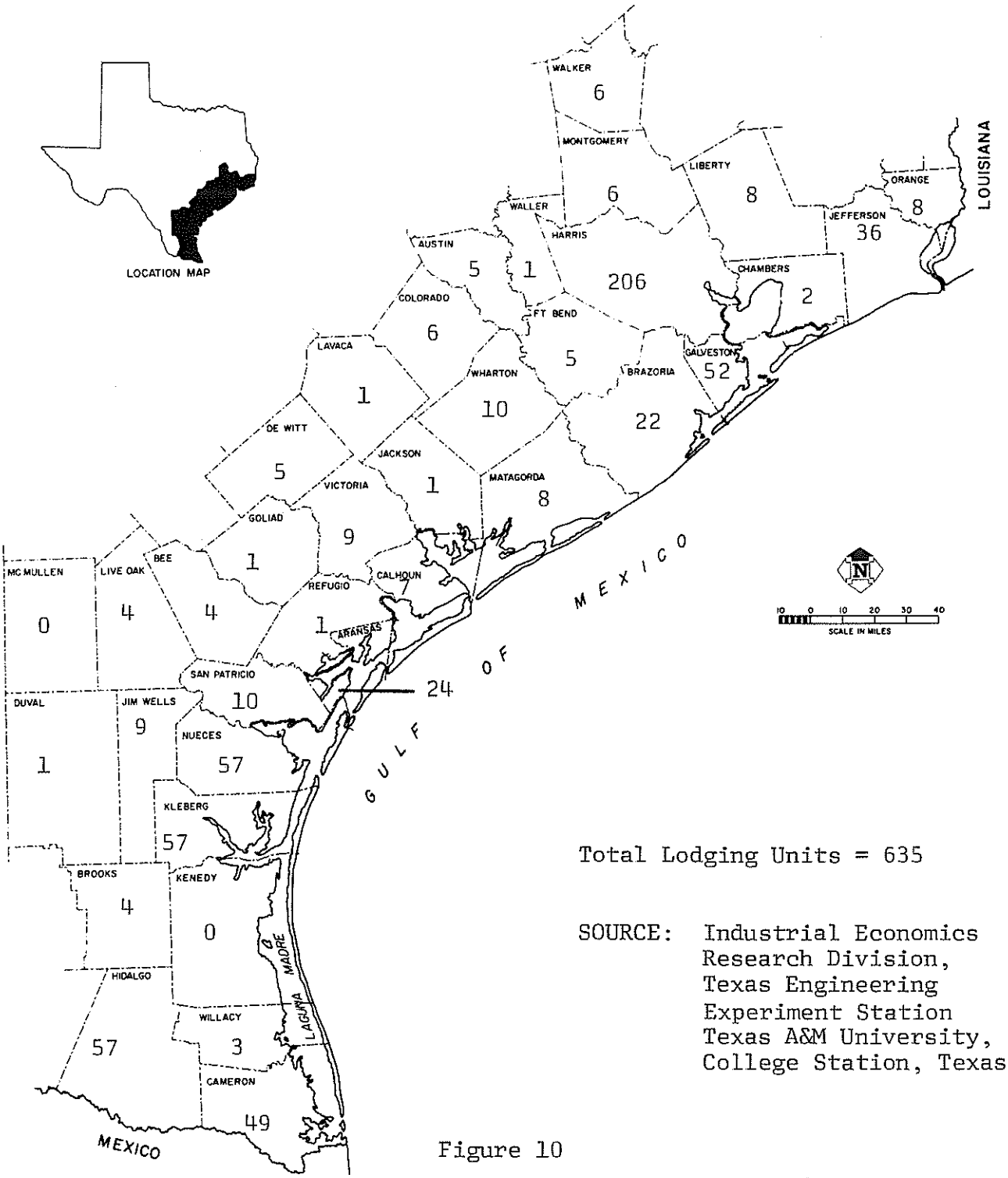


Total Eating and Drinking Units = 3,259

SOURCE: Industrial Economics Research Division, Texas Engineering Extension Service, Texas A&M University, College Station, Texas.

Figure 9

SELECTED LODGING UNITS BY COUNTY WITHIN TEXAS COASTAL ZONE 1972



Total Lodging Units = 635

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station Texas A&M University, College Station, Texas.

Figure 10

TABLE 11

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF ENTERTAINMENT UNITS
WITHIN
TEXAS COASTAL ZONE
1972

S.I.C. NUMBER	ENTERTAINMENT RELATED			
	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
365	9	57	$ 434,148	$ 943,804
573	213	1,514	8,827,364	67,902,796
592	246	1,078	4,814,088	71,851,996
729	47	622	3,276,849	8,808,731
781	22	*	*	*
782	1	*	*	*
783	103	*	*	*
792	65	463	2,700,488	7,805,188
*		2,332*	7,581,310*	31,032,068*
Total	706	6,066	$27,634,247	$188,344,583

* Combined to Avoid Disclosure.

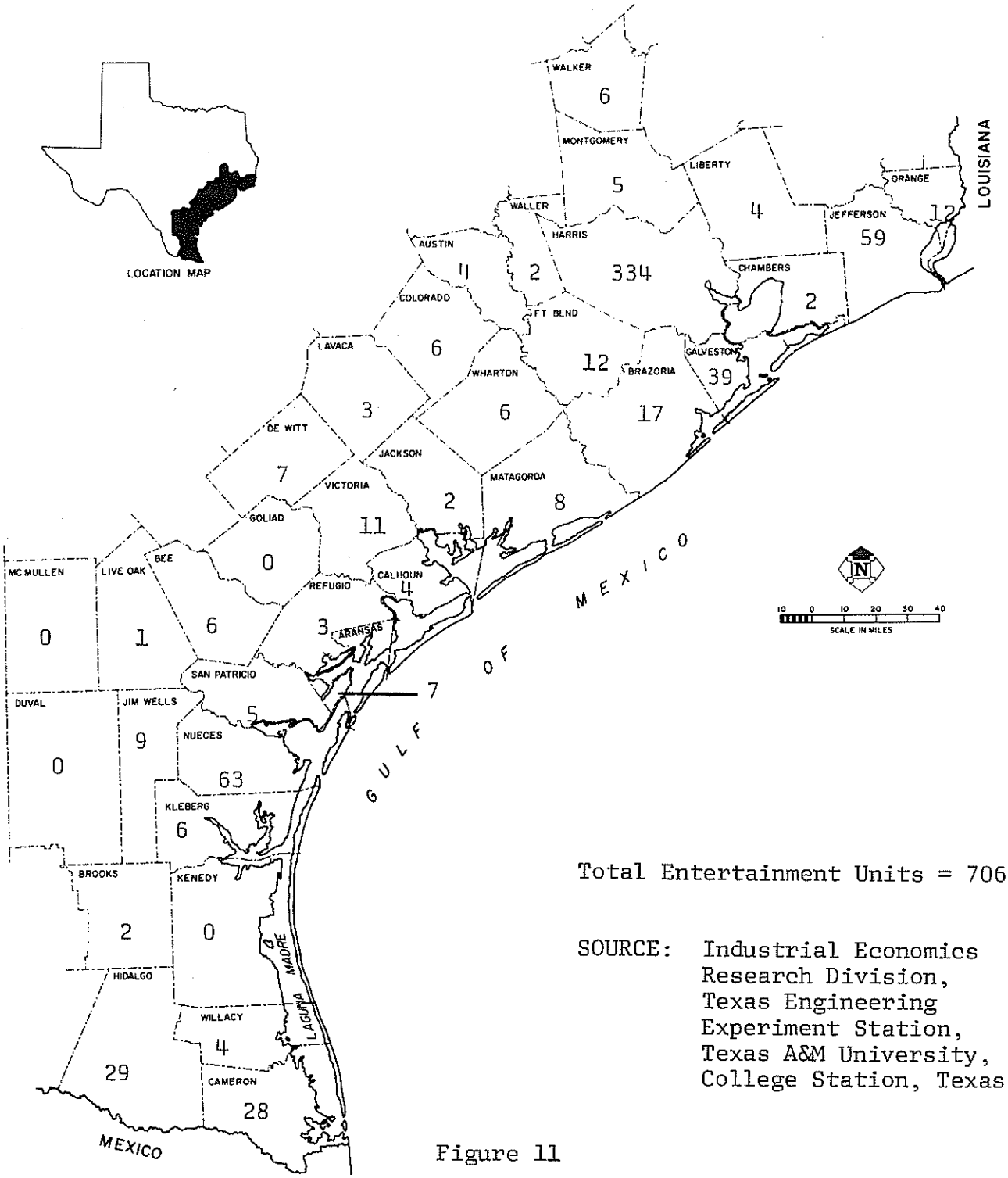
SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Zone for 1972. The motion picture industry has a significant ratio of employees to units.

Figure 11 illustrates the selected private sector entertainment units by county within the Texas Coastal Zone for 1972.

Table 12 presents the selected private sector economic data of combined recreation, tourism and entertainment units by category within the Texas Coastal Zone for 1972.

SELECTED PRIVATE SECTOR ENTERTAINMENT UNITS BY COUNTY WITHIN TEXAS COASTAL ZONE 1972



Total Entertainment Units = 706

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 11

TABLE 12

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF COMBINED RECREATION, TOURISM, AND ENTERTAINMENT UNITS
WITHIN
TEXAS COASTAL ZONE
1972

CATEGORY	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
Combined Recreation SIC Numbers	2,930	35,809	$203,125,367	$1,850,668,762
Combined Tourism SIC Numbers	3,894	55,134	179,755,670	701,505,397
Combined Entertainment SIC Numbers	706	6,066	27,634,247	188,344,583
Total	7,530	97,009	$410,515,284	$2,740,518,742

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Tables 13 through 17 present the selected private sector economic data of recreation and tourism units according to S.I.C. numbers within the Councils of Governments within the Texas Coastal Zone for 1972 and Table 18 presents the combined selected private sector economic data of recreation and tourism by Councils of Governments with the Texas Coastal Zone for 1972.

TABLE 13

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
SOUTH EAST TEXAS STATE PLANNING REGION
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
379	2	*	$ *	$ *
504	40	643	3,952,172	56,459,596
559	27	328	1,822,164	18,980,880
573	27	166	855,772	6,582,868
581	292	3,039	8,627,432	35,503,840
592	33	69	192,536	2,873,664
593	16	45	166,028	1,456,396
594	6	97	505,660	4,435,620
595	14	66	305,264	2,677,744
599	81	353	1,191,996	10,456,092
701	38	748	2,212,684	7,400,276
703	6	10	26,548	88,788
729	6	47	231,052	621,108
783	5	69	352,128	1,492,068
791	8	30	56,380	191,116
793	7	136	618,872	2,371,160
794	21	151	564,936	2,084,628
841	1	*	*	N.A.
864	30	240	836,984	N.A.
869	7	73	343,472	N.A.
*		6*	25,492*	36,664*
Total	667	6,316	$ 22,887,572	$153,712,508
Total County Units	4,602	93,210	$773,803,320	N.A.
Percent	14	7	3	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 14

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
HOUSTON-GALVESTON AREA COUNCIL
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
365	8	57	434,148	943,804
379	13	162	1,259,340	2,421,804
394	14	275	1,566,896	3,406,296
395	12	130	1,070,412	2,184,512
504	330	7,159	57,981,220	828,303,124
559	145	1,259	10,414,352	108,482,820
573	119	1,007	6,342,984	48,792,184
581	2,045	30,956	98,336,500	404,676,948
592	159	814	3,889,432	58,051,196
593	119	470	2,440,084	21,404,260
594	72	899	6,010,972	52,727,836
595	99	1,005	5,898,600	51,743,168
599	538	2,802	13,184,148	115,650,408
701	290	9,520	38,640,240	129,231,576
703	45	130	514,536	1,720,860
704	2	*	*	*
729	31	517	2,930,876	7,878,696
781	21	135	1,306,336	4,473,752
782	1	*	*	*
783	53	1,408	4,068,684	17,240,188
791	29	259	1,472,648	4,992,032
792	53	413	2,576,416	7,446,604
793	46	639	2,577,100	9,873,952
794	241	3,525	20,628,796	76,121,012
841	9	174	954,172	N.A.
842	1	*	*	*
864	152	1,704	7,811,632	N.A.
869	33	1,421	7,795,556	N.A.
*		16*	70,372*	146,764*
Total	4,680	66,856	$ 300,176,452	$1,957,913,796
Total County Units	36,124	782,155	$2,500,999,956	N.A.
Percent	13	9	12	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available
SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 15

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
GOLDEN CRESCENT COUNCIL OF GOVERNMENTS
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
319	5	1,104	$ 5,912,912	$10,194,676
379	2	*	*	*
504	30	467	2,053,848	29,340,664
559	9	47	271,540	2,828,548
573	6	14	42,628	327,908
581	145	932	2,151,284	8,853,020
592	14	32	95,988	1,432,652
593	7	10	55,424	486,176
594	2	*	*	*
595	3	*	*	*
599	29	87	276,496	2,425,420
701	24	223	666,432	2,228,872
783	7	133	358,588	1,519,440
791	3	*	*	*
793	3	*	*	*
794	16	87	242,768	895,820
864	14	46	81,768	N.A.
869	6	38	169,744	N.A.
*		247*	1,159,532*	2,667,572*
Total	325	3,467	$ 13,538,952	$63,200,768
Total County Units	2,489	28,649	$185,942,404	N.A.
Percent	13	12	7	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 16

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
COASTAL BEND DEVELOPMENT COUNCIL
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
395	1	*	$ *	$ *
379	1	*	*	*
394	2	*	*	*
504	52	938	5,842,872	83,469,588
559	39	279	1,777,328	18,513,832
573	35	157	680,324	5,233,268
581	453	4,929	14,213,084	58,490,056
592	28	114	424,396	6,334,276
593	25	65	272,440	2,389,828
594	7	65	348,728	3,059,012
595	26	127	639,800	5,612,288
599	92	394	1,567,044	13,746,008
701	107	1,037	3,410,416	11,406,076
703	14	32	93,176	311,616
729	6	55	109,996	295,688
781	1	*	*	*
783	20	345	911,460	3,862,128
791	3	*	*	*
792	12	50	124,072	358,584
793	12	155	470,772	1,803,720
794	48	332	1,582,288	5,838,704
841	2	*	*	N.A.
864	30	253	1,010,404	N.A.
869	15	230	1,011,324	N.A.
*		74*	405,756*	799,800*
Total	1,031	9,631	$ 34,895,680	$221,524,472
Total County Units	7,039	96,630	$650,726,880	N.A.
Percent	15	10	5	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 17

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
LOWER RIO GRANDE VALLEY DEVELOPMENT COUNCIL
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
365	1	N.A.	$ N.A.	$ N.A.
379	2	*	*	*
504	112	4,514	17,880,344	255,433,472
559	28	145	787,012	8,198,052
573	26	170	905,656	6,966,568
581	324	2,411	6,826,180	28,091,276
592	12	49	211,736	3,160,208
593	27	117	160,408	1,407,092
594	7	79	615,972	5,403,264
595	12	79	403,848	3,542,540
599	73	279	929,856	8,156,636
701	82	1,075	3,679,164	12,304,896
703	27	87	339,716	1,136,168
729	4	*	*	*
783	18	236	546,508	2,315,708
791	4	*	*	*
793	14	72	222,832	853,768
794	25	399	1,877,036	6,926,324
841	1	*	*	N.A.
842	2	*	*	N.A.
864	20	98	402,352	N.A.
869	6	833	2,782,156	N.A.
*		96*	445,844*	271,228*
Total	827	10,739	$ 39,016,620	$344,167,200
Total County Units	5,013	63,834	$328,527,648	N.A.
Percent	16	17	12	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 18

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
BY COUNCILS OF GOVERNMENTS
WITHIN
TEXAS COASTAL ZONE
1972

COUNCILS OF GOVERNMENT	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
South East Texas Regional Planning Commission	667	6,316	$ 22,887,572	$ 153,712,508
Houston-Galveston Area Council	4,680	66,856	300,176,452	1,957,913,796
Golden Crescent Council of Governments	325	3,467	13,538,952	63,200,768
Coastal Bend Development Council	1,031	9,631	34,895,680	221,524,472
Lower Rio Grande Valley Development Council	827	10,739	39,016,620	344,167,200
TOTAL	7,530	97,009	$410,515,276	$2,740,518,744

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Table 19 presents the selected private sector economic data of recreation and tourism units according to S.I.C. numbers within the Texas Coastal Zone for 1972. These data indicate that eating and drinking establishments ranked first in the categories of units, employment, and wages and that Sporting, Recreational, Photographic, and Hobby Goods, Toys and Supplies ranked first to a significant degree in the category of estimated annual economic significance. Lodging units ranked third in overall significance.

A comparison of the county, Councils of Governments, and S.I.C. totals for the reporting categories of selected S.I.C. data reveals a minor difference in the estimated annual economic significance due to rounding off.

Detailed compilations (Appendix B, pages 163 through 197) present the selected private sector economic data of recreation and tourism units within each of 35 counties by S.I.C. number for 1972. Kenedy was omitted since there were no units reported or data available. Data were tabulated for the recreation and tourism units and then compared with the total of all units reported within the county to indicate relationships in simple percentages.

Boats, Horses, and Travel

Three major components of the private sector economic data which were not included within the S.I.C. statistics but for which data were available include boats--other than sales for 1972, horses, and travel. The reliability of these data depend entirely upon the sources from which each was derived.

TABLE 19

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
BY STANDARD INDUSTRIAL CLASSIFICATION NUMBER
WITHIN
TEXAS COASTAL ZONE
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
319	5	1,104	$ 5,912,912	$ 10,194,676
365	9	57	434,148	943,804
379	20	398	2,523,602	4,853,077
394	16	298	1,705,160	3,706,872
395	13	142	1,129,420	2,304,936
504	564	13,721	87,710,456	1,253,006,444
559	248	2,058	15,072,396	157,004,132
573	213	1,514	8,827,364	67,902,796
581	3,259	42,267	130,154,480	535,615,140
592	246	1,078	4,814,088	71,851,996
593	192	694	3,048,192	26,738,556
594	96	1,162	7,548,469	66,214,659
595	154	1,286	7,273,897	63,807,186
599	813	3,915	17,149,540	150,434,564
701	541	12,603	48,608,936	162,571,696
703	92	259	973,976	3,257,432
704	2	5	18,278	61,129
729	47	622	3,276,849	8,808,731
781	22	*	*	*
782	1	*	*	*
783	103	2,191	6,237,368	26,429,532
791	47	323	1,601,288	5,428,093
792	65	463	2,700,488	7,805,188
793	82	1,019	3,943,467	15,109,079
794	351	4,494	24,895,824	91,866,488
841	13	191	1,026,751	N.A.
842	3	68	338,601	N.A.
864	246	2,341	10,143,140	N.A.
869	67	2,595	12,102,252	N.A.
*		141*	1,343,942*	4,602,536*
Total	7,530	97,009	$410,515,284	$2,740,518,742

* Combined to Avoid Disclosure.

N.A.: Not Available.

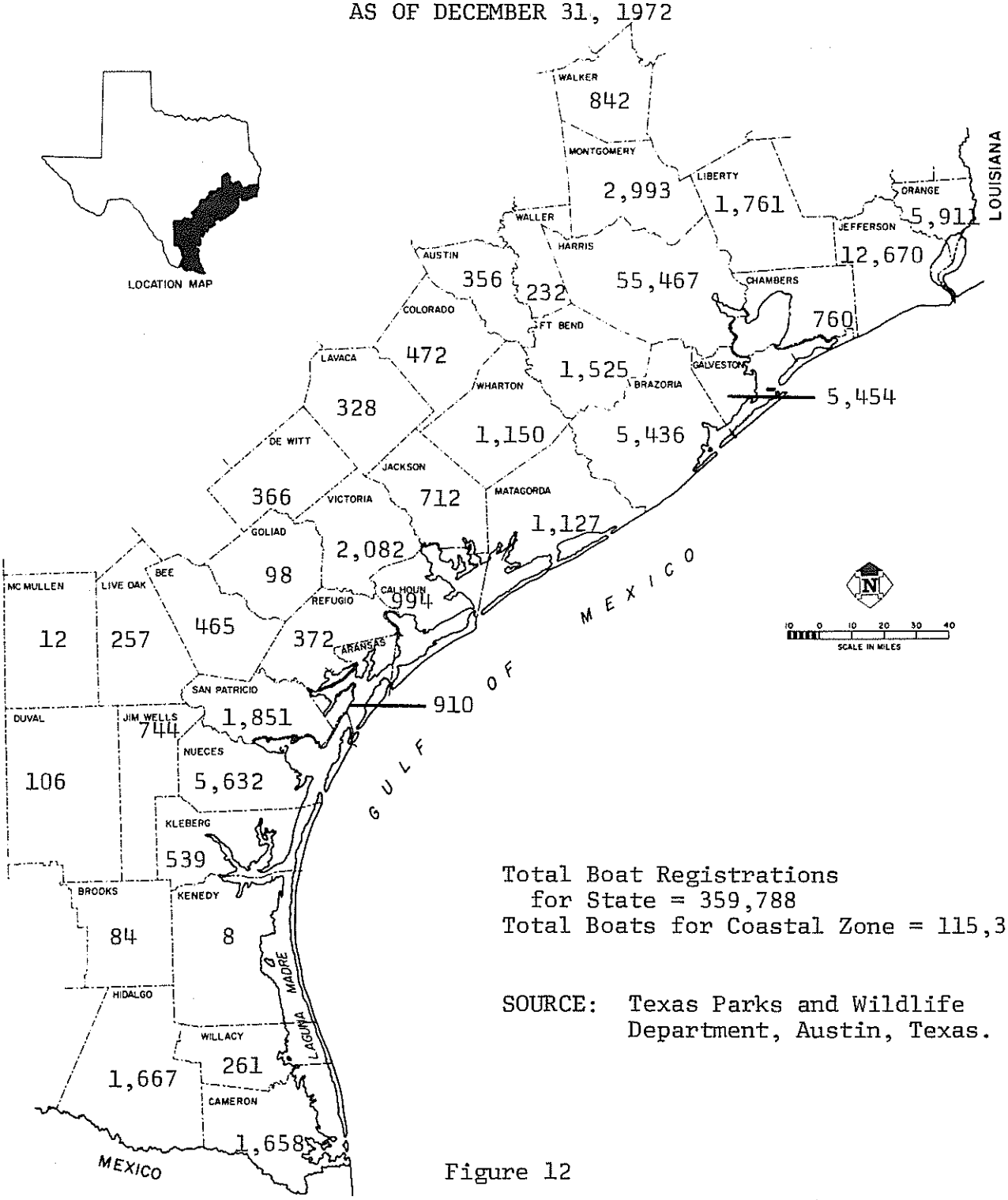
SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Boating is considered to be the most popular family recreational activity in the nation. Figure 12 reveals the number of pleasure boat registrations by county within the Texas Coastal Zone as of December 31, 1972. The total number of pleasure boats registered within the coastal zone was 115,302 and the average value per boat according to the 1972 issue of The Boating Industry was approximately $1,036, placing the estimated value for registered boats within the Texas Coastal Zone at $119,452,872.

Table 20 presents the number of horses vaccinated for VEE--Venezuelan Equine Encephalomyelitis--by county within the Texas Coastal Zone for 1971. These data reveal the estimated number of horses in July, 1971, the number of vaccinations and the percentage of horses vaccinated as of October 22, 1971. Figure 13 illustrates the number of horses by county according to vaccination records within the coastal zone. These figures are more significant with the knowledge that VEE was contracted from mosquitos, that the disease came through Mexico into the United States, and that the vaccine was effective in controlling the fatal disease. The estimates on the horse population appeared to be conservative in counties adjacent to the Mexican border where the disease was most severe.

The 1969 Spindletop Report determined the value per horse and the annual expenditures per horse. These figures are currently under revision and appear to be below present cost. Each horse was valued at $750 and the annual expenditure per horse was estimated at $735. These expenditures include feed, tack, trailers,

PLEASURE BOAT REGISTRATIONS BY COUNTY WITHIN TEXAS COASTAL ZONE AS OF DECEMBER 31, 1972



Total Boat Registrations
for State = 359,788
Total Boats for Coastal Zone = 115,302

SOURCE: Texas Parks and Wildlife Department, Austin, Texas.

Figure 12

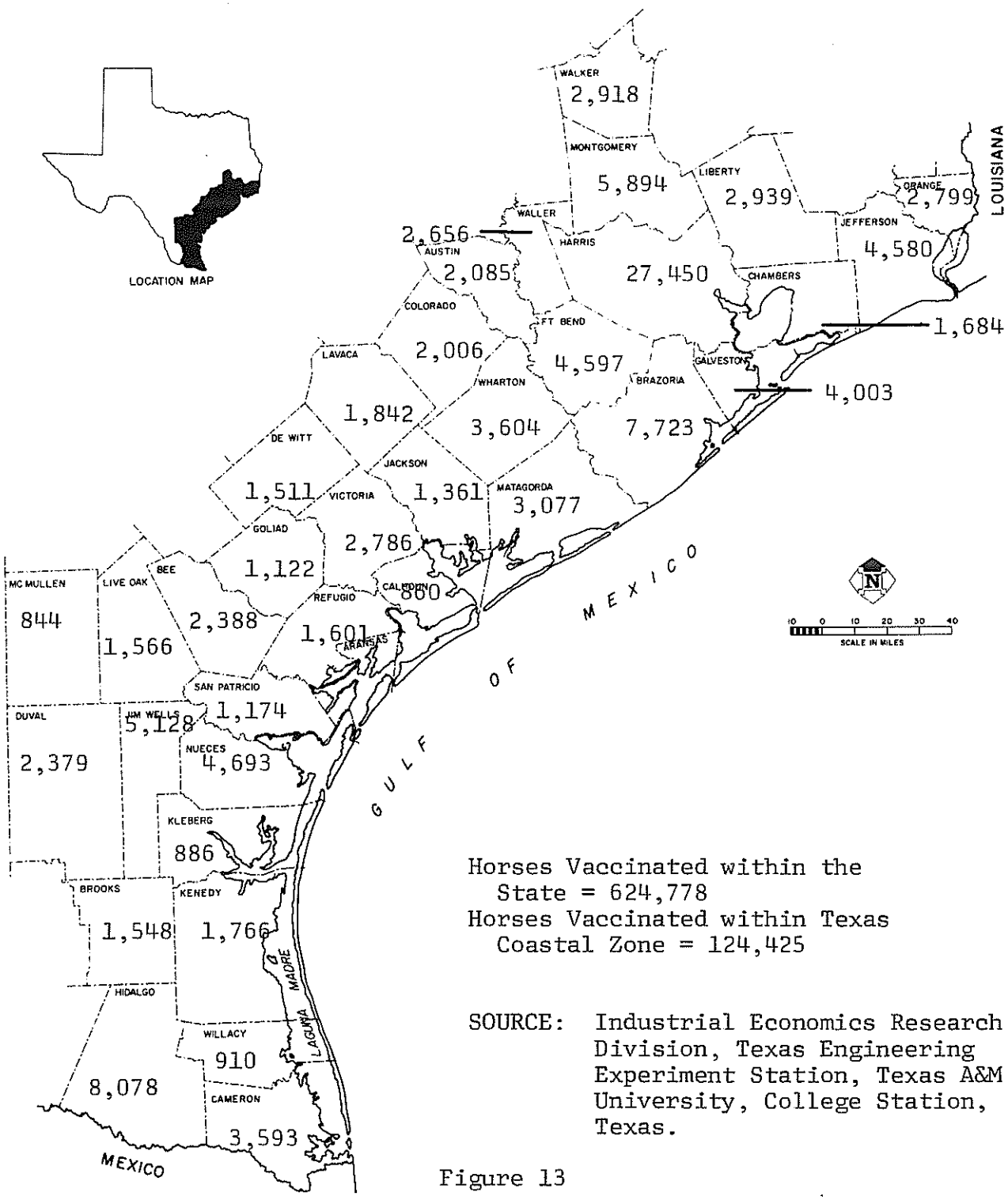
TABLE 20

ESTIMATED NUMBER OF HORSES AND ACTUAL
NUMBER OF HORSES VACCINATED FOR VEE
BY COUNTY
WITHIN
TEXAS COASTAL ZONE
1971

COUNTY	NUMBER OF JULY ESTIMATE	NUMBER OF VACCINATIONS	PERCENT AS OF 10/22/71
Aransas	450	324	72
Austin	2,600	2,085	80
Bee	2,800	2,338	84
Brazoria	9,000	7,723	86
Brooks	1,500	1,548	103
Calhoun	1,060	860	81
Cameron	1,919	3,593	187
Chambers	1,700	1,684	99
Colorado	2,150	2,006	93
DeWitt	1,800	1,511	84
Duval	1,500	2,379	159
Fort Bend	5,000	4,597	92
Galveston	3,000	4,003	133
Goliad	1,200	1,122	94
Harris	35,000	27,450	78
Hidalgo	3,995	8,078	202
Jackson	1,800	1,361	76
Jefferson	5,250	4,680	89
Jim Wells	2,100	5,128	244
Kenedy	1,500	1,766	118
Kleberg	2,200	886	40
Lavaca	1,500	1,842	123
Liberty	3,000	2,939	98
Live Oak	2,600	1,566	60
McMullen	1,095	844	77
Matagorda	3,000	3,077	103
Montgomery	5,068	5,894	116
Nueces	4,000	4,693	117
Orange	3,000	2,799	93
Refugio	1,750	1,601	91
San Patricio	1,550	1,174	76
Victoria	3,222	2,786	86
Walker	4,000	2,918	73
Waller	2,500	2,656	106
Wharton	6,000	3,604	60
Willacy	1,400	910	65
TOTAL	131,209	124,425	95

SOURCE: Office of the Horse Specialist, Texas Agricultural Extension Service, Texas A&M University, College Station, Texas.

NUMBER OF HORSES VACCINATED FOR VEE
BY COUNTY
WITHIN
TEXAS COASTAL ZONE
AS OF OCTOBER 22, 1971



Horses Vaccinated within the State = 624,778
Horses Vaccinated within Texas Coastal Zone = 124,425

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

Figure 13

stabling, and veterinarian services and supplies. Therefore, within the coastal zone the value of horses were estimated at $93,318,750 and the annual expenditures were estimated at $91,452,375. The horse industry becomes even more paramount when racing, shows and rodeos--the largest spectator sport in the nation--are considered.

The 1972 report of "The Texas Visitor Industry" compiled and published by the Texas Highway Department serves as the source for data pertaining to travel. Data revealed that Texas hosted 16,635,000 auto visitors, adding $1,588,984,000 to the State's economy. The spending of the travel dollar is broken down as: lodging-27¢, food-24¢, entertainment-10¢, auto-20¢ and other-19¢. Twenty-eight percent of the 4,657,800 visitors indicated the Texas Coastal Zone as their destination revealing an expenditure in the amount of approximately $444,915,520. It is estimated that 86 percent of the visitors to Texas arrive via auto, whereas 14 percent arrive via common carrier adding some 2,708,000 persons to accumulate a grand total of 19,343,000 visitors for the state. This increase in visitors to the state would indicate an increase for visitors and spending within the coastal zone.

Summary

The data revealed that the Texas Coastal Zone had 322,287 acres available for recreation and tourism and an additional 153,225 acres was proposed for acquisition. There were: a total

of 7,530 S.I.C. units--individual business locations; a combined public and private sector average annual total employment of 99,957; a combined public and private sector estimated annual total wages of $352,141,990; and a combined annual total expenditure of $2,606,671,161 for the combined recreation and tourism industry within the year of 1972. The expenditure figure reflects the adjusted total after the tourism data were statistically treated to include only recreation and tourism data and the estimated annual expenditure on horses. The value placed upon boats was $119,452,872; the value placed upon horses was $93,318,750; and the total estimated expenditure of visitors was $444,915,520 for the coastal zone for 1972.

The 1972 Statistical Abstract revealed trends from 1950-1971 pertaining to recreation and tourism: (1) the national income originating within the lodging industry yielded a total increase of 239 percent, (2) the motion picture industry increased by 80 percent, and (3) amusements and recreation services increased by 346 percent. Predictions indicate these trends will continue at an increased rate, which implies that more recreational areas, facilities, and activities will be required. This is most significant when applied to the Texas Coastal Zone.

FINDINGS, CONCLUSIONS, and RECOMMENDATIONS

CHAPTER V

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Findings

The analysis of the data is the basis for the following findings:

1. The Texas Coastal Zone contains approximately 600 miles of sandy beaches which are estimated to be one-half of the total beach mileage available for public recreation within the 48 contiguous states.
2. The Texas Coastal Zone contains 21,262,720 acres of which 322,286 acres or 1.5 percent is available for recreation and tourism. Padre Island National Seashore and the national wildlife preserves account for over two-thirds of the total acreage.
3. An additional 153,225 acres were proposed within the Texas Coastal Zone for recreational purposes.
4. The Texas Coastal Zone climate is conducive to outdoor recreation twelve months of the year.
5. The majority of the population within the Texas Coastal Zone is concentrated within the five Standard Metropolitan Statistical Areas (SMSA's).

6. The selected public sector budgets for recreation and tourism for one fiscal year, as of April 30, 1973, were:

Employees	2,948
Wages	$11,048,914
Operation Expenditures	$19,657,129
Capital Improvements	$27,350,561
Total Amount Reported Spent	$47,007,690

7. The selected private sector economic findings for recreation and tourism for 1972 were:

Number of units	7,530
Average Employment	97,009
Estimated Annual Wages	$ 410,515,284
Adjusted Estimated Annual Wages	$ 341,093,076
Estimated Annual Economic Significance	$2,740,518,742
Adjusted Estimated Annual Economic Significance	$2,468,211,096[1]

8. The Texas Coastal Zone had 115,302 registered boats valued at $119,452,872 as of December 31, 1972.

9. The Texas Coastal Zone had 124,425 horses valued at $93,318,750 with an estimated annual expenditure of $91,452,375 as of October 22, 1971.

10. The travel expenditure for the Texas Coastal Zone was estimated at $444,915,520 for the fiscal year 1972.

11. With one exception, acreage, Harris County ranked first in the public and private sectors for all major categories: number of units, average employment, estimated annual wages, estimated annual economic significance, operation expenditures, capital improvements, boats, horses, and travel expenditures.

---

[1]The 60% of S.I.C. 581 and 65% S.I.C. 701, 703, and 704 account for the difference in adjusted and estimated totals.

12. The combined public and private sector economic data for recreation and tourism within the Texas Coastal Zone were:

Average Employment	99,957
Estimated Annual Total Wages	$ 352,141,990
Estimated Annual Total Expenditures .	$2,606,671,161

13. One major S.I.C. number, 799--Miscellaneous Amusement and Recreation Services--including industry numbers for Public Golf Courses, Coin-Operated Amusement Devices, Amusement Parks, Membership Sports and Recreation Clubs, and Amusement and Recreation Services (listing nearly 100 categories), was not yet available as data. These data would make a significant difference in the private economic data.

Conclusions

The following conclusions based upon the results of the study are:

1. Texas beaches have the greatest public recreation potential of any area of the American coastline from Mexico to Canada.
2. The Texas Coastal Zone has the potential for becoming one of the leading recreational and tourism areas in the nation.
3. A significant increase is expected in the number of visitors to the coastal zone as a direct result of the extensive publicity campaign conducted by the Tourist Development Agency to promote the state as a recreational and tourist attraction.

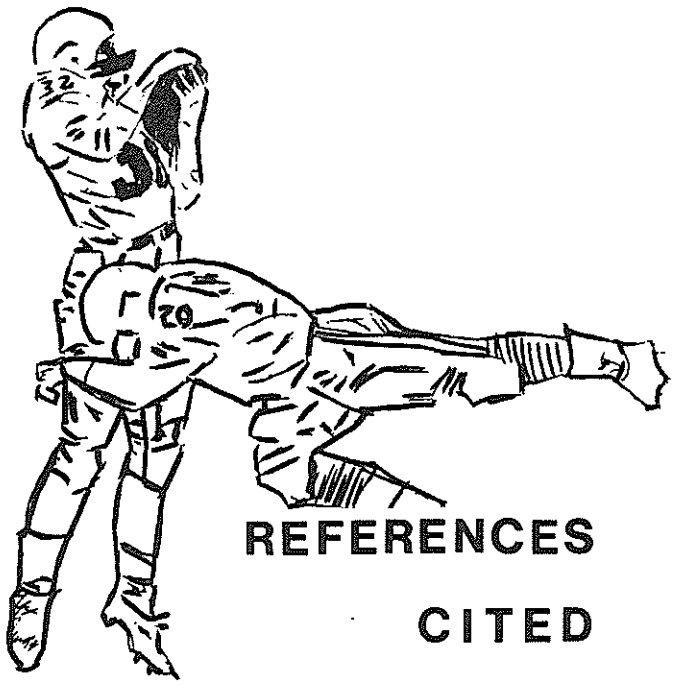
4. Adequate legislation must be enacted in order to prevent exploitation of the Texas Coast and in order to insure quality recreational areas for future generations.
5. Recreation and tourism is a significant factor in the economy of the Texas Coastal Zone generating more than $2.6 billion annually.

Recommendations for Further Research

Further studies recommended are:

1. The present study did not include economic data pertaining to recreational land development, second-home developments, airplane activities, weekend farms and ranches, fishing and hunting, and pets. Since these components comprise a large expenditure in the recreation and tourism industry, a study to determine these economic data is recommended;
2. to determine the economic impact of recreation and tourism within the Texas Coastal Zone;
3. to determine the legislation affecting recreation and tourism within the Texas Coastal Zone;
4. to determine needed legislation which would protect the Texas Coastal Zone for future generations;
5. to determine the compatibility of recreation and tourism with other industries within the Texas Coastal Zone;
6. to determine the amount of encroachment upon the public beaches of Texas;

7. to determine standards which should be considered prior to recreational development within the Texas Coastal Zone;
8. to determine the existing and potential access to the Texas Coastal Zone;
9. to determine the existing and potential activities for recreation and tourism within the Texas Coastal Zone;
10. to determine the conflicts of purposes, management, and land use of recreation and tourism within the Texas Coastal Zone;
11. to determine the effectiveness of proposing a coastal control board to regulate development within the Texas Coastal Zone;
12. to identify significant scenic areas for the purpose of constructing overlooks or turnouts on the Texas coast;
13. to identify "eye sore" sights for the purpose of beautifying the Texas coast; and
14. to determine the attitude of local and non-local persons toward the Texas Coastal Zone.



REFERENCES CITED

REFERENCES CITED

1. "83 Billion Dollars for Leisure," U. S. News and World Report, September 15, 1969, pp. 58-61.

2. Ocean Science Capital Corporation, Newsletter No. 22, August, 1970.

3. Silberman, Charles E., "The Money Left Over for the Good Life," Fortune, November, 1959, p. 135.

4. "83 Billion Dollars for Leisure."

5. Meyer, Harold D., Brightbill, Charles K. and Sessmons, H. Douglas, Community Recreation (4th ed.), Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969, p. 91.

6. "Recreation: A Record Boom," U. S. News and World Report, July 22, 1968, p. 52.

7. Ibid.

8. Lawyer, Donald E., "Recreation Boom," Water Spectrum, p. 5.

9. "Recreation: A Record Boom," p. 52.

10. "Leisure Boom: Biggest Ever and Still Growing," U. S. News & World Report, April 17, 1972, pp. 42-45.

11. U. S. Department of the Interior, Bureau of Outdoor Recreation, The 1970 Survey of Outdoor Recreation Activities, Washington, D. C., 1972, p. 7.

12. Cepede, Michel, Houtart, Francis, Grond, Linus, Population and Food, New York: Sheed and Ward, Inc., 1964, p. 12.

13. Hauser, Philip M., ed., The Population Dilemma, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1965, p. 10.

14. Jensen, Clayne R., Outdoor Recreation in America, Minneapolis: Burgess Publishing Company, 1970, p. 48.

15. Ibid.

16. "The Fun Part of the Cost of Living," American Home, March, 1969, p. 83.

17. Kazickas, Jurate, Houston Post, February 24, 1972.

18. "Three-Day Week-Ends Boost Business," U. S. News and World Report, Nov. 8, 1971, p. 64.

19. U. S. Department of Labor, Bureau of Labor Statistics, "Estimates of the Decrease in Hours Worked, 1960-2000," as reported in ORRRC Study Report No. 23, Projections to the Years 1976 and 2000: Economic Growth, Population, Labor Force and Leisure, and Transportation, Washington: Government Printing Office, 1962, p. 72.

20. "Leisure," The Magazine of Wall Street, New York, January 3, 1972, Vol. 123, No. 4.

21. Jensen, p. 47.

22. Clawson, Marion and Knetsch, Jack L., Economic of Outdoor Recreation, Baltimore: The Johns-Hopkins Press, 1966, pp. 4, 96-100.

23. Outdoor Recreation for America: The Report of the Outdoor Recreation Resources Review Commission to the President and to the Congress, Washington, D. C.: U. S. Government Printing Office, 1962, p. 31.

24. "Recreation: A Record Boom," p. 54.

25. The Boating Industry, The Boating Business, 1971, Denver, Colorado: Conover-Mast Publications, 1972.

26. Meyer, Brightbill, and Sessoms, pp. 45-91.

27. Butler, George D., Introduction to Community Recreation (4th ed.), New York: McGraw-Hill Book Co., Inc., 1964, p. 15.

28. Lawyer, p. 5.

29. Clawson, Marion. "The Crisis in Outdoor Recreation," American Forests, March-April, 1959, p. 11.

30. Outdoor Recreation for America, p. 173.

31. Ocean Science Capital Corporation.

32. "The Drive to Save America's Shoreline," U. S. News & World Report, July 31, 1972, pp. 38, 39.

33. Lemmon, Representative Ray, Chairman: Report of the Interim Study Committee on Oceanography, 1971.

34. Committee on Oceanography, Economic Benefits from Oceanographic Research, a special report of the Committee on Oceanography, National Academy of Sciences--National Resource Council, Publication 1328, Washington, D. C., 1964, p. 4.

35. Outdoor Recreation for America, p. 4.

36. Economic Benefits from Oceanographic Research, p. 3-4.

37. Outdoor Recreation for America, p. 70.

38. Shoreline Recreation Resources of the United States, Report of the Outdoor Recreation Resources Review Commission to the President and Congress, Report No. 4, Washington, D. C., 1962, p. 131.

39. Texas Highway Department, "Discover . . . Texas . . . America's Frontier," Austin: Texas Highway Department.

40. Texas Industrial Commission, "Texas Markets--Manpower," Texas Plant Location Fact Book.

41. "The Coastal Zone: Recreation and Tourism in Texas," Marine Resources: Leisure Uses, Texas A&M University Sea Grant Program, 1970, p. 16.

42. "The Leisurely Texan," Texas Business Review, May, 1970, p. 126.

43. "The Big Land Rush: No Slowdown in Sight," U. S. News and World Report, December 13, 1971, pp. 32-34.

44. Sund, et. al., "SIDC News," Vol. 5, No. 3, Atlanta, Georgia: Southern Industrial Development Council, 1971.

45. Ibid.

46. Liston, Linda, ed., "States Legislate Travel Investment Incentives to Capture the 'Industry Without Smokestacks'," Industrial Development, January/February, 1971, pp. 4-7.

47. National Shoreline Study: Texas Coast Shores Regional Inventory Report, U. S. Army Engineer District, Corps of Engineers, Galveston, Texas, 1971.

48. "The Leisurely Texas," p. 124-129.

49. Public Law 92-75, 92nd Congress, H. R. 19, August 10, 1971, "Federal Boat Safety Act of 1971."

50. Ibid.

51. Title 19, Article 1722a, "Texas Water Safety Act, 1971."

52. Shearer, Gordon K., "Texas Beaches Rated Nation's Best," Texas Game and Fish Magazine, December, 1956.

53. Comprehensive Planning Division, Texas Parks and Wildlife, The Texas Gulf Coast--A Study of Recreational Problems, Austin, Texas, 1965.

54. Gunn, Clare A., Annotated Bibliography of Resource Use--Texas Gulf Coast, Texas A&M University: Sea Grant Publication No. 204, 1969.

55. Fenter, Felix W., Texas Industry and the Ocean, Submitted to Representative Ray Lemmon, November 30, 1970.

56. Association of Bay Area Governments, Ocean Coastline Study, Berkeley, California: Association of Bay Area Governments, 1970.

57. Gunn, Clare., "Notes on the Texas Gulf Coast as a Tourism-Recreation Region," The Coastal Resources Management Program of Texas, Vol. 1, Austin, Texas: The Interagency Natural Resources Council, 1971.

58. Report of the Interim Study Committee on Oceanography.

59. Ditton, Robert B., "The Social and Economic Significance of Recreation Activities in the Marine Environment," Sea Grant Technical Report Number 11, Green Bay, Wisconsin: University of Winconsin, 1972.

60. Ducsik, Dennis W., ed., Power, Pollution, and Public Policy, Cambridge, Mass.: The Massachusetts Institute of Technology Press, 1970.

61. Ibid.

62. The Commission on Marine Science, "Outdoor Recreation Uses of Coastal Areas," Marine Resources and Legal-Political Arrangement for their Development, Vol. III, Narragansett, Rhode Island: University of Rhode Island.

63. Urban Land Institute,"Land: Recreation and Leisure", Abstracted from the first annual land use symposium, Washington, D. C.: Land Use Institute, 1970.

64. Robert R. Nathan Associates, Inc., Recreation as an Industry, Appalachian Research Report No. 2., Washington, D. C.: Resource Planning Associates, December, 1966.

65. Ozarks Regional Commission, A Strategy for Developing the Leisure Industry in the Ozarks Region, Vols. I, II, Kansas City, Missouri: Midwest Research Institute, 1968.

66. Floyd, Charles F., Heyl, R. James, and Barnes, James A., Economic Profile of the Coastal Plains Region, Atlanta, Georgia: University of Georgia, 1970.

67. Patterson, W. Robert, The New England Marine Industry: A Study of the Marine Manufacturing and Service Companies, Narragansett, Rhode Island: New England Marine Resources Information Program, 1971.

68. Pinson, Lawrence F., Tourism Development in the Coastal Plain Area, Athens, Georgia: University of Georgia, 1967.

69. Belden Associates, The National Market for Tourist Travel in Texas, 1969, Dallas: Belden Associates, 1969.

70. Leisure Systems, Incorporated, A Program for Optimizing the Tourist Industry as an Integral Part of the Economic Growth in the Coastal Plains Region, Washington, D. C.: Leisure Systems, Incorporated, 1969.

71. Checchi and Company, Tourism in the South Texas Triangle--An Analytical Framework and Action Program, Washington, D. C.: Checchi and Company, 1969.

72. Perkins, Edward L., "The Value of the Tourist Industry to a Community," (Paper presented at the Economic Conference on Tourism Sponsored by the Manitoba Department of Tourism and Recreation and the Tourist and Convention Association of Manitoba, Winnipeg, Manitoba, Canada, November 20, 1970.)

73. Ibid., p. 11.

74. Leisure Systems, Incorporated, Recreational Development Opportunities of the Intracoastal Waterway in North Carolina, South Carolina and Georgia, Washington, D. C.: Leisure Systems, Inc., 1969.

75. Department of the Interior, Bureau of Outdoor Recreation, Northern New England Vacation Home Study--1966, Washington, D. C.: Bureau of Outdoor Recreation, 1966.

76. Ducsik.

77. Fenter.

78. Lemmon.

79. Gunn, "Notes on the Texas Gulf Coast as a Tourism-Recreation Region."

80. Report on the Interim Study Committee on Oceanography.

81. Texas Tourist Development Agency, Community Guide, Austin, Texas, p. 7.

82. Lundberg, Donald E., The Tourist Business, Chicago: Institutions/Volume Feeding Management Magazine, 1972, pp. 135-6.

83. Deberry, B. L., News Release, April 4, 1973, Texas Highway Department.

84. U. S. Department of Commerce, Bureau of the Census, 1967 Census of Business, Vol. I., Retail Trade--Subject Reports, Washington, D. C.: Government Printing Office, p. x.

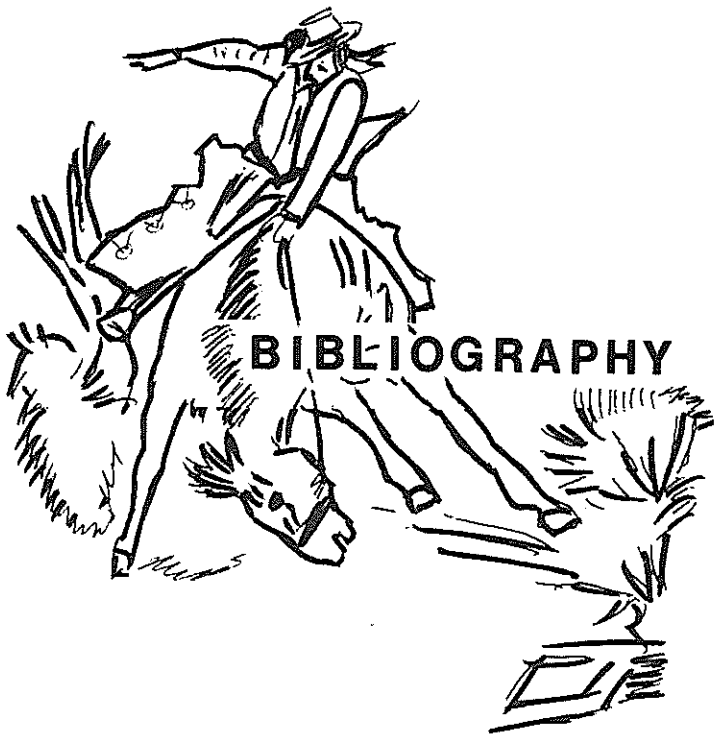
85. U. S. Department of Commerce, Bureau of the Census, 1963 Census of Business, Vol. VI, Selected Services--Summary Statistics, Washington, D. C.: Government Printing Office, p. xiv.

86. U. S. Department of Commerce, Bureau of the Census, 1967 Census of Manufacturers, Vol. II, Washington, D. C.: Government Printing Office, pt. 2, pp. 31B-6, 36D-11, 37C-9, 39B-6, pt. 3, 39C-9.

87. The Dallas Morning News, Texas Almanac, 1972-1973.

88. Goals for Texas in the Coastal Zone and the Sea, Summary of a Conference, co-sponosored by the Office of the Governor State of Texas and the Sea Grant Program Office, Texas A&M University, College Station, Texas. January, 1972, p. 3.

89. The Texas State Historical Association, The Handbook of Texas, Fort Worth, Texas: Marvin D. Evans Company, 1952.


BIBLIOGRAPHY

BIBLIOGRAPHY

Public Documents

Public Law 92-75, 92nd Congress, H. R. 19, August 10, 1971. "Federal Boat Safety Act of 1971."

Texas Parks and Wildlife Department. Annual Report 1971-1972. Austin, Texas.

Title 19, Article 1722a. "Texas Water Safety Act, 1971."

U. S. Department of Commerce. Bureau of the Census. Statistical Abstract of the United States 1972. Washington, D. C.: U. S. Government Printing Office.

U. S. Department of Commerce. Bureau of the Census. General Population Characteristics: Texas. Washington, D. C.: U. S. Government Printing Office, 1971.

U. S. Department of Commerce. Bureau of the Census. Guide to Recurrent and Special Governmental Statistics. Washington, D. C.: U. S. Government Printing Office, 1972.

U. S. Department of Commerce. Bureau of the Census. 1963 Census of Business, Vol. VI, Selected Services--Summary Statistics. Washington, D. C.: U. S. Government Printing Office.

U. S. Department of Commerce. Bureau of the Census. 1967 Census of Business, Vol. I, Retail Trade--Subject Reports. Washington, D. C.: U. S. Government Printing Office.

U. S. Department of Commerce. Bureau of the Census. 1967 Census of Business, Retail Trade: Texas. Washington, D. C.: U. S. Government Printing Office, 1970.

U. S. Department of Commerce. Bureau of the Census. 1967 Census of Business, Selected Services: Texas. Washington, D. C.: U. S. Government Printing Office, 1970.

U. S. Department of Commerce. Bureau of the Census. 1967 Census of Manufacturers, Vol. II. Washington, D. C.: U. S. Government Printing Office.

U. S. Department of Commerce. Bureau of the Census. County Business Patterns 1971: Texas. Washington, D. C.: U. S. Government Printing Office.

Books

Abraben, E. Resort Hotels Planning Land Management. New York: Reinhold Publishing Corporation, 1965.

Association of Bay Area Governments. Ocean Coastline Study. Berkeley, California: Association of Bay Area Governments, 1970.

Belden Associates. The National Market for Tourist Travel in Texas, 1969. Dallas: Belden Associates, 1969.

Blomstrom, Robert L. The Commercial Lodging Market. East Lansing, Michigan: Michigan State University, 1967.

Boating Industry, The. The Boating Business, 1971. Denver, Colorado: Conover-Mast Publications, 1972.

Bureau of Outdoor Recreation. U. S. Department of the Interior. The 1970 Survey of Outdoor Recreation Activities. Washington, D. C., 1972.

Butler, George D. Introduction to Community Recreation (4th ed.). New York: McGraw-Hill Book Co., Inc., 1964.

Cepede, Michel, Houtart, Francis, Grond, Linus. Population and Food. New York: Sheed and Ward, Inc., 1964.

Checchi and Company. Tourism in the South Texas Triangle--An Analytical Framework and Action Program. Washington, D. C.: Checchi and Company, 1969.

Clark, Charles T. Recreational Boating in Texas. Austin: Bureau of Business Research. The University of Texas, 1961.

Clawson, Marion and Knetsch, Jack L. Economics of Outdoor Recreation. Baltimore: The Johns-Hopkins Press, 1966.

Comprehensive Planning Division, Texas Parks and Wildlife. The Texas Gulf Coast--A Study of Recreational Problems. Austin, Texas, 1965.

The Commission on Marine Science. "Outdoor Recreation Uses of Coastal Areas." Marine Resources and Legal-Political Arrangements for their Development. Vol. III. Narragansett, Rhode Island: University of Rhode Island.

Committee on Oceanography. Economic Benefits from Oceanographic Research. A special Report of the Committee on Oceanography, National Academy of Sciences--National Resource Council, Publication 1328, Washington, D. C., 1964.

Danford, Howard G., et. al. Goals for American Recreation. Washington: American Association for Health, Physical Education, and Recreation, 1964.

Bureau of Outdoor Recreation, Department of the Interior. Northern New England Vacation Home Study--1966. Washington, D. C.: Bureau of Outdoor Recreation, 1966.

Coastal Bend Regional Planning Commission. Plan and Program: Resource Conservation and Open Space Development in the Coastal Bend Region. Corpus Christi, Texas: Coastal Bend Regional Planning Commission, 1973.

Ducsik, Dennis W., ed. Power, Pollution and Public Policy. Cambridge, Mass.: The Massachusetts Institute of Technology Press, 1970.

Dulles, Foster Rhea. A History of Recreation. New York: Appleton-Century-Crofts, 1965.

Fenter, Felix W. Texas Industry and the Ocean. Submitted to Representative Ray Lemmon. November 30, 1970.

Floyd, Charles F., Heyl, R. James, and Barnes, James A. Economic Profile of the Coastal Plains Region. Atlanta, Georgia: University of Georgia, 1970.

Goals for Texas in the Coastal Zone and the Sea. Summary of a Conference. Co-sponsored by the Office of the Governor of the State of Texas and the Sea Grant Program Office, Texas A&M University. College Station, Texas, January, 1971.

Gunn, Clare A. Annotated Bibliography of Resource Use--Texas Gulf Coast. Texas A&M University. Sea Grant Publication No. 204, 1969.

Hauser, Philip M., ed. The Population Dilemma. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1965.

Hawkins, Donald E., ed. Recreation and Parks Yearbook 1966. Washington, D. C.: National Park and Recreation Association, 1967.

Houston-Galveston Area Council. Parks, Recreation, and Open Space Plan 1971. Houston, Texas: Houston-Galveston Area Council, 1971.

Hutchinson, John L. Principles of Recreation. New York: A. S. Barnes and Company, 1949.

Interagency Committee for Outdoor Recreation. Statewide Outdoor Recreation and Open Space Plan. Olympia, Washington, 1967.

International City Managers' Association, The. Municipal Recreation Administration (4th ed.). Chicago: The International City Managers' Association, 1960.

Jenny, John H. Introduction to Recreation Education. Philadelphia: Saunders Company, 1955.

Jensen, Clayne R. Outdoor Recreation in America. Minneapolis: Burgess Publishing Company, 1970.

Lawyer, Donald E. "Recreation Boom." Water Spectrum.

Leisure Systems, Incorporated. Recreation Development Opportunities of the Intracoastal Waterway in North Carolina, South Carolina and Georgia. Washington, D. C.: Leisure Systems, Inc., 1969.

_____. A Program for Optimizing the Tourist Industry as an Integral Part of Economic Growth in the Coastal Plains Region. Washington, D. C.: Leisure Systems, Incorporated, 1969.

Lemmon, Representative Ray, Chairman: Report of the Interim Study Committee on Oceanography, 1971.

Lindeman, Edward C. Leisure--A National Issue. New York: Association Press, 1939.

The Lower Rio Grande Valley Development Council. Open Space Plan for the Lower Rio Grande Valley. McAllen, Texas: The Lower Rio Grande Valley Development Council, 1971.

Lundberg, Donald E. The Tourist Business. Chicago: Institutions/ Volume Feeding Management Magazine, 1972.

Madow, Pauline, ed. Recreation in America. New York: The H. W. Wilson Company, 1965.

Meyer, Harold D., Brightbill, Charles K., and Sessoms, H. Douglas. Community Recreation (4th ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969.

Motels, Hotels, Restaurants and Bars. New York: McGraw-Hill Book Company, Inc., 1960.

Myles, George A. Effect of Quality Factors on Water Based Recreation in Western Nevada. Agricultural Experiment Station, University of Reno.

Neumeyer, Martin H., and Heueyer, Esther S. Leisure and Recreation (3rd ed.). New York: The Ronald Press Co., 1949.

Outdoor Recreation for America: The Report of the Outdoor Recreation Resources Review Commission to the President and to the Congress. Washington, D. C.: U. S. Government Printing Office, 1962.

Ozarks Regional Commission. A Strategy for Developing the Leisure Industry in the Ozarks Region. Vols. I, II. Kansas City, Missouri: Midwest Research Institute, 1968.

Patterson, W. Robert. The New England Marine Industry: A Study of the Marine Manufacturing and Service Companies. Narragansett, Rhode Island: New England Marine Resources Information Program, 1971.

Pinson, Lawrence F. Tourism Development in the Coastal Plain Area. Athens, Georgia: University of Georgia, 1967.

Potts, Francis E., Lewis, John W. The New Geography of Texas. Dallas, Texas: Noble and Noble, Inc., 1964.

Robert R. Nathan Associates, Inc. Recreation as an Industry. Appalachian Research Report No. 2. Washington, D. C.: Resource Planning Associates, December, 1966.

Scott, Charles C. Criteria for Evaluating the Quality of Water Based Recreation Facilities. Raleigh, N. C.: Water Resources Research Institute of the University of North Carolina, Report No. 1, 1967.

Shoreline Recreation Resources of the United States. Report of the Outdoor Recreation Resources Review Commission to the President and Congress, Report No. 4. Washington, D. C., 1962.

The South East Texas Regional Planning Commission. Parks, Open Space and Recreational Plan for the South East Texas Region: An Initial Element. Beaumont, Texas: Lamar University Station, 1972.

The Dallas Morning News. Texas Almanac. 1972-1973.

Texas Highway Department. "Discover . . . Texas . . . America's Frontier." Austin: Texas Highway Department.

The Texas State Historical Society. The Handbook of Texas. Fort Worth, Texas: Mervin D. Evans Company, 1952.

Texas Tourist Development Agency. Community Guide. Austin, Texas.

Texas Water Development Board. The Texas Water Plan. Austin, Texas.

Trends in the Hotel/Motel Business. Harris, Kerr, Foster & Company. 1971.

U. S. Army Engineers. National Shoreline Study: Texas Coast Shores Regional Inventory Report. U. S. Army Engineer District, Corps of Engineers, Galveston, Texas, 1971.

Vernon's Annotated Revised Civil Statutes of the State of Texas. Vol. 15A. Kansas City, Missouri: Vernon Law Book Company, 1962.

Weisskamp, Herbert. Hotels, An International Survey. New York: Frederick A. Praeger, Inc., 1968.

Articles and Periodicals

"Big Land Rush: No Slowdown in Sight, The." U. S. News & World Report. December 13, 1971.

Bureau of Labor Statistics, U. S. Department of Labor. "Estimates of the Decrease in Hours Worked, 1960-2000." As reported in ORRRC Study Report No. 23. Projections to the Years 1976 and 2000: Economic Growth, Population, Labor Force and Leisure, and Transportation. Washington: Government Printing Office, 1962.

Clawson, Marion. "The Crisis in Outdoor Recreation." American Forests. March-April, 1959.

"Coastal Zone, The: Recreation and Tourism in Texas." Marine Resources: Leisure Uses. Texas A&M University Sea Grant Program, 1970.

Deberry, B. L. News Release. April 4, 1973. Texas Highway Department.

Ditton, Robert B. "The Social and Economic Significance of Recreation Activities in the Marine Environment." Sea Grant Technical Report Number 11, Green Bay, Wisconsin: University of Wisconsin, 1972.

"Drive to Save America's Shoreline, The." U. S. News & World Report. July 31, 1972.

"83 Billion Dollars for Leisure." U. S. News and World Report. September 15, 1969.

"Fun Part of the Cost of Living, The." American Home. March, 1969.

Gunn, Clare. "Notes on the Texas Gulf Coast as a Tourism-Recreation Region." The Coastal Resources Management Program of Texas. Vol. 1. Austin, Texas: The Interagency Natural Resources Council, 1971.

Kazickas, Surate. Houston Post. February 24, 1972.

"Leisure." The Magazine of Wall Street. New York, January 3, 1972.

"Leisure Boom: Biggest Ever and Still Growing." U. S. News and World Report, April 17, 1972.

"Leisurely Texan, The." Texas Business Review. May, 1970. Austin: University of Texas.

Liston, Linda, ed. "States Legislate Travel Investment Incentives to Capture the 'Industry Without Smokestacks'." Industrial Development. January/February, 1971.

"New Trend, The: Year-Round Schools." U. S. News & World Report. July 26, 1971.

Ocean Science Capital Corporation. Newsletter No. 22. August, 1970.

Perkins, Edward L. "The Value of the Tourist Industry to a Community." Paper presented at the Economic Conference on Tourism Sponsored by the Manitoba Department of Tourism and Recreation and the Tourist and Convention Association of Manitoba, Winnipeg, Manitoba, Canada, November 20, 1970.

Poston, Dudley L., Jr., and Bradshaw, Benjamin S. "Population Projections for Texas Counties: 1975-1990." Austin, Texas: The University of Texas at Austin, 1972.

"Recreation: A Record Boom," U. S. News & World Report. July 22, 1968.

Shearer, Gordon K. "Texas Beaches Rated Nation's Best." Texas Game and Fish Magazine. December, 1966.

Silberman, Charles E. "The Money Left Over for the Good Life." Fortune. November, 1959.

Sund, et. al. "SIDC News." Vol. 5, No. 3. Atlanta, Ga.: Southern Industrial Development Council, 1971.

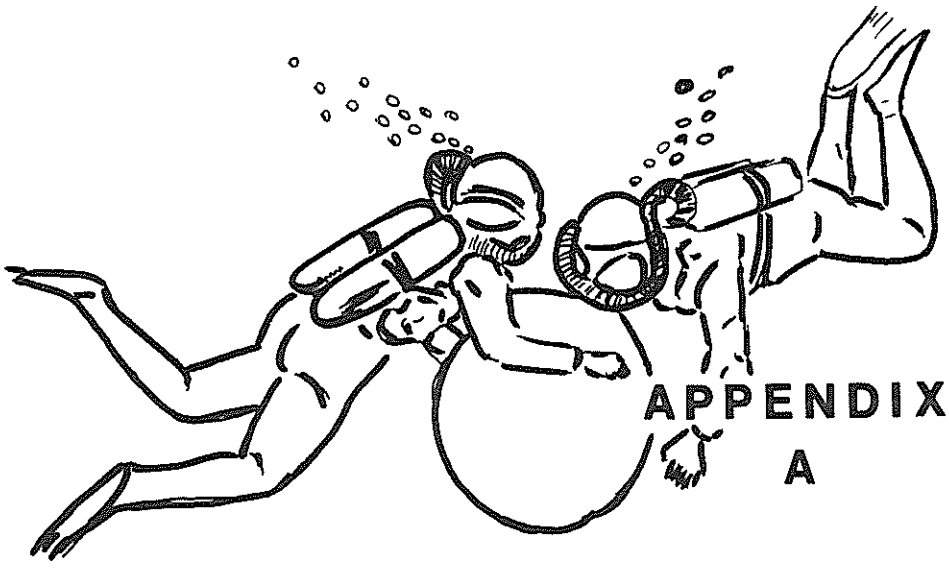
Suter, Hans A. "The Wildlife Resources of Coastal Texas." The Coastal Resources Management Program of Texas. Vol. 1 1971.

Texas Industrial Commission. "Texas Markets--Manpower." Texas Plant Location Fact Book.

Texas Parade. Vol. 35, No. 10, March, 1973.

"Three-Day Week-Ends Boosts Business." U. S. News & World Report. November 8, 1971.

Urban Land Institute. "Land: Recreation and Leisure." Abstracted from the first annual land use symposium. Washington, D. C. Land Use Institute, 1970.



APPENDIX A

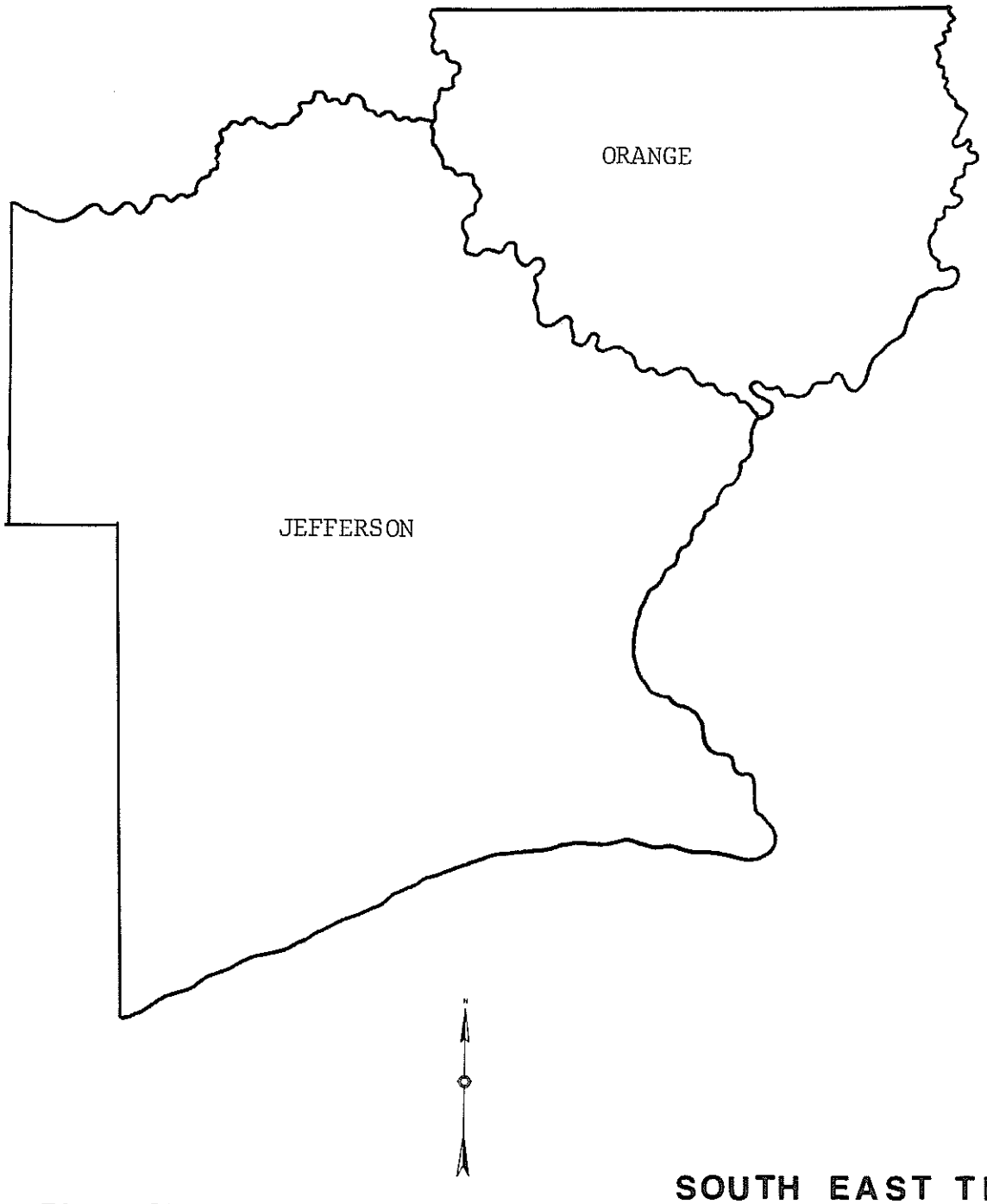


Figure 14

SOUTH EAST TEXAS
REGIONAL PLANNING COMMISSION

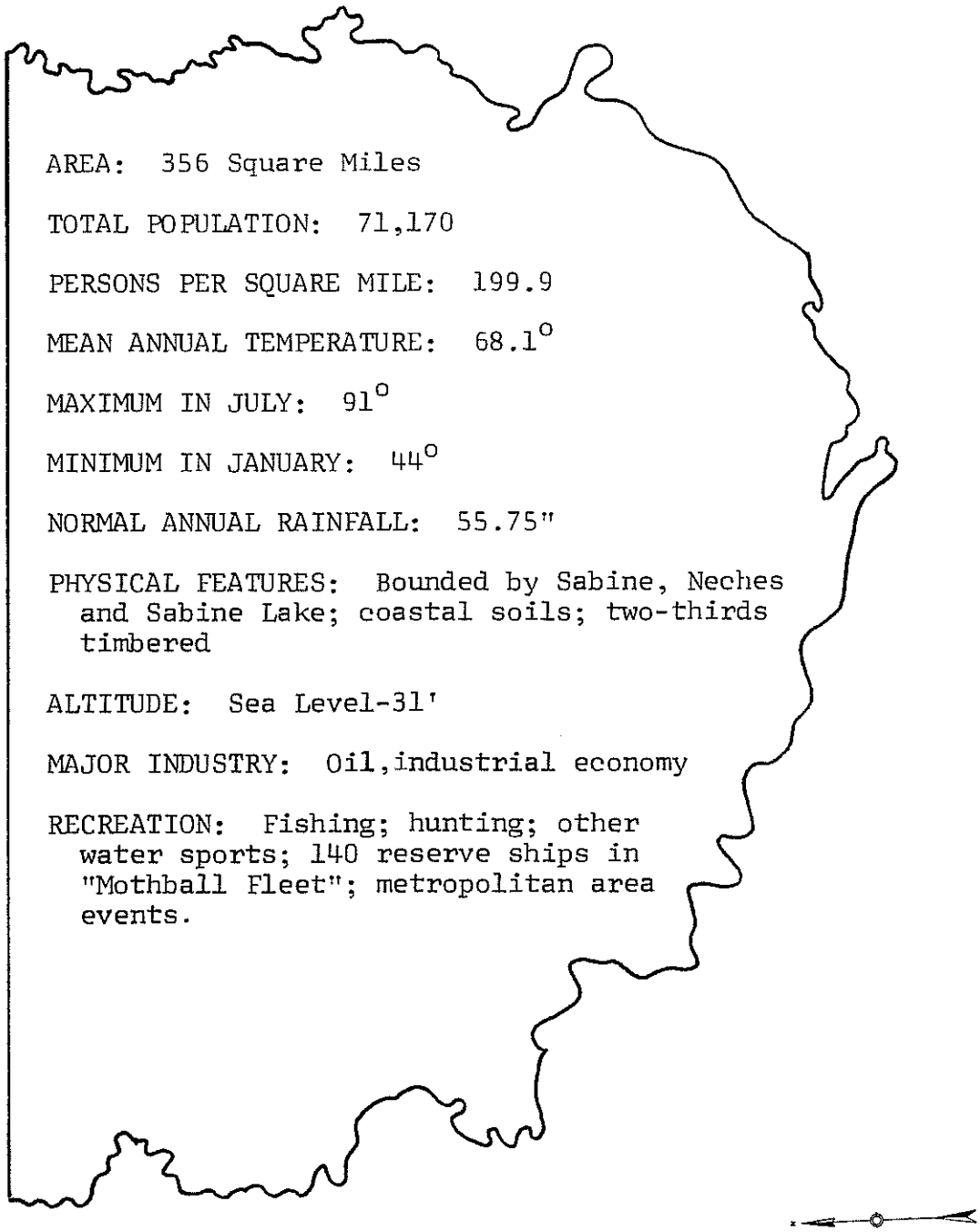
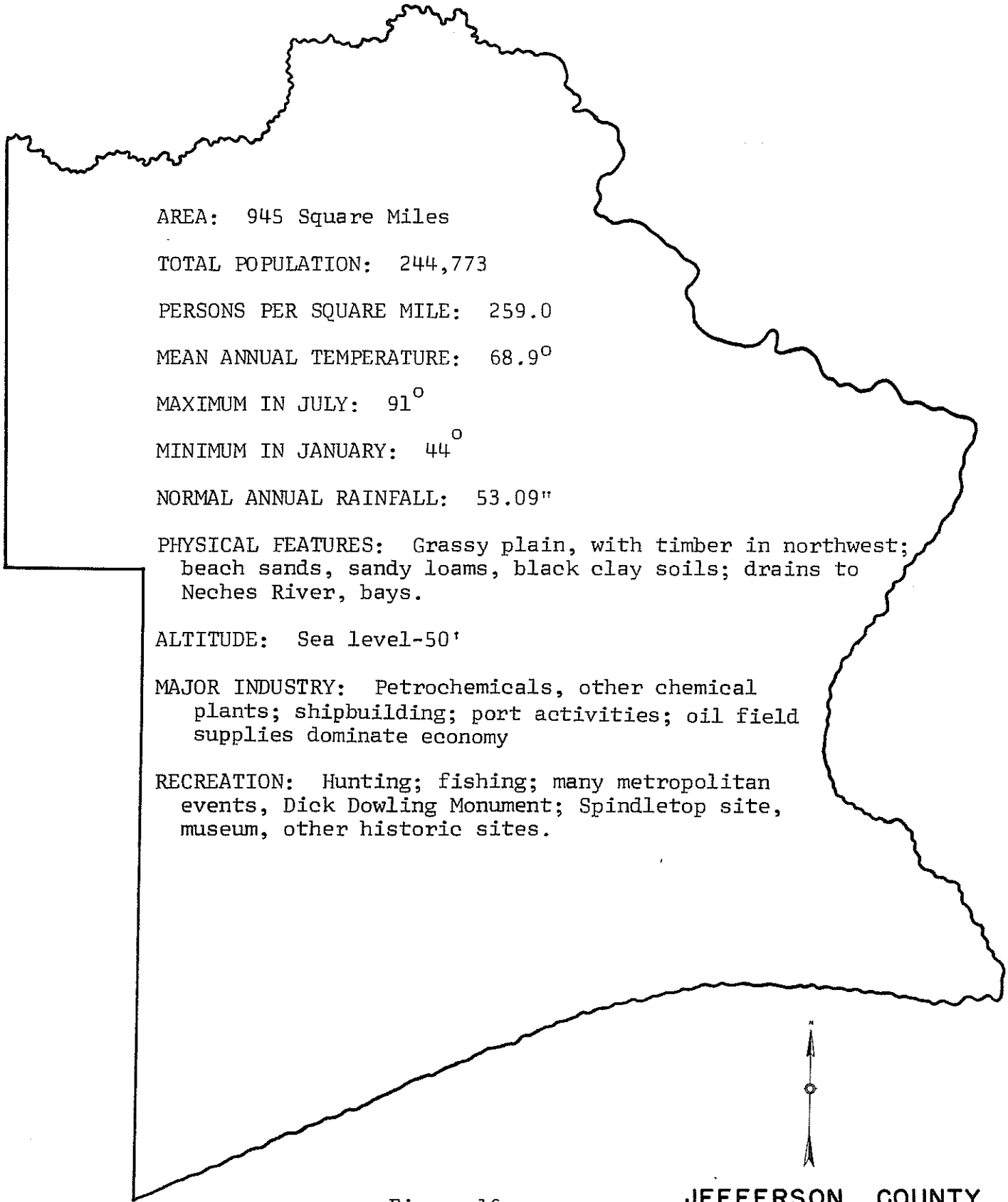


Figure 15

ORANGE COUNTY
TEXAS



AREA: 945 Square Miles

TOTAL POPULATION: 244,773

PERSONS PER SQUARE MILE: 259.0

MEAN ANNUAL TEMPERATURE: 68.9°

MAXIMUM IN JULY: 91°

MINIMUM IN JANUARY: 44°

NORMAL ANNUAL RAINFALL: 53.09"

PHYSICAL FEATURES: Grassy plain, with timber in northwest; beach sands, sandy loams, black clay soils; drains to Neches River, bays.

ALTITUDE: Sea level-50'

MAJOR INDUSTRY: Petrochemicals, other chemical plants; shipbuilding; port activities; oil field supplies dominate economy

RECREATION: Hunting; fishing; many metropolitan events, Dick Dowling Monument; Spindletop site, museum, other historic sites.

Figure 16

JEFFERSON COUNTY
TEXAS

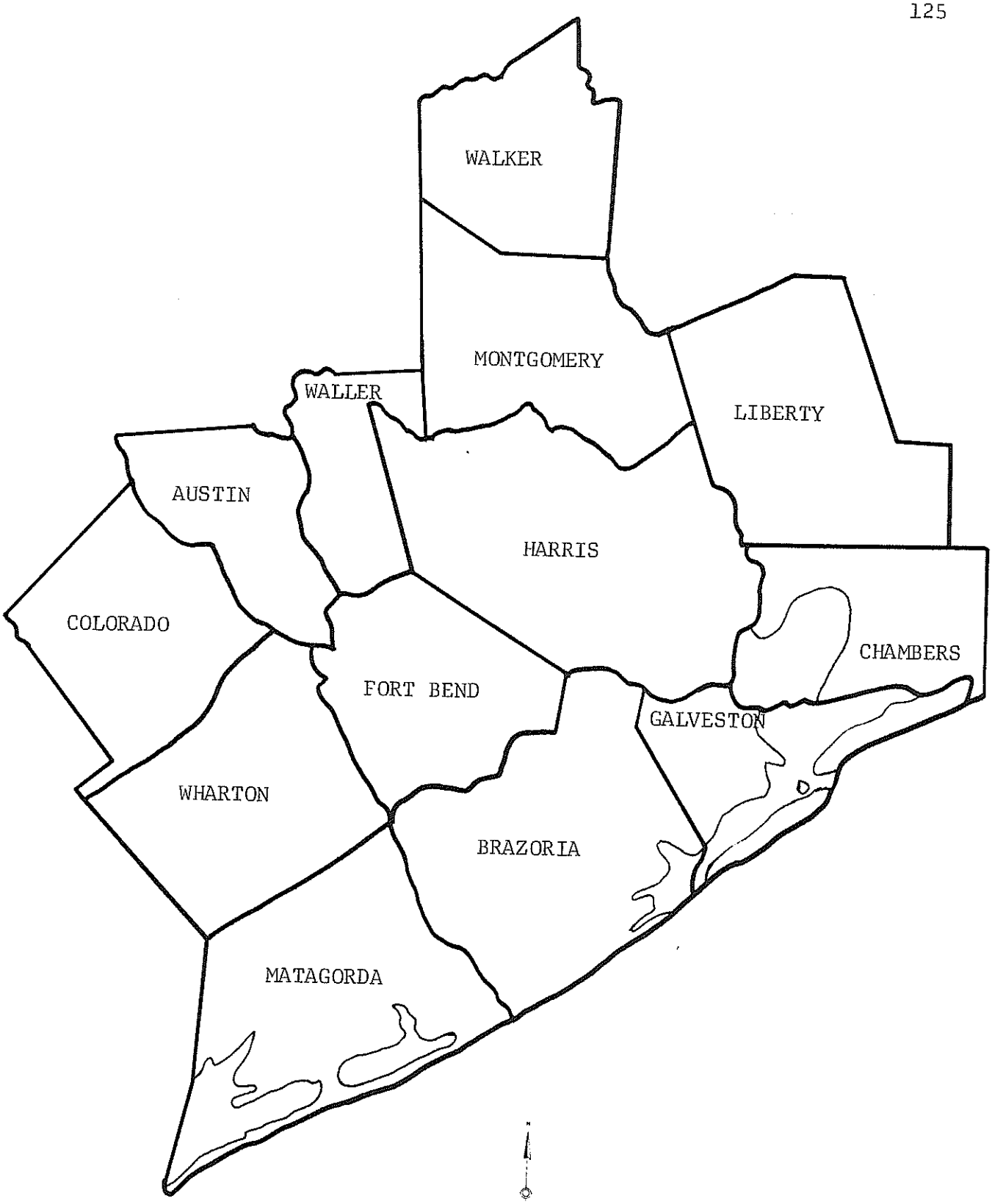


Figure 17

HOUSTON-GALVESTON AREA COU

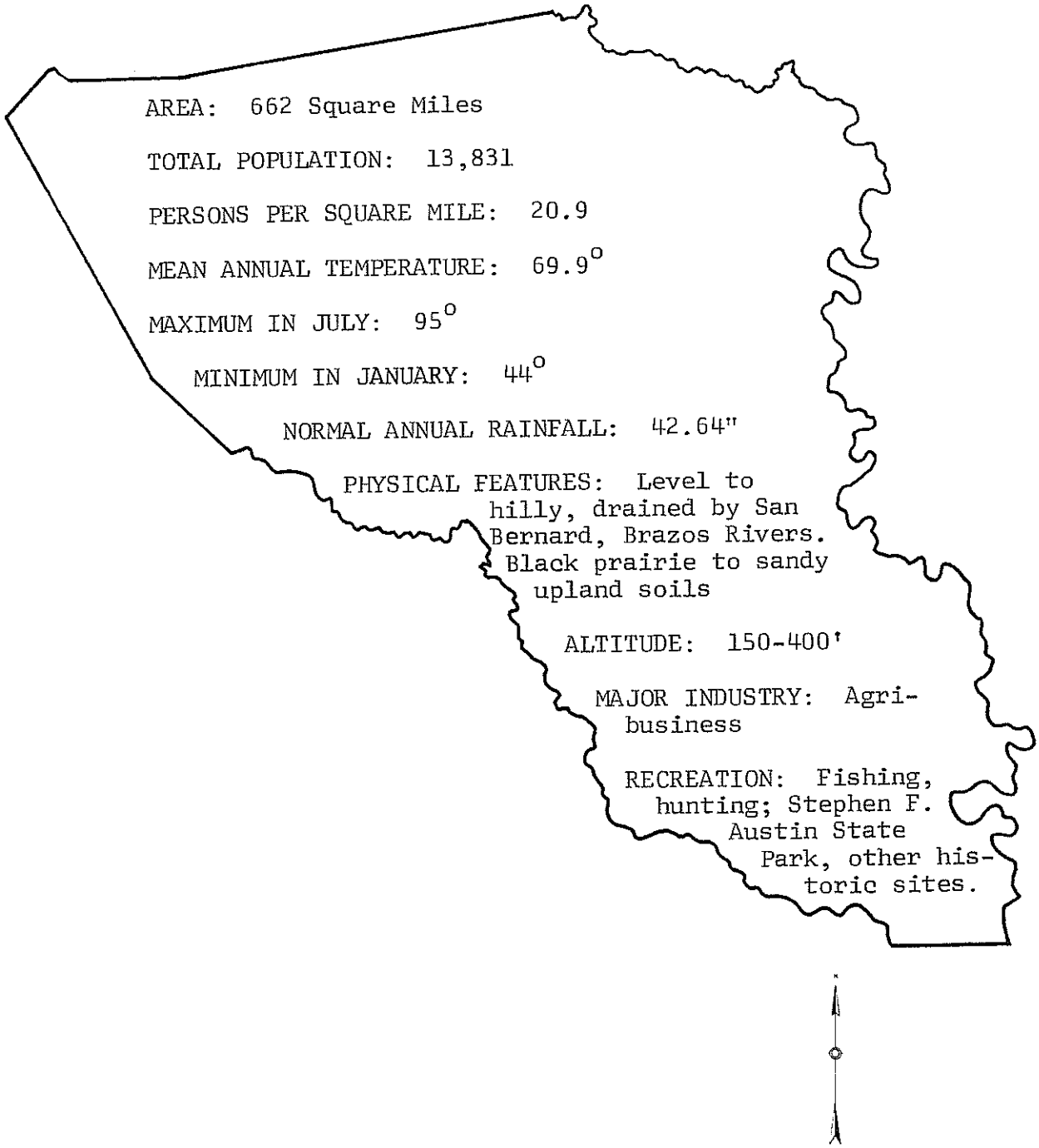
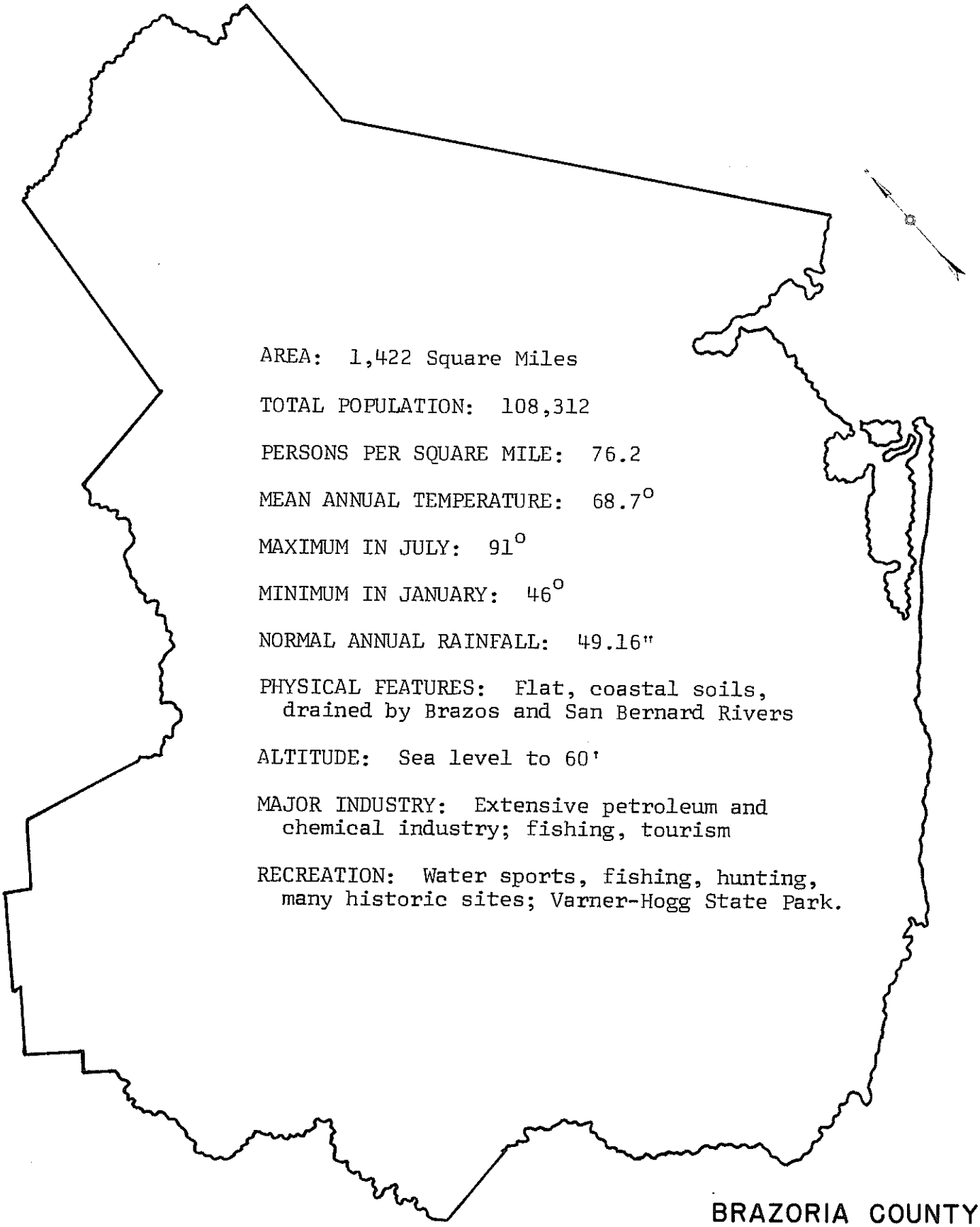


Figure 18

AUSTIN COUNTY
TEXAS



BRAZORIA COUNTY
TEXAS

Figure 19

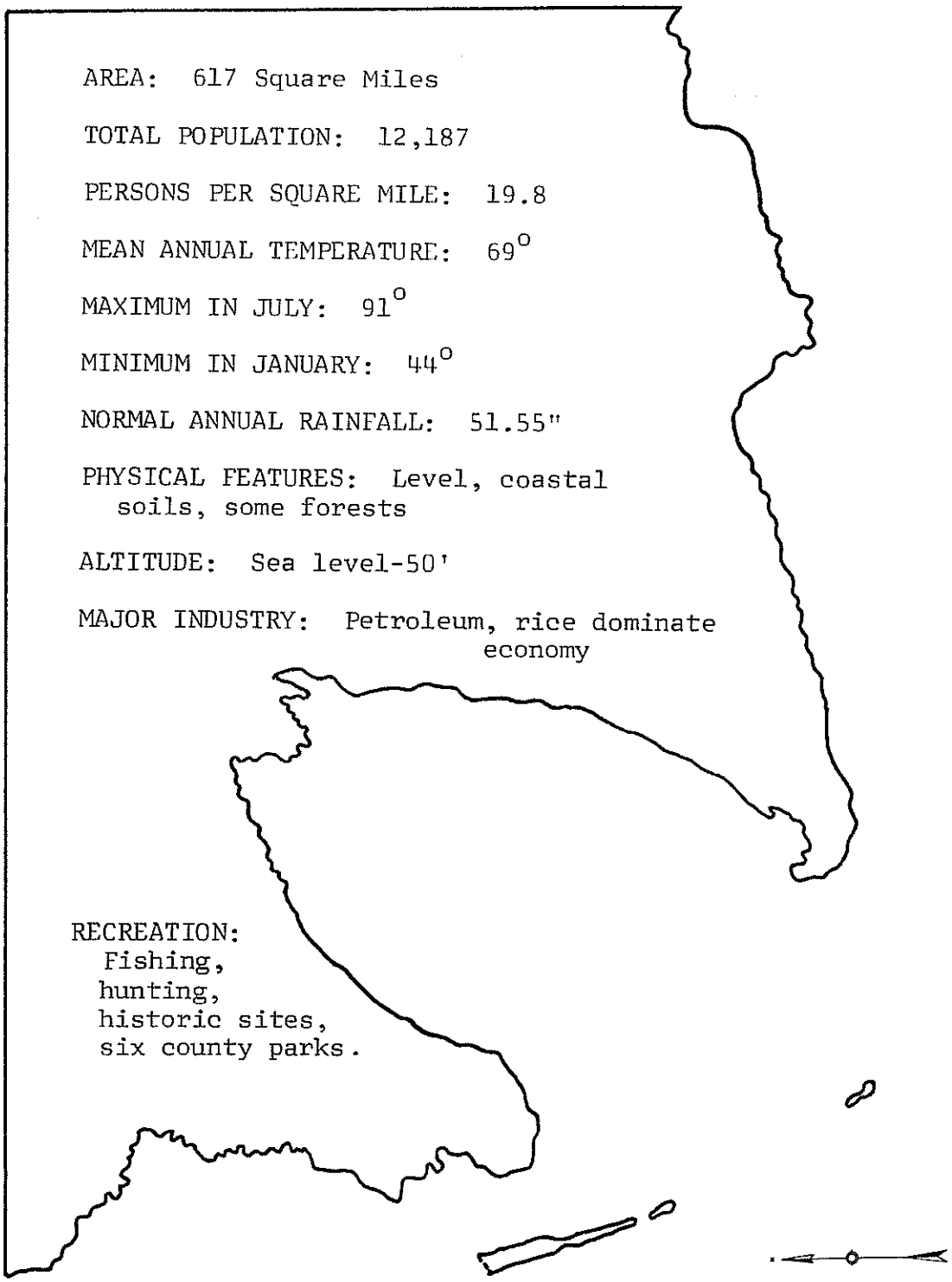
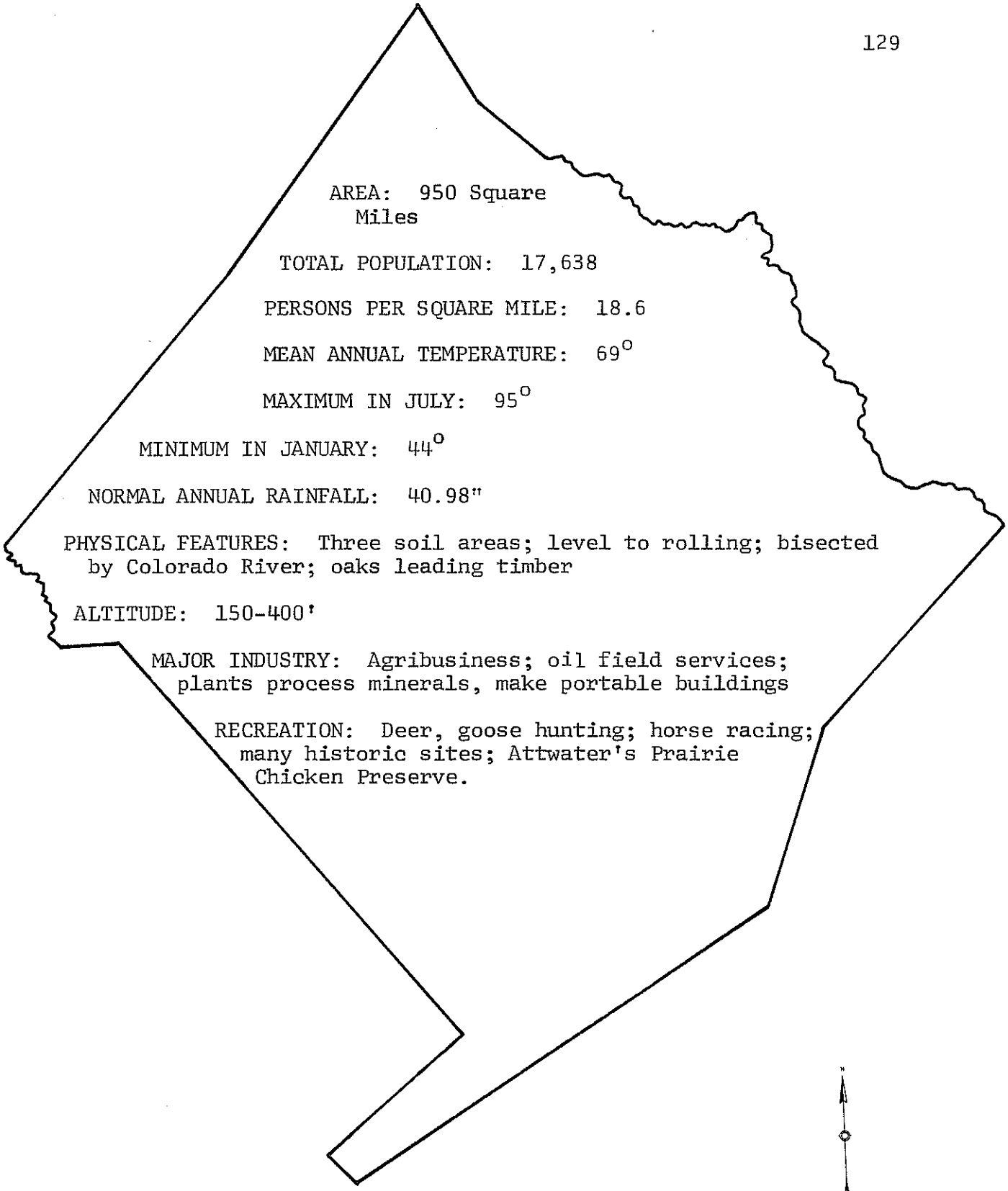


Figure 20

CHAMBERS COUNTY
TEXAS



AREA: 950 Square Miles

TOTAL POPULATION: 17,638

PERSONS PER SQUARE MILE: 18.6

MEAN ANNUAL TEMPERATURE: 69°

MAXIMUM IN JULY: 95°

MINIMUM IN JANUARY: 44°

NORMAL ANNUAL RAINFALL: 40.98"

PHYSICAL FEATURES: Three soil areas; level to rolling; bisected by Colorado River; oaks leading timber

ALTITUDE: 150-400'

MAJOR INDUSTRY: Agribusiness; oil field services; plants process minerals, make portable buildings

RECREATION: Deer, goose hunting; horse racing; many historic sites; Attwater's Prairie Chicken Preserve.

Figure 21

COLORADO COUNTY TEXAS

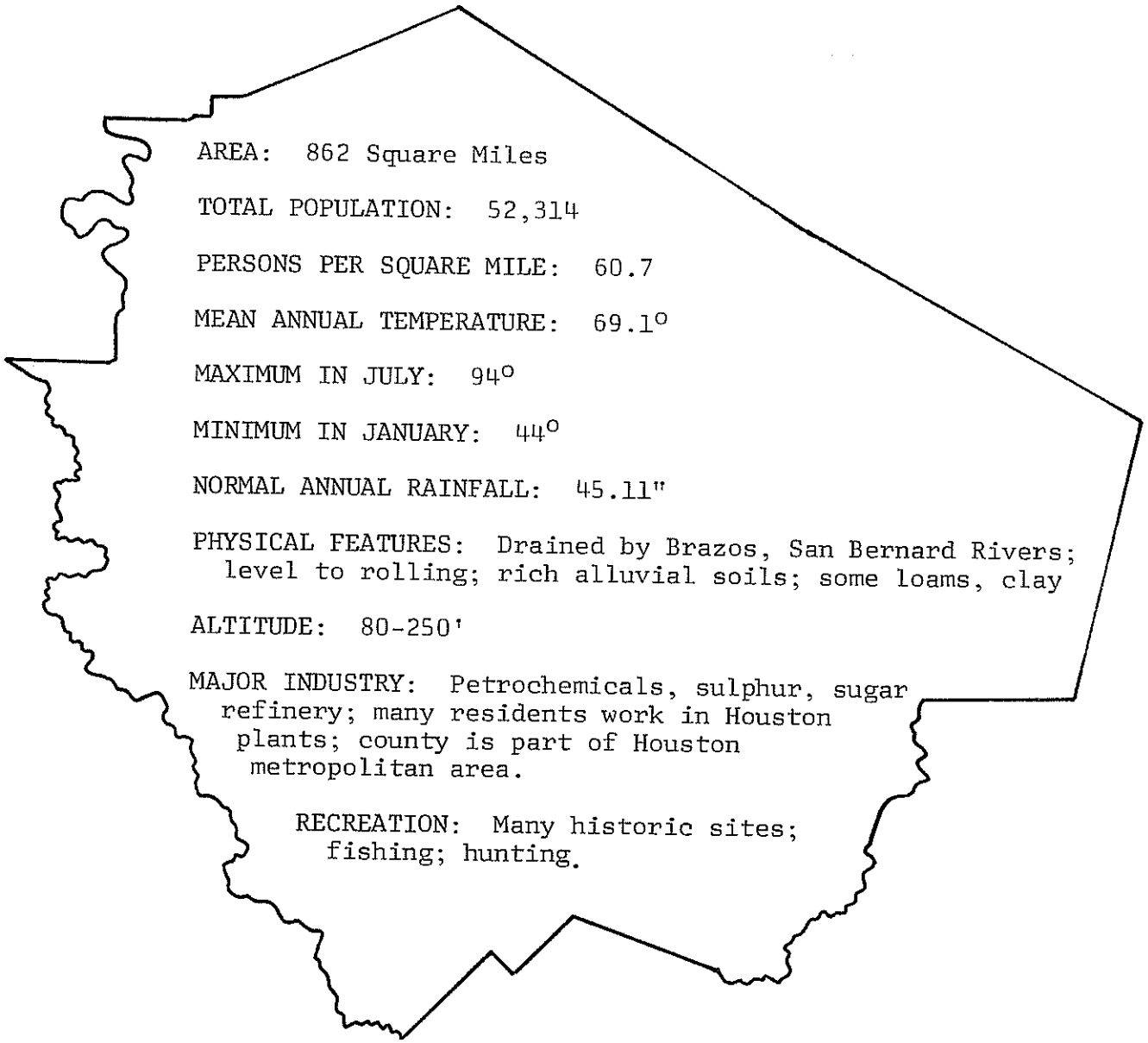
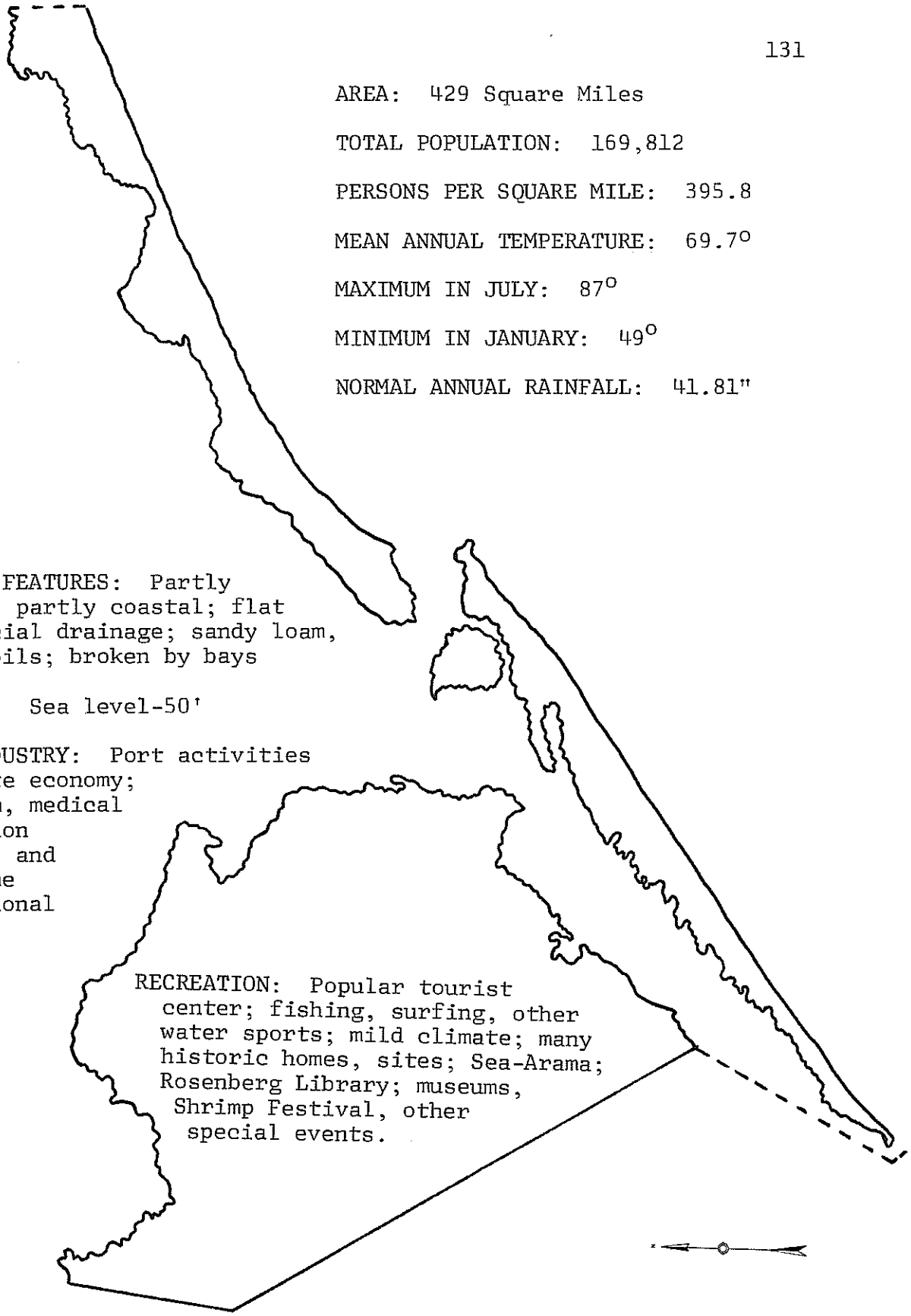


Figure 22

FORT BEND COUNTY
TEXAS



AREA: 429 Square Miles

TOTAL POPULATION: 169,812

PERSONS PER SQUARE MILE: 395.8

MEAN ANNUAL TEMPERATURE: 69.7°

MAXIMUM IN JULY: 87°

MINIMUM IN JANUARY: 49°

NORMAL ANNUAL RAINFALL: 41.81"

PHYSICAL FEATURES: Partly island, partly coastal; flat artificial drainage; sandy loam, clay soils; broken by bays

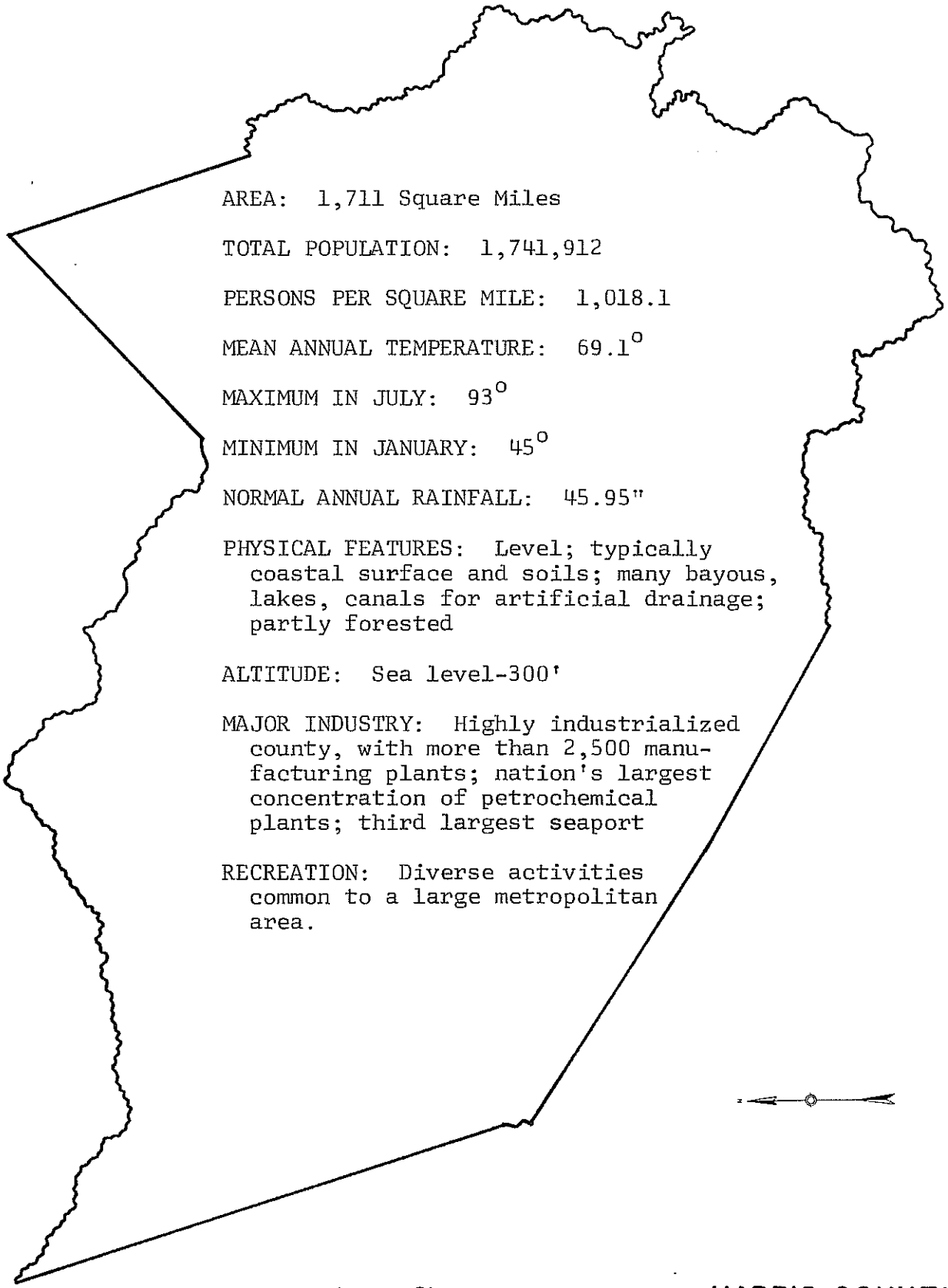
ALTITUDE: Sea level-50'

MAJOR INDUSTRY: Port activities dominate economy; tourism, medical education center; and Maritime Educational Center

RECREATION: Popular tourist center; fishing, surfing, other water sports; mild climate; many historic homes, sites; Sea-Arama; Rosenberg Library; museums, Shrimp Festival, other special events.

Figure 23

GALVESTON COUNTY TEXAS



AREA: 1,711 Square Miles

TOTAL POPULATION: 1,741,912

PERSONS PER SQUARE MILE: 1,018.1

MEAN ANNUAL TEMPERATURE: 69.1°

MAXIMUM IN JULY: 93°

MINIMUM IN JANUARY: 45°

NORMAL ANNUAL RAINFALL: 45.95"

PHYSICAL FEATURES: Level; typically coastal surface and soils; many bayous, lakes, canals for artificial drainage; partly forested

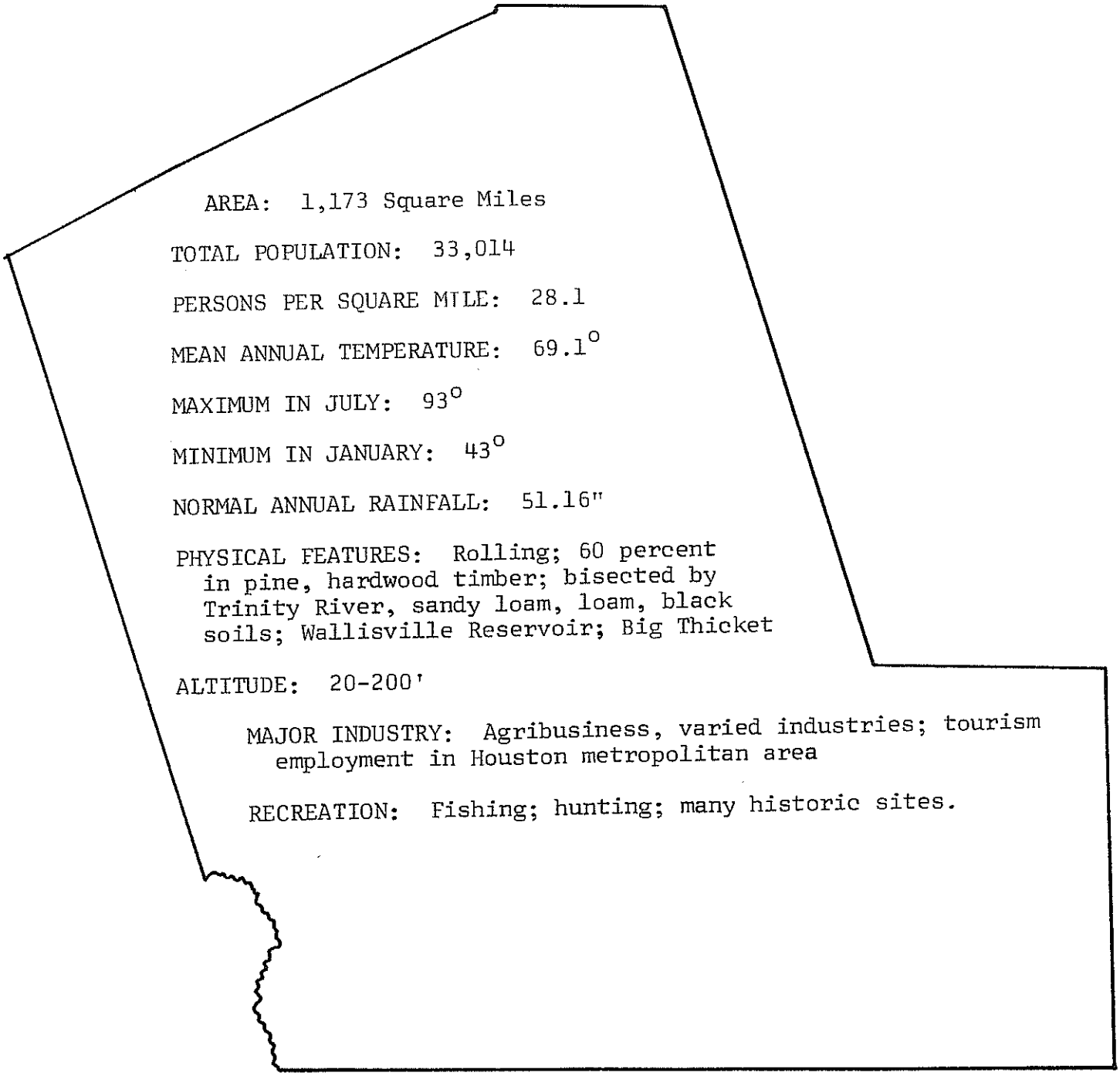
ALTITUDE: Sea level-300'

MAJOR INDUSTRY: Highly industrialized county, with more than 2,500 manufacturing plants; nation's largest concentration of petrochemical plants; third largest seaport

RECREATION: Diverse activities common to a large metropolitan area.

Figure 24

HARRIS COUNTY
TEXAS



AREA: 1,173 Square Miles

TOTAL POPULATION: 33,014

PERSONS PER SQUARE MILE: 28.1

MEAN ANNUAL TEMPERATURE: 69.1°

MAXIMUM IN JULY: 93°

MINIMUM IN JANUARY: 43°

NORMAL ANNUAL RAINFALL: 51.16"

PHYSICAL FEATURES: Rolling; 60 percent in pine, hardwood timber; bisected by Trinity River, sandy loam, loam, black soils; Wallisville Reservoir; Big Thicket

ALTITUDE: 20-200'

MAJOR INDUSTRY: Agribusiness, varied industries; tourism employment in Houston metropolitan area

RECREATION: Fishing; hunting; many historic sites.

Figure 25

LIBERTY COUNTY
TEXAS

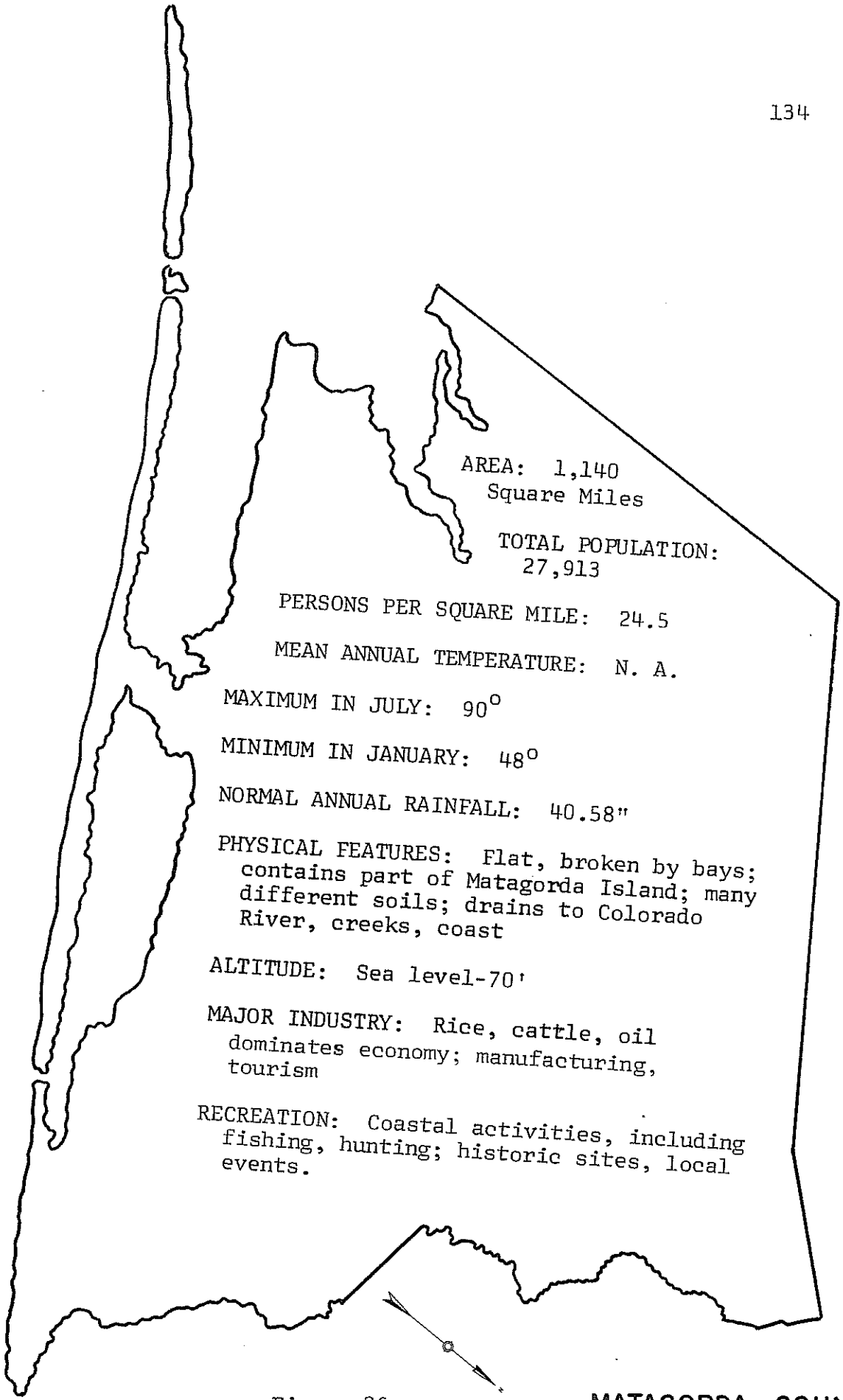


Figure 26

MATAGORDA COUNTY
TEXAS

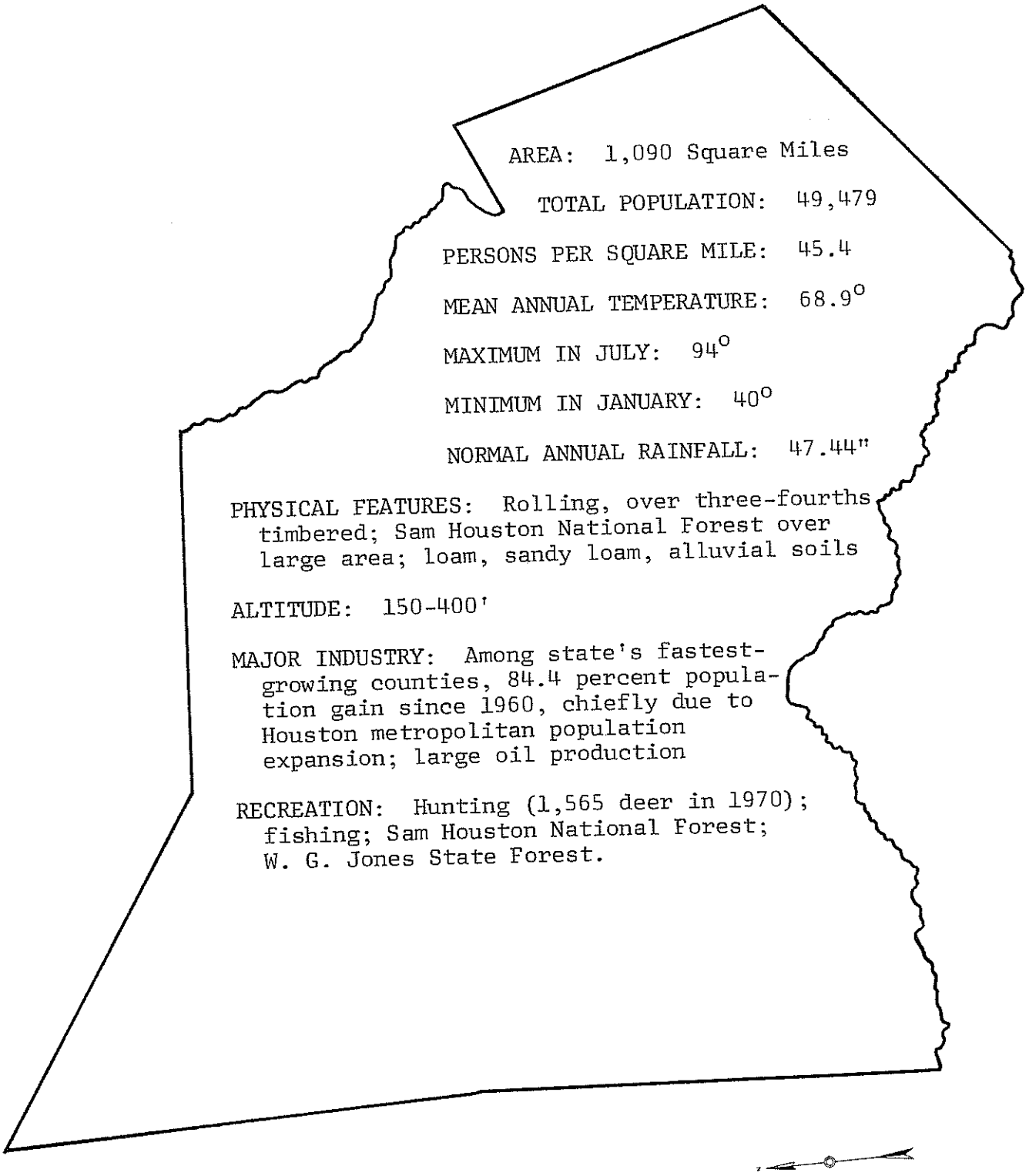
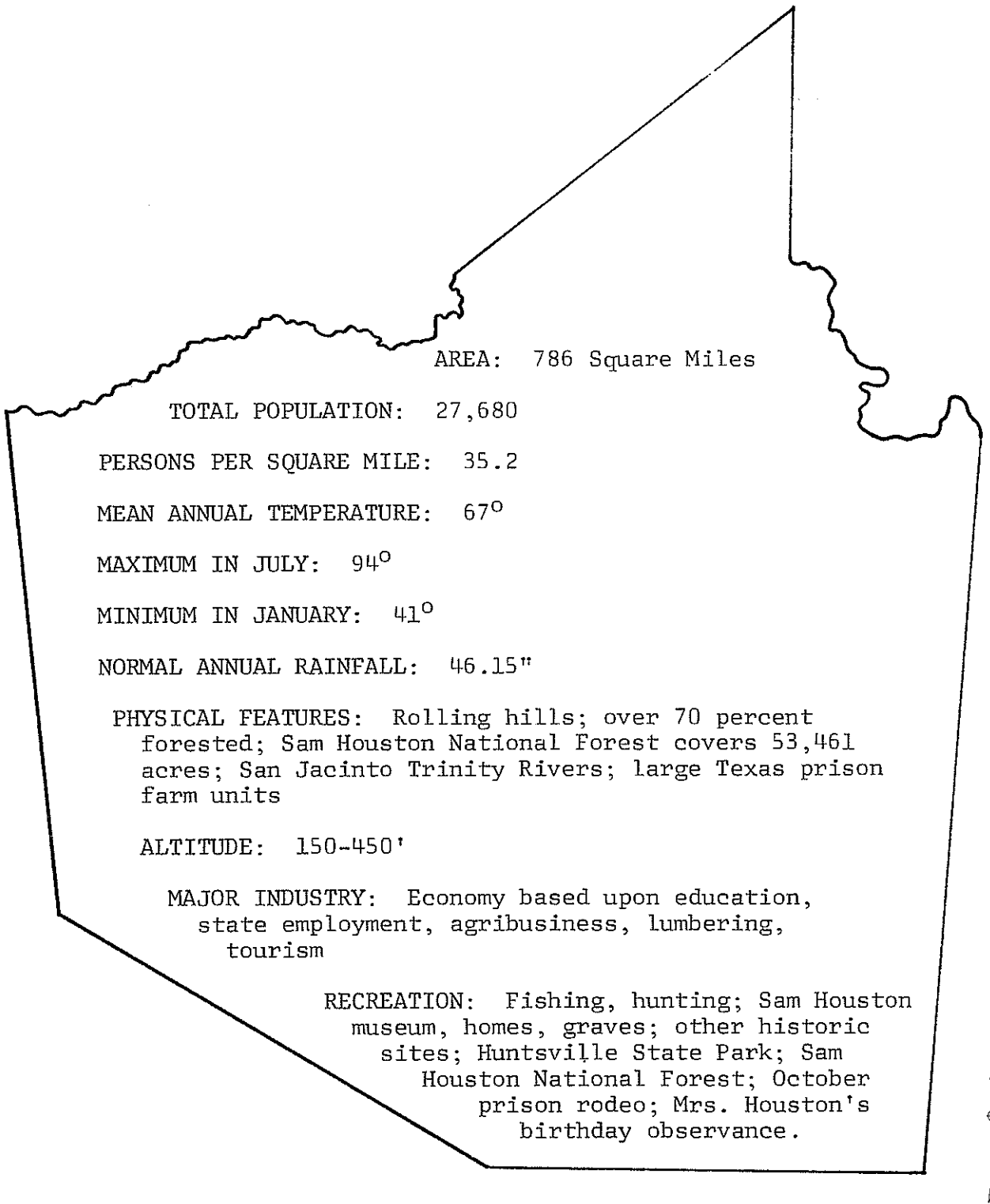


Figure 27

MONTGOMERY COUNTY
TEXAS



AREA: 786 Square Miles

TOTAL POPULATION: 27,680

PERSONS PER SQUARE MILE: 35.2

MEAN ANNUAL TEMPERATURE: 67°

MAXIMUM IN JULY: 94°

MINIMUM IN JANUARY: 41°

NORMAL ANNUAL RAINFALL: 46.15"

PHYSICAL FEATURES: Rolling hills; over 70 percent forested; Sam Houston National Forest covers 53,461 acres; San Jacinto Trinity Rivers; large Texas prison farm units

ALTITUDE: 150-450'

MAJOR INDUSTRY: Economy based upon education, state employment, agribusiness, lumbering, tourism

RECREATION: Fishing, hunting; Sam Houston museum, homes, graves; other historic sites; Huntsville State Park; Sam Houston National Forest; October prison rodeo; Mrs. Houston's birthday observance.

Figure 28

WALKER COUNTY TEXAS

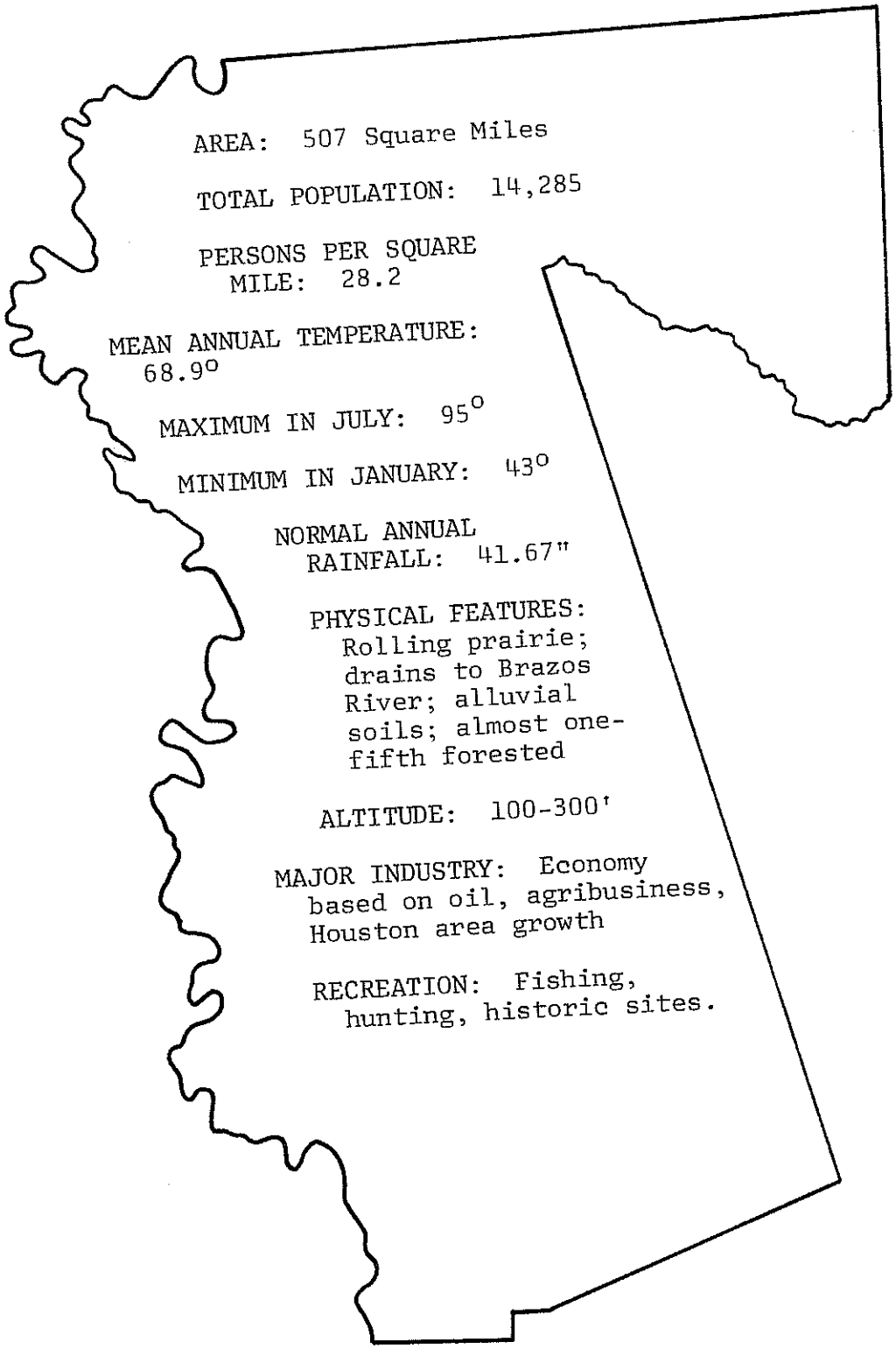


Figure 29

WALLER COUNTY
TEXAS

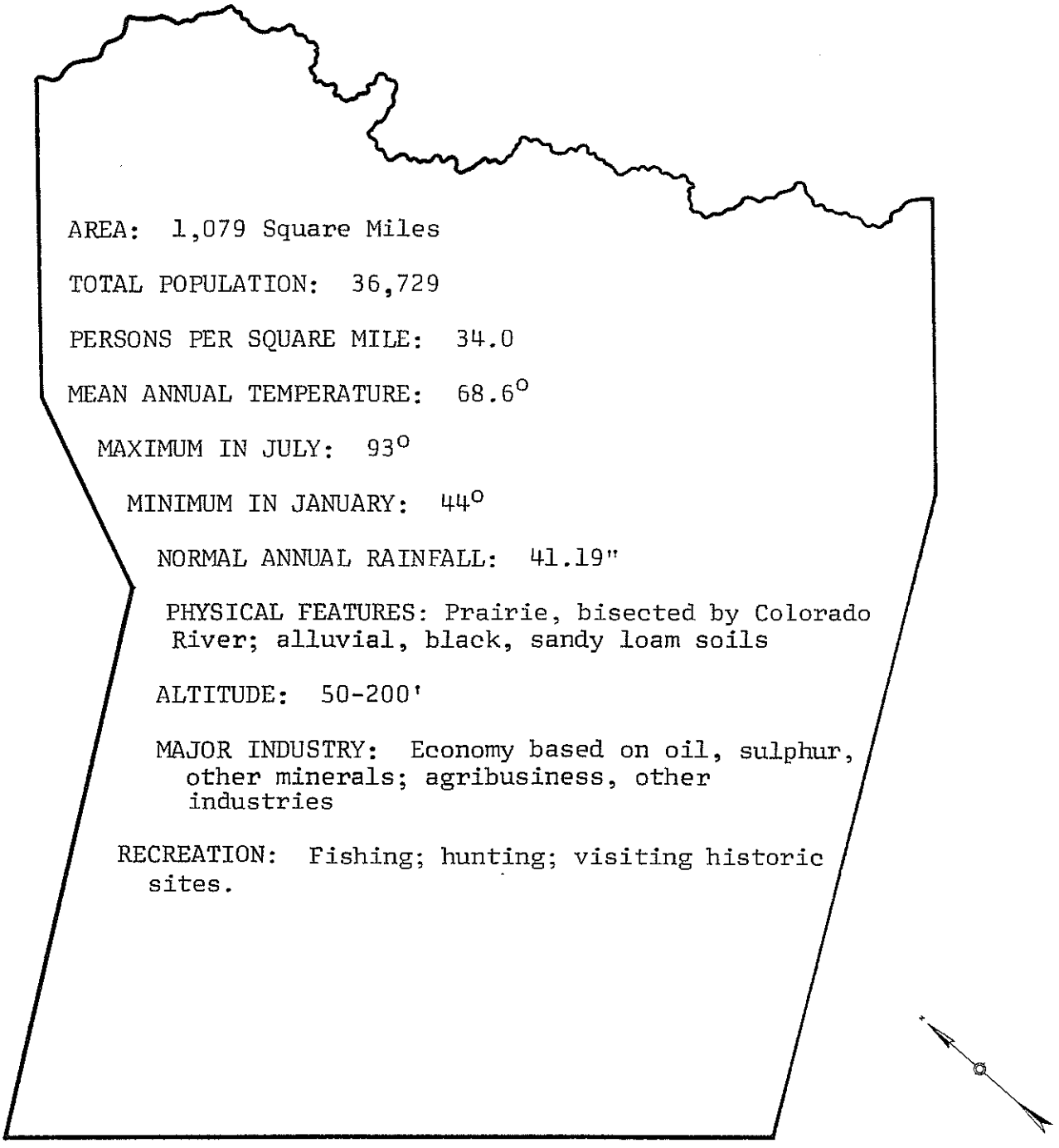


Figure 30

WHARTON COUNTY
TEXAS

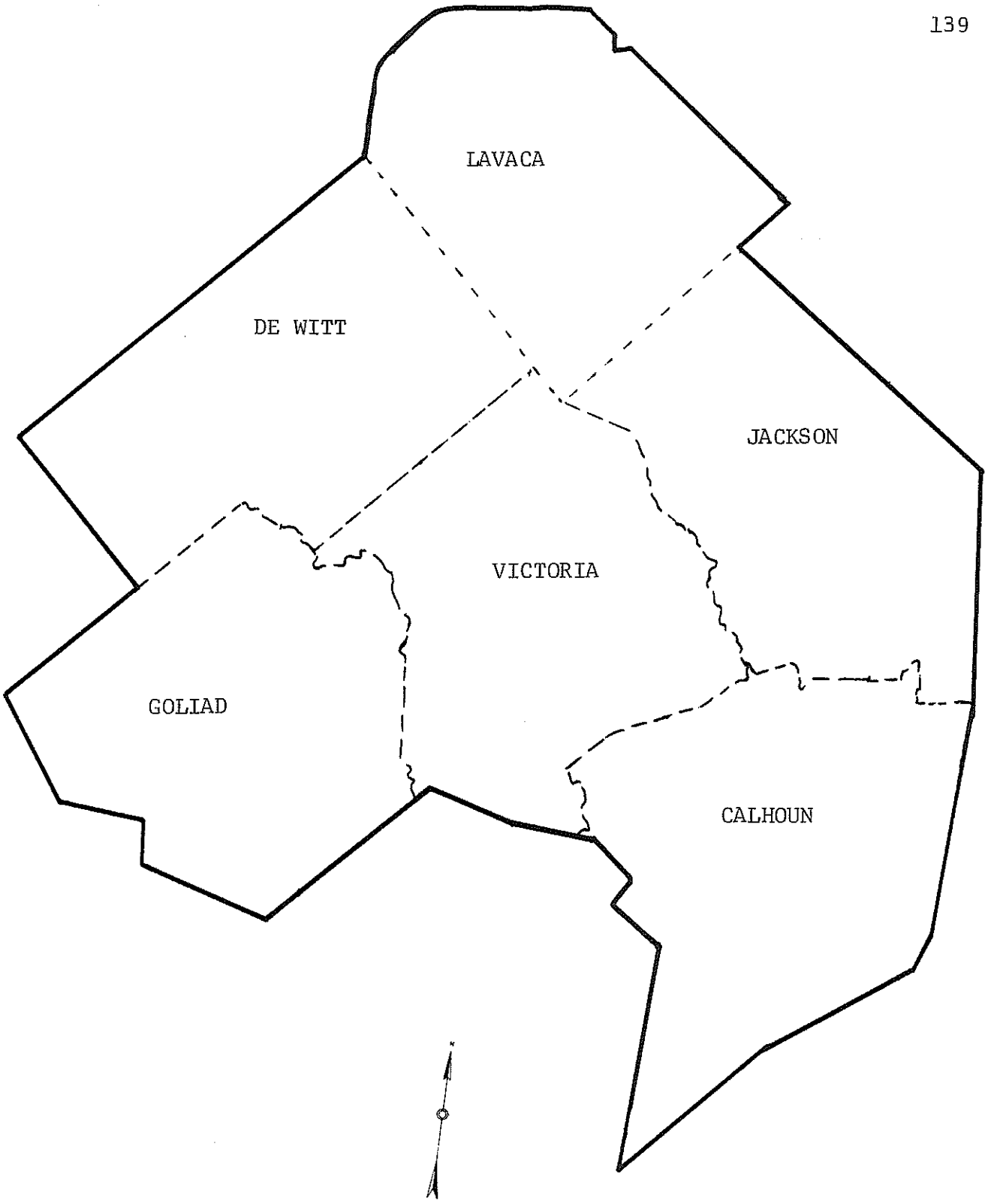


Figure 31 **GOLDEN CRESCENT COUNCIL OF GOVERNMENTS**

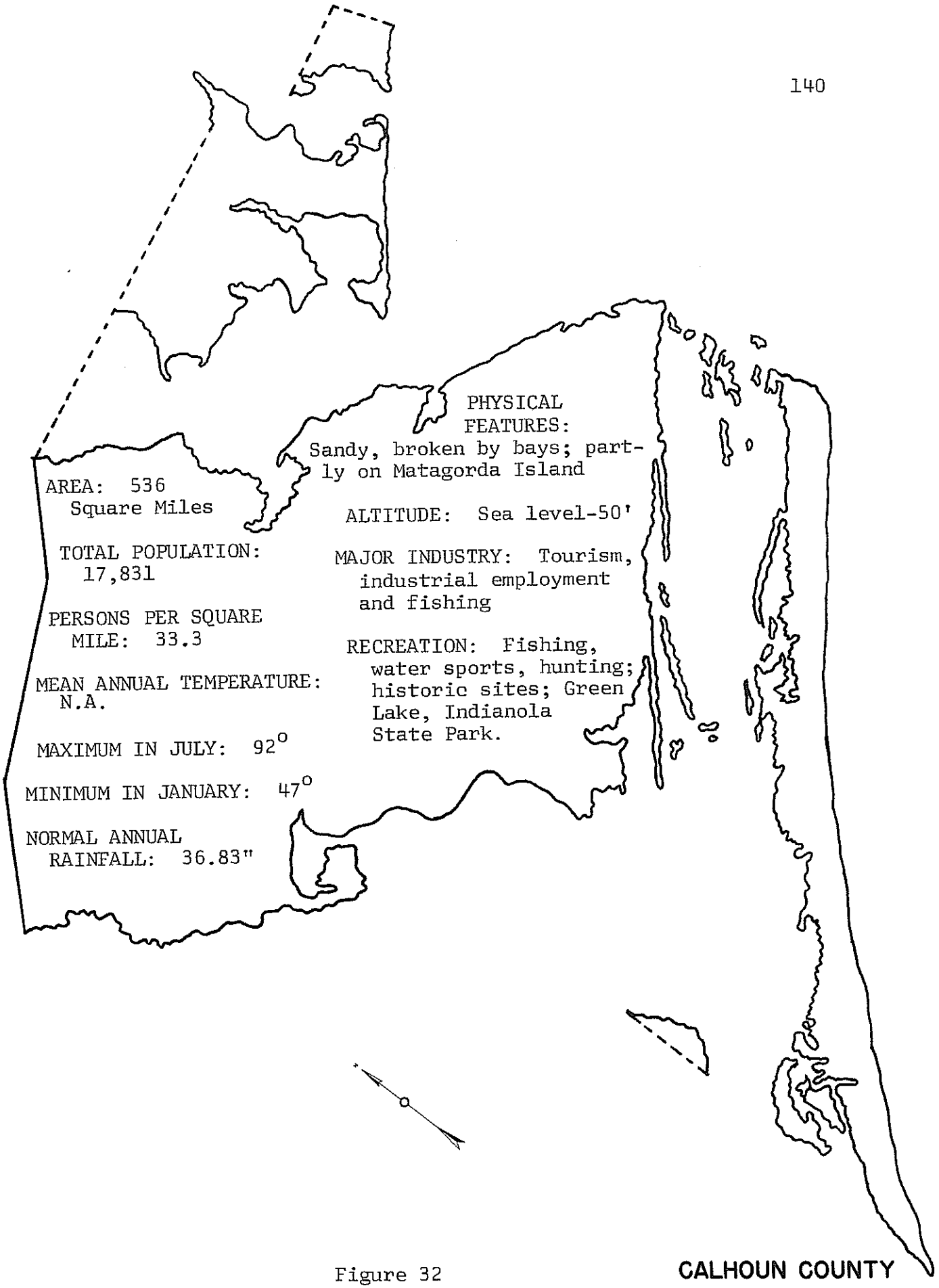


Figure 32

CALHOUN COUNTY
TEXAS

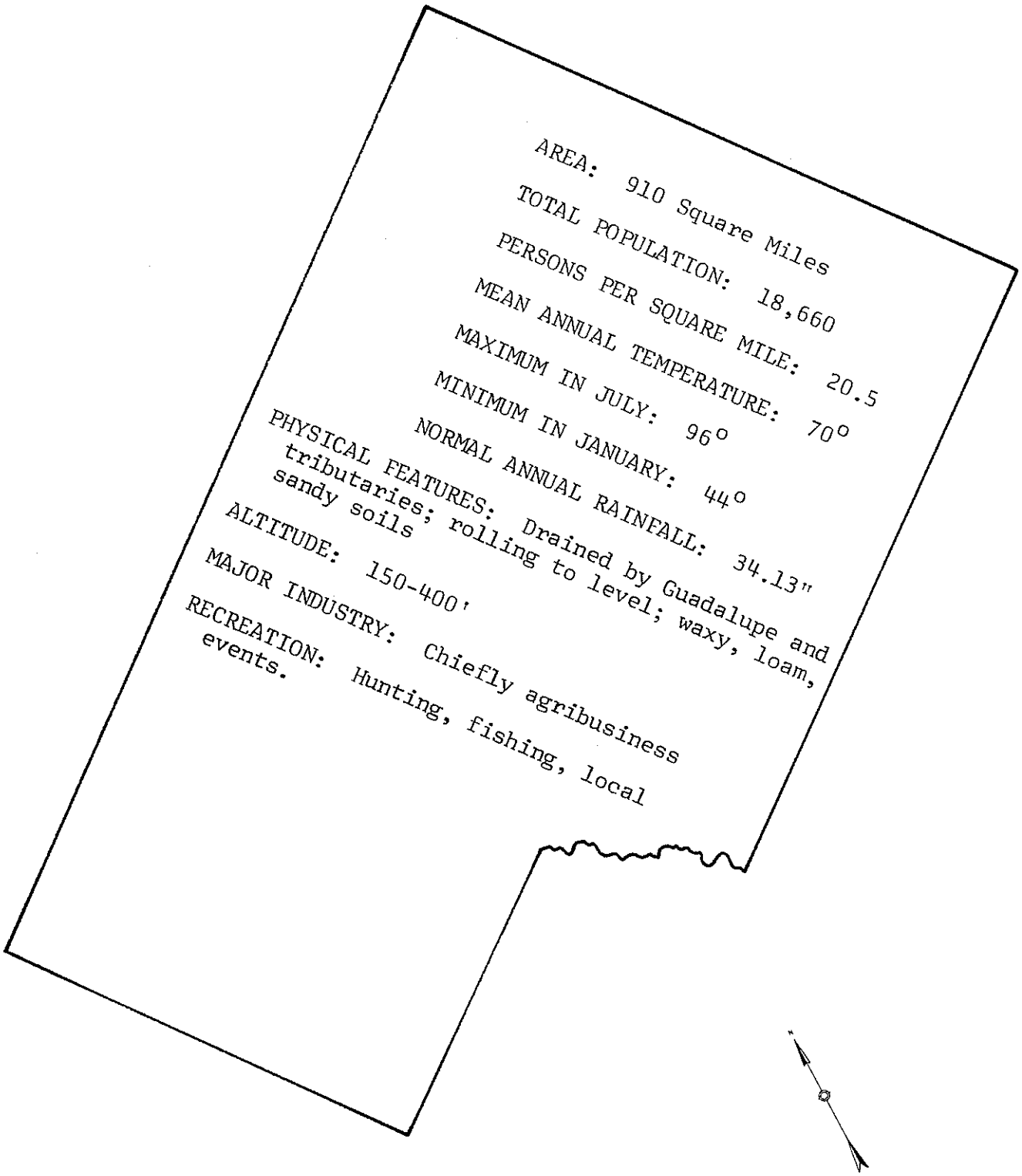


Figure 33

DE WITT COUNTY
TEXAS

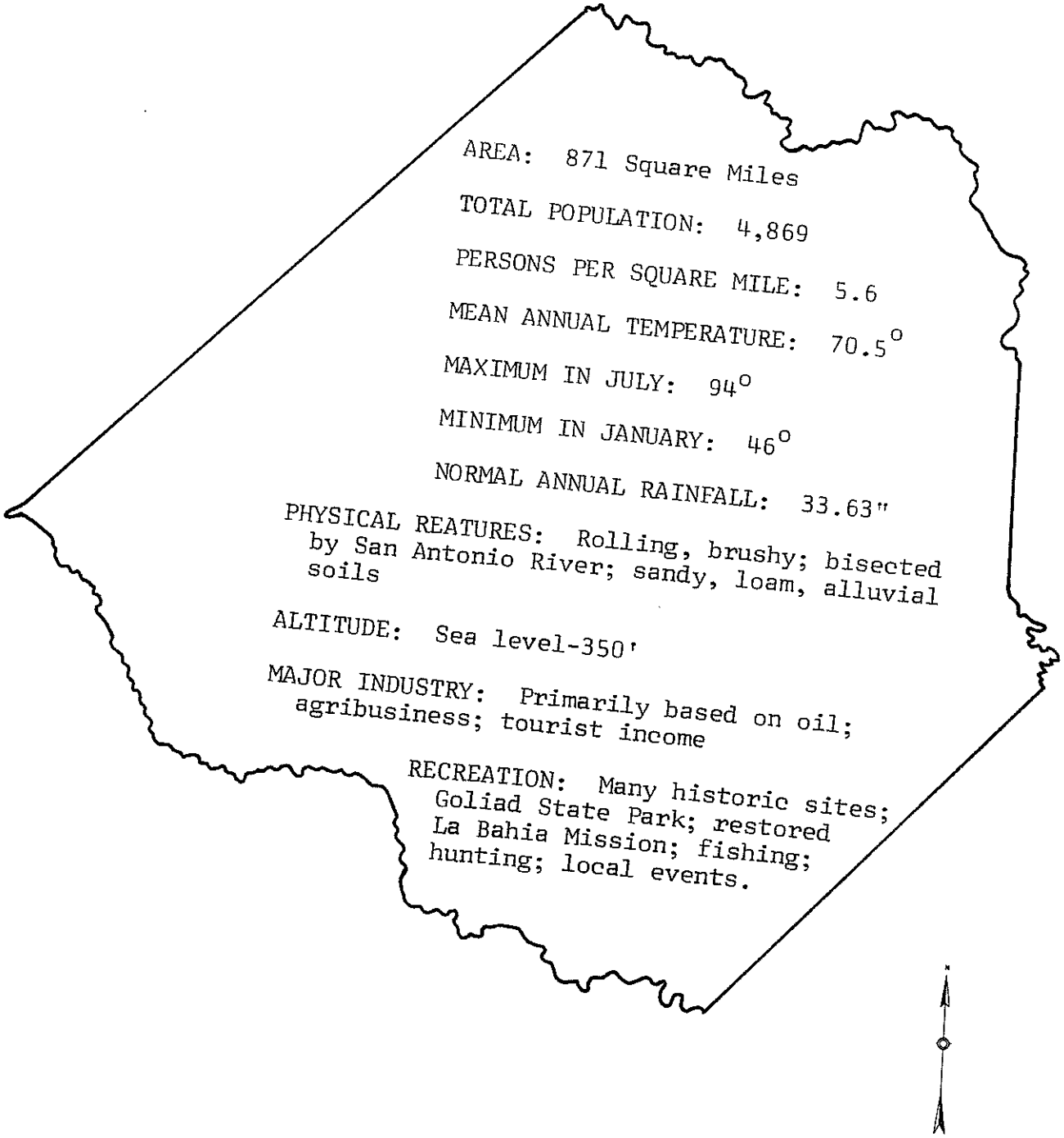


Figure 34

GOLIAD COUNTY
TEXAS

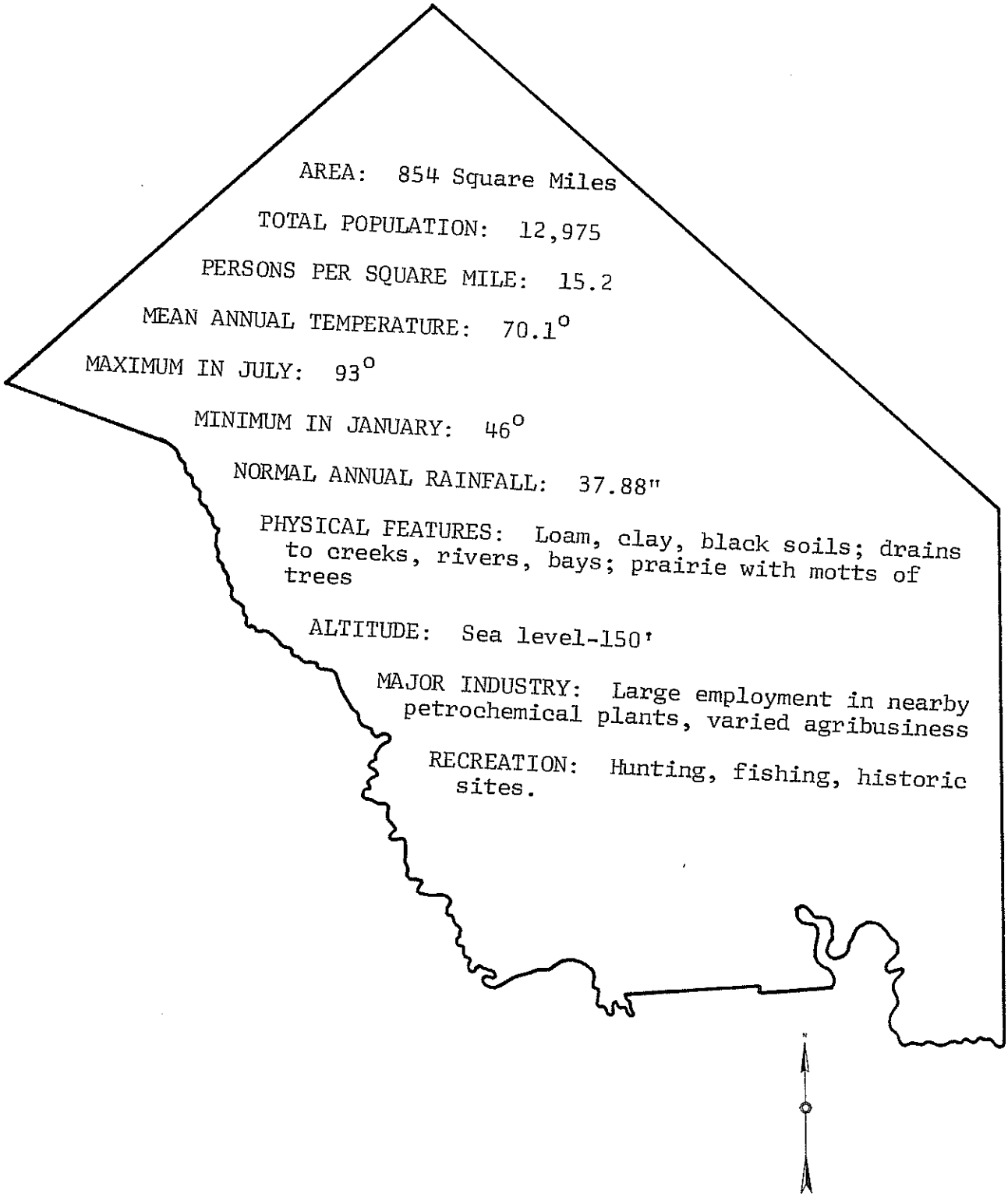


Figure 35

JACKSON COUNTY
TEXAS

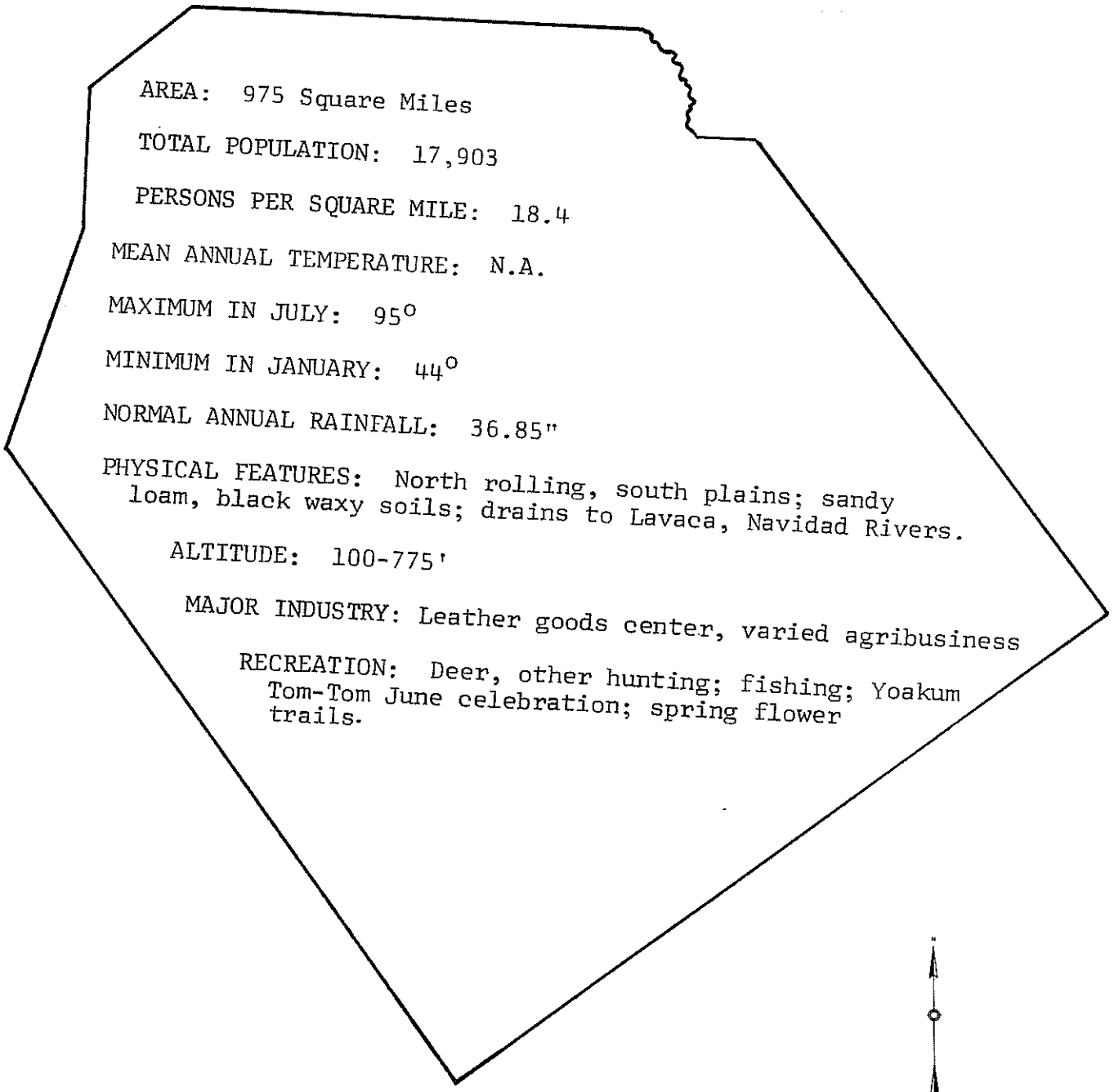


Figure 36

LAVACA COUNTY
TEXAS

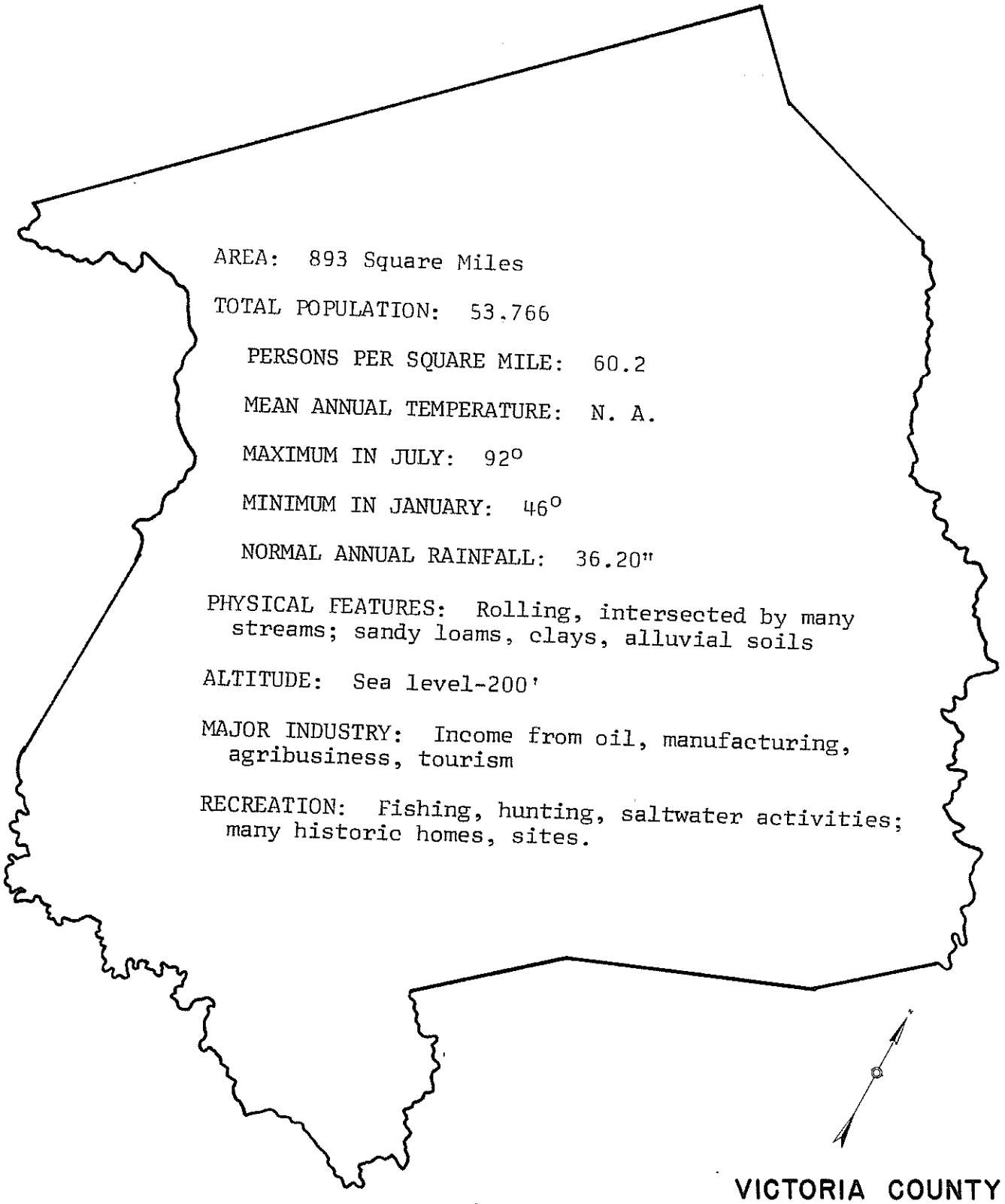

AREA: 893 Square Miles
TOTAL POPULATION: 53,766
PERSONS PER SQUARE MILE: 60.2
MEAN ANNUAL TEMPERATURE: N. A.
MAXIMUM IN JULY: 92°
MINIMUM IN JANUARY: 46°
NORMAL ANNUAL RAINFALL: 36.20"
PHYSICAL FEATURES: Rolling, intersected by many streams; sandy loams, clays, alluvial soils
ALTITUDE: Sea level-200'
MAJOR INDUSTRY: Income from oil, manufacturing, agribusiness, tourism
RECREATION: Fishing, hunting, saltwater activities; many historic homes, sites.
VICTORIA COUNTY
TEXAS

Figure 37

Figure 38

COASTAL BEND REGIONAL PLANNING COMMISSION

AREA: 276 Square Miles

TOTAL POPULATION: 8,902

PERSONS PER SQUARE MILE: 32.3

MEAN ANNUAL TEMPERATURE: 70°

MAXIMUM IN JULY: 92°

MINIMUM IN JANUARY: 48°

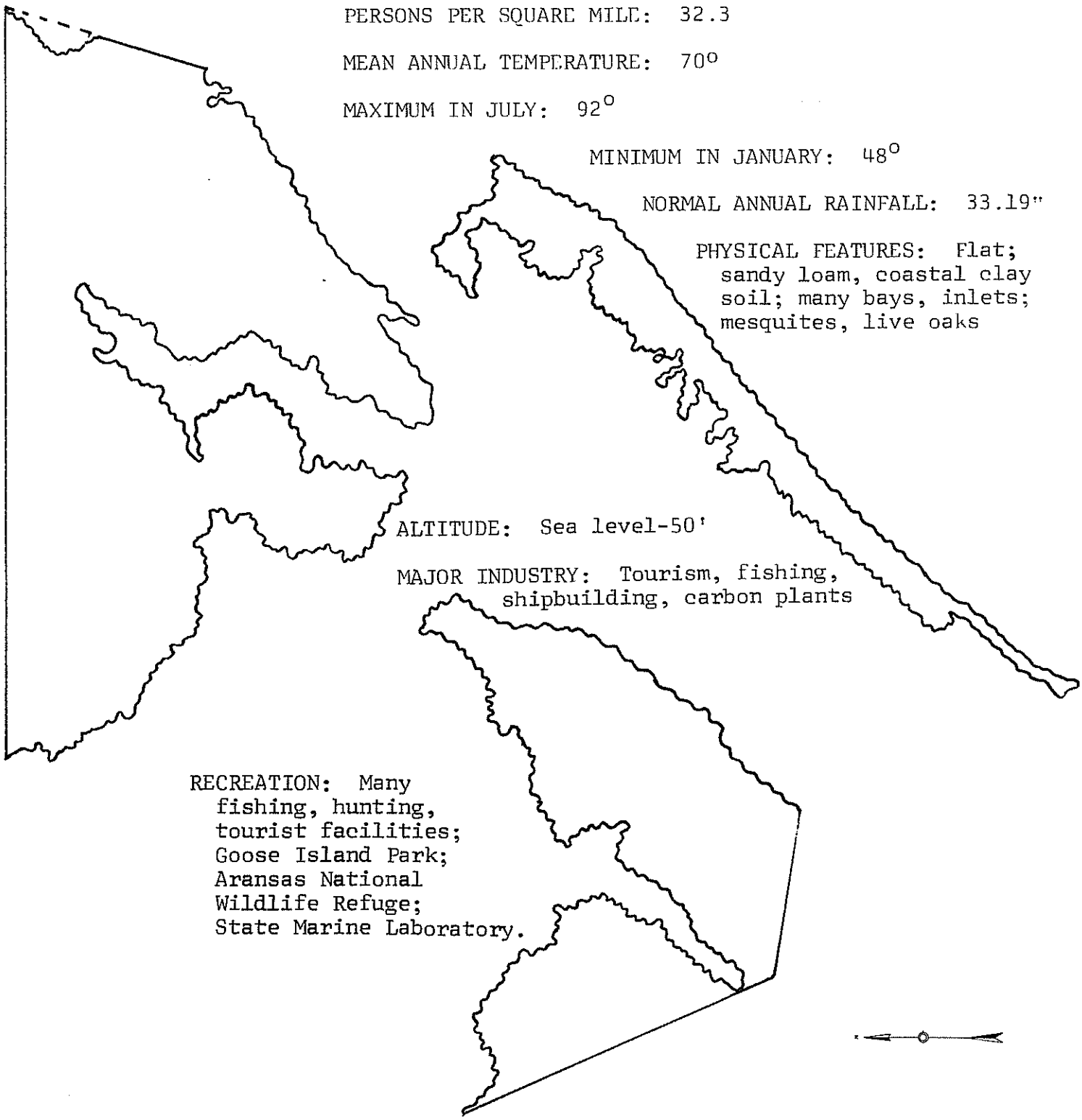
NORMAL ANNUAL RAINFALL: 33.19"

PHYSICAL FEATURES: Flat; sandy loam, coastal clay soil; many bays, inlets; mesquites, live oaks

ALTITUDE: Sea level-50'

MAJOR INDUSTRY: Tourism, fishing, shipbuilding, carbon plants

RECREATION: Many fishing, hunting, tourist facilities; Goose Island Park; Aransas National Wildlife Refuge; State Marine Laboratory.



ARANSAS COUNTY
TEXAS

Figure 39

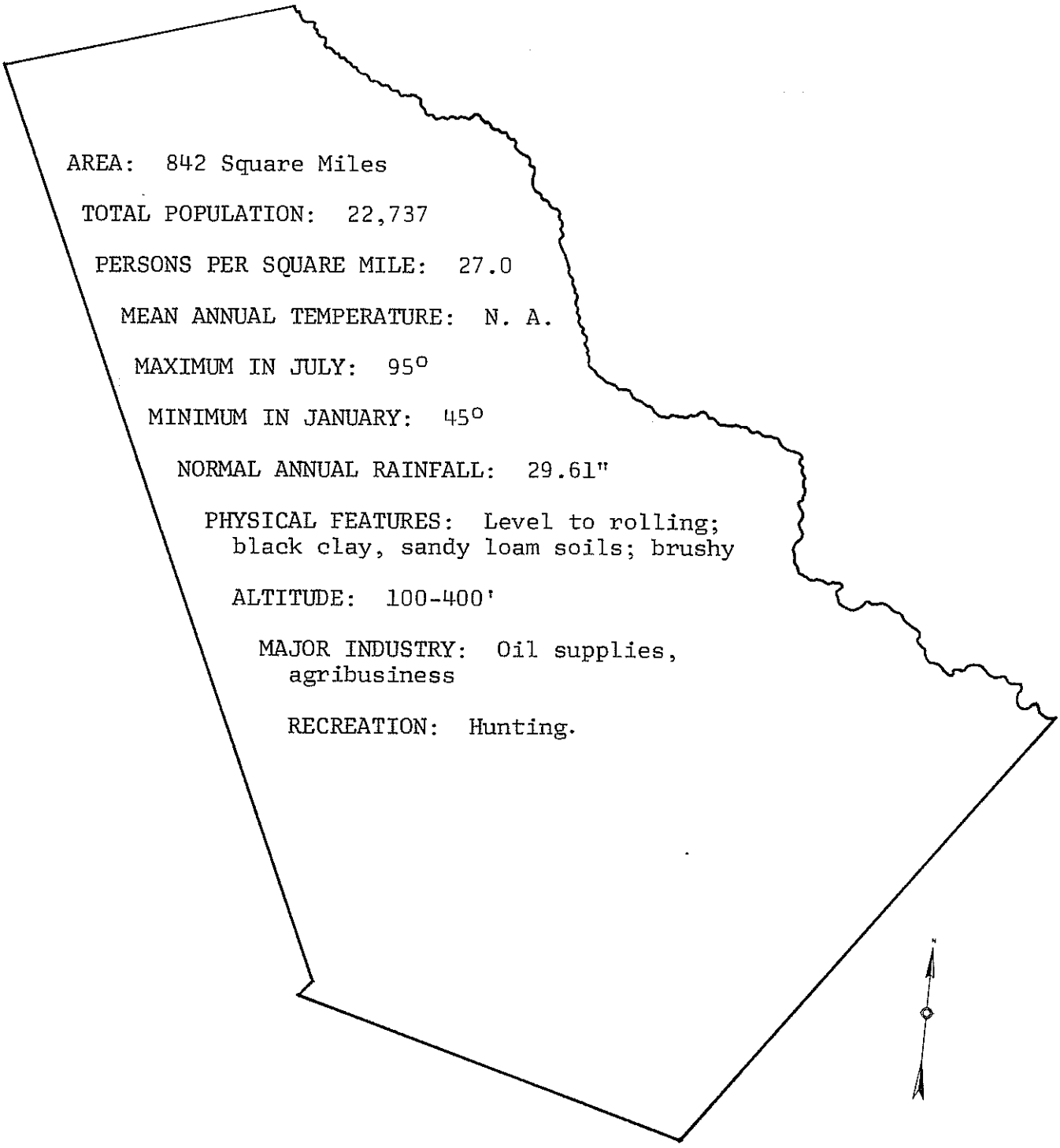


Figure 40

BEE COUNTY
TEXAS

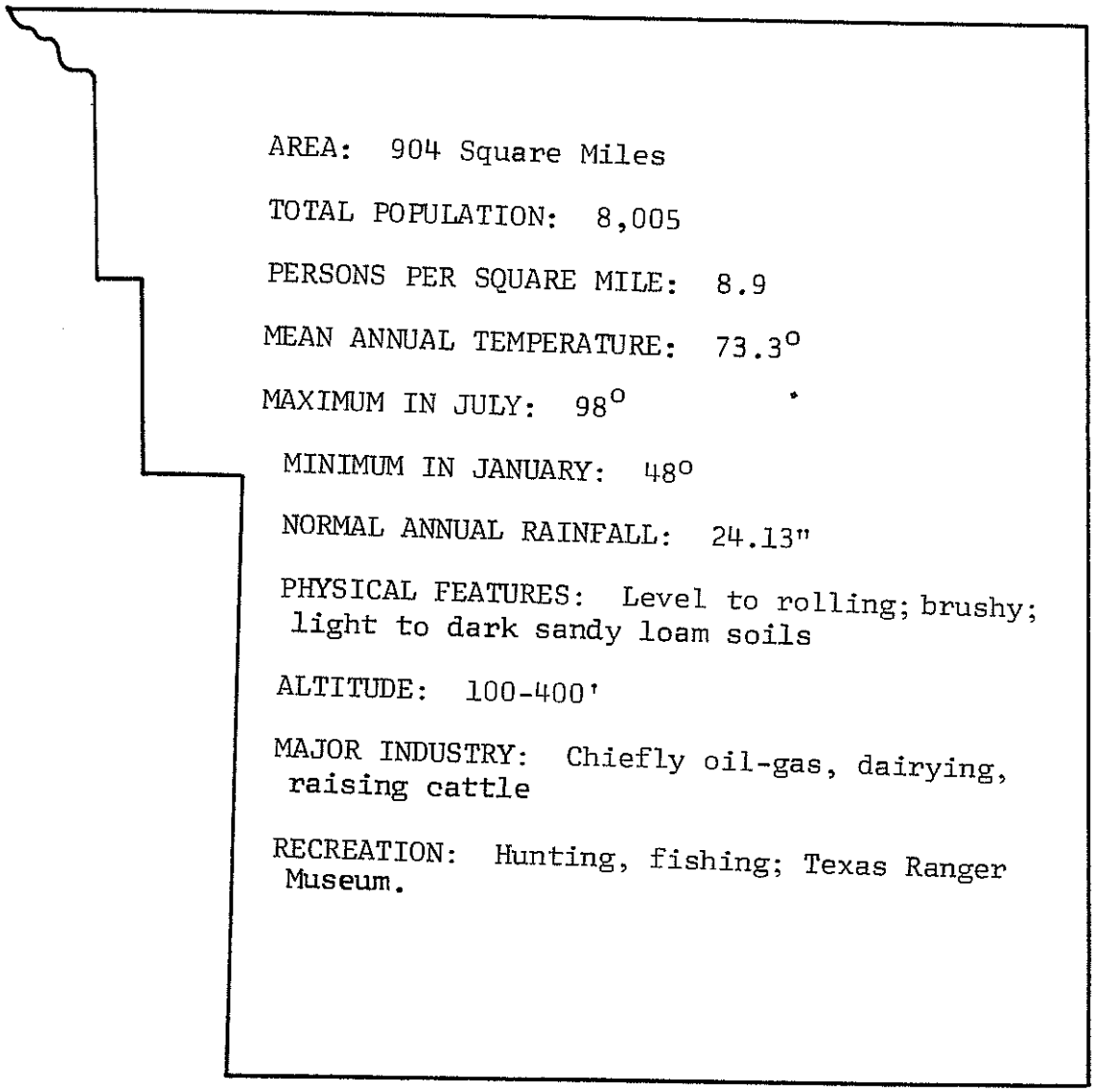


Figure 41

BROOKS COUNTY
TEXAS

AREA: 1,814 Square Miles

TOTAL POPULATION: 11,722

PERSONS PER SQUARE MILE: 6.5

MEAN ANNUAL TEMPERATURE: 72.2°

MAXIMUM IN JULY: 98°

MINIMUM IN JANUARY: 46°

NORMAL ANNUAL RAINFALL: 23.15"

PHYSICAL FEATURES: Level to hilly, brushy in most areas; varied soils

ALTITUDE: 250-800'

MAJOR INDUSTRY: Ranching, petroleum economy

RECREATION: Hunting, local events.

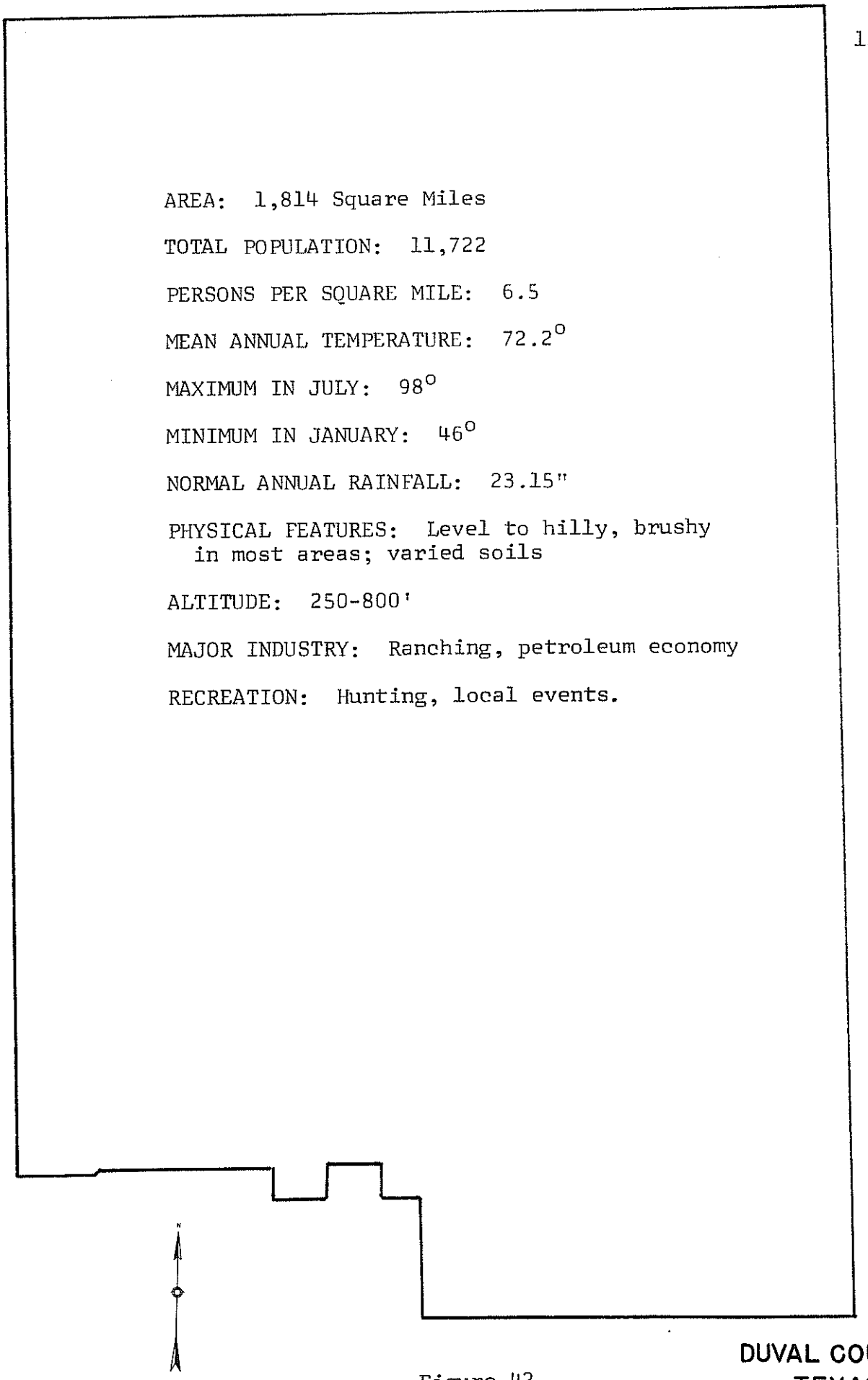


Figure 42

DUVAL COUNTY
TEXAS

AREA: 846 Square Miles

TOTAL POPULATION: 33,032

PERSONS PER SQUARE MILE: 39.0

MEAN ANNUAL TEMPERATURE: 71.8°

MAXIMUM IN JULY: 97°

MINIMUM IN JANUARY: 47°

NORMAL ANNUAL RAINFALL: 26.70"

PHYSICAL FEATURES: Level to rolling; sandy to dark soils; grassy, mesquite brush

ALTITUDE: 100-400'

MAJOR INDUSTRY: Oil production, agriculture dominate economy

RECREATION: Hunting, local events.

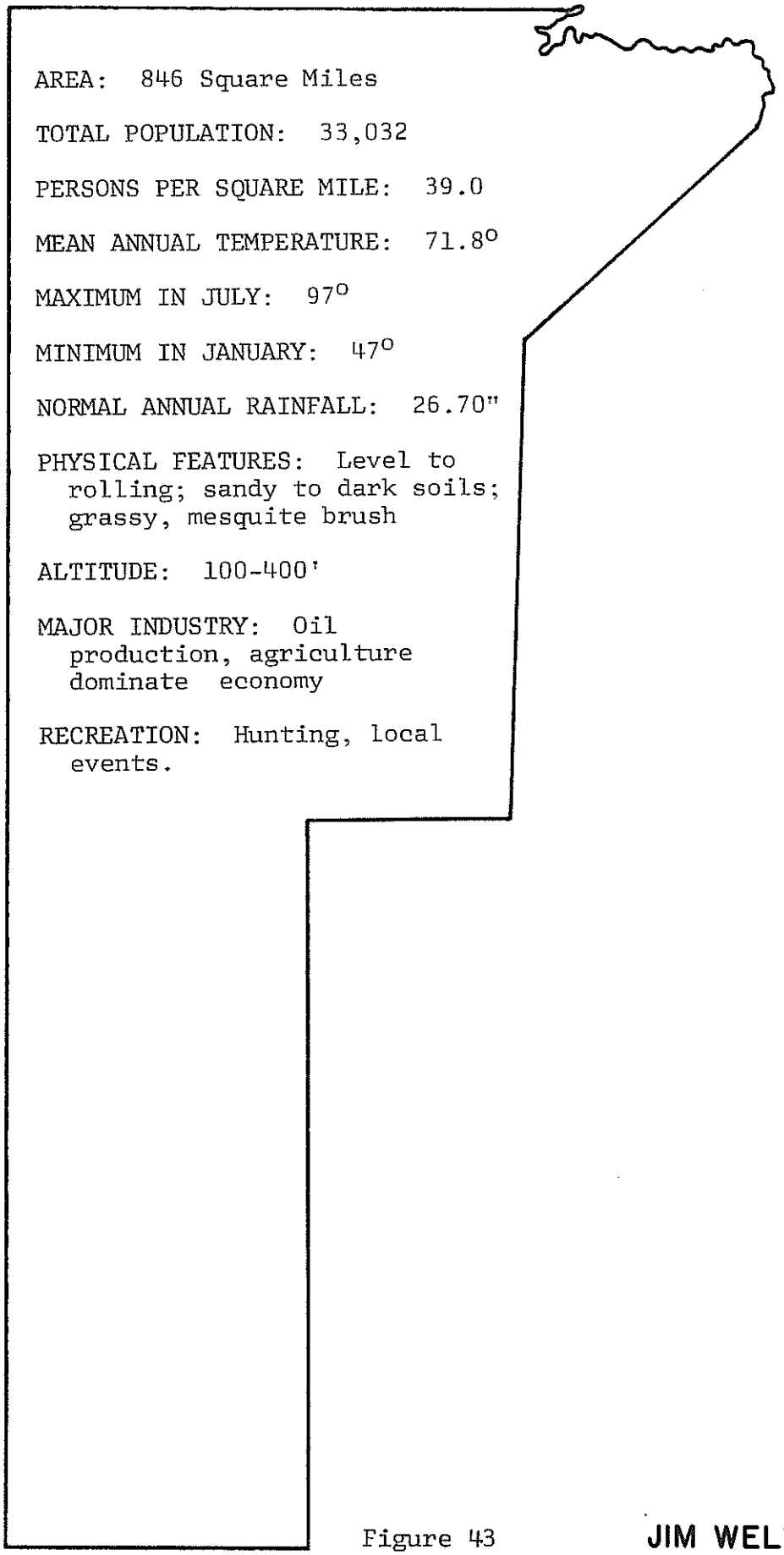
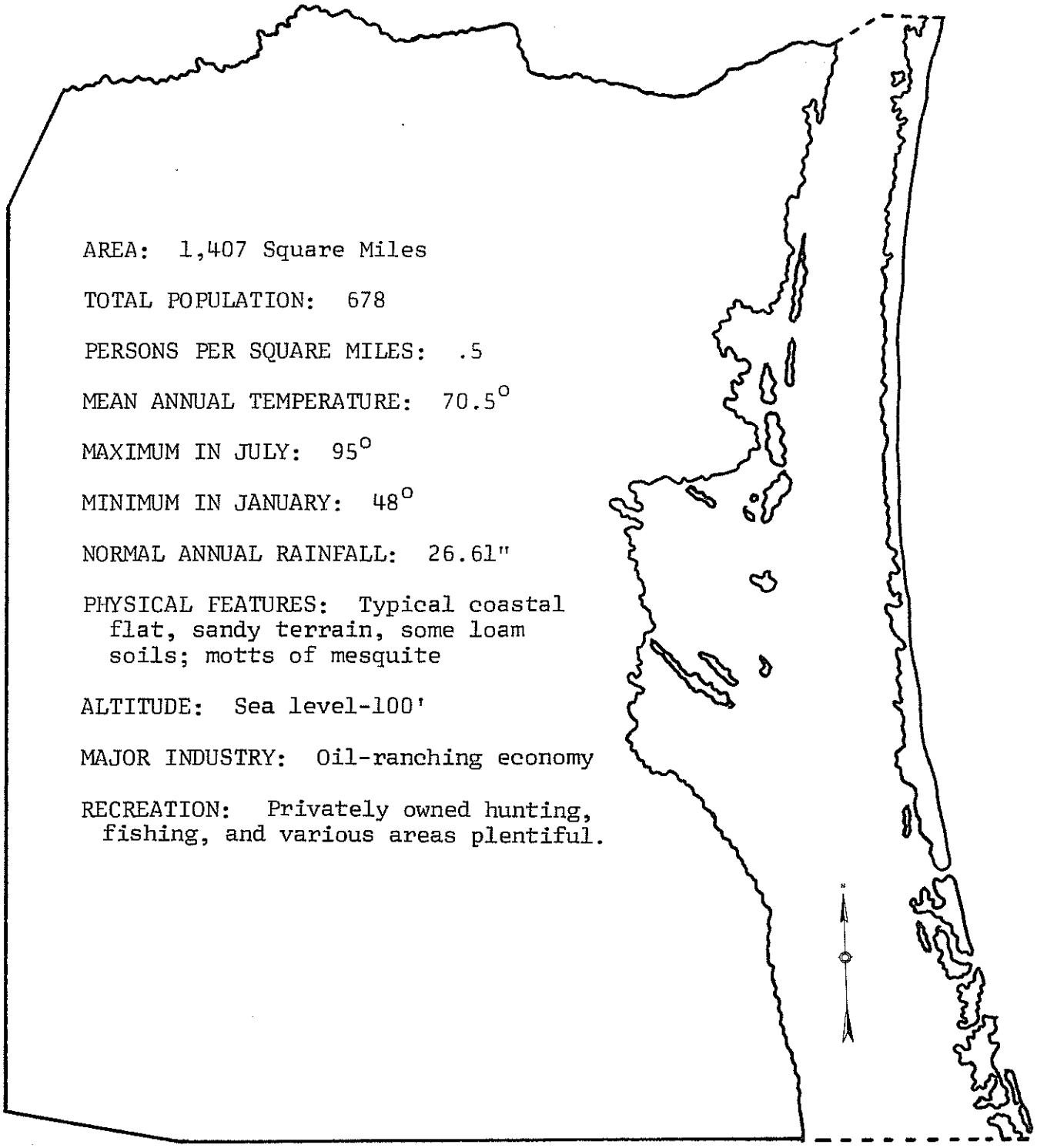


Figure 43

JIM WELLS COUNTY
TEXAS



AREA: 1,407 Square Miles

TOTAL POPULATION: 678

PERSONS PER SQUARE MILES: .5

MEAN ANNUAL TEMPERATURE: 70.5°

MAXIMUM IN JULY: 95°

MINIMUM IN JANUARY: 48°

NORMAL ANNUAL RAINFALL: 26.61"

PHYSICAL FEATURES: Typical coastal flat, sandy terrain, some loam soils; motts of mesquite

ALTITUDE: Sea level-100'

MAJOR INDUSTRY: Oil-ranching economy

RECREATION: Privately owned hunting, fishing, and various areas plentiful.

Figure 44

KENEDY COUNTY
TEXAS

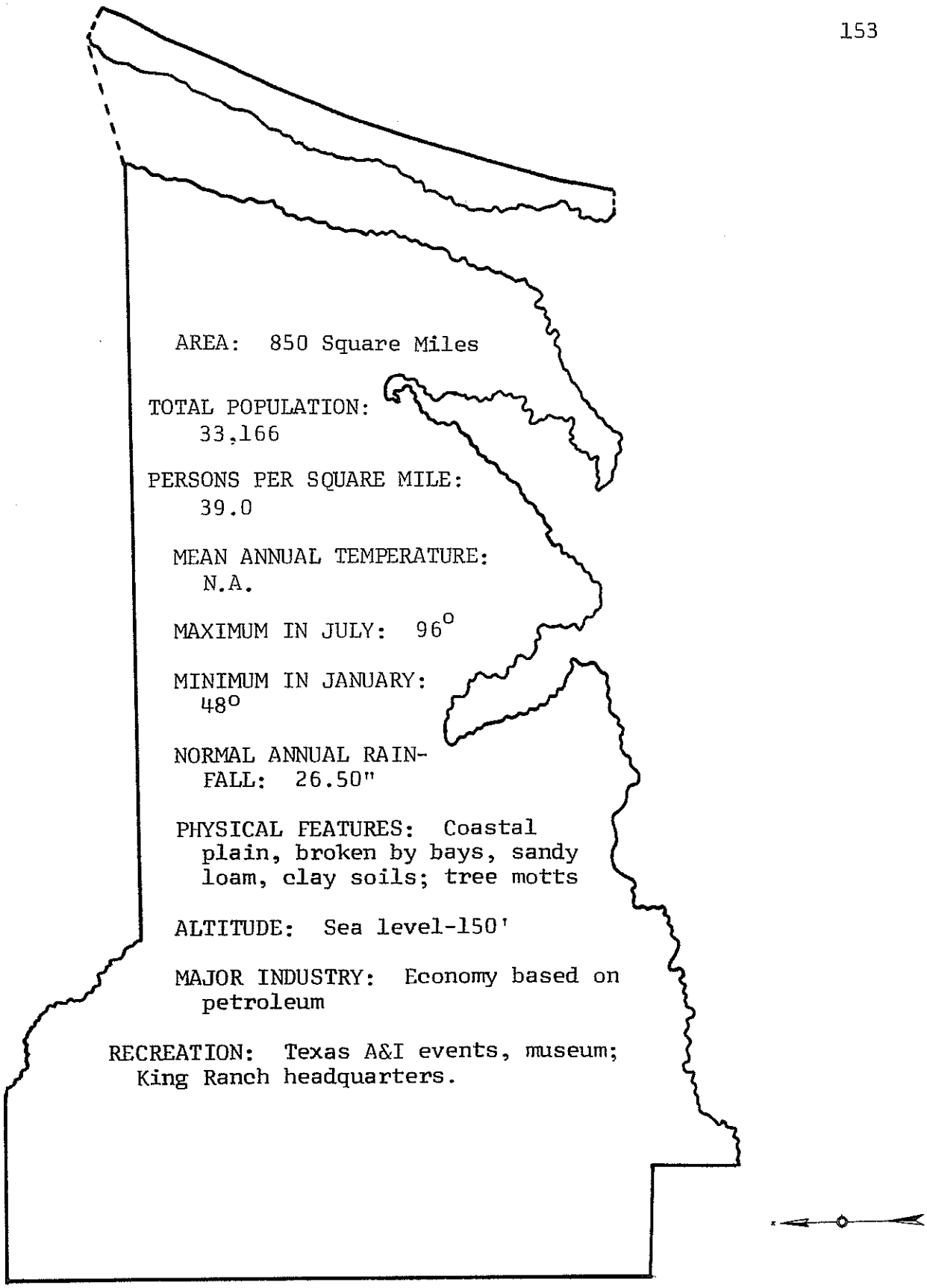
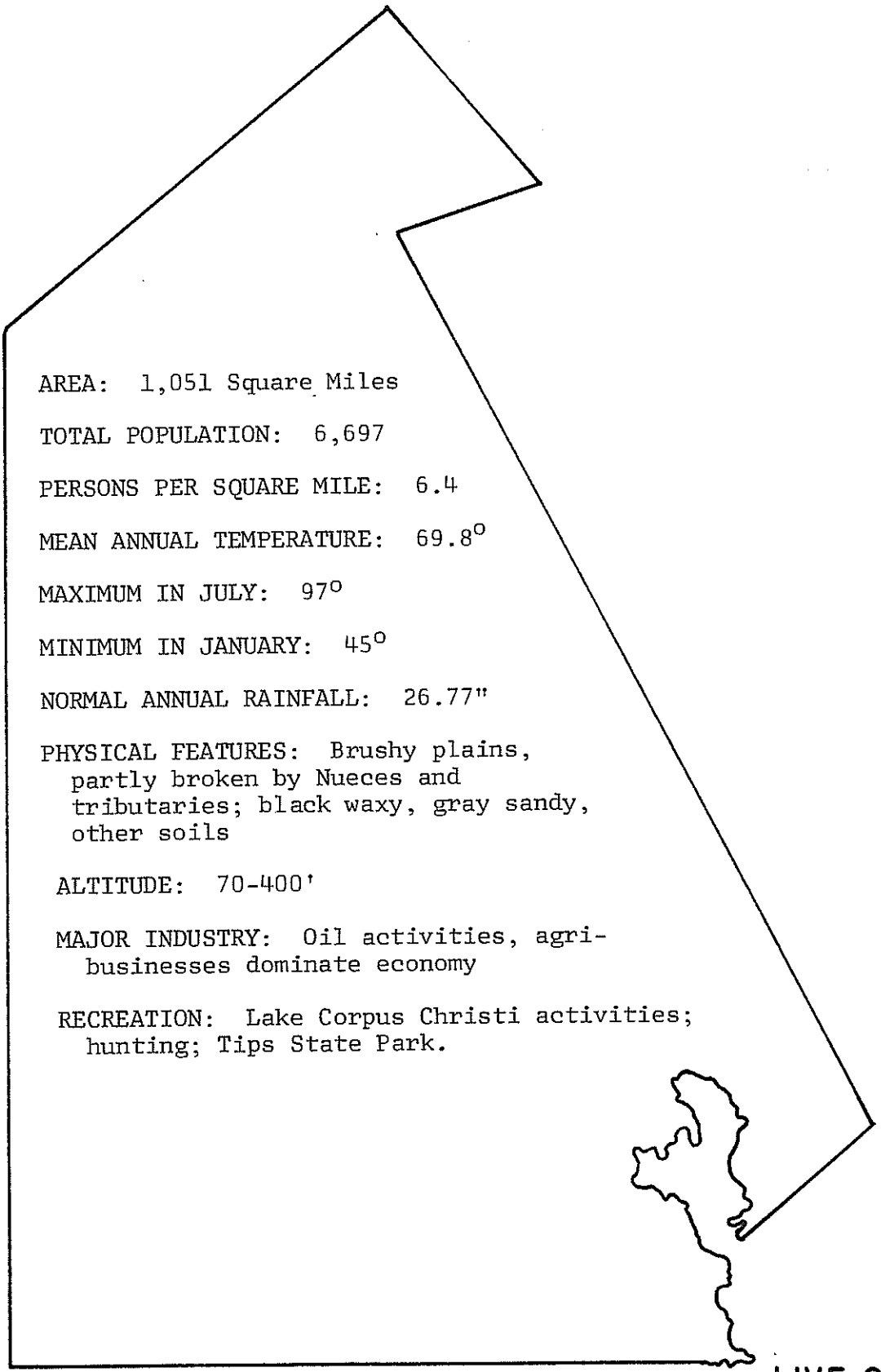


Figure 45

KLEBERG COUNTY
TEXAS



AREA: 1,051 Square Miles

TOTAL POPULATION: 6,697

PERSONS PER SQUARE MILE: 6.4

MEAN ANNUAL TEMPERATURE: 69.8°

MAXIMUM IN JULY: 97°

MINIMUM IN JANUARY: 45°

NORMAL ANNUAL RAINFALL: 26.77"

PHYSICAL FEATURES: Brushy plains, partly broken by Nueces and tributaries; black waxy, gray sandy, other soils

ALTITUDE: 70-400'

MAJOR INDUSTRY: Oil activities, agri-businesses dominate economy

RECREATION: Lake Corpus Christi activities; hunting; Tips State Park.

LIVE OAK COUNTY
TEXAS

Figure 46

AREA: 1,157 Square Miles

TOTAL POPULATION: 1,095

PERSONS PER SQUARE MILE: .9

MEAN ANNUAL TEMPERATURE: 72°

MAXIMUM IN JULY: 98°

MINIMUM IN JANUARY: 44°

NORMAL ANNUAL RAINFALL: 25.27"

PHYSICAL FEATURES: Brushy plain, sloping to Frio, Nueces and tributaries; saline clay soils

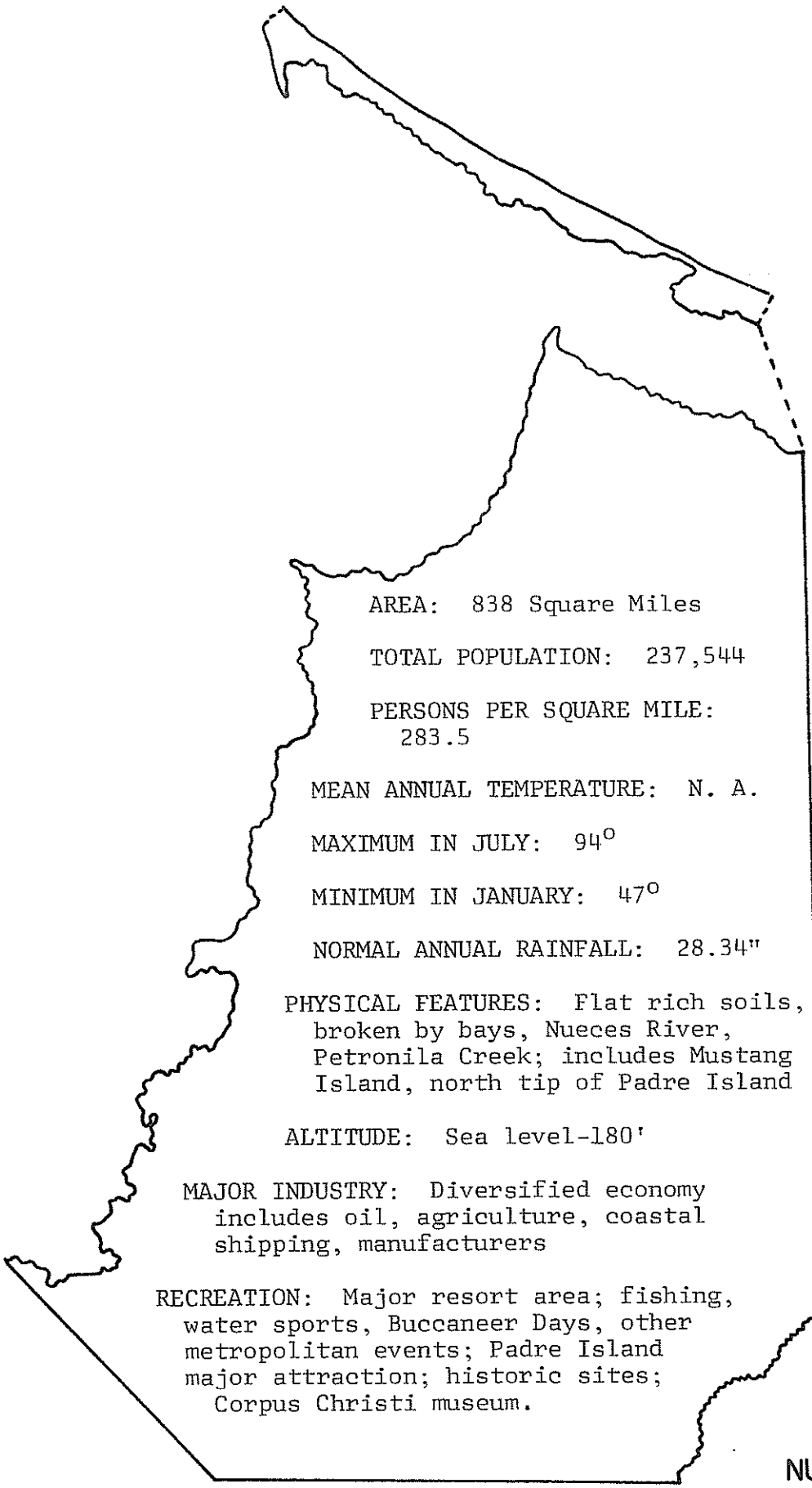
ALTITUDE: 150-500'

MAJOR INDUSTRY: Oil and cattle raising dominate economy

RECREATION: Local events.

Figure 47

MC MULLEN COUNTY
TEXAS



AREA: 838 Square Miles

TOTAL POPULATION: 237,544

PERSONS PER SQUARE MILE: 283.5

MEAN ANNUAL TEMPERATURE: N. A.

MAXIMUM IN JULY: 94°

MINIMUM IN JANUARY: 47°

NORMAL ANNUAL RAINFALL: 28.34"

PHYSICAL FEATURES: Flat rich soils, broken by bays, Nueces River, Petronila Creek; includes Mustang Island, north tip of Padre Island

ALTITUDE: Sea level-180'

MAJOR INDUSTRY: Diversified economy includes oil, agriculture, coastal shipping, manufacturers

RECREATION: Major resort area; fishing, water sports, Buccaneer Days, other metropolitan events; Padre Island major attraction; historic sites; Corpus Christi museum.

NUECES COUNTY
TEXAS

Figure 48

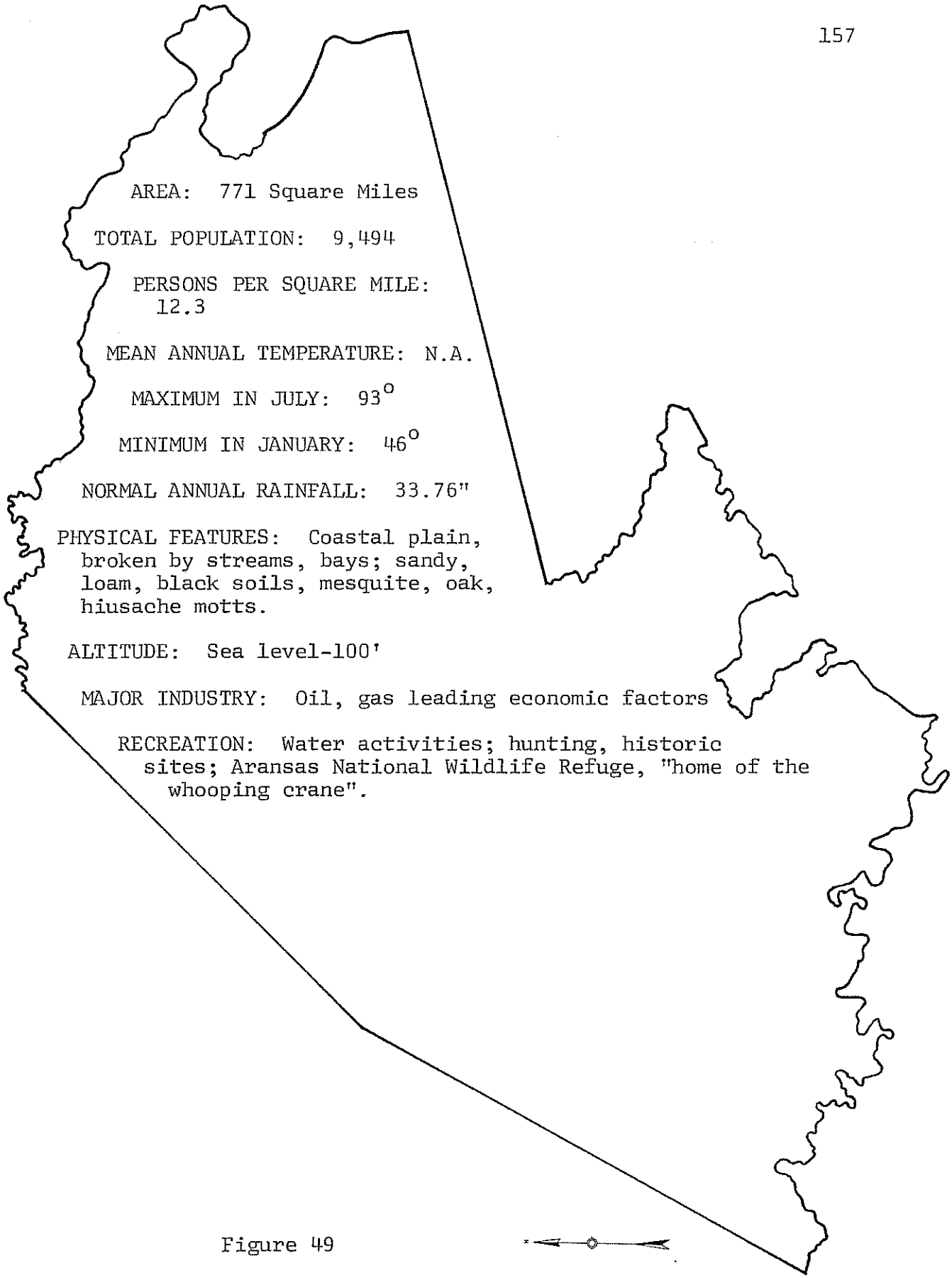


Figure 49

REFUGIO COUNTY
TEXAS

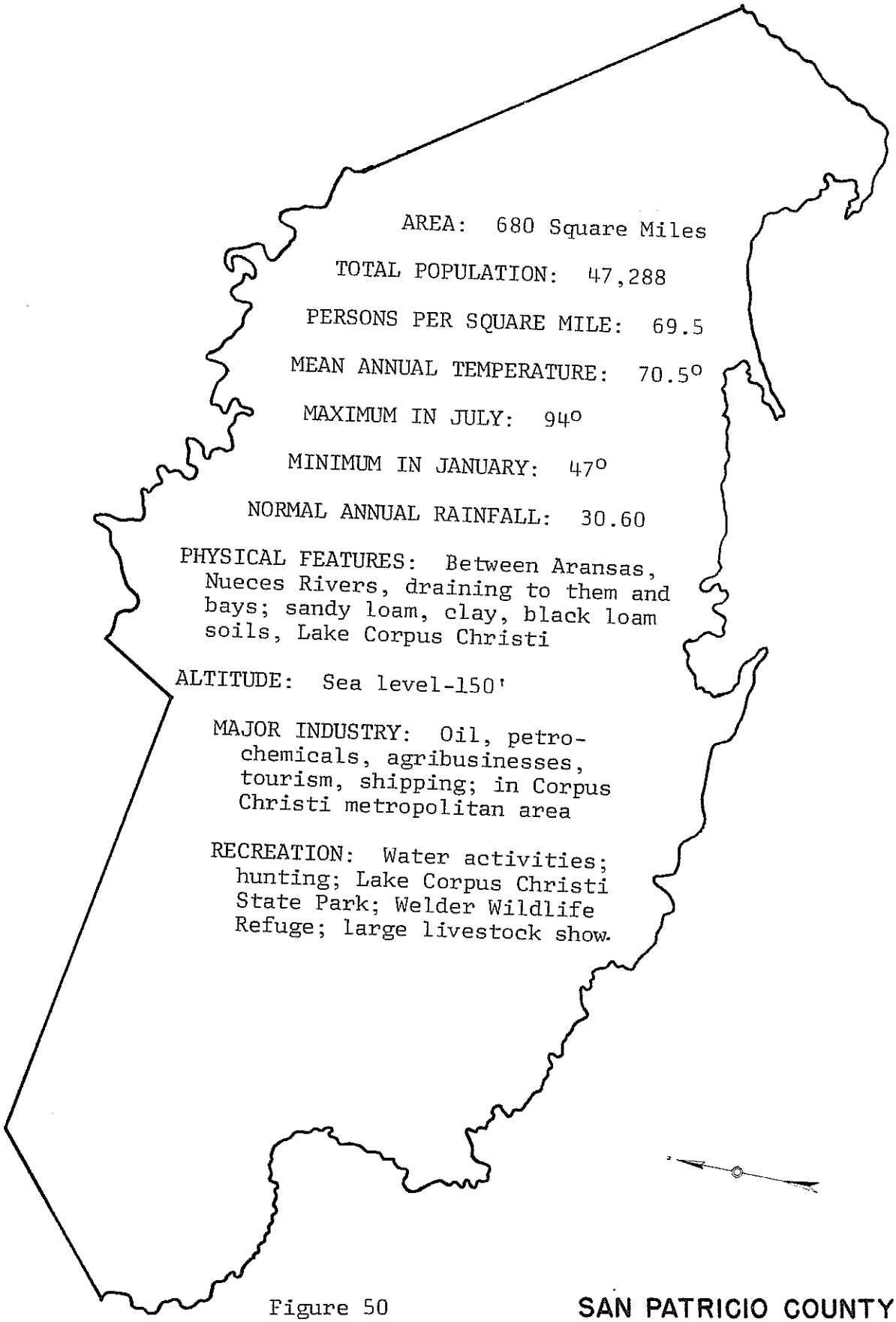


Figure 50

SAN PATRICIO COUNTY TEXAS

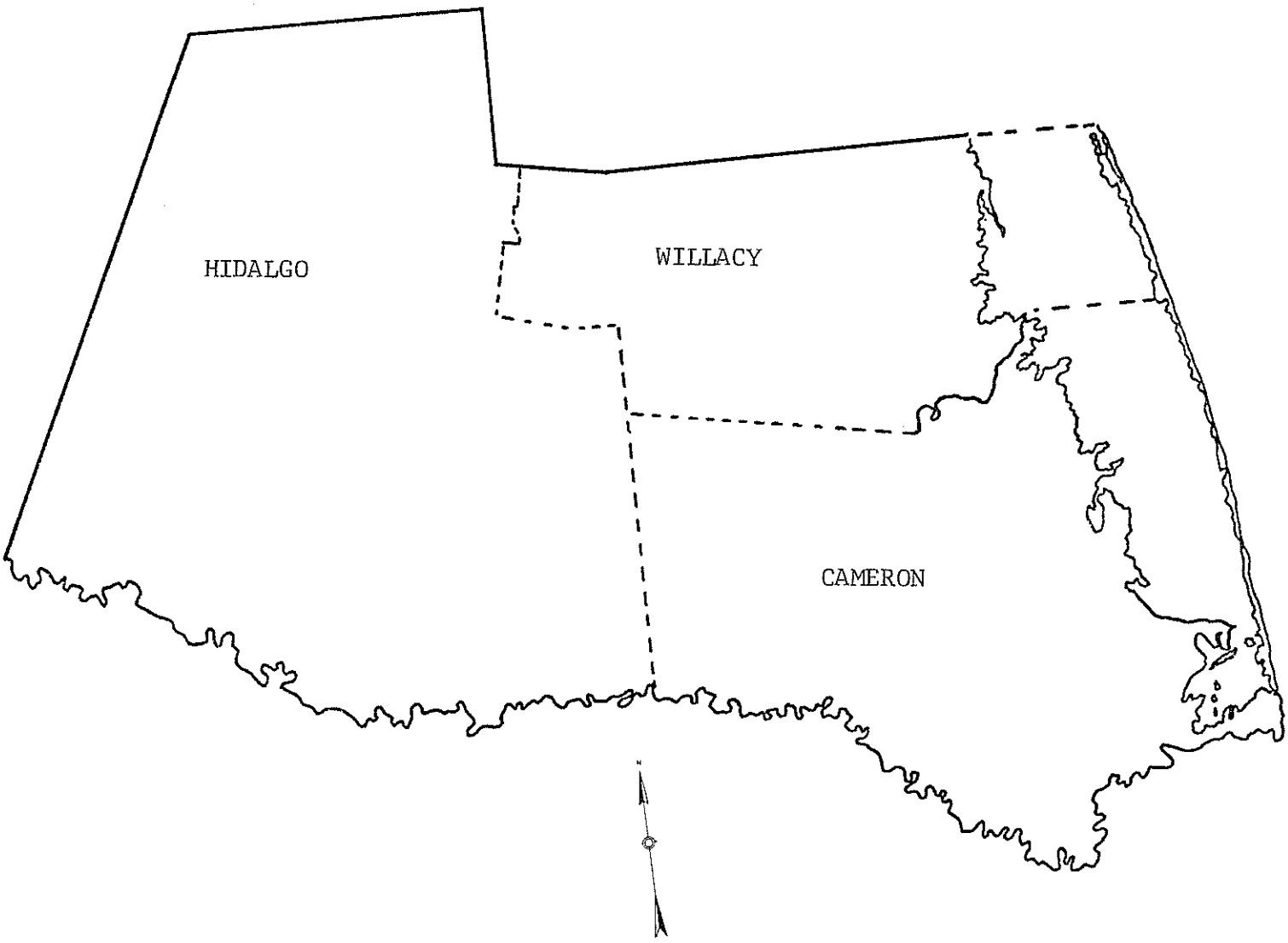


Figure 51

LOWER RIO GRANDE VALLEY DEVELOPMENT COUNCIL

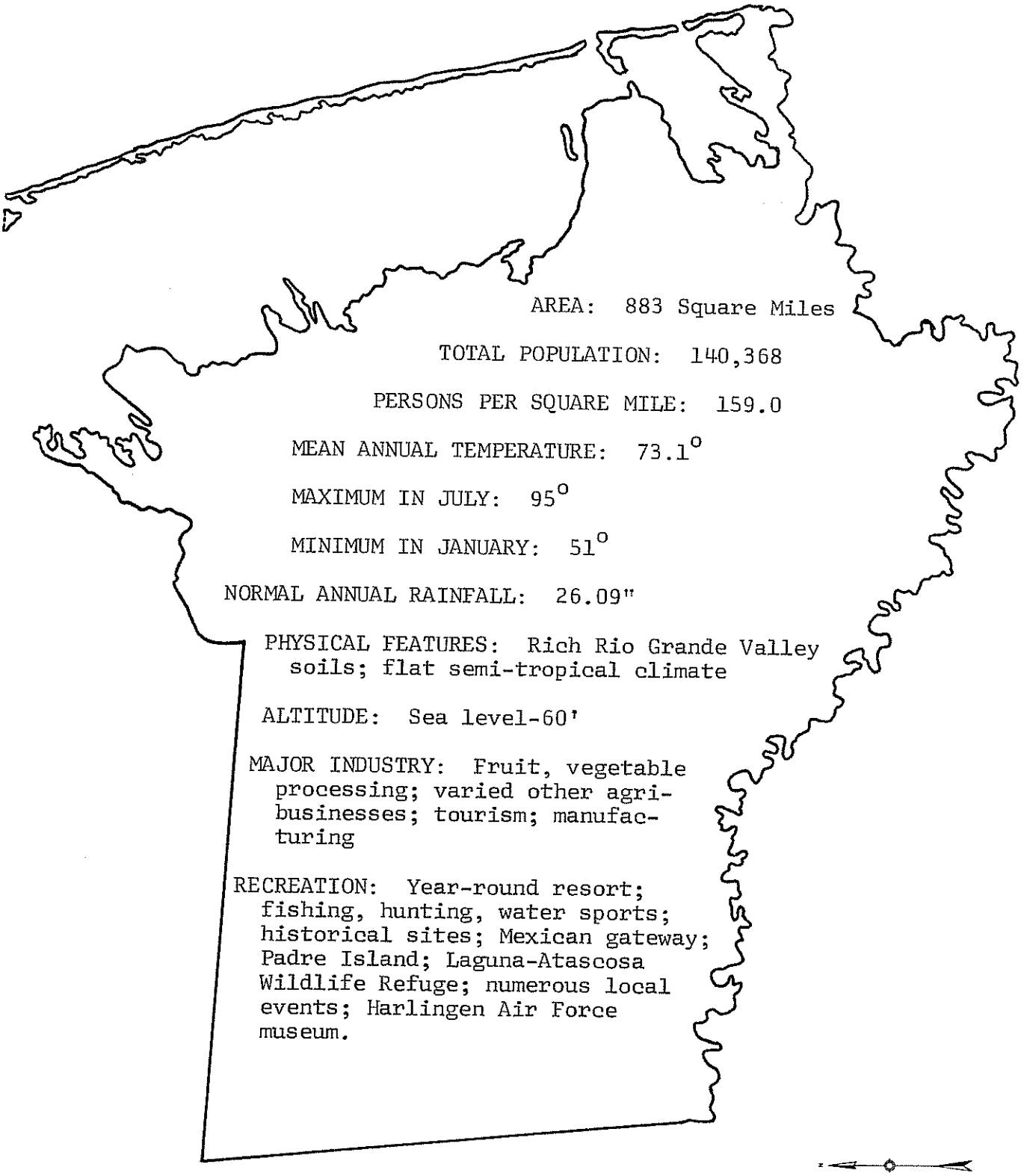
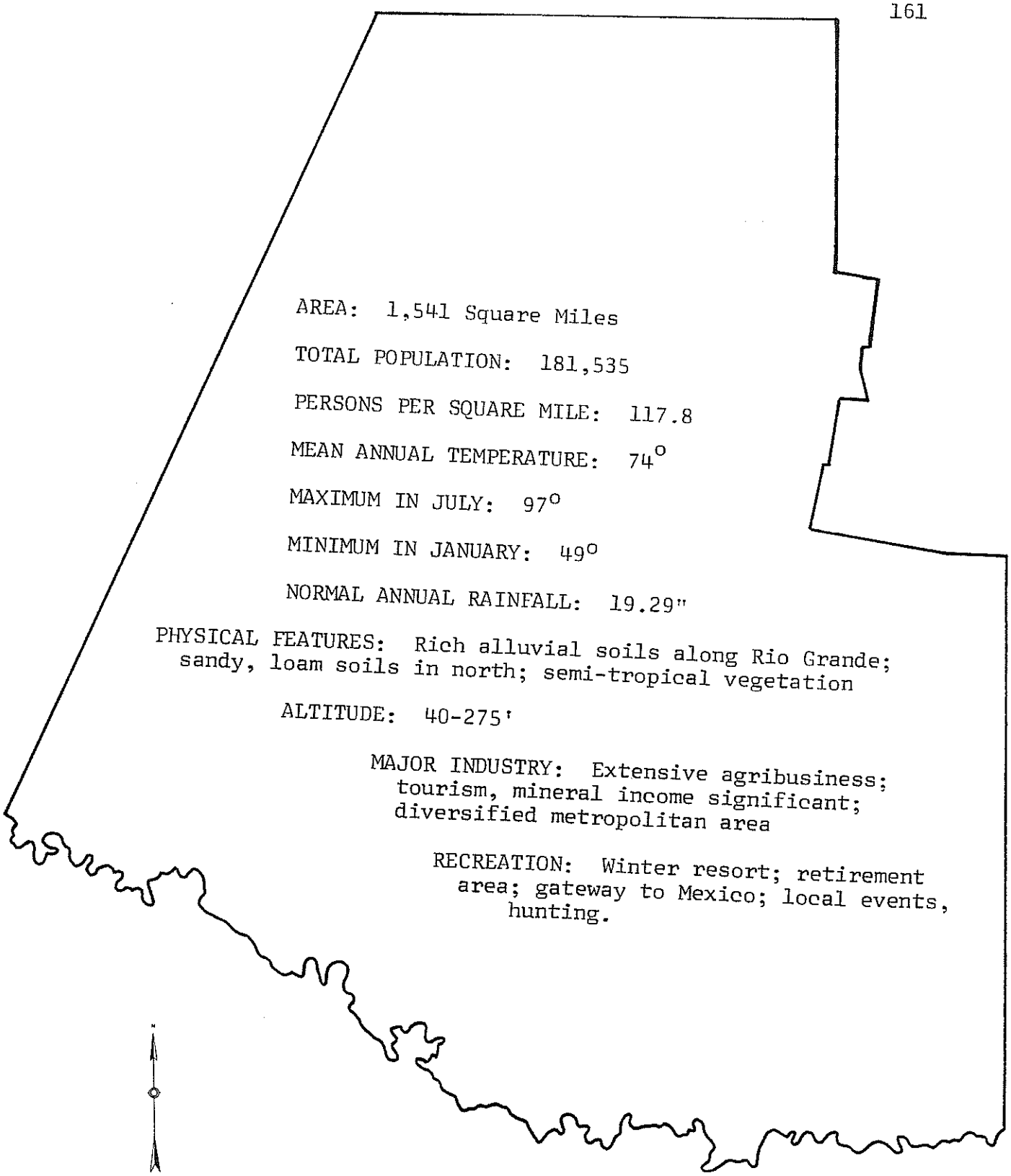


Figure 52

CAMERON COUNTY
TEXAS



AREA: 1,541 Square Miles

TOTAL POPULATION: 181,535

PERSONS PER SQUARE MILE: 117.8

MEAN ANNUAL TEMPERATURE: 74°

MAXIMUM IN JULY: 97°

MINIMUM IN JANUARY: 49°

NORMAL ANNUAL RAINFALL: 19.29"

PHYSICAL FEATURES: Rich alluvial soils along Rio Grande; sandy, loam soils in north; semi-tropical vegetation

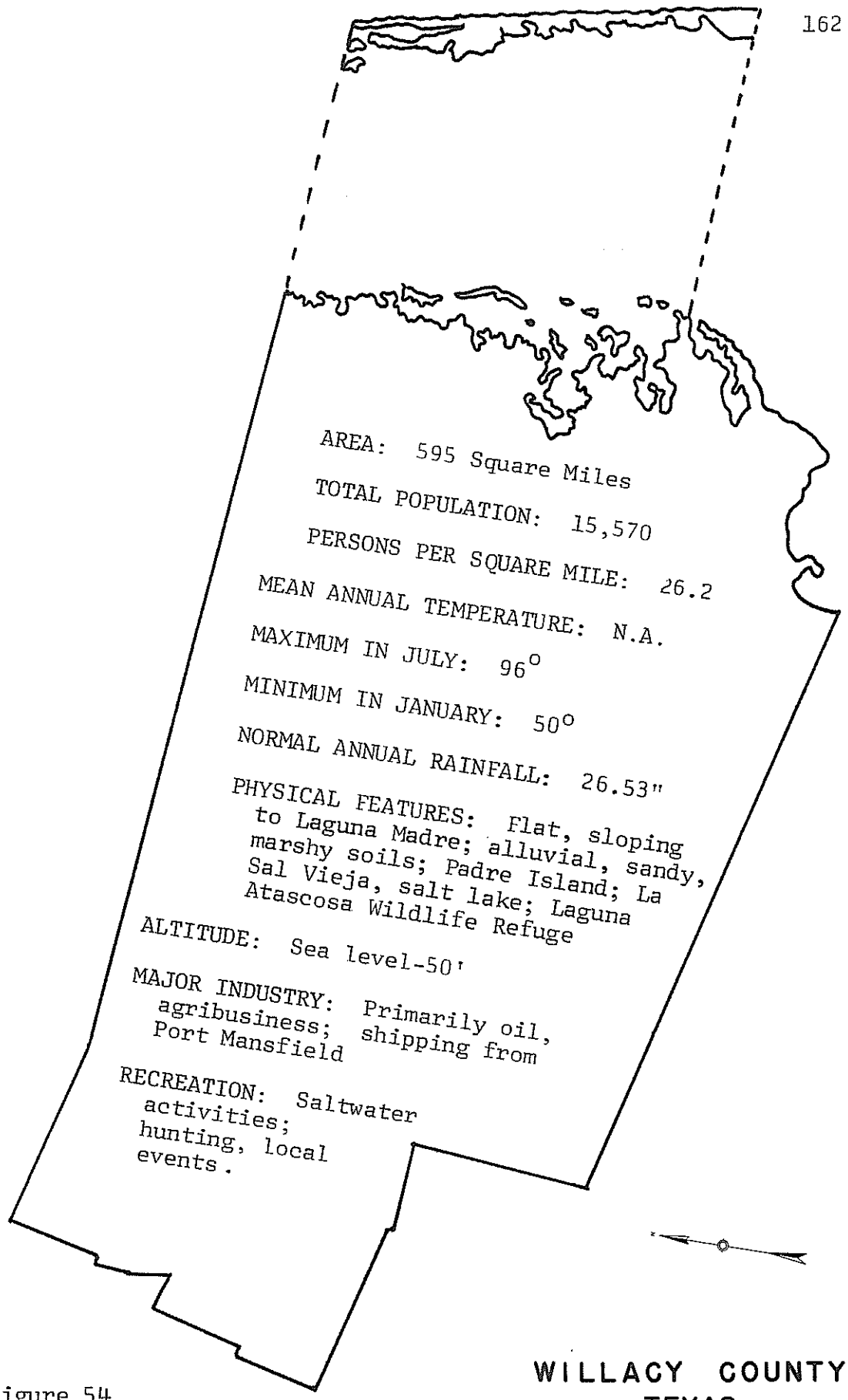
ALTITUDE: 40-275'

MAJOR INDUSTRY: Extensive agribusiness; tourism, mineral income significant; diversified metropolitan area

RECREATION: Winter resort; retirement area; gateway to Mexico; local events, hunting.

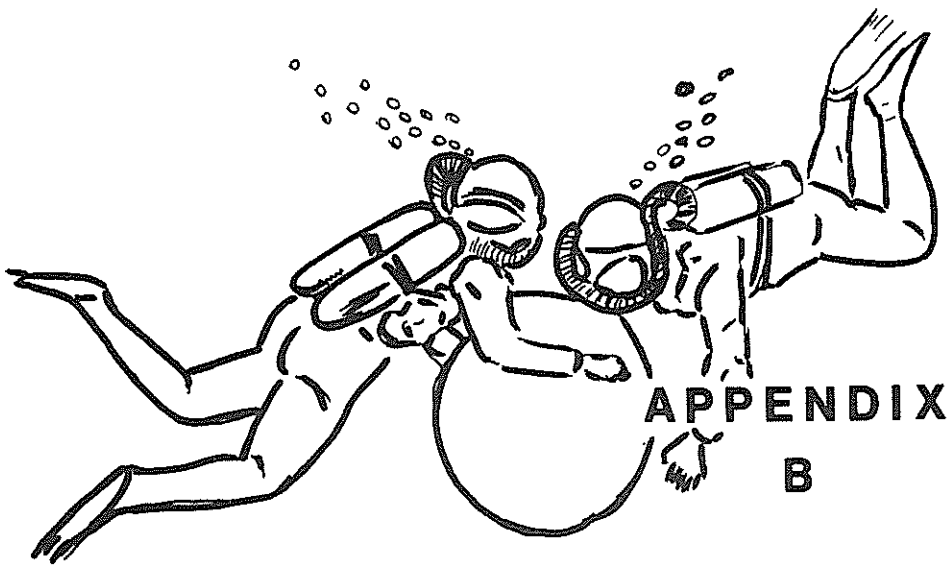
Figure 53

HIDALGO COUNTY
TEXAS



WILLACY COUNTY
TEXAS

Figure 54



APPENDIX B

APPENDIX B

TABLE 21

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
ARANSAS COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	8	113	$ 575,562	$ 8,222,324
559	3	*	*	*
573	1	*	*	*
581	20	160	500,720	2,060,578
592	6	15	41,456	618,753
595	3	*	*	*
599	2	*	*	*
701	19	214	651,054	2,177,440
703	5	14	32,278	107,953
794	3	*	*	*
*		53*	311,610*	2,754,831*
Total	70	569	$ 2,112,680	$15,941,879
Total County Units	309	2,398	$13,523,156	N.A.
Percent	23	24	16	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 22

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
AUSTIN COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	3	*	$ *	$ *
581	26	186	360,094	1,481,868
592	3	*	*	*
599	3	*	*	*
701	5	30	57,802	193,318
729	1	*	*	*
794	3	*	*	*
869	1	*	*	*
*		70*	226,461*	1,726,724*
Total	45	286	$ 644,357	$3,401,910
Total County Units	320	2,167	$11,132,135	N.A.
Percent	14	13	6	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 23

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
BEE COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	3	*	$ *	$ *
559	1	*	*	*
573	1	*	*	*
581	25	201	528,801	2,176,139
592	2	*	*	*
593	3	*	*	*
595	2	*	*	*
599	2	*	*	*
701	3	*	*	*
703	1	*	*	*
783	3	*	*	*
793	1	*	*	*
794	3	*	*	*
864	3	*	*	*
869	3	*	*	*
*		197*	699,699*	3,194,544*
Total	56	398	$ 1,228,500	$5,370,683
Total County Units	381	3,665	$20,836,587	N.A.
Percent	15	11	6	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 24

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
BRAZORIA COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	18	93	$ 593,290	$ 8,475,577
559	7	37	341,494	3,557,235
573	7	19	83,118	639,374
581	94	684	1,565,495	6,442,367
592	3	*	*	*
593	1	*	*	*
594	2	*	*	*
595	5	10	45,227	396,729
599	18	32	85,340	748,598
701	20	195	643,699	2,152,841
703	2	*	*	*
729	1	N.A.	N.A.	N.A.
783	5	60	133,685	566,462
792	1	*	*	*
793	2	*	*	*
794	15	58	339,211	1,251,704
864	7	36	148,190	N.A.
869	1	*	*	N.A.
*		55*	136,779*	981,614*
Total	209	1,279	$ 4,115,528	$25,212,501
Total County Units	1,552	24,696	$220,126,178	N.A.
Percent	13	5	2	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 25

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
BROOKS COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	4	*	$ *	$ *
581	9	47	118,408	487,277
599	2	*	*	*
701	4	*	*	*
783	1	*	*	*
792	1	*	*	*
794	1	*	*	*
*		81*	269,687*	3,254,583*
Total	22	128	$ 388,095	$3,741,860
Total County Units	153	838	$4,675,152	N.A.
Percent	14	15	8	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 26

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
CALHOUN COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	11	192	$ 526,141	$ 7,516,295
559	3	*	*	*
581	17	146	427,491	1,759,221
592	2	*	*	*
593	1	*	*	*
599	3	*	*	*
701	7	11	21,308	71,263
783	2	*	*	*
794	1	*	*	*
864	1	*	*	N.A.
869	1	*	*	N.A.
*		49*	151,476*	977,372*
Total	49	398	$ 1,126,416	$10,324,151
Total County Units	302	5,714	$51,055,473	N.A.
Percent	16	7	2	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 27

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
CAMERON COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
379	2	*	$ *	$ *
504	48	839	3,604,587	51,494,102
559	15	74	438,900	4,571,879
573	15	112	649,676	4,997,512
581	144	1,057	3,095,931	12,740,460
592	5	39	184,003	2,746,317
593	12	46	127,619	1,119,468
594	2	*	*	*
595	7	39	199,104	1,746,527
599	28	104	318,701	2,795,626
701	40	665	2,409,939	8,059,998
703	9	26	78,455	262,393
729	1	*	*	*
783	7	86	214,488	908,849
791	2	*	*	*
793	6	33	92,222	353,344
794	12	305	1,489,446	5,496,113
841	1	*	*	N.A.
842	1	*	*	N.A.
864	12	62	262,404	N.A.
869	2	*	*	N.A.
*		563*	1,777,869*	448,463*
Total	371	4,050	$ 14,943,344	$97,741,051
Total County Units	2,302	30,389	$158,860,935	N.A.
Percent	16	13	9	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 28

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
CHAMBERS COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	1	*	$ *	$ *
581	10	98	216,981	892,929
592	2	*	*	*
599	2	*	*	*
701	2	*	*	*
*		70*	154,867*	1,298,384*
Total	17	168	$ 371,848	$2,191,313
Total County Units	204	1,687	$12,147,688	N.A.
Percent	8	10	3	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 29

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
COLORADO COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	4	*	$ *	$ *
573	2	*	*	*
581	26	150	292,468	1,203,572
592	3	*	*	*
595	1	*	*	*
599	5	13	16,679	146,308
701	6	64	167,961	561,744
783	1	*	*	*
794	2	*	*	*
864	2	*	*	N.A.
869	1	*	*	N.A.
*		176*	912,517*	12,492,322
Total	53	403	$ 1,389,625	$14,403,946
Total County Units	396	3,377	$18,319,674	N.A.
Percent	13	12	8	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 30

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
DEWITT COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
319	3	*	$ *	$ *
504	8	65	351,616	5,023,087
573	1	*	*	*
581	35	129	237,721	978,274
592	4	*	*	*
599	4	*	*	*
701	5	47	102,213	341,849
783	2	*	*	*
791	2	*	*	*
794	4	*	*	*
864	3	*	*	N.A.
869	1	*	*	N.A.
*		468*	2,184,584*	4,409,551*
Total	72	709	$ 2,876,134	$10,752,761
Total County Units	456	3,933	$18,466,871	N.A.
Percent	16	18	16	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 31

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
DUVAL COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
581	7	26	$ 62,492	$257,170
701	1	*	*	*
793	1	*	*	*
864	1	*	*	*
*		9*	13,387*	40,851*
Total	10	35	$ 75,879	$298,021
Total County Units	161	957	$5,531,108	N.A.
Percent	6	4	1	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 32

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
FORT BEND COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	7	22	$ 132,099	$ 1,887,142
559	3	*	*	*
573	5	20	72,617	558,593
581	48	391	942,507	3,878,632
592	5	8	17,032	254,208
593	4	*	*	*
594	2	*	*	*
595	2	*	*	*
599	5	23	56,643	496,874
701	4	*	*	*
703	1	*	*	*
783	1	*	*	*
792	1	*	*	*
793	4	*	*	*
794	5	123	621,264	2,292,488
864	2	*	*	N.A.
869	1	*	*	*
*		173*	632,386*	4,165,464*
Total	100	760	$ 2,474,548	$13,533,401
Total County Units	711	10,475	$76,761,352	N.A.
Percent	14	7	3	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 33

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
GALVESTON COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
379	2	*	$ *	$ *
504	19	206	1,098,951	15,699,301
559	11	37	267,473	2,786,179
573	13	50	268,391	2,064,549
581	230	2,026	5,928,415	24,396,772
592	19	87	393,842	5,878,243
593	7	15	54,589	478,856
594	5	15	59,742	524,058
595	10	35	156,730	1,374,825
599	39	125	498,390	4,371,847
701	44	833	2,832,753	9,474,093
703	8	18	69,168	231,334
783	4	*	*	*
791	4	*	*	*
792	3	*	*	*
793	4	*	*	*
794	40	238	853,383	3,149,016
841	1	*	*	N.A.
864	19	105	426,132	N.A.
869	3	*	*	N.A.
*		187*	856,440*	1,755,646*
Total	485	3,977	$ 13,764,399	$72,184,719
Total County Units	2,427	44,257	$344,126,771	N.A.
Percent	20	9	4	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 34

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
GOLIAD COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
581	6	42	$ 58,770	$241,851
701	1	*	*	*
794	2	*	*	*
864	1	*	*	N.A.
*		12*	24,204*	83,685*
Total	10	54	$ 82,974	$325,536
Total County Units	92	572	$2,744,359	N.A.
Percent	11	9	3	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 35

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
HARRIS COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
365	7	57	$ 434,150	$ 943,804
379	10	125	993,264	1,910,123
394	13	274	1,557,896	3,386,732
395	11	128	1,068,302	2,180,208
504	252	6,422	54,168,646	773,837,802
559	110	1,107	9,242,098	96,271,856
573	84	887	5,743,698	44,182,292
581	1,408	25,959	85,236,069	350,765,716
592	115	672	3,346,866	49,953,228
593	98	415	2,221,479	19,486,662
594	60	861	5,843,994	51,263,108
595	71	937	5,582,152	48,966,250
599	434	2,482	12,183,170	106,869,915
701	174	8,082	34,099,293	114,044,460
703	31	102	425,483	1,423,021
704	1	*	*	*
729	28	501	2,855,424	7,675,873
781	18	127	1,286,019	4,404,175
782	1	*	*	*
783	33	1,091	3,304,901	14,003,819
791	23	248	1,448,921	4,911,596
792	48	398	2,556,685	7,389,264
793	32	540	2,309,943	8,850,358
794	161	2,968	18,349,337	67,709,731
841	8	170	928,182	N.A.
842	1	*	*	N.A.
864	111	1,510	7,088,464	N.A.
869	20	1,343	7,417,079	N.A.
*		14*	62,901*	121,769*
Total	3,363	57,420	$ 269,754,416	$1,780,551,762
Total County Units	27,439	663,289	$1,626,649,887	N.A.
Percent	12	9	17	N.A.

* Combined to Avoid Disclosure.

N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 36

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
HIDALGO COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
365	1	N.A.	$ N.A.	$ N.A.
504	62	3,582	13,952,784	199,325,530
559	11	54	276,111	2,876,157
573	10	56	252,777	1,944,442
581	167	1,288	3,587,147	14,761,921
592	7	10	27,731	413,892
593	15	71	32,790	287,622
594	5	69	589,129	5,167,795
595	5	40	204,745	1,796,013
599	42	170	603,153	5,290,820
701	39	384	1,211,603	4,052,183
703	18	61	261,259	873,776
729	3	*	*	*
783	8	132	309,350	1,310,804
791	2	*	*	*
793	8	39	130,611	500,424
794	13	94	387,587	1,430,212
842	1	*	*	N.A.
864	8	36	139,947	N.A.
869	3	*	*	N.A.
*		375*	1,472,118*	58,232*
Total	428	6,461	$ 23,438,842	$240,089,823
Total County Units	2,530	32,283	$164,749,227	N.A.
Percent	17	20	14	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 37

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
JACKSON COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	1	*	$ *	$ *
581	15	63	118,006	485,621
592	1	*	*	*
593	1	N.A.	N.A.	N.A.
599	2	*	*	*
701	1	*	*	*
783	1	*	*	*
794	3	*	*	*
869	1	*	*	*
*		41*	99,673*	892,004*
Total	26	104	$ 217,679	$1,377,625
Total County Units	246	1,800	$9,735,228	N.A.
Percent	11	6	2	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 38

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
JEFFERSON COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	34	570	$ 3,598,161	$ 51,402,302
559	22	308	1,645,302	17,138,562
573	24	163	840,343	6,464,177
581	236	2,604	7,492,179	30,832,012
592	27	59	164,833	2,460,199
593	14	40	139,428	1,223,061
594	5	95	502,438	4,407,351
595	10	53	236,733	2,076,609
599	69	307	1,060,486	9,302,516
701	32	664	1,949,287	6,519,357
703	4	*	*	*
729	6	47	231,052	621,108
783	2	*	*	*
791	7	29	54,663	185,298
793	6	104	322,253	1,234,687
794	19	143	531,853	1,962,554
841	1	*	*	N.A.
864	25	211	758,305	N.A.
869	7	73	343,470	N.A.
*		64*	340,773*	1,397,040*
Total	550	5,534	$ 20,211,559	$137,226,833
Total County Units	3,816	77,676	$641,690,141	N.A.
Percent	14	7	3	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 39

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
JIM WELLS COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	5	97	$ 652,986	$ 9,328,382
559	1	*	*	*
573	1	*	*	*
581	27	242	762,883	3,139,437
592	3	*	*	*
593	1	*	*	*
594	1	*	*	*
599	7	18	57,852	507,482
701	9	62	211,518	707,418
783	5	50	125,351	531,150
793	1	*	*	*
794	4	*	*	*
864	2	*	*	N.A.
869	2	*	*	N.A.
*		131*	576,928*	1,114,252*
Total	69	600	$ 2,387,518	$15,328,121
Total County Units	592	6,196	$38,659,329	N.A.
Percent	12	10	6	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 40

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
KLEBERG COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	3	*	$ *	$ *
559	2	*	*	*
573	4	*	*	*
581	26	397	934,149	3,844,237
592	1	*	*	*
593	1	*	*	*
595	1	*	*	*
599	8	30	64,032	561,692
701	5	40	141,628	473,674
703	2	*	*	*
783	1	*	*	*
793	1	*	*	*
794	2	*	*	*
864	5	24	68,082	N.A.
869	1	*	*	*
*		67*	232,272*	1,713,853*
Total	63	558	$ 1,440,163	$6,593,456
Total County Units	404	6,035	$34,820,724	N.A.
Percent	16	9	4	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 41

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
LAVACA COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
319	2	*	$ *	$ *
504	4	*	*	*
573	1	*	*	*
581	22	104	157,707	649,001
592	2	*	*	*
593	2	*	*	*
599	4	*	*	*
701	1	*	*	*
794	1	*	*	*
864	1	*	*	N.A.
869	1	*	*	N.A.
*		771*	3,982,115*	7,922,608*
Total	41	875	$ 4,139,822	$ 8,571,609
Total County Units	317	3,172	$ 14,736,866	N.A.
Percent	13	28	28	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 42

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
LIBERTY COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	4	*	$ *	$ *
559	1	*	*	*
573	1	*	*	*
581	30	157	468,950	1,929,837
593	2	*	*	*
594	1	*	*	*
595	1	*	*	*
599	5	14	24,295	213,122
701	8	50	98,450	329,265
783	3	*	*	*
793	1	*	*	*
794	2	*	*	*
869	1	*	*	N.A.
*		65*	238,427*	1,582,498*
Total	60	286	$ 830,122	$ 4,054,722
Total County Units	587	5,063	$ 30,968,548	N.A.
Percent	10	6	3	

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 43

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
LIVE OAK COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
581	10	87	$ 173,384	$ 713,517
595	1	*	*	*
599	1	*	*	*
701	4	*	*	*
783	1	*	*	*
794	1	*	*	*
869	1	*	*	N.A.
*		41*	91,351*	381,353*
Total	19	128	$ 264,735	$ 1,094,870
Total County Units	135	806	$ 3,686,735	N.A.
Percent	14	16	7	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 44

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
McMULLEN COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
581	1	*	*	*
Total	1	*	*	*
Total County Units	16	100	$ 703,703	N.A.
Percent	6	*	*	

* Omitted to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 45

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
MATAGORDA COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
395	1	*	$ *	$ *
504	6	130	342,125	4,887,511
559	2	*	*	*
573	2	*	*	*
581	37	241	568,731	2,340,459
592	5	23	72,577	1,083,253
594	2	*	*	*
595	1	*	*	*
599	6	18	55,596	487,686
701	7	50	197,347	660,026
703	1	*	*	*
783	1	*	*	*
793	1	*	*	*
794	3	*	*	*
864	2	*	*	N.A.
869	2	*	*	N.A.
*		109*	375,710	1,508,096*
Total	79	571	$ 1,612,086	$ 10,967,031
Total County Units	529	4,654	$ 31,926,417	N.A.
Percent	15	12	5	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 46

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
MONTGOMERY COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
365	1	N.A.	$ N.A.	$ N.A.
379	1	*	*	*
394	1	*	*	*
504	6	28	193,149	2,759,285
559	4	*	*	*
573	2	*	*	*
581	47	399	1,108,185	4,560,433
593	2	*	*	*
594	2	*	*	*
595	4	*	*	*
599	8	19	62,275	546,277
701	4	*	*	*
703	2	*	*	*
783	2	*	*	*
791	1	*	*	*
793	1	*	*	*
794	4	*	*	*
864	3	*	*	N.A.
869	1	*	*	N.A.
*		175*	633,332*	3,379,331*
Total	96	621	$ 1,996,941	$ 11,245,326
Total County Units	745	6,554	$ 40,230,753	N.A.
Percent	13	9	5	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 47

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
NUECES COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
379	1	*	$ *	$ *
394	2	*	*	*
395	1	*	*	*
504	27	646	4,121,846	58,883,517
559	29	238	1,503,794	15,664,523
573	25	114	528,259	4,063,535
581	287	3,477	10,516,385	43,277,308
592	14	85	359,516	5,365,911
593	18	54	233,757	2,050,501
594	6	57	318,358	2,792,618
595	19	91	441,528	3,873,058
599	64	319	1,379,717	12,102,781
701	53	584	2,088,814	6,986,003
703	4	*	*	*
729	6	55	109,995	295,687
781	1	*	*	*
783	6	213	575,064	2,436,724
791	3	*	*	*
792	11	37	112,626	325,510
793	6	123	362,089	1,387,317
794	28	241	1,263,110	4,660,924
841	2	*	*	N.A.
864	18	219	914,303	N.A.
869	6	57	236,271	N.A.
*		79*	424,442*	862,299*
Total	637	6,689	$ 25,489,874	$ 165,028,216
Total County Units	4,151	67,516	$ 468,892,287	N.A.
Percent	15	10	5	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 48

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
ORANGE COUNTY
1972

S.I.C NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
379	2	*	$ *	$ *
504	6	73	354,010	5,057,294
559	5	20	176,862	1,842,317
573	3	*	*	*
581	56	435	1,135,254	4,671,827
592	6	10	27,702	413,462
593	2	*	*	*
594	1	*	*	*
595	4	*	*	*
599	12	46	131,507	1,153,574
701	6	84	263,395	880,920
703	2	*	*	*
783	3	*	*	*
791	1	*	*	*
793	1	*	*	*
794	2	*	*	*
864	5	29	78,680	N.A.
*		85*	508,596*	2,466,270*
Total	117	782	$ 2,676,006	$ 16,485,664
Total County Units	786	15,525	$ 132,113,180	N.A.
Percent	15	5	2	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 49

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
REFUGIO COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
581	16	99	$ 182,929	$ 752,797
592	2	*	*	*
599	2	*	*	*
701	1	*	*	*
783	1	*	*	*
793	1	*	*	*
794	2	*	*	*
*		30*	87,657*	456,104*
Total	25	129	$ 270,586	$ 1,208,901
Total County Units	207	1,501	$ 9,129,277	N.A.
Percent	12	9	3	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 50

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
SAN PATRICIO COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	2	*	$ *	$ *
559	3	*	*	*
573	3	*	*	*
581	25	193	432,927	1,781,593
593	2	*	*	*
599	4	*	*	*
701	8	65	166,132	555,627
703	2	*	*	*
783	2	*	*	*
793	1	*	*	*
794	4	*	*	*
864	1	*	*	N.A.
869	2	*	*	*
*		139*	638,563*	4,581,230*
Total	59	397	$ 1,237,622	$ 6,918,450
Total County Units	530	6,618	$ 50,268,819	N.A.
Percent	11	6	2	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 51

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
VICTORIA COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
379	2	*	$ *	$ *
504	6	191	1,080,220	15,431,712
559	6	40	243,729	2,538,848
573	4	*	*	*
581	50	448	1,151,590	4,739,053
592	5	15	52,304	780,659
593	3	*	*	*
594	2	*	*	*
595	3	*	*	*
599	16	50	193,967	1,701,467
701	9	155	521,484	1,744,094
783	2	*	*	*
791	1	*	*	*
793	3	*	*	*
794	5	40	150,392	554,954
864	8	27	58,311	N.A.
869	2	*	*	N.A.
*		361*	1,643,929*	4,358,298*
Total	127	1,327	$ 5,095,926	$31,849,085
Total County Units	1,076	13,458	$89,203,605	N.A.
Percent	12	10	6	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available.

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 52

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
WALKER COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	5	47	$ 248,015	$ 3,543,076
559	5	28	196,295	2,044,740
573	1	*	*	*
581	29	334	853,830	3,513,706
593	1	*	*	*
595	1	*	*	*
599	6	15	51,602	452,650
701	5	79	238,159	796,520
704	1	*	*	*
781	3	*	*	*
783	2	*	*	*
793	1	*	*	*
794	2	*	*	*
864	2	*	*	N.A.
*		56*	194,802*	1,091,053*
Total	64	559	$ 1,782,703	$ 11,441,745
Total County Units	357	6,717	$ 38,340,054	N.A.
Percent	18	8	5	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 53

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
WALLER COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
581	16	89	$ 179,073	$ 736,927
592	2	*	*	*
599	1	*	*	*
701	1	*	*	*
794	1	*	*	*
869	1	*	*	N.A.
*		14*	34,081*	307,774*
Total	22	103	$ 213,154	$ 1,044,701
Total County Units	174	2,840	$ 13,068,359	N.A.
Percent	13	4	2	N.A.

* Combined to Avoid Disclosure.
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

TABLE 54

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
WHARTON COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	5	35	$ 228,972	$ 3,271,036
559	2	*	*	*
573	2	*	*	*
581	44	242	615,694	2,533,724
592	2	*	*	*
593	2	*	*	*
595	3	*	*	*
599	6	12	30,427	266,907
701	10	32	55,570	185,853
729	1	*	*	*
783	1	*	*	*
791	1	*	*	*
794	3	*	*	*
864	4	*	*	N.A.
869	1	*	*	N.A.
*		102*	296,018*	1,423,172*
Total	87	423	$ 1,226,681	$ 7,680,692
Total County Units	683	6,379	$ 37,201,736	N.A.
Percent	13	7	3	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.

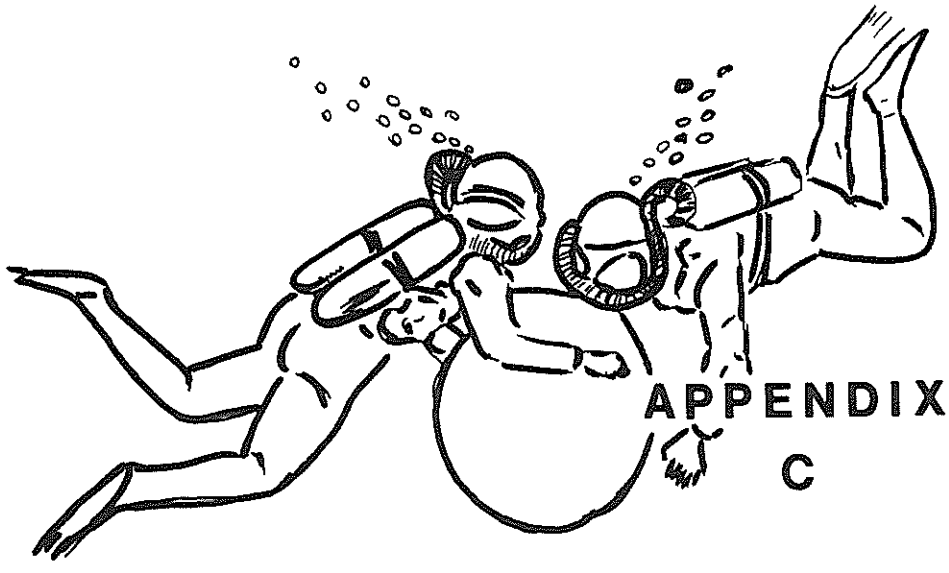
TABLE 55

SELECTED PRIVATE SECTOR ECONOMIC DATA
OF RECREATION AND TOURISM UNITS
WITHIN
WILLACY COUNTY
1972

S.I.C. NUMBER	NUMBER OF UNITS	AVERAGE EMPLOYMENT	ESTIMATED ANNUAL WAGES	ESTIMATED ANNUAL ECONOMIC SIGNIFICANCE
504	2	*	$ *	$ *
559	2	*	*	*
573	1	*	*	*
581	13	66	143,101	588,895
599	3	*	*	*
701	3	*	*	*
783	3	*	*	*
869	1	*	*	N.A.
*		162*	491,319*	5,747,427*
Total	28	228	$ 634,420	$ 6,336,322
Total County Units	181	1,162	$ 4,917,486	N.A.
Percent	15	20	13	N.A.

* Combined to Avoid Disclosure
N.A.: Not Available

SOURCE: Industrial Economics Research Division, Texas Engineering Experiment Station, Texas A&M University, College Station, Texas.



APPENDIX C

APPENDIX C

TEXAS OPEN BEACH LAW

Art. 5415d. State beaches; right of public to free and unrestricted use and enjoyment.

Declaration of Policy

Section 1. It is hereby declared and affirmed to be the public policy of this state that the public, individually and collectively, shall have the free and unrestricted right of ingress and egress to and from the state-owned beaches bordering on the seaward shore of the Gulf of Mexico, or such larger area extending from the line of mean low tide to the line of vegetation bordering on the Gulf of Mexico, in the event the public has acquired a right of use or easement to or over such area by prescription, dedication, or has retained a right by virtue of continuous right in the public.

It shall be an offense against the public policy of this state for any person, firm, corporation, association or other legal entity to create, erect or construct any obstruction, barrier, or restraint of any nature whatsoever which would interfere with the free and unrestricted right of the public, individually and collectively, to enter or to leave any state-owned beach bordering on the seaward shore of the Gulf of Mexico, or such larger area, extending from the line of mean low tide to the line of vegetation bordering on the Gulf of Mexico, in the event the public has acquired a right of use or easement to or over such area by prescription, dedication, or has retained a right by virtue of continuous right in the public.

It shall be an offense against the public policy of this state for any person, firm, corporation, association or other legal entity to create, erect, or construct any obstruction, barrier or restraint which would interfere with the free and unrestricted right of the public, individually and collectively to the lawful and legal use of, any property abutting upon or contiguous to the state-owned beach bordering on the seaward shore of the Gulf of Mexico upon which the public has acquired a prescriptive right.

Be it provided, however, that nothing in this Act shall prevent any agency, department, institution, subdivision or instrumentality of this state or the federal government from erecting or maintaining any groin, seawall, barrier, pass, channel, jetty or other structure as an aid to navigation,

protection of the shore, fishing, safety or other lawful purpose authorized by the Constitution or laws of this state or the United States.

The requirements of free and unrestricted rights of ingress and egress over areas landward of the line of vegetation shall be deemed to be fully satisfied by access roads or ways, now existing and available to the public, or which by or with the approval of any governmental authority having jurisdiction, may be provided in the future.

Be it provided further, that nothing in this Act shall be construed as in any way affecting the title of the owners of land adjacent to any state-owned beach bordering on the seaward shore of the Gulf of Mexico, or to the continuation of fences for the retention of livestock across sections of beach which are not accessible to motor vehicular traffic by public road or by beach.

Be it provided further, that none of the provisions of this Act shall apply to the beaches on those islands or peninsulas that are not accessible by a public road or ferry facility, so long as such condition shall exist.

Actions' prima facie evidence of right of user and prescriptive easement in public

Sec. 2. In any action brought or defended under this Act or whose determination is affected by this Act a showing that the area in question is embraced within the area from mean low tide to the line of vegetation shall be prima facie evidence that:

(1) the title of the littoral owner does not include the right to prevent the public from using the area for ingress and egress to the sea;
(2) there has been imposed upon the area subject to proof of easement a prescriptive right or easement in favor of the public for ingress and egress to the sea.

Definitions

Sec. 3. a. The term "line of vegetation" means the extreme seaward boundary of natural vegetation whic spreads continuously inland. In any area where there is no clearly marked vegetation line (as, for instance, a line immediately behind well-defined dunes or mounds of sand and at a point where vegetation begins) recourse shall be had to the nearest clearly marked line of vegetation on each side of such unmarked area shall be the line of constant elevation connecting

the two clearly marked lines of vegetation on each side. In the event the elevation of the two points on each side of the area are not the same, then the extension defining the line reached by the highest waves on the Gulf shall be the average elevation as between the two points; provided, however, that where there is no clearly marked line of vegetation, such extended line shall in no event extend inland further than two hundred (200) feet from the seaward line of mean low tide. The "line of vegetation" shall not be affected by the occasional sprigs of salt grass upon the mounds or dunes, or seaward from them, and shall not be affected by artificial fill, the addition or removal of turf, or by other artificial changes in the natural vegetation of the area. Where such changes have been made, and thus the vegetation line has been obliterated or has been created artificially, then the line of vegetation shall be determined in the same manner as in those areas where there is otherwise no clearly marked "line of vegetation"; however, where there is a vegetation line consistently following a line more than two hundred (200) feet from the seaward line of mean low tide, this two hundred (200) foot line shall constitute the landward boundary of the area subject to public easement until such time as a final court adjudication shall establish this line in another place.

b. The term "highest wages" means the highest swell of the surf with such regularity that vegetation is prevented, and does not refer to the extraordinary waves which temporarily extend above the line of vegetation during storms and hurricanes.

c. The term "beach" as used herein means that area subject to public use and easement as defined in Section 1.

d. "Person" as used herein includes natural persons, corporations and associations.

e. "Littoral owner" means the owner of land adjacent to the shore and includes anyone acting under the littoral owner's authority.

Construction of term "public beaches"

Sec. 4. Nothing herein shall in any way reduce, limit, construct or vitiate the definition of public beaches as defined from time immemorial in law and custom.

Injunction; protection of rights of ingress and egress

Sec. 5. The Attorney General, any County Attorney, District Attorney, or Criminal District Attorney of the State of Texas is hereby authorized and empowered, and it shall be his, or their duty to file in the District Court of Travis County, Texas, or the county wherein such property is situated, actions seeking either temporary or permanent court orders or injunctions to remove any obstruction or barrier, or prohibit any restraint or interference, restricting the right of the public, individually or collectively, to free and unrestricted ingress and egress to and from the state-owned beaches, or such larger area, extending from the line of mean low tide to the line of vegetation, in the event the public has acquired a right to use or easement to or over such area by prescription, dedication, or has retained a right in the public, or any property abutting upon or contiguous to the state-owned beach bordering on the Gulf of Mexico upon which the public has acquired a prescriptive right, and in such proceedings, the Attorney General, County Attorney, District Attorney, or Criminal District Attorney, shall also be empowered to bring an action seeking recovery of the costs of removing any obstruction or barrier if the same be removed by public authorities pursuant to any order of such court.

Declaratory judgment suits

Sec. 6. Any littoral owner whose rights may be determined or affected by this Act shall be premitted to bring suit for a declaratory judgment against the State of Texas to try such issue or issues. Service of citation in such cases may be had by serving the Attorney General of Texas.

Study committee

Sec. 7. Because of certain problems peculiar to the various beaches of Texas, a study committee is hereby authorized to study the development of those beaches. The committee shall be composed of three (3) Representatives to be appointed by the Speaker of the House of Representatives, three (3) Senators to be appointed by the Lieutenant Governor of the state, and, as ex officio members, the Land Commissioner of the State of Texas, or a representative appointed by such Land Commissioner, the Chief Engineer of the Highway Department of the State of Texas, or a representative appointed by such Chief Engineer, and a representative of the Attorney General to be appointed by the Attorney General. The expense incurred by the legislative members of the Committee in performing their duty shall be payable one-half out of the Contingent Expense Fung of the House and one-half out of the Contingent

Expense Fund of the Senate. Such interim committee shall examine into the special conditions prevailing as to the shore line in the various areas, and shall file its report to the Legislature, whether in Special or General Session, at the earliest time compatible with the peformance of its duties. The report shall include recommendations for legislation, including the following subjects:

a. the most practical method of procuring the right-of-way necessary for construction of essential parallel highways and for vehicular parking areas (to facilitate access to the beach) all to be situated landward and above the beach;

b. method of procuring easements for egress and ingress between such parking areas and the beach;

c. procedure for negotiation and execution of cooperative agreements between the state and affected landowners for acquisition by gift or purchase of such rights-of-way and easements;

d. recognition of rights in such landowners to construct works, including groins, for the protection of their property and meeting the standards to be prescribed in such legislation;

e. method of negotiations with landowners for additional easements or deeds for park areas adjacent to the beach, for the use and pleasure of the public, provided such lands or easements can be obtained without cost to the state;

f. any change necessary to bring general legislation into conformity with the fixed procedures applicable to National Seashore Areas, to the extent that lands along the coast may be designated to a National Seashore Area; and

g. such other related matters as in the opinion of the interim committee should be included in such report so as to facilitate the development of Texas' beaches as public recreational areas and to further their development as a tourist attraction.

Power of commissioners court; rules and regulations; violations; penalties

Sec. 8. The Commissioners Court of any county shall have and is hereby granted, the authority to regulate motor vehicular traffic and the littering of such state-owned beaches, or such larger area, extending from the line of mean low tide to the line of vegetation bordering on the Gulf of Mexico, in the event the public has acquired a right

of use or easement to or over much area by prescription, dedication, or has retained a right by virtue of continuous right in the public, within the limits of said county. Such regulations may include the speed of motor vehicles in accordance with existing state laws and rules or regulations promulgated by the Texas Highway Commission, and the zoning of designated areas for non-vehicular traffic. The Commissioners Court may declare the violation of such regulations to be and the same shall be considered as a violation of this Act, and the Commissioners Court may prescribe civil penalties therefore not to exceed a penalty in the payment of Two Hundred Dollars ($200.00) in money.

The right of the public to use the public beaches covered in this Act shall remain inviolate subject to the rules and regulations promulgated by the Commissioners Court having jurisdiction. Acts 1959, 56th Leg., 2nd C.S., p. 108, ch.19.