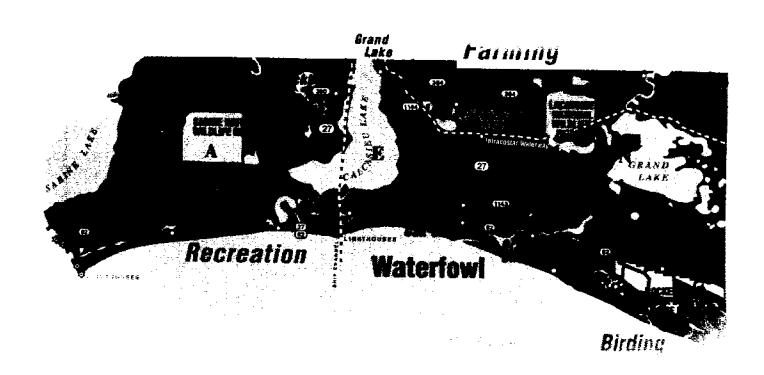
# CAMERON PARISH

LOAN COPY ONLY

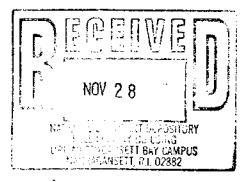
# CHALLENGES AND OPPORTUNITIES

An Economic Development Assessment



# CAMERON PARISH: CHALLENGES AND OPPORTUNITIES

An Economic Development Assessment



Coastal Economic Strategy Series Louisiana Sea Grant College Program Louisiana State University

This publication was produced by the Louisiana Sea Grant College Program, a part of the National Sea Grant College Program, maintained by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The Louisiana program is also supported by the state of Louisiana.

The research reported herein resulted from the Coastal Economic Strategy Development Project, conducted by Louisiana Sea Grant and partially funded by the U.S. Economic Development Administration. November 1997.

To order additional copies of this publication contact:

Louisiana Sea Grant College Program Communications Office Wetland Resources Building Louisiana State University Baton Rouge, LA 70803-7507

Phone: (504) 388-6448 Fax: (504) 388-6331

## TABLE OF CONTENTS

Pa	ige
SUMMARY	., 1
LAND LOSS AND ENVIRONMENTAL ISSUES	1
Immediate Action	2
Near-Term Action	2
Longer-Term Action	
COMMERCIAL FISHERIES	2
Immediate and Near-Term Action	3
Longer-Term Action	3
AGRICULTURE	
Immediate Action	
Near-Term Action	
Longer-Term Action	4
COASTAL RECREATION AND TOURISM	5
Immediate Action	
Near-Term Action	
Longer-Term Action	6
BUSINESS AND INDUSTRIAL DEVELOPMENT	6
Immediate and Near-Term Action	7
Longer-Term Action	7
PHYSICAL INFRASTRUCTURE	8
Immediate Action	8
Near-Term Action	8
Longer-Term Action	9
COMMUNITY LEADERSHIP: REINVENTING GOVERNMENT	9
INTRODUCTION	11
BACKGROUND	11
Study Team Approach	11
Cameron's Preparedness for Economic Development in the 21st Century	13
Chapter References	16

LAND LOSS AND ENVIRONMENTAL ISSUES	17
Existing Situation	17
Outlook	18
Strengths	19
Weaknesses	19
Opportunities	20
Immediate Action	
Near-Term Action	20
Longer-Term Action	21
COMMERCIAL FISHERIES	24
Existing Situation	
Outlook	
Strengths	
Weaknesses	
Opportunities	
Immediate and Near-Term Action	29
Longer-Term Action	
Chapter References	
AGRICULTURE	31
Existing Situation	31
Outlook	31
Strengths	32
Weaknesses	32
Opportunities	33
Immediate Action	33
Near-Term Action	33
Longer-Term Action	33
Chapter References	34
COASTAL RECREATION AND TOURISM	35
Existing Situation	35
Outlook	37
Strengths	38
Weaknesses	39
Opportunities	40
Immediate Action	40
Near-Term Action	42
Longer-Term Action	43
Chapter References	······································

BUSINESS AND INDUSTRIAL DEVELOPMENT	45
Existing Situation	45
Outlook	50
Strengths	53
Weaknesses	53
Opportunities	53
Immediate and Near-Term Action	
Longer-Term Action	56
Chapter References	57
PHYSICAL INFRASTRUCTURE	59
Existing Situation	59
Outlook	61
Strengths	62
Opportunities	63
Immediate Action	., 63
Near-Term Action	64
Longer-Term Action	64
Chapter References	65
COMMUNITY LEADERSHIP: REINVENTING GOVERNMENT	66
Chapter References	70
APPENDIX A	72
APPENDIX A	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
APPENDIX B: ECONOMIC ANALYSIS	79
SHIFT-SHARE ANALYSIS	80
What is Shift-Share Analysis?	80
Why do we use Shift-Share Analysis?	80
How do we use Shift-Share Analysis?	80
What are the factors?	80
What do these factors tell us?	81
What are the implications to Cameron Parish?	81
LOCATION QUOTIENT	81
What is the Location Quotient?	81
Why do we use the Location Quotient?	82
What does the Location Quotient tell us?	. <i></i> 82
What are the implications to Cameron Parish?	82

### LIST OF TABLES

Tables		Page
ì	Commercial Fishery Landings by Louisiana Parish, 1995	25
2	Commercial Fisheries Production Volume and Value for Cameron Parish, Louisiana, 1994-1996	26
3	Impact of Travel on Cameron Parish, 1991-1995	36
4	Shift-Share Explanation of Employment Changes in Cameron Parish Relative to U.S., 1985-1993	46
5	Shift-Share Explanation of Employment Changes in Cameron Parish Relative to Louisiana, 1985-1993	46
6	Selected Location Quotients for Cameron Parish Relative to U.S., 1991-1993	47
7	Fisheries and Wildlife Production in Cameron Parish, 1995	49
A1	Population Statistics for Cameron Parish, Coastal Study Parishes, and Louisiana	73
A2	Population Estimates for Coastal Study Area, 1990-1994	74
<b>A</b> 3	Population per Square Mile, Median Age, and Education Levels for Cameron Parish and Louisiana	75
A4	Personal Income and Income per Capita for Cameron Parish and Louisiana	75
A5	Statistics on Public Assistance for Cameron Parish and Louisiana	76
A6	Employment and Earnings Statistics by Sector for Cameron Parish	77
A7	Employment Data and Subsequent Change from 1985-1993 for U.S., Louisiana, and Cameron Parish	78

Bl	Employment Data and Subsequent Change: United States,  1985-1993	
B2	Cameron Parish Shift-Share Analysis Relative to United States, 1985-1993	
В3	Employment Data and Subsequent Change: Louisiana, 1985-1993	
B4	Cameron Parish Shift-Share Analysis Relative to Louisiana, 1985-1993	
B5	Cameron Parish Location quotients, 1985-1994	

### CAMERON PARISH: CHALLENGES AND OPPORTUNITIES

#### SUMMARY

A summary of the development opportunities by key issue or economic sector is presented below. The opportunities are discussed in terms of immediate actions/ activities projects that can be done now, near-term that can be realized within the next two years, and longer-term ones that will require five or more years.

This report contains the observations and recommendations made by the 14-member Cameron Parish Study Team (study team) following an intensive economic development assessment of the parish conducted during the week of January 6-10, 1997. The assessment had as its primary objectives to (1) help identify the parish's key economic development challenges and opportunities; (2) help develop sustainable, environmentally sensitive programs to capitalize on opportunities; (3) make leaders and the general public aware of these opportunities and challenges and their potential role in helping the area's economy; and (4) develop ideas that encourage government, business, and the community to work cooperatively on approaches that link economic prosperity and environmental stewardship. The assessment was performed using a rapid rural appraisal (RRA) which differs considerably from the more traditional, time consuming, and expensive methods of collecting information and reporting.

# LAND LOSS AND ENVIRONMENTAL ISSUES

In terms of land area, Cameron Parish is the largest parish in Louisiana, covering over 1,400 square miles (900,000 acres). Of this total, Louisiana Department of Wildlife and

Fisheries 1988 data identified approximately 750,000 acres to be coastal wetlands. Many of the coastal marsh habitats in the parish, however, are disappearing at an average annual rate exceeding two square miles per year. Cameron Parish wetlands are extremely valuable to all citizens, not only because of the commercial, recreational, and cultural benefits they provide to the parish, but also because of the important biological and physical process benefits. Important coastal wetland functions include:

- providing a buffer against hurricanes and storms
- holding excess flood water during high rainfall or high tides
- recharging groundwater aquifers used for drinking and irrigation
- cleaning water by filtering pollutants and taking up nutrients

High rates of coastal wetland loss within the parish are expected to continue if existing restoration projects are not implemented and maintained. The future of Cameron Parish wetlands will be bleak if additional aggressive action is not taken. Seafood landings will decline, oil and gas production infrastructure (pipelines, production facilities, processing stations) will be at risk, public utility company infrastructure (utility lines, transfer stations, etc.) will be jeopardized, and the potential for naturebased tourism enterprises will decline. In addition, all Cameron Parish communities (Holly Beach, Cameron, Creole, Grand Chenier, Hackberry, and Grand Lake/Sweet Lake) will become much more vulnerable to tidal surges from future tropical storms and hurricanes.

There is also a real possibility that without quick action Louisiana Highway 82 will be lost. This highway connects the east and west halves of the parish and represents a vital hurricane evacuation route for Johnson Bayou residents. Additionally, valuable marshes located just north of the highway are at great risk from saltwater intrusion.

Wetland resource-based opportunities are limitless in Cameron Parish. Sustainable development is intricately linked to healthy coastal wetlands, and direct efforts must be made to protect and conserve the parish's productive marsh habitat.

#### Immediate Action

- Organize and appoint an official Wetland Advisory Committee.
- Organize and appoint a parishwide Drainage Board Advisory Group.
- Help revitalize the concept of a Coalition of Coastal Parishes.

#### Near-Term Action

- Appoint/retain an official Cameron Parish environmental project staff person.
- Develop a comprehensive Cameron Parish Wetland Conservation Plan.
- Develop a detailed wetland mitigation program.
- Develop a comprehensive Cameron Parish Drainage Plan.
- Investigate the feasibility of incorporating a wetland functions and values curriculum in the Cameron Parish public school system.
- Initiate a joint meeting between the Cameron Parish Police Jury and the Jefferson County, Texas, local government to discuss issues relative to the proposed, expanded use of Sabine River water.

- Seek technical information on the impacts of continued sand mining on the beaches and cheniers of Cameron Parish.
- Continuously nominate beneficial restoration projects for funding through Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA).

#### Longer-Term Action

- Seek state and national support for reinstatement of Outer Continental Shelf (OCS) mineral revenue sharing.
- Investigate the feasibility of establishing an increased state oil and gas severance tax revenue-sharing formula.
- Seek approval for using locally raised revenues as cost sharing for federal restoration funding.
- Facilitate an effective engineering solution to the highway erosion crisis in western Cameron Parish.
- Efforts should be made by the parish to assure that opportunities for creating or restoring interior marshes through the beneficial placement of dredge material.
- Seek long-term funding for priority restoration projects.
- Seek state and national support for correcting the problems caused by navigation and flood control projects.

#### COMMERCIAL FISHERIES

According to the U.S. Department of Commerce fisheries statistics, in 1994 the dockside value of Louisiana's fishery products was \$336 million. The state's 1.7 billion pounds of fishery products represented 42 percent of the total commercial fishery landings in the Gulf of Mexico region for that year. Cameron Parish ranks second in total landings for the state, and in 1995, some 279 millions pounds crossed Cameron docks. The area has historically

been known for its fisheries production, and the industries associated with this production are primarily oysters, menhaden, shrimp, crabs, and some finfish. All of these industries are well-established. Current levels of production and employment have remained relatively stable, and these figures are not likely to change in the immediate or near-term.

Menhaden represents the most important fishery in terms of volume of production and value for Cameron Parish. The production volume and dockside value of shrimp have remained fairly constant over the last several years. The commercial finfish fishery has declined in recent years due to Act 1316—the phasing out of gill nets—which passed in 1995. No change in these laws is likely to take place and affect the fishery. Crabs appear to be a large, silent economy in Cameron Parish. The value of this fishery has recently surpassed that of the finfish industry. Oyster production is limited to Calcasieu Lake and West Cove.

The issues being faced by the commercial fishing industry are long term and regional. It is expected that the industry will experience some contraction in the next few years, which will result in the loss of jobs. The nearshore finfish industry will most likely feel the greatest impact, but it is still uncertain how great this impact will be. In addition, there is a notable lack of organizational leadership within commercial fisheries. There are no quick fixes for this industry. But awareness and sensitivity to the issues facing it will help parish leaders assist this industry over the long-term. The parish might consider helping by implementing the following strategies and actions.

#### Immediate and Near-Term Action

 Regulatory changes are inevitable and the commercial fishing industry will further

- contract. Parish leaders should be prepared for an increased level of unemployment and consider offering retraining opportunities.
- Efforts should be directed at educating the general public and other industries in the parish about the economic importance, as well as the cultural significance of the industry both locally and regionally.
- Fisheries leaders should be sought and included in all strategic planning efforts.
- Parish leaders should participate, as well as encourage industry participation, in state, regional, and federal regulatory processes that affect this industry's resources.
- Parish leaders should encourage resource allocation decisions that ensure that no single user group acquires exclusive rights to access.

#### Longer-Term Action

- A public dock is badly needed by the industry. It could serve needs for fuel, ice, and safe harbor. Prior to embarking on such an effort, however planners will have to prepare a detailed analysis of the outlook for Cameron and regional fisheries.
- A crab processing facility on Calcasieu
   Lake would enable the parish to capture
   this important value-added opportunity.

#### **AGRICULTURE**

The 1992 Census of Agriculture reports 258,035 acres of land in farms in Cameron Parish, divided among 453 farms (U.S. Department of Commerce). Average farm size in the parish is 570 acres, compared with the state average of 306 acres. However, the market value of agricultural products sold per farm is only \$16,251 in Cameron Parish, versus \$62,666 statewide. Land suitable for crops is limited in Cameron Parish. The primary agricultural commodities are rice (20 producers), soybeans (six producers),

hay (312 producers), and cattle (440 producers).

In terms of the outlook, rice production in southwest Louisiana and Cameron Parish has higher costs and lower yields than other regions of Louisiana and the U.S. making it difficult to compete in global markets. This disadvantage has been offset to an extent by federal agricultural policy, which has historically provided the price and income support that made rice production profitable in the southwest area of the state. The Federal Agricultural Improvement and Reform (FAIR) Act of 1996 fundamentally changed federal agricultural policy by removing the link between income support payments and farm prices.

Without further changes in federal agricultural policy, rice producers will be totally dependent on market prices for income after 2002. The future of rice production in Cameron Parish will depend on world market prices, the productivity of individual farming operations, and the management ability of farm operators. Soybeans have never received income support from federal programs, and producers will not receive lump sum payments under the FAIR Act

Currently, cattle ranching and hay production are the next best alternative uses for agricultural land in Cameron Parish.

These lands could also be used for crawfish farming and for waterfowl hunting purposes.

#### Immediate Action

 Market prices for rice and soybeans have been favorable in the last two years and are expected to continue so in the near future. Cattle and calf prices should begin an upswing in the cattle cycle in the near

- future that could continue for the next several years.
- Crawfish production is an opportunity that is extremely labor intensive. For more information, contact Kevin Savoie, the fisheries agent for Cameron and Calcasieu parishes.

#### Near-Term Action

- Research and technology may offer solutions to some of the problems faced by Cameron Parish rice producers.
   Genetically altered seed varieties will be coming into the market in the next several years.
- Some producers in southwest Louisiana are currently experimenting with sugarcane as an alternative crop. Producers are utilizing rail and truck transport to existing mills in the southeast portion of the state. However, rail transport is not available in Cameron Parish and may prevent consideration of this alternative.
- Lease-fee hunting has long been a source of outdoor recreation for Louisianians who do not own lands of suitable size or quality for hunting. This type of hunting often represents a major source of income for landowners.

#### Longer-Term Action

- Agricultural producers will need to evaluate the potential for alternative crops, such as kenaf, in comparison with the traditional crops of rice, soybeans, hay, and cattle.
- Landowners should also be prepared to consider other nonagricultural alternatives for land use, including government programs for returning converted wetlands to their original condition.

# COASTAL RECREATION AND TOURISM

Tourism offers an excellent opportunity for rural parishes such as Cameron to diversify their economic base. Cameron has a cultural heritage and wealth of natural resources that can be a source for capitalizing on tourism, especially in the increasingly popular nature-based tourism.

Cameron can derive great benefits from nature-based tourism, but it is not likely, nor desirable, that large developments take place. Local ownership and investment in tourist attractions and services are essential. Cameron is already well known for birding, but currently this is primarily a day-trip market. Other visitors come to the area to use the resources, but do not spend much money. Cameron needs to capture this revenue through tourism-related service industries such as hotels and cabins.

#### Immediate Action

- Hospitality training is needed not only for the front-line workers in hotels and restaurants, but also for employees at bait shops, convenience stores, the parish library, gas stations, government offices, the sheriff's office, ferry landings, and everyone who is likely to serve visitors.
- Though brochures were developed in the past, new ones should be printed updating information. They should be kept updated and on the shelves.
- Highway pull-offs along LA 82 should be investigated and promoted to accommodate not just emergency situations, but also birders, anglers, and outdoor enthusiasts.
- Access to water-based recreation is a priority among outdoor enthusiasts, particularly the availability of bank or

- pier fishing, which is extremely important for the many who cannot afford boats or guides. In addition to the development along the Jetty Road, a fishing pier at Holly Beach would be well utilized.
- Nonhunting and fishing opportunities such as birding, shelling, biking, hiking, and the swimming beaches need to be more effectively promoted, taking advantage of the recently designated, Creole Nature Trail National Scenic Byway.
- Rutherford and Holly beaches are very nice but in need of restrooms and possibly concessions.
- The parish should continue to support the development of private-sector marsh and wildlife tours in the wildlife refuges.
- There needs to be continued promotion of the Fur and Wildlife Festival as an authentic event and revitalization of the Cajun Riviera Festival is needed.
- The Internet is a tremendous tool for marketing and for obtaining information, as travellers can become well informed about Cameron when considering their travel plans. It is a relatively inexpensive mechanism for providing information to tourists and potential tourists.

#### Near-Term Action

- The shortest route in terms of actual mileage from Houston to New Orleans is LA 82 to LA 14 to US 90. This would serve as a perfect nature-based tourism route, including a continuation of the Texas Coastal Birding Trail. It could be featured as "Alternate 10."
- Parish officials should arbitrate between Holleyman-Sheely-Henshaw Sanctuary representatives and the Little Florida Subdivision to reach reasonable accommodation between the subdivision residents and naturalists.

- Because of the popularity of shore and surf fishing in Cameron Parish, the beach stabilization rock breakwaters parallel to the beach on Highway 82 are a valuable asset. Maintenance of access to this shore fishing opportunity is essential.
- Docks and stores for bait, gas, ice, and other supplies are needed by fishing guides and the public. Having these facilities would also capture money within the parish that anglers are currently spending outside the parish.
- There are over 15,000 hunters who commute from outside the parish.
   Accommodations, supplies, and boat launching and docking facilities are needed to keep these people overnight.

#### Longer-Term Action

- Monkey Island represents a rare opportunity for the parish. Cameron and developers have the opportunity to carefully plan attractively-built marinas, motels, service facilities, stores, condominiums, and entertainment areas.
- The parks developed by the Cameron recreation districts all are well used and offer local recreational opportunities. The areas need to be studied, and the potential to add or redirect the recreational development is needed.
- It would be very desirable if a state park was constructed in Carneron Parish as part of the implementation of the state's 1997-2012 State Parks Master Plan.

# BUSINESS AND INDUSTRIAL DEVELOPMENT

In terms of employment, the parish experienced growth in the construction, manufacturing, retail trade, finance, insurance, real estate, and the service sectors between 1985 and 1993. In some cases,

employment growth was quite strong, surpassing growth rates in the state or the country as a whole. Yet, one of the hardest hit sectors for Cameron Parish was the mining sector.

Oil and gas extraction has historically been of great importance to Cameron Parish, not just because of the large deposits and activities that take place within the parish's jurisdiction, but also because of its proximity to oil and gas reserves in the Gulf of Mexico. Sea Grant estimates that as much as 60 percent of the nonagricultural employment in Cameron Parish is somehow related to oil and gas extraction.

Fisheries and wildlife are also a big part of the economic base of Cameron Parish. In 1995, fisheries and wildlife produced a gross farm value of \$28.5 million in the parish with \$21.3 million a result of two products, shrimp and menhaden. Seafood handling and processing are by far the largest value added/export activities within the parish. The agricultural sector does not have as big an economic impact on Carneron Parish as do fisheries and wildlife. Waterway use is an important aspect of the economic base of Cameron Parish. In 1994, there were 126 people employed in water transportation. Nature-based tourism, also known as ecotourism, provides a nonconsumptive means of using the wildlife and land resources within the parish. That same year there were an estimated 900 people employed in local commerce activities in the parish.

Grand Lake, in the northern part of the parish, is experiencing some population growth associated with suburban growth in Lake Charles and relocations from the southern part of Cameron Parish. This growth offers business opportunities in commercial retail and services.

The oil and gas extraction sector is, according to Dr. Loren C. Scott, an economics professor at LSU, "one of the truly bright spots in the (state's) economy...". The outlook is one of optimism and high expectations for deepwater Gulf exploration and production for the next two decades. There is, however, concern over the deteriorating physical infrastructure (notably roads, bridges, ports and terminals, industrial lands, water supplies, solid waste disposal, sewerage, etc.) and the need for new construction. There is also mounting concern over fiscal issues and a trained work force, as well as the mini-boom's impact on coastal wetlands.

The forecast for water transportation also looks promising, while the outlook for coastal recreation and tourism activities is mixed. Tourism is down slightly in New Orleans, yet the southwest Louisiana casinos continue to draw visitors. The number of Cameron Parish visitors should continue to grow with the designation of the Creole Nature Trail as a National Scenic Byway. Some of the biggest winners in the recent U.S. economy in terms of employment have been in the services, financial, and wholesale/retail trade sectors. As stated earlier, these sectors, plus construction, make up a big portion of local commercial activities.

#### Immediate and Near-Term Action

- Update Cameron's directory of business and industry.
- Simultaneously, a compilation needs to be made concerning available industrial development properties within the parish.
- The parish's industrial development interests need to determine a development direction and goals. There needs to be broad-base support for any initiatives, and the Cameron community, particularly the

- business and service sector, must help identify a track and set priorities.
- An economic development strategy can be planned that carefully considers "how to get there from here". That is, what approach(es) should be used. It must be a parish-led effort that involves the community's leadership and the citizenry through committees. Two approaches to be considered are (1) recruitment of industrial, wholesale/retail trade, and service businesses, and (2) resident business and industry retention and expansion.
- Once a plan is designed, parish leaders must implement it and monitor the results over a period of time. A plan that sits on a shelf is not a plan, it is simply a dream. It is important to remember that business and industrial development takes time and effort.

#### Longer-Term Action

- The parish should undertake a Cameron Parish Resident Industry Program within the next year or so. As part of the program, the parish should work with IMCAL and McNeese's Small Business Development Center and set up a small business education program.
- To prepare for any opportunity that might arise, the parish should coordinate efforts of all development groups.
   Presently there is a Chamber of Commerce, an Economic Development Task Force, a Tourism Commission, and two port commissions. These groups need to be better coordinated and work together.
- Not enough can be said about networking with other interests in the region and state, whether it is tourism development, port and transportation development, or organizations exploring means for coping with changes in other sectors. Regional approaches are needed

to solve many of these crucial problems; otherwise, little long-term progress can be made.

#### PHYSICAL INFRASTRUCTURE

Electric power is supplied to homes, businesses, and industrial facilities in Cameron Parish by Gulf States Utilities (GSU) and the Jefferson Davis Electric Cooperative (JDEC). The two companies that provide natural gas to Cameron Parish are ENTEX and United Gas Pipeline Company. Five public water systems serve the parish. Cameron's main transportation arteries are state highways 27 and 82.

Highway 82 is in serious jeopardy. The highway is not only an integral transportation artery for southwest Louisiana and southeast Texas, but also a hurricane evacuation route for the communities of Holly Beach, Constance Beach, Peveto Beach, Ocean View Beach, and Johnson Bayou. A preliminary feasibility report estimated that the highway preservation efforts would cost between \$24 million and \$84 million

Another key concern for vehicular traffic is the toll crossing of the Calcasieu River Ship Channel. Vehicles must now use a ferry system that often exceeds 1,000 vehicles per day. For a number of years, local leaders have sought the construction of a high-rise fixed or mid-level moveable bridge. Preliminary cost estimates range from \$31 million for a mid-level moveable bridge with a vertical lift span to \$51 million for a similar bridge with twin swing spans, and \$44 million for a high-level, fixed structure. A two-lane tunnel has been estimated to cost \$83 million. Some consideration has been given to adding a second ferry in lieu of a bridge crossing.

The parish has no rail or scheduled air service. Water transportation remains a major form of transportation for the parish. The Calcasieu Ship Channel, Mermentau River, and Gulf Intracoastal Waterway are the primary routes for the movement of waterborne cargo to and from the parish. At this time, there are no public port facilities in the parish.

Cameron's industrial development—notably seafood processing and support operations for the oil and gas sector—has taken place on properties owned by private interests. Prime industrial properties are in short supply. The demand has spurred interest in additional lands for industrial development, particularly in the vicinity of Hackberry and Cameron, and a great deal of attention has focused on Monkey Island.

#### Immediate Action

- Industrial development interests have noted a need for a comprehensive inventory of developable properties for Cameron Parish.
- The Monkey Island bridge issue must be expedited. Industrial development on the island will not take place without it.
   Once this is accomplished master planning for Monkey Island should be fast-tracked.
- The protection and restoration of Highway 82 must be made a top priority for the entire parish, in fact, Louisiana.

#### Near-Term Action

 The parish, in cooperation with IMCAL and the Imperial Calcasieu RC&D, needs to take a very serious look at the status and needs of roads, streets, water systems, sewage and solid waste disposal systems, and prepare a plan. This is

- needed in order to rank and undertake projects that involve millions of dollars to respond to infrastructure needs.
- IMCAL, the West Cameron Port Commission, and navigation interests in the Hackberry area propose the establishment of an anchorage area. The project has reached a point at which funding is critical, and its future depends on the interest of the Lake Charles-area maritime community, notably the Harbor and Terminal District. Unless this interest and a financial commitment is secured, the project is not likely to take place in the near-term.
- In 1992, the U.S. Army Corps of Engineers began a reconnaissance study for the Port of Cameron located on the Cameron Loop. According to the Corps, the costs of all alternative channel dimensions were always greater than the average annual benefits returned for all the plans. The Corps thus suspended the study and placed the project in an inactive category. But times have radically changed, and Cameron leaders should consider requesting that the Corps or the state of Louisiana (through DOTD) revisit this project in light of the increased deepwater activity that has been witnessed throughout the region.
- The possibility of obtaining an additional ferry from DOTD for the Calcasieu Ship Channel crossing should be explored, as this presents an interim solution to traffic congestion and delays. This action is also discussed in the Coastal Recreation and Tourism Section.

#### Longer-Term Action

 Carneron's greatest advantage from an industrial development standpoint is its proximity to the Gulf of Mexico, and deepwater drilling presents an outstanding

- opportunity. It has the opportunity for becoming "Port Fourchon West," or a staging area for the new generation of offshore support vessels. But the window of opportunity is a relatively small one (up to five years) as Cameron faces stiff competition from Sabine Pass and Galveston.
- If the community wants this to take place, it will need to tackle the issue of local port development funding through an ad valorem tax. It can no longer entirely rely on federal and state monies.

#### COMMUNITY LEADERSHIP: REINVENTING GOVERNMENT

Strong leadership is essential for sustained economic development to take place in Cameron. Furthermore, such leadership must be found beyond the traditional, governmental arena. Cameron, much like other parishes in the state, has historically relied on its elected officials to carry the overwhelming share of leadership responsibilities. The leadership burden needs to be better distributed with civic and business groups, and the citizenry at-large.

Cameron has several organizations that can help expand the leadership base. The Chamber of Commerce and Lions Club are the most prominent groups and in a position to recruit new members and take on additional economic development responsibilities. Church groups and commercial fisheries associations might also consider becoming active in the field, particularly in the conflict resolution realm.

Leadership is no longer just being in charge. It involves facilitating, motivating, learning, mentoring others, and collaborating and cooperating with diverse groups and individuals.

Because of these changing roles in government and the needs of communities, many parishes have reconsidered their form of government. About a third of the state's parishes have concluded that, whereas the Police Jury system served them well during many years when administrative and legislative functions could be consolidated, there is now a need to separate these functions. Nineteen parishes have opted for a new system that enables them to better execute parish-wide decisions.

Cameron Parish should consider such a change in light of the challenges and opportunities that are described throughout this report. Too many of the issues that confront Cameron, notably those in community and economic development, are parishwide in nature. It is extremely difficult for a ward-based system, such as the Police Jury, to agree on parishwide directions. A unifying executive voice, elected at-large, is needed in order to compete in this intense state, national, and global arena. It might also be time for Cameron Parish to consider the possible incorporation of the towns of Cameron, Hackberry, and Holly Beach.

#### INTRODUCTION

# Michael Liffmann, Assistant Executive Director Office of Sea Grant Development

#### **BACKGROUND**

This report contains the observations and recommendations made by the 14-member Cameron Parish Study Team (study team), following an intensive economic development assessment of the parish conducted during the week of January 6-10, 1997. Socioeconomic statistics and a map of Cameron Parish are contained in Appendix A. The study team was organized and coordinated by the Louisiana Sea Grant College Program at LSU, with the assistance of the Louisiana Cooperative Extension Service, LSU Agricultural Center. The study was conducted at the request of the Cameron Parish Police Jury (Police Jury) and its Economic Development Group.

The assessment had as its primary objectives to (1) help identify the parish's key economic development challenges and opportunities; (2) help develop sustainable, environmentally sensitive programs to capitalize on opportunities; (3) make leaders and the general public aware of these opportunities and challenges and their potential role in helping the area's economy; and (4) develop ideas that encourage government, business, and community to work cooperatively on approaches that link economic prosperity and environmental stewardship.

The study team was assembled following a reconnaissance in Cameron on October 28, 1996. Members were selected according to their expertise and the parish's economic development ideas as articulated by the

Economic Development Group and Police Jury. The team included:

- Dr. Paul Coreil, Associate Specialist, Louisiana Cooperative Extension Service, LSU Agricultural Center and Study Team Co-Coordinator
- Elinor Craven, Director, Division of Outdoor Recreation, Office of State Parks
- Dr. Sandy Dooley, Specialist, Louisiana Cooperative
  Extension Service, LSU Agricultural Center
  Rochella Michaud Duggs, Governor's Office of
- Rochelle Michaud-Dugas, Governor's Office of Rural Development
- Ted Falgout, Greater Lafourche Port Commission
- Dr. Bill Good, Coastal Management Division, Louisiana Department of Natural Resources
- Brenda Henning, Assistant to Executive Director, Office of Sea Grant Development, LSU
- Dr. Steve Henning, Associate Professor, Department of Agricultural Economics & Agribusiness, LSU
- Michael Liffmann, Assistant Executive Director, Office of Sea Grant Development, LSU, and Study Team Co-Coordinator
- Dr. Ken Roberts, Specialist, Louisiana Cooperative Extension Service, LSU Agricultural Center
- Robin Roberts, Research Associate, Office of Sea Grant Development, LSU
- Johnnie Tarver, Office of Wildlife, Department of Wildlife and Fisheries
- Dr. Deborah Tootle, Assistant Professor, Department of Sociology and Rural Sociology, LSU
- Dr. Charles Wilson, Professor, Coastal Fisheries Institute, and Chair, Department of Oceanography and Coastal Sciences

Kevin Savoie, Sea Grant's marine advisory agent in the parish, served as liaison between the Economic Development Group and the study team.

#### Study Team Approach

The assessment was performed using a rapid rural appraisal (RRA) which differs

considerably from the more traditional, time consuming, and expensive methods of collecting information and reporting. Louisiana Sea Grant defines RRA as "an intensive, qualitative survey that uses a multidisciplinary team approach to help communities identify challenges and opportunities and formulate sustainable solutions to the same." The technique is one adapted from work done in the 1980s by Dr. Frederick Smith of Oregon Sea Grant, who used a similar method to assess opportunities for coastal and marine development in Oregon, and from rapid rural appraisals conducted by British and Australian scientists "...seeking approaches to solving complex problems, particularly those in which people factors are prominent" (Dunn, 1994).

In this definition, the word "qualitative" refers to the descriptive nature of the information collected and the quality of the observations and ideas. It may involve an assembly of insights rather than facts and figures. This in effect is a challenge to the conventional view that everything can be measured, and a confirmation that the expertise gained over the years by the study team members is knowledge and, thus, valid for the purposes of the assessment. The term "survey" is used loosely in the sense that the information collected is gathered primarily from sources in the field and filtered through the perceptions of the study team and other collaborators. The intent of surveys is to deliberately go about collecting abundant detail and insight. The notion of "sampling" is also loosely applied in that information is gathered until patterns and understanding emerge, but not necessarily in a statistical or representative sense. The "method" does not require that each step be precisely followed, but rather an understanding that each study team member needs to apply his/her knowledge and skills to the

particular project. It invites them to modify and adapt to fit the project situation. The number of multidisciplinary team members varies from project to project, but the team's makeup always reflects diverse disciplines and backgrounds that provide a range of perspectives through which the information can be analyzed and interpreted. Members are encouraged to keep open minds about challenges, opportunities, and sources of solutions.

Louisiana Sea Grant's rapid appraisals entail several steps. The first one involves the project coordinator's making a reconnaissance visit to the study area and meeting with selected local leaders to establish the context of the proposed project while beginning to identify major challenges and perceived opportunities. The project coordinator then defines specific issues and objectives that help identify the necessary disciplines and backgrounds needed for the study team. The project team is assembled by the project coordinator, and the objectives are finalized. The project coordinator, in cooperation with the local liaison(s), then prepares a blueprint that provides study team members and local collaborators with further guidance on the study process, anticipated outcomes, and logistical details. The study is then conducted over three to five days at the end of which local collaborators are invited to hear an oral presentation of the team's findings. A written report is issued six months after the field study is completed.

Louisiana Sea Grant began using this method in 1987 when it was looking for a means to interact more effectively with rural, coastal leaders and to stimulate strategic thinking concerning sustainable economic development, notably coastal recreation and tourism. The intent was to enable communities to think strategically

and provide ideas on how to improve planning by considering strengths, weaknesses, challenges, and opportunities. Prior to this study, similar assessments had been conducted in Plaquemines, Cameron, St. Mary, and St. Bernard parishes, the three Mississippi Delta parishes of East and West Carroll and Madison, and the town of Grand Isle.

### Cameron's Preparedness for Economic Development in the 21st Century

On January 9, 1997, on the occasion of the Cameron Parish study team's exit presentation to the Police Jury and Economic Development Group of the interim findings and recommendations, Michael Liffmann, the project coordinator, made the opening remarks. The following is an elaboration of his comments.

"On behalf of my colleagues, I'd like to once again express our sincerest appreciation for the outstanding hospitality that was extended to us by your parish during the course of the week. There are too many individuals to acknowledge by name, but we certainly want to recognize the members of the Police Jury; its administrator, Ms. Tina Horne; State Representative Dan Flavin and his staff, Scott Henry and other members of the parish's Economic Development Group; the Lions Club; the East and West Cameron port commissions: the Tourist Commission: Chamber of Commerce; the business community; and, of course, Guthrie Perry and the rest of the very kind Department of Wildlife and Fisheries staff at the Rockefeller Wildlife Refuge, who saw to our many needs during the week.

"Our primary objective in conducting this rapid appraisal was to help Cameron identify its main economic development challenges and opportunities. Louisiana Sea Grant and

the Louisiana Cooperative Extension
Service have been working with you for a
number of years. First, Paul Coreil and,
now, Kevin Savoie have served as marine
agents in the parish and worked with many
coastal user groups. In addition, the
scientific community, sponsored in part by
Sea Grant, has worked extensively on
fisheries and wetlands-related issues. And
as most of you recall, in the mid 1980s you
helped launch Sea Grant's work in coastal
tourism and recreation by allowing us to do
an assessment that was similar in methodology to the one we are reporting on today.

"So we have seen the highlights and low points of your recent history. Cameron's economic woes of the last ten years or so have been hashed and rehashed. And although the near-term economic situation appears to be improving, thanks to the recent resurgence of the oil and gas industry, the long-term outlook is still troubling when you consider that your very lifeline, the Gulf shore and coastal wetlands, are literally disappearing. If the long term is of concern, and it should be, then I offer some friendly suggestions on how you can better prepare to tackle the daunting tasks that lie ahead and are sure to increase in an unprecedented and fast-paced fashion. I would like to spend a few minutes sharing our views on how Cameron can better prepare for its future and help to shape it, rather than being entirely vulnerable to what happens beyond its boundaries.

"We were quite fortunate in that we had the opportunity to travel throughout the parish and meet with many leaders—government, business, and civic. We also took time and visited in Lake Charles and Jennings and heard many outstanding ideas that could help shape your future. But the leaders also pointed out that most ideas and projects have not developed beyond the talking or

study phases. There simply has been no closure. Part of the problem stems from the fact that the parish's community and economic leadership core is too small and needs to broaden its base to better plan and actually implement. We see signs of this through the formation of the Chamber of Commerce, tourist commission, Economic Development Group, and activation of the West Cameron Port Commission. Cameron is fortunate in that many retirees have stepped up and taken on major civic responsibilities. Many of these eager individuals have spent years pursuing ideas and projects, and others need to step up and help. Younger leaders need to be recruited and groomed for the future. More "doers" need to be attracted; more "movers and shakers" are needed. Perhaps the oil and gas service industry can help in this regard through its management staff.

"In addition, you have many boards, committees, and commissions with overlapping responsibilities. As your planning progresses, you might give some thought to better integrating parishwide economic development efforts by consolidating or abolishing some of these entities. The Economic Development Group is a good example of a parishwide body that could serve as a home for overall development activities. But it also needs to broaden its base and involve others in a meaningful way. The group, for example, might take the lead in preparing a community-based plan for the entire parish. Such a plan does not need to be prepared by consultants. You can do it yourself. It requires the parish to think about its future—objectives that it wants to pursue, strategies for pursuing them, and actions for carrying them out.

"We also noted that a great deal of energy and time has been expended on ideas or projects that for one reason or another did not go very far. For instance, consider the

fate of Cameron's biggest and most sought public works project—the high-rise bridge over the Calcasieu Ship Channel. For over 40 years, leaders have been building a strong case for such a structure on the basis of hurricane evacuation, vehicular traffic needs, economic development, and integration of the eastern and western portions of the parish. But now unfortunately the project does not appear feasible and lacks significant support beyond Cameron. It is perceived to be too expensive, considering the alternative use of ferries, and does not seem popular at all among the powerful. deepwater navigation interests. By developing a community-based plan, you can better determine whether to continue expending time and energy to make the project feasible, or to consider alternatives such as increased ferry services.

"The bottom line is that the parish as a whole needs to consider its future, establish priorities, and go about planning and carrying out the necessary actions. I might add, that when you embark on the task of setting priorities, do not forget the natural resources that you are truly blessed with. You need to consider actions to address the problems that afflict many of your coastal wetlands and Highway 82, which serves as a buffer between the Gulf and the marsh. The wetlands habitat for fish and wildlife resources, and the coastline places you in an enviable position of proximity to the Gulf and its resources. You will need to work overtime at making choices and finding ways to encourage government, business, and the community to cooperate on approaches that link future economic prosperity with preservation and conservation of your remarkable environment. This is what will make Cameron's economic development sustainable.

"Why the sudden urgency? Cameron has many opportunities for development, but it

needs to prepare quickly in order to better position itself in this incredibly competitive environment. Competition is not just from Sabine Pass, Mobile, or Galveston. It's the 63 other Louisiana parishes; other states with substantial commercial fisheries; and, yes, developing nations with fewer operating costs and friendlier regulatory environments. So your single biggest challenge is what I'll refer to as preparedness.

"Preparedness means placing this community in a position to respond to job, income, and environmental needs for years to come in a world that has changed dramatically in the last decade and continues to transform virtually at the speed of light. You must agree that these are remarkable yet scary times. We are in an era of rapid and often confusing changes and innovations that, on one hand, are exhilarating, but on the other are intimidating. The fact is that we really have no choice. Even the residents of the remotest places are being affected. In communications and other technological innovations, we're in the age of the Internet and virtual reality. We have seen the end of the Cold War and now do battle on a different, 'gentler and kinder' front—the global economy. Technology has enabled deepwater exploration and 4-D seismic drilling. Regulations have affected fisheries and coastal development. Textile manufacturers are moving overseas. Significant responsibility for the oversight of many programs is devolving from federal to state agencies. Coastal land loss continues, and we cannot seem to make up our minds, what to do about it. Change is not just likely, it's happening!

"In this dynamic world, how then can Cameron go about positioning itself for economic and community development in the next decade or so? We asked ourselves this question and would like for you to give

this a great deal of thought. As I pointed out earlier, you need to plan. But another good move, in our opinion, is to consider reinventing your parish and local governments. That is, carefully analyze your current form of government and determine whether it can take you where you want to go, in the environment described above. The Police Jury system has served the citizens of the parish quite well. It has enabled the 9,000 or so constituents of this very large parish to deal with their district representative in resolving government-related problems. This type of representation can and should continue. But what the Police Jury system has not enabled Cameron to do is to speak with a single voice on matters that relate to economic development and other issues for the parish as a whole. The jurors primarily look after the interests of the 1,500 or so residents within their districts. No one other than the sheriff, district attorney, or tax assessor has a parishwide mandate, and these three offices are seldom involved in economic development decision-making. The parish needs to be unified. Your parishwide infrastructure needs alone are priced at over several hundred million dollars and you need someone who serves as a point person. And it should not be an entity in Lake Charles or Jennings, nor your parish administrator or state legislator. They have other roles and responsibilities. Cameron should not even rely on its well-intentioned and hard-working volunteers or a paid professional economic developer to carry out such efforts. All are an integral part of the economic development effort, members of a team, but they do not have the decisionmaking authority of an official who is elected on a parishwide basis.

"Cameron ought to look into several types of home rule charters, perhaps a President-Council charter, in which the President is elected at-large. Many other parishes have

gone this route. In most cases the transition has not been easy, but they are staying the course, and in the long haul should be better served. What really triggered this line of thinking on our part was your need to prepare for an entirely different future. You need a solid foundation to help undergird future decision-making on all kinds of economic development projects that you can act on-ideas and projects that everyone can rally around, that can be pursued until there is a conclusion. For now, these ideas and projects don't get much past the talking stage and are left at a standstill when advocates and detractors confront each other, usually in front of the Jury, and deadlocks rule the day. You need decisionmaking. A President-Council form is not a panacea, as factionalism and provincialism would probably continue, but it would enable projects to be studied, debated, and ultimately concluded. It creates a unified front for seeking solutions to real-world, Cameron problems.

"You need vision, a strategy, and unity. While considering this suggestion and deliberating on its merits and shortcomings, please don't worry about who would be the candidates for the first President. Think forty and fifty years down the line. This could be a lasting legacy. And while I'm at it, the time may also be right to incorporate some of your communities, and thus enable them to better compete; perhaps a mayor and aldermen should be elected for the towns of Cameron, Hackberry and Holly Beach."

### Chapter References

Dunn, Tony. "Rapid rural appraisal: a description and methodology and its application in teaching and research at Charles Stuart University," Rural Society, December 1994.

#### LAND LOSS AND ENVIRONMENTAL ISSUES

Dr. Paul Coreil, Associate Specialist, Louisiana Cooperative Extension Service and the Louisiana Sea Grant College Program, Louisiana State University

Dr. Bill Good, Coastal Restoration Division Louisiana Department of Natural Resources

Mr. Johnnie Tarver, Assistant Secretary, Office of Wildlife Louisiana Department of Wildlife and Fisheries

#### Existing Situation

In terms of land area, Cameron Parish is the largest parish in Louisiana, covering over 1,400 square miles (900,000 acres). Of this total, Louisiana Department of Wildlife and Fisheries 1988 data identified approximately 750,000 acres to be coastal wetlands broken out into the following categories:

Freshwater marsh 202,841 acres Brackish marsh 291,000 acres Intermediate marsh 256,572 acres

Many of the coastal marsh habitats in the parish, however, are disappearing at an average annual rate exceeding two square miles per year. From 1960 to 1980 over 24 square miles (15,360 acres) of coastal wetlands were lost, and from 1980 to 1997 the rate of loss increased significantly to an estimated 34 square miles. Since 1960 over 58 square miles (over 37,000 acres) of vegetated Cameron Parish wetlands have converted to open water.

Cameron Parish wetlands are extremely valuable to all citizens, not only because of the commercial, recreational, and cultural benefits they provide to the parish, but also because of the important biological and physical process benefits. Important coastal wetland functions include:

- providing a buffer against hurricanes and storms
- holding excess flood water during high rainfall or high tides
- recharging groundwater aquifers used for drinking and irrigation
- cleaning water by filtering pollutants and taking up nutrients

Cameron Parish's coastal wetland habitats serve as the foundation for the provision of numerous natural resource-related jobs and expenditures, some of which include:

- (1) commercial fishing and processing,
- (2) recreational fishing, (3) sport hunting,
- (4) fur trapping, (5) alligator hunting and farming, (6) livestock production, (7) hay production, and (8) nature-based tourism-related enterprises.

Because of the alteration of important coastal wetland processes over the past 75-80 years, more than 150,000 acres of marshlands have eroded and converted to open water. This represents over 10 percent of the total parish land area. The current rate of loss in the Sabine-Calcasieu Basin has been approximately 2.5 square miles per year since 1978. The loss rate in the Mermentau Basin has exceeded 4.5 square miles per year for that same period.

Below is a discussion of the process alterations that have had the most significant impact in the parish. Construction of the Calcasieu Ship
Channel and the Mermentau "New Cut".
These projects changed shallow, meandering
river systems into straight, deep channels
connected directly to full strength saltwater
from the Gulf of Mexico. Saltwater intrusion resulting from these projects has
significantly contributed to interior marsh
erosion (marsh conversion to open water).

Construction of the Gulf Intracoastal Waterway. This project has caused serious freshwater flow restrictions by altering the natural flow of freshwater from the uplands to the southern coastal marshes. Water flowing from the north now tends to move in an east-west direction (influenced by the Intracoastal Canal) instead of slowly moving southward through the coastal marsh system.

Commingling of river and drainage systems. The artificial interconnection of historically isolated drainage basins and watersheds has resulted in complex hydrological and drainage problems.

Access canal construction. Numerous access canals constructed for varied development purposes (drainage, fur trapping lines, navigation, oil and gas exploration and production, etc.) have resulted in increased saltwater intrusion and altered natural water flow within the marsh.

The project impacts noted above ultimately acted synergistically, thus compounding the natural deterioration process. The combination of north-south ship channels and an east-west Gulf Intracoastal Waterway was particularly destructive by allowing saltwater introduction and alteration of hydrology. It took thousands of years to reach the pre-1960s "state of equilibrium," and it may again take an equal amount of time to readjust the distribution of sediments, water, and plants to reach a "new"

equilibrium. Unfortunately, during this equilibrium process many more marshland acres may be sacrificed. The deterioration process, however, can be slowed by some basic (and maybe costly) restoration actions that should result in the retention of historic wetland resource production.

#### Outlook

High rates of coastal wetland loss within the parish are expected to continue if planned restoration projects are not implemented and maintained. The future of Cameron Parish wetlands will be bleak if additional aggressive action is not taken. Seafood landings will decline, oil and gas production infrastructure (pipelines, production facilities, processing stations) will be at risk, public utility company infrastructure (utility lines, transfer stations, etc.) will be jeopardized, and the potential for naturebased tourism enterprises will decline. In addition, all Cameron Parish communities (Holly Beach, Cameron, Creole, Grand Chenier, Hackberry, and Grand Lake/Sweet Lake) will become much more vulnerable to tidal surges from future tropical storms and hurricanes.

There is also a real possibility that without quick action Louisiana Highway 82 will be lost. This highway connects the east and west halves of the parish and represents a vital hurricane evacuation route for Johnson Bayou residents. Additionally, valuable marshes located just north of the highway are at great risk from saltwater intrusion, which would result if a breaching of the beach rim occurs (the southern boundary of Sabine National Wildlife Refuge is located just a few miles north of the highway). High rates of barrier shoreline erosion are also being observed in the eastern sections of the parish from the Mermentau River to Rockefeller Refuge.

Without action, traditional natural resourcerelated jobs in commercial fishing, trapping, alligator hunting, and sport hunting and fishing enterprises will become more at risk, and the ability of the parish to deliver vital public services will be challenged. Increased coastal risks may also hinder business investments, reduce property values, and ultimately result in citizen emigration.

#### Strengths

Cameron Parish wetlands are much more stable than the fragile wetlands located in the eastern deltaic regions of Louisiana. Even though it is significant, the annual rate of wetland loss in southwest Louisiana is lower than that in the coastal wetlands of southeast Louisiana. Stable soils allow for greater success in utilizing "hard" structure restoration approaches such as rock breakwaters, wave dampening fences, rip-rap, and water-control structures.

The technology to effectively restore degraded wetlands and the skilled work force needed to design and construct viable projects are available in the parish to address these challenges. Several parish oilfield construction companies experienced with marsh construction projects have expanded their services to include wetland conservation and restoration initiatives. With adequate restoration funding, these businesses stand ready to implement viable marsh protection and conservation projects that will effectively reduce Cameron Parish's wetland loss rate.

Another clear strength lies in the fact that national, state, and parish elected officials (policymakers) seem to have developed a strong partnership with wetland owners and other interested user groups in the coordination of viable parish coastal restoration

actions. Additionally, marsh landowners seem to be keenly interested in maintaining the fish and wildlife productivity of their lands.

#### Weaknesses

Identified weaknesses are as follows:

Lack of a comprehensive parish wetland restoration and mitigation plan. Cameron Parish does not have a comprehensive wetland restoration plan, and does not seem to have a staff in place to independently develop such a plan.

Lack of a comprehensive coordinated drainage plan. Cameron Parish does not have a coordinated parishwide drainage program. Several regional drainage boards operate somewhat autonomously without adequate watershed-based linkages both within and outside parish boundaries.

Lack of a directed wetland education curriculum within the schools. The importance of wetlands to the Cameron Parish economy does not seem to be adequately understood by parish students. However, the next generation of parish leaders and policymakers will come from the young people now enrolled in parish public schools.

Lack of statewide coastal parish coordination. Even though all of Louisiana's 19 or 20 coastal parishes share the same land loss challenges, there is an obvious lack of coordination among these parishes.

Loss of parish marshlands' tax base.

Deteriorated coastal marshland habitats generally produce fewer fish and wildlife resources. Declining surface revenues from deteriorated parish marshlands continue to exert negative pressure on marshland use values (and tax base). Vital public services provided through parish property taxes may be more and more at risk with continued wetland loss.

Adverse effects of continued sand mining. Many concerned citizens feel that continued sand mining operations on cheniers or on the beach jeopardize the first line of defense from hurricanes and tropical storms.

Lack of coordination with neighboring Texas. With the state of Texas proposing expanded use of Sabine River water sometime in the future for industrial development, lack of official parish-county coordination may be environmentally and economically detrimental.

### Opportunities

Wetland resource-based opportunities are limitless in Cameron Parish. Sustainable development is intricately linked to healthy coastal wetlands and direct efforts must be made to protect and conserve the parish's productive marsh habitat.

#### Immediate Action

Organize and appoint an official Wetland Advisory Committee that can advise national, state, and parish policymakers on wetland-related issues and help develop a comprehensive wetland conservation plan for Cameron Parish (an initial Wetland Advisory Committee meeting was held in January 1997).

Organize and appoint a parishwide

Drainage Board Advisory Group that
would serve as a coordinating body for all
parish drainage initiatives. Benefits of this
effort would include better coordination of
parish drainage initiatives and better
cooperation and sharing of critical

information and resources. The chairs of each of the regional drainage boards could serve as designated advisory group representatives.

With assistance from the Louisiana Police Jury Association, revitalize the concept of a Coalition of Coastal Parishes. The serious land-loss challenges facing all coastal parish governments are causing economic stresses and immediate safety risks. Maximum national and state assistance will only become a reality if coastal parishes leverage their influence and speak with one voice. Cameron Parish should take the lead in seeing this idea become a reality.

#### Near-Term Action

Appoint or retain an official Cameron Parish environmental project staff person or consultant. With the growing bureaucracy involved in restoration project development and approval, it is becoming more apparent that coastal parishes need professional expertise to assure that much needed projects get approved and funded in a timely manner. With the development of a comprehensive Parish Wetland Conservation Plan, a parish wetlands professional can assure that all opportunities for project approval and funding are adequately covered.

Develop a comprehensive Cameron Parish Wetland Conservation Plan that describes the current wetland situation, identifies problems and projects that will help alleviate these problems, and outlines project designs, cost estimates, permit requirements, and funding sources. Projects included in the plan should be ranked according to overall benefits to the parish and feasibility.

Develop a detailed wetland mitigation program (may be included as a section of the comprehensive Wetland Conservation Plan) that outlines activities that should be mitigated, suggests "small" authorized mitigation projects throughout the parish, and suggests parish mitigation area(s) that may help speed up the implementation of fast-track wetland restoration projects identified by the committee.

Develop a comprehensive Cameron Parish Drainage Plan that describes the current situation, identifies drainage problems and projects that may help alleviate these problems, estimates project designs and costs, identifies permits needed, and names potential sources of project funding.

With parish Wetland Advisory Committee leadership, investigate the feasibility of incorporating a wetland functions and values curriculum in the Cameron Parish public school system. Draw on the expertise and resources of the Louisiana Cooperative Extension Service/Sea Grant, the National Wildlife Refuge system (Cameron Prairie NWR, Sabine NWR, Lacassine NWR), and the Louisiana Department of Wildlife and Fisheries (Fur and Refuge Division—Rockefeller Refuge and the Information and Education Section district staff).

The Cameron Parish Police Jury (with Wetland Advisory Committee support) should initiate a joint meeting between the Cameron Parish Police Jury and the Jefferson County, Texas, local government. The primary focus of the meeting would be discussion of Texas' proposed expanded use of Sabine River water for industrial development westward and the potential challenges associated with reduced freshwater flows into the Sabine estuary.

The Wetland Advisory Committee should seek technical information on the impacts of continued sand mining on the beaches

and cheniers of Cameron Parish. Analysis should center on hurricane protection and coastal erosion impacts. Policy alternatives should then be considered based on an accurate cost-benefit analysis that includes private property issues.

Beneficial restoration projects that have been identified by parish should be continuously nominated for funding through Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA), the state Wetland Trust Fund, and mandated wetland development mitigation projects.

#### Longer-Term Action

The Cameron Parish Police Jury should seek state and national support for reinstatement of Outer Continental Shelf (OCS) mineral revenue sharing. The ability of local governments to provide vital community services directly linked to increased oil and gas exploration and production justifies the sharing of federal mineral revenues. Increased road and bridge wear and tear, utility needs, waste disposal, port facility needs, and other needed services clearly justify a federal revenue-sharing policy in Louisiana.

The Cameron Parish Police Jury (with support from the Coalition of Coastal Parishes) should investigate the feasibility of establishing an increased state oil and gas severance tax revenue-sharing formula. Currently, only 10 percent of the state-collected oil and gas severance taxes earned from production within a parish are rebated to the local government; however, the 10 percent rebate is limited to a maximum cap of \$500,000 annually. If Cameron Parish actually received a full 10 percent rebate, the annual amount would exceed the \$500,000 cap in most years.

Seventy-five percent of the forestry-related state severance taxes collected are rebated to parish governments with no annual maximum cap. Several parishes with heavy forest production receive state forest severance tax rebates well in excess of \$500,000. In both cases, severance tax revenue sharing is the state's attempt to help parishes provide the vital services needed to maximize mineral production for the benefit of the entire state of Louisiana.

Parish officials should seek approval for using locally raised revenues as cost sharing for federal restoration funding. CWPPRA requires a 25 percent "state" match. This should be changed to clearly allow either a state or "local" match. Parishes with locally raised funds would then be able to better compete for restoration dollars.

With assistance from both state and federal agencies (including the state's legislative and congressional delegations), the parish should facilitate an effective engineering solution to the highway erosion crisis in western Cameron Parish. Most believe this issue to be one of the most serious environmental and economic challenges currently facing the parish. Beneficial use of dredge material from both the Calcasieu and Sabine Rivers may be one of the most effective erosion abatement strategies currently available. The creation of a wide sand-silt buffer between the highway and the Gulf of Mexico, together with the rock breakwaters, may provide the protection needed to stop the fast erosion rates currently threatening to close the road permanently.

Efforts should be made by the parish to assure that opportunities for creating or restoring interior marshes through the beneficial placement of dredge material are carried out by the U.S. Army Corps of

Engineers (Corps). Opportunities exist when ongoing maintenance dredging is conducted within the Sabine, Calcasieu, and Mermentau rivers.

With a strong, comprehensive parish wetland conservation plan in place, the parish should seek long-term funding for priority restoration projects. Existing funding from the State Wetlands Trust Fund and CWPPRA should be protected and secured. Additionally, support from state and national policymakers for increased oil and gas severance tax and OCS royalty revenue sharing should be actively pursued in light of the continued coastal wetland loss rates taking place in the parish. Sustainable development in Cameron Parish will be achieved only through aggressive coastal restoration funded through a fair sharing of nonrenewable mineral revenues.

Although the coastal deterioration process is a natural one (as the coast is being destroyed and rebuilt simultaneously) in geologic time, the building features have been exceeding the destructive forces. In very recent (human) time, the predictable forces have been altered by man's activities, including but not limited to navigation channels and levees for flooding prevention. In Cameron Parish, the Calcasieu Ship Channel, the Gulf Intracoastal Canal, and the leveeing of the Mississippi River are responsible for the loss of productive marsh land and conversion to open water. The Cameron Parish Police Jury should seek state and national support for correcting the problems caused by navigation and flood control projects mentioned above. Since those projects are the primary causative factors for marsh deterioration, it is therefore logical for the Corps of Engineers to examine and correct the situation. The President has declared "a zero wetland loss" a national goal and Congress has made the Corps of

Engineers responsible for wetland restoration. Because Louisiana's coastline is a "national treasure" not exceeded anywhere in the nation, Congress should allocate additional funding for coastal restoration.

### **COMMERCIAL FISHERIES**

Dr. Charles Wilson, Chair and Professor

Department of Oceanography and Coastal Sciences and Coastal Fisheries Institute

Louisiana State University

#### **Existing Situation**

Louisiana commercial fishery landings are second only to those of Alaska in terms of dockside value. According to the U.S. Department of Commerce fisheries statistics, in 1994 the dockside value of Louisiana's fishery products was \$336 million. The state's 1.7 billion pounds of fishery products represented 42 percent of the total commercial fishery landings in the Gulf of Mexico region for that year. Thus, fishery products represent an important industry for Louisiana. According to Louisiana Department of Wildlife and Fisheries statistics (Table 1), Cameron Parish ranks second in total landings for the state, and in 1995, some 279 millions pounds crossed Cameron docks.

Because Cameron Parish is blessed with a broad coastal zone that is primarily chenier plain marshes and wetland vegetation, it provides a rich habitat for fisheries and wildlife. The area has historically been known for its fisheries production, and the industries associated with this production are primarily oysters, menhaden, shrimp, crabs, and some finfish. All of these industries are well-established. Current levels of production and employment have remained relatively stable, and these figures are not likely to change in the near-term (Table 2).

Menhaden represents the most important fishery in terms of volume of production and value for Cameron Parish. Production almost doubled between 1994 and 1996. from 225,000,000 pounds to 400,000,000 (Table 2). There was a significant decline in landings from 1994 to 1995. Other factors combined with this decline resulted in the closure of some processing plants, leaving only one in the parish. Zapata Protein, which produces fish meal and oil, contributes to the economy through sizable state and local tax payments, licenses, supply and services expenditures in the parish, and by employing more than 280 people during the fishing season. This industry is facing severe labor shortages which are being met by nonparish residents.

One positive prospect for the industry is that human consumption of menhaden oil has recently been approved by the FDA, which should increase demand and value. However, at this time, processing of oils is expected to take place primarily along the East Coast, with none being processed in Cameron Parish. Therefore, the impact to the industry in Cameron Parish is not predicted to result from the value-added product, but rather from a potential expansion in the market for the dockside product.

The production volume and dockside value of shrimp have remained fairly constant over the last several years. The commercial finfish fishery has declined in recent years due to Act 1316—the phasing out of gill nets—which passed in 1995. No change in these laws is likely to take place and affect the fishery. Crabs appear to be a large, silent economy in Cameron Parish. The value of this fishery has recently surpassed

Table 1. Commercial Fishery Landings by Louisiana Parish, 1995.

Parish	Landings Volume (lbs.)	Parish	Landings Volume (lbs.)
Assumption	6,416,000	W. Baton Rouge	<1,000
Calcasieu	226,000	E. Baton Rouge	151,000
Cameron	279,501,000	Caddo	81,000
Iberia	5,685,000	Catahoula	811,000
Jefferson	17,689,000	Grant	3,000
Lafayette	520,000	Iberville	4,513,000
Lafourche	18,927,000	Madison	46,000
Orleans	3,950,000	Morehouse	<1,000
Plaquemines	306,940,000	Ouachita	23,000
St. Bernard	12,650,000	Point Coupee	1,000
St. Charles	2,469,000	Rapides	30,000
St. John	63,000	St. Landry	1,553,000
St. Mary	127,445,000	St. Martin	5,515,000
St. Tammany	737,000	Desoto	2,000
Tangipahoa	561,000	Vernon	5,000
Terrebonne	127,843,000	Webster	36,000
Vermilion	187,988,000	St. James	517,000
Acadia	29,000	Livingston	5,000
Avoyelles	1,027,000		
Ascension	633,000		

Source: Louisiana Department of Wildlife and Fisheries, unpublished data.

Table 2. Commercial Fisheries Production Volume and Value for Cameron Parish, Louisiana, 1994-1996.

Shrimp	1994	1995	1996
# of Producers	700	700	700
Vol. of Production (lbs)	7,800,000	7,950,840	10,133,025
Gross Farm Value	\$14,508,000	\$13,516,428	\$15,706,189
Menhaden	1994	1995	1996
# of Producers	13	13	13
Vol. of Production (lbs).	225,000,000	115,836,400	400,000,000
Gross Farm Value	\$11,250,000	<b>\$7</b> ,79 <b>1,82</b> 0	\$20,000,000
Crabs	1994	1995	1996
# of Producers	80	80	80
Vol. of Production (lbs).	2,000,000	2,135,266	2,968,683
Gross Farm Value	\$1,300,000	\$1,434,919	\$1,781,210
Oysters	1994	1995	1996
# of Producers	150	82	86
Vol. of Prod. (sacks)	20,000	10,000	40,000
Gross Farm Value	\$240,000	\$120,000	\$640,000
Commercial Finfish	1994	1995	1996
# of Producers	NA	80	80
Vol. of Production (lbs.)	850,000	1,093,399	1,041,888
Gross Farm Value	\$1,700,000	\$1,469,013	\$1,555,768

NA = Not Available.

Source: Louisiana Summary. Agriculture and Natural Resources. Louisiana State University. Agricultural Center, Louisiana Cooperative Extension Service, 1994, 1995, 1996.

that of the finfish industry. Roughly 80 crab fishermen harvest in the parish, but there is little value-added processing. Most of the crabs are shipped out to processing facilities in other parishes or northeast into the Maryland crab market.

Oyster production is limited to Calcasieu Lake and West Cove. Current quotas for fishermen are ten sacks per day per boat. Many of the oysters harvested are extremely large, which indicates that the resource is somewhat underutilized. With a change in the management of the fisheries to a quota of 15 sacks per day, the parish could realize increased revenues. We discussed the possibility of increasing the quota to 15 or 20 sacks per day with some fishermen; however, the fishermen were against this. Since the reef in Calcasieu Lake is a public reef, any increased incentive would cause an influx of "tongers" from Alabama or Florida.

#### Outlook

The commercial fishing industry has many constraints caused by evolving federal and state regulations on all fisheries in the parish. There are, however, some proactive measures that could improve fisheries resource utilization and help strengthen the industry in the parish. None of these changes, however, are foreseen to cause an increase in the revenue base or employment situation.

Menhaden producers in the parish have worked with the Louisiana Department of Wildlife and Fisheries to determine harvests for the species. Future development of the industry will depend greatly on the sustainability of the species and any regulations such as those dealing with nets that might limit harvests.

The positive acceptance of menhaden oil for human consumption can give this industry a

boost. Increased demand for menhaden may result in the expansion of the existing processing plant or, in the long-term, could bring additional operations to the region.

The best location for a new processing plant may be on the west side of the parish.

However, access to rail is critical to new development, and the parish lacks rail access.

Beginning in 1995, inshore shrimp trawlers are no longer exempted from turtle excluder devices (TEDs). For the shrimp fishery, these increased regulations are likely to reduce the number of boats over time, particularly as bycatch issues begin to affect inshore shrimpers. The long-term prospects will probably be a movement of the fleet south, away from nursery areas, as seems to be happening in adjacent states. This will limit the number of small boats in the fleet, leaving mid- to larger-sized vessels operating along the shoreline.

There is some long-term potential in the finfish fishery for flounder harvest within the butterfly fleet. However, flounder regulations continue to evolve and current landing limitations are such that no significant industry is on the horizon. Red drum was given gamefish status in 1995, and if proponents succeed at gaining similar status for the spotted seatrout, this would benefit the promotion of the sportfishing business. Red snapper landings in the region will probably increase over time as federal regulators increase the quota. It is uncertain how the parish will capture the benefits of these increased landings other than through small, seasonal increases in employment.

Act 1316 also allows for a hook and line commercial fishery for marine finfish. This could provide some potential employment opportunities, since this gear can be used to

harvest spotted seatrout, black drum, and sheepshead.

Crabs present a value-added opportunity for the parish. However, at the present time, there is a significant number of small crab meat processing operations that may not be fully licensed and need to comply with HACCP and other sanitation standards.

The oyster industry has been confronted with reduced demand for the raw product as a result of public health and safety concerns. Also, increasingly stringent onboard handling and time-to-market requirements have been placed on this industry. A process developed by a Louisiana firm, AmeriPure, designed to produce a safer oyster for raw consumption, has been approved and operations in Lafourche parish have begun. This process has the potential to have a significant impact on the raw market and could result in positive economic consequences for the local oyster industry. Water quality and health of the habitat are significant factors contributing to the overall harvestability of the product. A portion of Calcasieu Lake to the north has been closed by the state due to run-off (FCBs). It is possible that over time these oysters could be moved into the lower regions of the estuary where they could be purged and harvested.

John Supan, oyster specialist in the Louisiana Sea Grant Program, has advocated the investigation of an oyster relaying program, where oysters are relayed from these contaminated areas to nearshore waters where they could be purged. This concept may have a long-term potential and help facilitate growth of the oyster industry in the region; however, there seems little industry desire currently due to the abundance of health-approved, harvestable oysters in the open lower part of the lake.

#### Strengths

The value of the commercial fishing industry to Cameron Parish should not be underestimated. It is a significant factor in the economy of the parish and provides an important source of employment. It provides the possibility of future new growth revenue for the parish especially in the menhaden and crab sectors where processing facilities could be brought in to the parish.

#### Weaknesses

Weaknesses associated with the commercial fishing industry are not related just to Cameron Parish but face the industry as a whole. The industry operates in a global market and some sectors such as shrimp, reef fish, and freshwater crawfish have become susceptible to foreign imports. There is little control on the price of fish meal and oil, which are basically sold on the commodity markets. Additional significant costs to this industry come from those associated with resource and environmental concerns. These include: (1) regulations aimed at resource preservation, (2) news media attention to raw shellfish consumption, and (3) regional efforts to eliminate use of entangling nets, resulting in loss of access to resources, market contractions, and economic inefficiencies associated with compliance.

#### **Opportunities**

The issues being faced by the commercial fishing industry are long term and regional. It is expected that the industry will experience some contraction in the next few years, which will result in the loss of jobs. The nearshore finfish industry will most likely feel the greatest impact, but it is still uncertain how great this impact will be. In

addition, there is a notable lack of organizational leadership within commercial fisheries. Fishers are seemingly too preoccupied with harvesting and selling their catch to get organized and articulate a unified position. They appear to deal with issues on a crisis-management basis. TEDs and bycatch are examples. There are no quick fixes for this industry. But awareness and sensitivity to the issues facing this industry will help parish leaders assist this industry over the long-term. The parish might consider helping by implementing the following strategies and actions.

Immediate and Near-Term Action

Retraining opportunities. Additional regulatory changes are inevitable and the commercial fishing industry will further contract. Parish leaders should be prepared for an increased level of unemployment. Attempts should be made to retrain those displaced commercial fishers who are willing to participate in these programs. Possibilities include retraining at vo-tech schools focusing on existing skills. There are presently labor shortages associated with oil and gas exploration, such as welding and other trades, which could be met through a retraining program. Leaders should work with industries, high schools, and vo-techs in the parish to help meet their employment needs. Other opportunities may exist on the water in connection with nature-based tourism such as guide or charter services. Assistance to this industry to avoid relocation of displaced workers should be a high priority for parish leaders.

Market the industry. Information should be included about the commercial fishing industry and its importance to the parish in planning and marketing activities and materials. Efforts should be directed at educating the general public and other industries in the parish about the economic importance, as well as the cultural significance of the industry both locally and regionally.

Fisheries leadership. Commercial fisheries play a significant role in the parish economy, and revolutionary changes have been particularly hard on this industry (Horst, 1994). Recent trends in aquaculture, imports, restrictive management practices, environmental and humane movements, recreational fisheries, and habitat have all brought about change, and the industry has had a difficult time adapting to the new circumstances.

Fisheries leaders should be sought and included in all strategic planning efforts. Their input is vital for the parish's future.

Regulatory interaction. Parish leadership should participate, as well as encourage industry participation, in state, regional, and federal regulatory processes that affect this industry's resources. Because of the importance of the industry to the local economy, parish leaders should encourage the industry to maintain political visibility to help ensure that parish interests are considered in management decisions.

Conflict resolution. Parish leaders should encourage resource allocation decisions that ensure that no single user group acquires exclusive rights to access. They should work with both commercial and recreational groups to see that all groups have maximum use of available marine resources.

Longer-Term Action

Public dock. It is the consensus of the fishermen and the study team that a public dock is badly needed by the industry in general. It could serve needs for fuel, ice.

and safe harbor. These uses are also likely to help defray most of the costs of operation. The two areas that may lend themselves to consideration for this use are properties on Monkey Island or the west side of Calcasieu Ship Channel. This landing facility would enable fishermen to unload their catch without having to travel upriver. Also, this landing facility would allow the seafood processors to capture some of the larger freezer vessel landings that currently go to southeast Texas ports for further processing. This would be of economic benefit to the parish. With the creation of the public dock, there is a potential for commercialrecreational conflict. This could be worked out in the initial planning stages. The Venice (Louisiana) Marina is an excellent example of a public marina that provides commercial and recreational vessel services.

Processing facility. Crabs are an important fishery to the parish. However, most of the crabs landed are shipped outside the parish for processing. A processing facility on Calcasieu Lake would enable the parish to capture this important value-added opportunity.

## Chapter References

- Adams, Charles. Seafood Sector in Plaquemines Parish Challenges and Opportunities. An Economic Development Assessment. Louisiana Sea Grant College Program, Louisiana State University, Baton Rouge, LA, October 1996, pp. 21-34.
- Horst, Jerald. Can You Live With Change? In Coastal Fishing: What is the Future? Louisiana Sea Grant College Program and Louisiana Cooperative Extension Service, Baton Rouge, LA April 1994.
- Louisiana Cooperative Extension Service.

  Louisiana Summary 1994 Agriculture
  and Natural Resources. Louisiana State
  University Agricultural Center. Baton
  Rouge, LA.
- Louisiana Cooperative Extension Service.

  Louisiana Summary 1995 Agriculture
  and Natural Resources. Louisiana State
  University Agricultural Center. Baton
  Rouge, LA.
- Louisiana Cooperative Extension Service.

  Louisiana Summary 1996 Agriculture
  and Natural Resources. Louisiana State
  University Agricultural Center. Baton
  Rouge, LA.
- Louisiana Department of Wildlife and Fisheries. 1996. Unpublished Parish 1995 Annual Landings Data. Office of Fisheries. Baton Rouge, LA.

## **AGRICULTURE**

Steven A. Henning, Associate Professor
Department of Agricultural Economics & Agribusiness
LSU Agricultural Experiment Station

## **Existing Situation**

The 1992 Census of Agriculture reports 258,035 acres of land in farms in Cameron Parish, divided among 453 farms (U.S. Department of Commerce). Average farm size in the parish is 570 acres, compared with the state average of 306 acres. However, the market value of agricultural products sold per farm is only \$16,251 in Cameron Parish, versus \$62,666 statewide.

Land suitable for crops is limited in Cameron Parish. As discussed in other sections of this report, over 80 percent of the parish is marsh, much of which is used for cattle rangelands. The primary agricultural commodities are rice, soybeans, hay, and cattle. Cameron Parish reported 13,589 acres of rice harvested for grain in 1996, along with 5,949 acres of soybeans. There were 36,528 head of cattle and calves on farms in the parish in 1996, as well as 5,050 acres of land in hay production (Louisiana Cooperative Extension Service).

In terms of farm numbers, there were only 20 rice producers and six soybean producers in Carneron Parish in 1996 (Louisiana Cooperative Extension Service). On the other hand, the extension service reported 440 cattle producers and 312 hay producers.

#### Outlook

In general, rice production in southwest Louisiana and Cameron Parish has higher costs and lower yields than other regions of Louisiana and the U.S., making it difficult to compete in global markets. This disadvantage has been offset to an extent by federal agricultural policy, which has historically provided the price and income support that made rice production profitable in the southwest area of the state.

The Federal Agricultural Improvement and Reform (FAIR) Act of 1996 fundamentally changed federal agricultural policy by removing the link between income support payments and farm prices. The act provides for "seven annual fixed but declining production flexibility contract payments whereby participating producers may receive government payments largely independent of farm prices, in contrast to the past when deficiency payments were dependent on farm prices" (Economic Research Service). Eligible producers are those who had participated or had certified acreage in the wheat, feed grains, cotton, and rice programs in any one of the past five years. Any commodity may be grown on contract acreage except fruits and vegetables. Some exceptions are made for fruits and vegetables with an acre-for-acre loss of payment.

The seven-year contract, which began with the 1996 production season, pays participating producers an annual, but declining, amount. In return, producers are generally free to plant any crop they desire. Without further changes in federal agricultural policy, rice producers will be totally dependent on market prices for income after 2002. The future of rice production in Cameron Parish will depend on world market prices, the productivity of individual farming operations, and the management ability of farm operators.

Soybeans have never received income support from federal programs and producers will not receive lump sum payments under the FAIR Act. Participating producers will receive some price support through nonrecourse and marketing loans. Unless world market prices increase or decrease significantly, total soybean acreage in Cameron Parish is not likely to change much. Any increased acreage will likely be a shift from rice production.

Currently, cattle ranching and hay production are the next best alternative uses for agricultural land in Cameron Parish. These lands could also be used for crawfish farming and for waterfowl hunting purposes. Cattle and calf prices are cyclical in nature. increasing as cattle herds are built up and declining as supply becomes greater and cattle herds are sold off. Most recently, for example, the prices of calves have declined from \$98.10 per hundredweight in 1991 to \$62.50 per hundredweight in 1996 (Zapata and Frank). According to historical patterns, it can be expected that prices will begin to increase over the next several years, before again declining. Given the limited land use alternatives available, cattle ranching and hay production will continue at current levels, and may actually increase, depending on rice and soybean market conditions.

#### Strengths

Agriculture is a traditional, well established industry in Carneron Parish, with an infrastructure that supports rice, soybean, and cattle production. Rice and cattle producers are active in state groups that promote

research and marketing programs for their respective commodities. Rice producers have offset some of the higher cost of production by using less expensive surface water sources rather than irrigation wells. Cattle ranching and hay production are currently the best alternative uses of agricultural land in the parish. If cattle and calf prices continue to improve these types of farm enterprises are likely to continue and expand, at least in the near term.

#### Weaknesses

The land and water resources of Cameron Parish are limiting factors in the long-term productivity and economic success of agriculture of the area. Any decline in rice production threatens the maintenance of the infrastructure that supports the industry throughout southwest Louisiana. At this time it is uncertain whether federal agricultural policy will continue to provide some income support to rice producers beyond the expiration of the FAIR Act in 2002. As a result, the future of rice production in southwest Louisiana and Cameron Parish is in doubt.

Cameron Parish rice producers also face excessive yield losses to birds because rice fields are close to marsh habitat. The Animal Damage Control Office of USDA is in the fifth year of conducting and monitoring projects to control blackbird populations in the rice growing belt of southwest Louisiana. The Louisiana Rice Growers Association, in conjunction with USDA and Cooperative Extension personnel, are working together to help decrease the destruction these birds do to rice crops. This year 90 acres were treated in this region. USDA personnel provide careful monitoring and controls over the treated area to ensure that current government guidelines are met (LeBlanc).

## **Opportunities**

### Immediate Action

Market prices for rice and soybeans have been favorable in the last two years and are expected to continue so in the near future. Cattle and calf prices should begin an upswing in the cattle cycle in the near future that could continue for the next several years.

Crawfish production is an opportunity that is extremely labor intensive (de la Bretone, Jr. and Romaire, 1987). A 40-acre crawfish pond can be constructed for approximately \$70,000 and operated annually for about \$26,000. For more information on crawfish production, marketing, and economics contact Kevin Savoie, the fisheries agent for Cameron and Calcasieu parishes.

#### Near-Term Action

Research and technology may offer solutions to some of the problems faced by Cameron Parish rice producers. Genetically altered seed varieties coming onto the market in the next several years, such as Roundup Ready Rice, will be resistant to selected herbicides, allowing for more efficient and less costly weed control.

Some producers in southwest Louisiana are currently experimenting with sugarcane as an alternative crop. Producers are utilizing rail and truck transport to existing mills in the southeast portion of the state. However, rail transport is not available in Cameron Parish and may prevent consideration of this alternative. The mills are apparently encouraging this expansion in order to satisfy their own capacity needs. No sugar mill construction is being considered in the southwest Louisiana.

Lease-fee hunting has long been a source of outdoor recreation for Louisianians who do not own lands of suitable size or quality for hunting. This type of hunting often represents a major source of income for landowners. In fact, the income from hunting may make the difference between breaking even or suffering a loss (Payne, 1997). Cameron landowners should continue exploring such opportunities.

#### Longer-Term Action

Success of sugarcane production in Cameron Parish will eventually depend on the productivity of the land and the management capabilities of producers in offsetting higher transportation costs. In the long run, agricultural producers will need to evaluate the potential for alternative crops, such as kenaf, in comparison with the traditional crops of rice, soybeans, hay, and cattle. While alternative crops may be suitable for the climate and soils of Cameron Parish, the necessary processing and manufacturing infrastructure to make production economically viable may not exist.

Landowners should also be prepared to consider other nonagricultural alternatives for land use, including government programs for returning converted wetlands to their original condition and mitigation banking. For example, the Environmental Quality Incentives Program (EQIP), which was established in the 1996 Farm Bill, may provide a mechanism which Cameron farmers and ranchers can use to help solve some of their natural resource concerns. "EQIP offers financial, educational, and technical help to install or implement structural, vegetative, and management practices called for in 5- to 10-year contracts for most agricultural land uses" (Natural Resources Conservation Service). Priority areas for the EQIP program are those that

have significant natural resource problems such as those with watersheds, regions, or areas of special environmental sensitivity or having significant soil, water, or related natural resource concerns. These natural resource concerns can include soil erosion, water quality and quantity, wildlife habitat, wetlands, and forest and grazing lands. The priority areas will be identified by local work groups which should help ensure that local needs and priorities are met (Natural Resources Conservation Service).

## Chapter References

- de la Bretone, Jr., and Robert P. Romaire.
  Southern Regional Aquaculture Center.
  "Crawfish Production: harvesting,
  Marketing and Economics." SRAC
  Publication No. 242. January 1990.
- Economic Research Service, USDA, "1996 FAIR Act Frames Farm Policy for 7 Years," Agricultural Outlook Supplement, April 1996.
- LeBlanc, Dwight. USDA, Animal Damage Control. Telephone Conversation, July 1, 1997.
- Louisiana Cooperative Extension Service, Louisiana State University Agricultural Center, 1996 Louisiana Summary, Agriculture and Natural Resources, Publication No. 2382. February 1997.
- Natural Resources Conservation Service, "Environmental Quality Incentives Program Fact Sheet." http:// www.nhq.nrcs.usda.gov/OPA/FB96OPA/ eqipfact.html.
- Payne, Jack. Texas Agricultural Extension Service. "Proceedings of the Waterfowl Hunting Business Conference." September 25-26, 1987.
- U. S. Department of Commerce, Bureau of the Census, 1992 Census of Agriculture: Louisiana.

Zapata, Hector O., and David Frank,
Agricultural Statistics and Prices for
Louisiana, 1989-1995, A.E.A. Information Series No. 147, Department of
Agricultural Economics & Agribusiness,
Louisiana State University Agricultural
Experiment Station, Baton Rouge, LA,
October 1996.

# COASTAL RECREATION AND TOURISM

Elinor Craven, Department of Culture, Recreation and Tourism Office of State Parks, Division of Outdoor Recreation

Ken Roberts, Specialist, Marine Resource Economics, LSU Extension Service

Rochelle Michaud Dugas, Field Coordinator
Office of Rural Development, Office of the Governor

Tourism offers an excellent opportunity for rural parishes such as Cameron to diversify their economic base. Cameron has a cultural heritage and wealth of natural resources that can be a source for capitalizing on tourism, especially in the increasingly popular nature-based tourism.

## Existing Situation

Cameron can derive great benefits from nature-based tourism, but it is not likely, nor desirable, that large developments take place. Local ownership and investment in tourist attractions and services are essential because under such approach to development (1) tourism profits are more likely to stay in Cameron; (2) additional local investments will be encouraged; (3) there will be more and a better selection of jobs for residents; and (4) the concept of sustainable development can best be implemented by local interests as they are more likely to respond to linking economic growth, job creation, and environmental stewardship.

Cameron is already well known for birding, but currently this is primarily a day-trip market. Other visitors come to the area to use the resources, but do not spend much money. Cameron needs to capture this revenue through tourism-related service industries such as hotels, cabins, etc.

Cameron Parish has three federal, one state, and one privately owned wildlife refuge

(Sabine, Lacassine and Cameron Prairie National Wildlife Refuges, Rockefeller Wildlife Refuge, and the Audubon Society's Holleyman-Sheely and Henshaw Sanctuary). Due to strong national public support for wetland and wildlife preservation, federal acquisition of land for additional refuges has increased in recent years. This has been a concern for Cameron Parish because of loss of property tax revenues. Though state and federal refuges are required to share a portion of the revenues derived from the land such as farmland leases, alligator and fur hide sales, and oil and gas royalties, these revenues have dropped in recent years. Tourism, through visitation to these areas, has the potential to balance or even exceed lost revenues and property taxes (Coreil, 1993).

As shown in Table 3 the impact of travel on the parish for 1991-1995 has remained fairly stable with employment remaining constant and state and local taxes increasing only slightly. With the increasing popularity of nature-based tourism activities, Cameron has the potential for increasing these numbers.

Some steps have been taken to promote tourism in the parish, such as forming a Cameron Parish Tourist Commission and Cameron Parish Chamber of Commerce and compiling a parish resource directory. Fairs and festivals attract many visitors to the region and several are held in the parish each year: Louisiana Fur and Wildlife

Table 3. Impact of Travel on Cameron Parish, 1991-1995

	1991	1992	1993	1994	1995
Expenditures (\$Millions)	3.62	3.68	3.89	4.32	4.21
Payroll (\$Millions)	.53	.53	.57	.66	.57
Employment (Thousands)	.05	.05	.05	.05	.05
State Tax Receipts (\$Millions)	.16	.16	.17	.19	.19

Source: U.S. Travel Data Center.

Festival, Marshland Festival, Fourth of July Festival and Fishing Rodeo, Summer Fishing Festival, Blessing of the Fleet, Cajun Riviera Festival, and Alligator Festival. In 1996, The Creole Nature Trail, a 180-mile driving route in Calcasieu and Cameron Parishes, became a National Scenic Byway. This has great potential for promoting tourism in the area.

Sportfishing and Hunting. From 1989 to 1995 the annualized growth rate in saltwater recreational fishing licenses in Louisiana was six percent. Expenditures per angler also increased, resulting in a high dollar growth rate. Data available from published sources do not depict Cameron Parish's situation specifically. However, the National Marine Recreational Fishery Statistics Survey conducted annually does provide Louisiana data. It depicts the number of trips, location, and mode of angling. This data base was reviewed to provide insight as to the economic significance of the saltwater angling industry.

From the mid 1980s to mid 1990s, the number of saltwater angling trips involving fishing from the shore in Louisiana actually decreased 19 percent. Although in 1995 anglers still made 646,000 shore trips, this was a decrease of 144,000 trips from the mid 1980s! Cameron Parish has the

potential to maintain as well as increase the attractiveness of its area to shore anglers. The previously cited period also revealed a major change in the charter industry. A significant increase occurred in Louisiana's nearshore and inland saltwater charter fishing trips. By 1995 the increase amounted to 18 percent. Approximately, 60,000 saltwater charter trips were taken in 1995. Overall, the charter guides increased their share of total saltwater fishing trips taken in Louisiana by approximately 22 percent. Louisiana's generous bag limits compared with those of Texas can be a stimulus. Also, north Louisiana anglers represent a valued economic opportunity to bring money to the parish.

Interviews with saltwater angling guides in the parish verified these trends. There were 16 saltwater guides in Cameron Parish licensed by the Louisiana Department of Wildlife and Fisheries in 1996. An additional 15 licensees reside in Calcasieu Parish. It is clear that the inshore waters of Cameron Parish and offshore are the reason for the existence of these businesses. Fishing guides bring "new" dollars into the Cameron community. These businesses not only need viable fishery resources but an infrastructure conducive to travelers. Although no specific discussion with hunting guide businesses occurred, it is

important to record that many are combined with fishing guide businesses. The parish government should recognize this more seasonal business pursuit as a potential avenue for additional stay over days and nonseason visits. It is important to recognize the fishing and hunting business personnel as having the most lengthy contact with tourists per stay. These personnel need to promote the community with a positive attitude.

#### Outlook

Rural tourism has flourished in Louisiana in the last decade or so, primarily because of its rich natural and cultural resources. Some communities have done better than others in capturing this market. Their success can be attributed to several essential elements: leadership, partnership, entrepreneurship, and sustainability. Any community seeking to incorporate tourism into its economic development efforts or becoming more active in development, would be well served to note these components.

Competent, motivated, strong leadership is vital if tourism, or any other key sector, is to become an economic force within Cameron Parish Sufficient and attractive facilities. services, attractions, finances, and all other aspects necessary to produce a tourism program will not progress unless adequate leadership can provide direction and planning. In the early 1980s, the travel industry, particularly tourism travel. prospered in south Louisiana. But the predominantly rural coastal parishes did not take advantage of the opportunity because the region was fairly prosperous at the time and few leaders could be motivated to think along the lines of economic diversification. Many viewed tourism as a frivolous activity rather than a generator of jobs, income, and tax revenues. As a result, the lion's share of

the growth and benefits accrued to New Orleans. But in the mid 1980s, coastal leaders began to seriously explore alternative economic strategies to help overcome the severe economic downtum and many focused on tourism as part of the solution. Tourism was one of the state's few growth sectors and required relatively minor public investments. Those Louisiana coastal communities that are today considered tourism success stories and models for replication achieved this status by identifying and developing effective leadership for the public as well as private sectors. The need to network and coordinate both within and outside parish borders is another vital element for success, particularly in light of the designation of the Creole Nature Trail as a national scenic byway. Cameron has become a member of the Louisiana Travel and Promotion Association, Louisiana Fairs and Festivals, and Southwest Louisiana Convention and Visitors Bureau. But in order to build on this positive first step, additional intra- and intercommunity cooperation must be sought and organized. Certainly there is a need to encourage visitors to spend more time in the parish and environs, but there is also an urgent need to make area-wide improvements to many of the heritage-based resources in order to create a better attractions package. Partnerships can also help create more events. In addition, they can help clarify the

opportunities for larger attractions and parish's internal and external images. The most successful Louisiana coastal towns

and parishes have forged strong and lasting intracommunity partnerships by reaching out within the parish and involving the private sector, not just government. Furthermore, they have involved both the for-profit component (represented by motels, restaurants, guide and charter services, etc.) as well as nonprofit interests, most often

represented by civic groups, environmental, sportsmen and conservation organizations, etc. The key has been to be inclusive, not exclusive.

Broadly based actions are needed because local governments alone cannot accomplish long-term solutions. Cooperation is essential. State and federal governments are more than sources of funding, and those coastal parishes and towns that have realized this and involved these governments in their tourism development activities have benefitted tremendously. For instance, state and national wildlife refuges in Cameron are tourist destinations, and regulations and forms of development are topics that need to be confronted and resolved early on. Signage issues, an often discussed priority topic for tourism development, also cannot be resolved without government actions. Furthermore, governments are excellent sources of technical assistance for an array of tourism-related topics.

Attractions draw people into our coastal parishes, while businesses and the services they provide create a large majority of the jobs and income generated by the tourism. industry. And to a large extent, small businesses have been at the heart of rural tourism development in coastal Louisiana. Business development in this sector has been characterized by commitment of both time and resources from entrepreneurs. Cameron has been no exception. Many businesses in Holly Beach, for example, started small, and the owners/operators had close ties to the community, invested their personal resources, and grew as tourism expanded. It has also been very apparent that business development and expansion are difficult without strong support from other in the business community and occasional technical assistance to solve problems. Parish governments must also

provide strong support for business development.

Rural, coastal Louisiana is particularly fortunate in that we have a distinctive, and in some instances unique, set of attractions based on our natural endowments, history, and culture. Cameron, for instance, has the most beachfront access in the state and is blessed with natural beauty. The most successful attractions have sought to be authentic and preserve the integrity of the resources while increasing their drawing power. Thus, the key to sustainability is to carefully manage to assure visitor satisfaction while balancing this with outstanding stewardship of the resources.

## Strengths

Cameron Parish is recognized as one of the best birding destinations in the state and probably the nation. Many birders already visit the parish to enjoy the great number of species that use the parish's abundant habitat for feeding and resting. Its location with 26 miles of beaches along the Gulf of Mexico provides many sporting and outdoor recreation opportunities. The outstanding natural resources of the parish provide enormous opportunities for outdoor enthusiasts, as do the marine resources of the Gulf of Mexico.

Funds have been obtained for the Jetty Road Fishing Pier Project, which will convert a popular but dangerous recreational area of rock jetties near the Calcasieu Ship Cannel into a user-friendly facility. This 2500-footlong fishing pier will provide safe access for anglers, birders, and other visitors to the area. The project will include parking, restrooms, lighting, and camp facilities. It has been demonstrated that anglers use shore fishing opportunities when such facilities exist. Marketing the jetty project along the

Calcasieu Ship Channel will ultimately benefit the community.

Groups and individuals visited by the study team thought that tourism is big business and that Cameron Parish has the potential for enhancing its existing tourism sector. Such a positive attitude can go a long way toward building the interest needed to sustain and develop tourism within the parish, but organization and leadership seemed to be a problem.

The Creole Nature Trail has been designated as a National Scenic Byway. This provides an opportunity for partnering with Calcasieu Parish and the Southwest Louisiana Convention and Visitors Bureau for advertising, tour packages, etc.

#### Weaknesses

Tourism promotion of the parish has been inconsistent, and in order to stimulate visitor interest and access to attractions, there needs to be an on-going effort. While the parish has the Beachfront Development District, the Chamber of Commerce, and other organizations, a more active and involved Tourist Commission would be beneficial to the parish. The existing committees such as the Fur and Wildlife Festival Association, Cajun Riviera Festival Association, Alligator Harvest Festival, and others need to join to provide new ideas, to motivate each other, and to plan the direction for tourism for the parish. By joining, forming subcommittees, and getting more people involved, much more can be accomplished toward common goals. While there are several organizations working on tourism projects, there did not seem to be a concerted effort by all individuals to move toward a common goal. The tourism community should work with existing assets before undertaking huge projects that may be less likely to succeed.

Fishing guide businesses deal face to face with numerous tourists for an extended period of time each visit, and any tourism development efforts for the parish would be more productive by involving the fishing guide companies. These are not the same casually operated, part-time businesses that were common to the industry 10 years ago. The existing operations reflect well on the community and are run by full-time operators with top-quality equipment who provide excellent fishing experiences.

There are many fresh and saltwater fishing opportunities, but team found that there is a need for comprehensive marina services in the parish. From Freshwater Bayou to the Texas border, there are no marinas that meet these fishermen's needs. The parish leadership should delegate a few people to travel to comprehensive marina developments in central and southeastern Louisiana. such as Cypress Cove and Pointe Fourchon or Pleasure Island near Port Arthur, Texas. These developments are compatible with the petroleum industry. Both exist in petroleum-based economies, yet are able to provide attractive environments for recreational boaters and owners of quality homes. Marinas are more than boat slips. Marina investments often include wet slips, dry rack storage, guide services, boat condominiums, and canal complexes for home construction. There is some development emerging in Hackberry and Big Lake. Yet the potential exists for further development.

Litter continues to be a problem, and not an easy one to solve, though much has been done to clean up the parish since the first team visit to the area. It is not only a cleanup issue but an educational one, which needs to be addressed through hospitality training, in the school system, and through civic organizations. The annual Beach Sweep continues to clean up litter each year

along the beaches, but there is a need to clean up the derelict boats and other structures abandoned to rust in the waterways and on land which are an eyesore to tourists as they travel the parish.

Signage is a vital element in directing tourists to attractions and locations within the parish. While there has been an improvement in signage, there are still some areas that lack proper signs and other that are in need of maintenance.

# **Opportunities**

### Immediate Action

Hospitality training is needed not only for the front-line workers in hotels and restaurants, but also for employees at bait shops, convenience stores, the parish library, gas stations, government offices, the sheriff's office, ferry landings, and everyone who is likely to serve visitors. Familiarization tours should be conducted for the hospitality trainees as well as various other groups. These tours would be designed to acquaint the trainees with the parish's many attributes and attractions, as well as the importance and economic benefits of tourism. Many workshops and seminars are available, such as the Louisiana Rural Tourism Conference, LTPA-sponsored workshops on various topics, Louisiana Office of Tourism-sponsored seminars, and others. It is vitally important to the promotion of the tourism industry that the community be knowledgeable about what it offers, as well as friendly and helpful. Though brochures were developed in the past, new ones should be printed updating information. They should be kept updated and on the shelves. The parish should partner with such groups as the Southwest Visitors and Convention Bureau, Louisiana Travel Promotion Association, fishing and

hunting clubs, Louisiana Office of Tourism, and the Texas Office of Tourism, and keep them abreast of activities such as fairs, festivals, fishing rodeos, birding season, etc.

Ferries can be tourism and economic development generators. DOTD is looking at ways to phase out ferries throughout the state. But since a bridge over the Calcasieu Ship Channel is not likely in the near to mid-term, it would be advisable for Cameron Parish officials to investigate the possibility of obtaining an additional ferry to expedite traffic or at the very least for backup in case one breaks down (the only backup now is a much smaller ferry). The Chamber of Commerce, for example, can begin identifying times when congestion at the ferry is the greatest, obtain DOTD figures regarding users, and identify other areas where ferries are successfully accommodating traffic. Tourism development would also be served by such a move. Cameron could be marketed as one of the last "ferry rides" in the state or the South since there are relatively few left.

Highway 82 pull-offs. Highway pull-offs along LA 82 should be investigated and promoted to accommodate not just emergency situations, but also birders, anglers, and outdoor enthusiasts. Developing stops along Hwy 82 with stops at the federal wildlife refuges and Rockefeller would also be a worthwhile project, and would tie into promotion of the Creole Nature Trail National Scenic Byway. Also, school groups and educational tours could be put together to explain and visually examine the disastrous effects of coastal erosion left unchecked, particularly in the Johnson Bayou, Constance Beach, and Holly Beach areas.

Access to pier and bank fishing. Access to water-based recreation is a priority among

outdoor enthusiasts, particularly the availability of bank or pier fishing, which is extremely important for the many who cannot afford boats or guides. In addition to the development along the Jetty Road, a fishing pier at Holly Beach would be well utilized. A "coastal fishing trail" to accompany a "coastal birding trail" might be the second trail in a coastal series, beginning with the rocks at Johnson Beach, a pier at Holly Beach, the Cameron Jetties, and possibly surf fishing at Rutherford or other beaches. Here again, pull-offs would be a necessary feature to accommodate tourists, birders, anglers, and emergencies. These would be in addition to those already being planned along LA 27. Fishing at the rocks along Johnson Bayou has been a great attraction for persons wading to the rocks or fishing by boat. Shops, restrooms, gas and parking areas need to be developed to accommodate these fishing enthusiasts. This area should then be targeted for promotion.

Nonhunting and fishing opportunities such as birding, shelling, biking, hiking, and the swimming beaches need to be more effectively promoted, taking advantage of the Creole Nature Trail National Scenic Byway. Rutherford and Holly beaches are very nice, but in need of restrooms and possibly concessions. Instead of trying to get the FEMA requirements changed, officials should look at Grand Isle State Park, and other parks along the Alabama and Florida coasts that innovatively have addressed the problem without exorbitant additional costs.

The parish should continue to support the development of private-sector marsh and wildlife tours in the wildlife refuges, capitalizing on the fact that there is no other place in the country where so much wildlife can be seen with so little expense.

Continued promotion of the Fur and Wildlife Festival as authentic and revitalization of the Caiun Riviera Festival. An ongoing observation and criticism put forth by the Rural Tourism Development Task Force is that festivals are becoming generic and no longer integrate the traditions that spurred their creation. The Fur and Wildlife Festival is a good example of an event that has stayed close to the traditions that created it. However, there should be more marketing of the event outside the parish. Contact with the Southwest Louisiana Convention and Visitor's Bureau, the Louisiana Travel Promotion Association, and attendance at the Rural Tourism Conference are good places to start networking and garnering ideas and support for the event.

The Cajun Riviera Fourth of July celebration was chosen three times as one of the top 20 events in the Southwest United States. It was founded to promote business and tourism in the area as well as preserve the Cajun culture. These achievements provided positive marketing opportunities for the parish and consideration should be given to reestablishing the festival.

Many of the suggestions in Louisiana Sea Grant's first (1987) and follow-up assessments (1990) have been implemented partially or entirely. The reports should be revisited for evaluation purposes and to help determine future courses of action.

The Internet is a tremendous tool for marketing and for obtaining information, as travellers can become well informed about Cameron when considering their travel plans. The Internet is as close as the public library or the schools. Librarians, students, and teachers could be enrolled in research to find out what others are reading, seeing, and hearing about the parish.

The state provides Internet access to parish information through http:// www.doa.state.la.us/ including parish profiles and various information about state departments. The State Parks home page (http://www.crt.state.la.us) lists state parks, state commemorative areas, and preservation areas with information about each. Home pages for Louisiana parishes can be found at http://www.lapage.com/ page/ with 64 clickable parish locations that include a tour of the area's culture and attractions, dining, lodging, etc. Http:// www.louisianatravel.com provides an alternative to information in the Tour Guide. According to Peter A. Mayer Advertising, this site received almost 300,000 hits from January to April 30, 1997.

The Internet is a relatively inexpensive mechanism for providing information to tourists and potential tourists immediately. It is easily updated with new information and, with audio capabilities, it's possible to talk to web site visitors! Purchases and reservations can now be made on-line. Possibilities abound and this tool should become a part of any marketing program. Cameron would best be served, in the near term, by working with the Southwest Louisiana Convention and Visitors Bureau on such opportunities.

### Near-Term Action

"Alternate 10," Coastal Louisiana, is a national treasure. The shortest route in terms of actual mileage from Houston to New Orleans is LA 82 to LA 14 to US 90 through Cameron, New Iberia, Morgan City, Houma, and Thibodaux. This would serve as a perfect nature-based tourism route, including a continuation of the Texas Coastal Birding Trail. It could be featured as "Alternate 10." This would provide a perfect opportunity for a multiparish task

force to investigate economic development opportunities associated with nature-based tourism in other areas and partner to entice visitors to travel "Alternate 10." A first step would be the coordination and promotion of a birding trail along this route.

Texas has created a very successful coastal birding trail with High Island in Jefferson County identified as one of the most significant viewing areas in the country. Nearly two million birds are attracted annually to the Holleyman-Sheely and Henshaw Sanctuaries near Johnson Bayou, a fact that is of great significance to birding enthusiasts.

Several actions need to take place in preparation for partnering concerning birding activities. Parish officials should arbitrate between Holleyman-Sheely Sanctuary representatives and the Little Florida Subdivision to reach reasonable accommodation for both the subdivision residents and naturalists wishing to continue providing excellent birding opportunities. Possibly some screening along the perimeter of the sanctuary would appease residents who are offended by the weed gardens grown to feed birds.

Because of the popularity of shore and surf fishing in Cameron Parish, the beach stabilization rock breakwaters parallel to the beach on Highway 82 are a valuable asset. Maintenance of access to this shore fishing opportunity is essential. Highway 82 is threatened by coastal erosion and must be viewed as an asset for transportation, beach angling access, and marshland protection. The availability of wade and jetty fishing can be viewed as providing diversity for saltwater anglers.

The Calcasieu Ship Channel has potential to generate income. Docks and stores for

bait, gas, ice, and other supplies are needed by fishing guides and the public. Having these facilities would also capture money within the parish that anglers are currently spending outside the parish. If no land is available in the Monkey Island area or on port property on the west bank of the channel, a barge could be used with fuel and an ice plant and tied up to the Port Commission's property. Venice Marina used to do this. Because of the lack of facilities below Hackberry and Grand Lake, anglers make their purchases and stay overnight outside the parish.

Interviews with saltwater fishing guides indicated that 90-95 percent of their clients are from outside the Cameron/Calcasieu economies. They need comfortable accommodations and their guides need fuel, ice, and boat storage at convenient places. Once guides leave the Hackberry and Big Lake areas, support services are in need of improvement. Consider this to be also a reflection of private-boat angler needs. Private-boat anglers represent a growth prospect for the community. Dry rack storage, wet slips, boat condominiums, and marinas are needs offering business investment opportunities.

The Intracoastal Waterway is as an overlooked asset. Many vacationers with large boats and sailing vessels cruise inland waterways, such as the Intracoastal, on trips from Maine to Corpus Christi, Texas. A place to fuel, purchase supplies, and fish would be an attraction to this niche market group. A marina in the area around Monkey Island would not only attract these vacationers, but also Louisiana and Texas residents looking for a day's fishing trip. The marina planned for the Mermentau River needs to become aware of this opportunity to serve transient boaters.

Hunters can equal new dollars in the Cameron Parish economy. There are over

15,000 hunters who commute from outside the parish. According to the 1991 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation for Louisiana, hunters spent an average of \$59 per day. This could be a great gain in revenue for Cameron Parish. Accommodations, supplies, and boat launching and docking facilities are needed to keep these people overnight. As it is, they use the resources, leave litter, and are gone. The Little Pecan property is being sold by The Nature Conservancy and will in all likelihood be used for hunting and fishing purposes.

## Longer-Term Action

Monkey Island represents a rare opportunity for the parish. Most coastal communities that attract great numbers of tourists went through a cycle from a small fishing village, to an inexpensive campsite for citizens living nearby, to a deteriorating. rundown area unattractive to tourists, to an attractive area in demand by visitors. Examples are Santa Rosa Island at Pensacola, Gulf Shores, and Dauphin Island, where hurricanes created a clean sweep and rebirth of the area. We are not suggesting cheap attractions, but are saying that Cameron has the opportunity to carefully plan attractively built marinas, motels, service facilities, stores, condominiums, and entertainment areas. Louisiana examples of such developments can be found in Grand Isle, Venice, Pointe Fourchon, and in the south Terrebonne area.

A state park for Cameron Parish. The Louisiana State Parks Master Plan, 1997-2012 calls for a series of coastal state parks and preservation areas extending from Plaquemines Parish to Cameron Parish. Cameron Parish was selected because of the significant natural resource base, and the opportunities for fishing, bird watching,

hiking, boating, carnping, and other family activities. The location of a park in Cameron could generate \$3 million or more in acquisition and construction depending on the facilities and land costs, offer local park operating budget expenditures of \$100,000 to \$200,000+, and have other direct and indirect economic impacts. For instance, Grand Isle State Park, in 1994, accounted for \$4.8 million in total expenditures by park visitors in Louisiana in preparation for their trip to Grand Isle, in route to and from, and during their visit. The total economic impact on the parish economy was \$8.4 million.

The parks developed by the Cameron recreation districts all are well used and offer local recreational opportunities. The areas need to be studied and the potential to add or redirect the recreational development is needed. For instance, Recreation District #6 between Creole and Cameron could be studied for rally camping opportunities, perimeter exercise trails, etc.

# Chapter References

Bureau of the Census. 1991 National
Survey of Fishing, Hunting, and
Wildlife-Associated Recreation,
Louisiana. U.S. Government Printing
Office, Washington, DC 1993.

Coreil, Paul. Facts and Analysis of the Economic Structure of Cameron Parish, Louisiana. Louisiana State University. 1993.

U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce,

# BUSINESS AND INDUSTRIAL DEVELOPMENT

Robin Roberts, Research Associate, LSU Office of Sea Grant Development Michael Liffmann, Assistant Executive Director, LSU Office of Sea Grant Development

#### **Existing Situation**

Employment changes (1985-1993). As part of the Cameron Parish economic assessment study, Louisiana Sea Grant analyzed the parish's economy using a technique known as "shift-share analysis." Shift-share analysis enables parish leaders to evaluate how their parish compares with the United States and Louisiana in terms of employment shifts and growth. The results of this analysis are shown in Tables 4 and 5. For a more in-depth discussion of the economic analysis techniques used, see Appendix B.

In terms of employment, the parish experienced growth in several sectors between 1985 and 1993 as seen in the column labeled "Actual Change" in Table 4. These sectors were construction, manufacturing, retail trade, finance, insurance, real estate, and the service sector. In some cases, employment growth was quite strong, surpassing growth rates in the state or the country as a whole. For example, when we look at construction, we would expect growth of only two jobs between 1985 and 1993. Cameron Parish actually added 109 jobs, causing a net gain of 107 jobs in this sector. The service sector was the fastest growing sector in Louisiana and the United States. This was also true in Cameron Parish.

Not surprisingly, given the economic downturn of the 1980s, one of the hardest hit sectors for Cameron Parish was the mining sector. It is noteworthy that this sector declined at both the state and national levels, yet Cameron Parish employment losses in mining were at a rate greater than those of Louisiana or the U.S. as a whole. The "Parish Share Effect" columns in tables 4 and 5 show the share of employment lost by the parish. All of this decline was attributed to the steady deterioration of the offshore oil and gas extraction industry.

Calculations presented in the "Potential Change" column of Table 4 indicate that, because of on national economic forces alone (U.S. employment growth and the industry mix), Cameron Parish should have gained 214 jobs between 1985 and 1993. Total nonagricultural employment for the period increased by only 95 jobs. That means that Cameron actually suffered a net loss of 121 jobs ("Actual Change" minus "Potential Change").

Relative to Louisiana employment growth (Table 5), which was in a state of decline at the time, Cameron Parish should have gained only one job ("Total of Potential Change" column) versus the 95 that were actually gained. Thus, relative to the state, Cameron realized a net gain of 94 jobs between 1985 and 1993 ("Total of Parish Share Effect" column).

Economic base. In order to help define the economic base for Cameron Parish, Louisiana Sea Grant used an analytical tool known as location quotient analysis. A location quotient measures the parish's relative employment concentration in various industries. For more information on location quotient analysis, see Appendix B.

Table 4. Shift-Share Explanation of Employment Changes in Cameron Parish Relative to U.S., 1985-1993

Sector	National Growth Effect	Industry Mix Effect	Potential Change	Actual Change	Parish Share Effect
Mining	-117	-34	-151	-234	-83
Construction	2	0	2	109	107
Manufacturing	-12	17	5	5	0
Transportation & Public Utilities	78	-4	74	-37	-111
Wholesale	7	2	13	-32	-45
Retail	43	4	47	9	-36
Fin., Ins., Real Estate	9	9	18	17	-1
Services	298	-92	206	225	14
Total	314	-100	214	95	-121

Sources: Louisiana Sea Grant College Program 1996; and County Business Patterns, U.S. Department of Commerce, Bureau of the Census, 1985 and 1993.

Table 5. Shift-Share Explanation of Employment Changes in Cameron Parish Relative to Louisiana, 1985-1993

Sector	State Growth Effect	Industry Mix Effect	Potential Change	Actual Change	Parish Share Effect
Mining	-149	6	-143	-234	-91
Construction	-6	32	26	109	83
Manufacturing	3	-7	-4	5	9
Transportation & Public Utilities	-49	-47	-96	-37	59
Wholesale	-8	3	-5	-32	-26
Retail	11	7	18	42	24
Fin., Ins., Real Estate	-3	5	2	17	15
Services	319	-116	203	225	22
Total	118	-117	1	95	94

Sources: Louisiana Sea Grant College Program 1996; and County Business Patterns, U.S. Department of Commerce, Bureau of the Census, 1985 and 1993.

## If LQ=1:

Industry employment in the parish and the U.S. are concentrated to an equal degree.

## If LQ<1:

Parish employment in the industry is concentrated less than in the U.S.

#### If LO>1:

Parish employment in the industry is concentrated more than in the U.S.

The location quotients in Table 6 show some of the areas in which Cameron Parish non-agricultural employment is concentrated more than in the United States. For instance, in 1994, parish employment in oil and gas extraction was concentrated 25 times as much as in the U.S., and that same year, Cameron Parish employment was approximately 33 times as concentrated in water transportation as in the rest of the U.S.

Cameron Parish's key economic sectors have been grouped into two categories that reflect the source of their economic significance. They are: (1) natural resource extraction and use, and (2) local commerce.

#### Natural resource-extraction and use.

Natural resource extraction means the resources are physically removed from their location. Some of these resources, such as fisheries, can be renewed, while others, such as oil and gas, occur in limited quantities and can only be partially renewed through reuse and recycling efforts. Natural resource use means that businesses and industries make use of the resources where they are, possibly with some modification, but the resources are not removed.

As a part of natural resource extraction and use, there are related value added and export

Table 6. Selected Location Quotients for Cameron Parish Relative to U.S., 1991-1993

Title	1991	1992	1993	1994
Natural Resource Extraction and Use				
Oil & Gas Extraction	18.84	40.03	15.35	24.69
Heavy Construction (including oilfield)	16.70	17.77	11.58	12.75
Electric, gas, & sanitary services (gas pipelines)	5.91	5.06	8.57	8.50
Business Services (oilfield services)	4.06	3.44	3.48	3.33
Wholesale-nondurable (including crude petroleum)	1.29	1.67	0.95	0.82
Food & Kindred Products (including seafood processing)	2.28	3.67	4.76	3.11
Water Transportation	62.30	60.05	41.54	33.33
Local Commerce				
Retail - Building materials, hardware, etc.	1.63	1.82	1.68	1.75
Depository Institutions	1.35	1.15	1.23	1.12

Sources: Louisiana Sea Grant College Program 1996; and County Business Patterns, U.S. Department of Commerce, Bureau of the Census, 1985 and 1993.

activities that take place within the parish. These activities are important because they bring money into the parish from outside the region.

Oil and gas extraction has historically been of great importance to Cameron Parish, not just because of the large deposits and activities that take place within the parish's jurisdiction, but also because of its proximity to oil and gas reserves in the Gulf of Mexico. For instance, in 1994, Cameron Parish produced 4,288,424 BBLS of oil and condensate and 133,441,692 MCF of natural and casinghead gas.

Sea Grant estimates that as much as 60 percent of the nonagricultural employment in Cameron Parish is somehow related to oil and gas extraction. Many of the businesses and industries in the parish have forward and backward linkages with the oil and gas extraction industry. Forward linkages include the wholesalers like L & L Oil who handle the crude petroleum, as well as pipelines run by companies such as ANR Pipeline and Tennessee Gas Pipeline. Most of the processing activity takes place north of Cameron in Calcasieu Parish, but there is some processing by NER Natural Gas Clearing House. Backward linkages are those companies that provide inputs or services for use in oil and gas extraction and related areas. Some examples are Francis Drilling Fluids and Wilson Supply Company. There are other industries that do not provide direct inputs, but are still linked to the oil industry. For example, Petroleum Helicopters transports workers to the oil rigs offshore.

Fisheries and wildlife are a big part of the economic base of Cameron Parish. In 1995, fisheries and wildlife produced a gross farm value of \$28.5 million in the parish with \$21.3 million a result of two products,

shrimp and menhaden. Table 7 shows the complete breakdown. Carneron Parish accounts for over 7 percent of the shrimp and over 20 percent of the menhaden landed in Louisiana. Another important product for the parish is alligator production (hides, eggs, and meat). Over 11 percent of the wild and farm-raised alligator value in Louisiana was in Cameron Parish. One fact the table does not show is the importance of wild alligators. Carneron Parish produces over 20 percent of the wild alligators in Louisiana. Attempts are being made to market nutria meat.

Seafood handling and processing are by far the largest value added/export activities within the parish. Most of the seafood products are sold to handlers and wholesalers who first pack the product in ice and then export it outside the parish to be processed. Most of the value-added seafood processing within the parish takes place at Zapata Haynie, Inc., which produces fish meal and oil from menhaden. Alpha Seafood in Hackberry also processes seafood, primarily shrimp.

As mentioned earlier, resource use refers to businesses and industries that make use of resources without removing them. This application of natural resources must be sustainable for continued use. Some sustainable uses of natural resources include land use for agriculture (crop and animal production), waterway use for freight and passenger transportation, and consumptive (hunting and fishing) and nonconsumptive (birding, photography, shelling, etc.) uses of wildlife such as nature-based tourism.

The agricultural sector does not have as big an economic impact on Cameron Parish as do fisheries and wildlife. In 1995, the gross farm value of crop production was \$5.5 million. The largest single crop was rice,

Table 7. Fisheries and Wildlife Production in Cameron Parish, 1995

Animal	Number of Producers	Total Production	Gross Farm Value	% of LA	
Crawfish (Wild & Farm)	10	506,270 pounds	\$303,449	0.54	
Alligators (Wild & Farm)	3	53,514 feet	\$1,951,798	11.51	
Oysters	82	10,000 sacks	\$120,000	0.49	
Soft-Shell Crabs	4	500 dozen	\$9,000	0.44	
Catfish	40	100,000 pounds	\$50,000	1.14	
Gar	15	30,000 pounds	\$29,700	2.60	
Other Finfish	15	10,248 pounds	\$9,951	7.28	
Shrimp	700	7,950,840 pounds	\$13,516,428	7.28	
Menhaden	13	155,836,400 pounds	\$7,791,820	20.39	
Crabs	80	2,135,266 pounds	\$1,434,919	6.54	
Commercial Finfish	80	1,093,399 pounds	\$1,469,013	4.83	
Fur Animals	D	17,880 animals	\$100,233	8.59	

D = Disclosure

Sources: Louisiana Cooperative Extension Service, Louisiana Summary 1995 - Agriculture and Natural Resources.

which accounted for almost \$4 million. This was less than 2 percent of the value of all rice produced in Louisiana in 1995. Total animal production for Cameron Parish in 1995 was \$10.5 million of which \$10.3 million was in cattle and calf production. Cameron cattle and calf production accounted for 4.3 percent of the state's total.

Waterway use is an important aspect of the economic base of Cameron Parish. In 1994, there were 126 people employed in water transportation, Location quotient analysis from 1985 to 1994 showed that Cameron Parish specialized in water transportation employment 30 to 70 times more than did the United States. The most traversed waterways in the parish are the Calcasieu Ship Channel, GIWW, and the Mermentau

River. The economic impact of these important waterways on the parish economy is limited. In some circles, in fact, it is argued that the shoreline erosion and vehicular traffic disruption costs of the channel have greatly exceeded the benefits to the parish. However, future plans could greatly enhance the economic significance of the ship channel to the parish. The GIWW's significance is regional and national, not just local, although impacts such as shoreline erosion are felt by local landowners.

Nature-based tourism, also known as ecotourism, provides a nonconsumptive means of using the wildlife and land resources within the parish. Bird watchers and other nature lovers travel to the parish to

enjoy the natural beauty of the beaches, wetlands, and other wildlife habitats. In 1995, 8,462 people signed the visitors' register at the Cameron Prairie National Wildlife Refuge, and 7,725 at the Sabine National Wildlife Refuge Headquarters. A counter on the walking trail at the Sabine National Wildlife Refuge registered 173,228 visitors in 1995. The current economic impact of this nonconsumptive resource use is minimal, however, because of the lack of tourism support industries and a significant means for capturing the dollars locally.

Coastal recreation and tourism activities are important for two reasons: (1) tourism is a means of exporting culture, and (2) related activities bring in money from outside the parish. The export of culture includes intangibles such as the tourists' memories, but it also includes tangible items created by local artisans such as Shell Art by Mickey in Constance Beach. The biggest beneficiaries of tourism are the related support industries. Motels, restaurants, retail establishments, and hospitality services all benefit from people visiting the parish as travellers. In 1994, an estimated 330 people were employed in travel and tourism-related activities in the parish. This number, however, also includes the employment that overlaps with commercial travel activities.

Local commerce refers to those businesses within the parish that offer final goods and services to individuals and households. Other than the overlap with coastal recreation and tourism, these activities do not generate any new money within the region. Traditionally, these businesses are found in the construction, retail, and service sectors of the economy. They can also be found under the finance, insurance, and real estate sectors. In 1994, there were an estimated 900 people employed in local commerce activities in Cameron Parish.

Grand Lake, in the northern part of the parish, is experiencing some population growth associated with suburban growth in Lake Charles and relocations from the southern part of Cameron Parish. This growth offers business opportunities in commercial retail and services. At present, there is a scarcity of retail establishments in Cameron Parish. If these goods and services are not available locally, they will be purchased outside the area, with the associated loss to Cameron of business revenues. This situation causes a void in the parish economy as residents purchase may of the items they consume in Lake Charles or Port Arthur and Beaumont.

#### Outlook

Natural resource-extraction and use. The oil and gas extraction sector is, according to Dr. Loren C. Scott, an economics professor at LSU, "one of the truly bright spots in the (state's) economy...". In May 1993, there were only 86 rigs active in the state. By May 1997, that figure had risen to 189. Bob Baumann with the LSU Energy Center attributes this miniboom to technological advances that have reduced risk and increased drilling payoffs. Success rates, according to Baumann, have been "phenomenal". In one instance, a major firm drilled 18 wells and 16 proved successful. In another instance, a Louisiana-based firm succeeded with 12 of 13 wells drilled. This results in lower finding costs and helps offset higher operating costs. The technological advances include 3-D and 4-D seismic make it easier to locate oil and gas deposits, but these advances also enable companies to get more out of existing wells. The new Deepwater Systems technologies summarized below allow firms to drill at increasing depths:

- Fixed Platform (FP) Up to 1,650 feet.
- Compliant Tower (CT) 1,500 3,000 feet. Both the fixed platform and

compliant tower are supported by piles driven into the seabed.

- Floating Production System (FPS) —
  consists of a semisubmersible equipped
  with drilling and production equipment.
  Anchored in place with wire rope and
  chain, or can be dynamically positioned
  using rotating thrusters. 600 6,000 feet.
- Tension Leg Platform (TLP) a floating structure held in place by vertical, tensioned tendons connected to the sea floor by pile-secured templates. 1,500 -6,000 feet.
- SeaStar (Sstar) a floating minitension leg platform of relatively low cost developed for production of smaller deepwater reserves. 600 - 3,500 feet.
- Subsea System (SS) single or multiple wells located on the sea floor producing through a manifold and pipeline system to a distant production facility. 7,000 feet.
- SPAR Platform (SP) consists of a large-diameter single vertical cylinder supporting a deck. Hull is moored using a taut catenary system of six to 20 lines anchored into the sea floor. 2,000 to 10,000 feet.

The Deepwater Royalty Relief Act of 1995 helped make it economically feasible to drill

in deepwater (over 800 meters). The Minerals Management Service predicts that oil production will rise from 945,000 bbl/day in 1995 to between 1.6 and 1.9 million bbl/day by the year 2000. The table below shows the dramatic rise in deepwater activity.

In March 1997, 1,032 leases of federally owned tracts in the Gulf were sold for \$824 million. Oil and gas companies issued a record 1,790 bids for those tracts totaling \$1.2 billion. Scott cautions that the increase in activity will not be accompanied by a symmetrical increase in employment because of technological advances.

The outlook is one of optimism and high expectations for deepwater Gulf exploration and production for the next two decades. The deepwater gas reserves in the Gulf have been compared with those of Prudhoe Bay, Alaska, and technology is evolving at a pace in which depth will not be a major factor in years to come. Shell Oil Company described its Mars project as "...the largest Gulf of Mexico discovery in 25 years..." in an Internet news release (<a href="http://www.shellus.com/news/press080896.html">http://www.shellus.com/news/press080896.html</a>).

# Central Gulf of Mexico Tracts Receiving Bids1

Water Depth	1994*	1995*	1996*	1997*
<200 m	313	387	453	412
200 - 400 m	7	23	29	33
400 - 800 m	15	38	41	52
800 m>	40	140	401	535

<sup>\*</sup>Before Deepwater Royalty Relief

<sup>\*</sup>After Deepwater Royalty Relief

http://www.mms.gov/omm/gomr/images/graphics/cgomwd.html

Historically, the oil and gas extraction industry has been the driving force behind the Louisiana economy. Since the offshore activity is sustained in the coastal region, and because of the traditional ties to oil and gas, any new activity in this sector will tend to help the overall economies of the coastal region as well as the state. Much of the deepwater activity is taking place out of Port Fourthon, but the port facilities there are strained. The West Cameron Port could be in a position to capitalize on the deepwater activity. And even without the deepwater activity, there is still enough nearshore activity to keep the smaller ports such as Cameron busy.

In the short term, the renewed activity looks very promising. Advances in technology have made the drilling more automated, thus there will be less direct employment potential than in the past. However, many of the land-based support services will still be needed. In the longer term, some questions still remain. Developers are concerned over the implications of significant oil and gas exploration and production far offshore in the Gulf of Mexico to the existing coastal infrastructure (notably roads, bridges, ports and terminals, industrial lands, water supplies, solid waste disposal, sewerage, etc). There is also mounting concern over fiscal issues and a trained work force, as well as the impact on coastal wetlands. Recent and controversial research by Dr. R.E. Turner (1997) attributes 90 percent of the statewide wetlands loss to oilfield canals built in the mid-20th century.

The outlook for fisheries and wildlife is one of uncertainty. Each sector of the industry is likely to face specific problems that may result in reduced individual participation in that sector. Therefore, a contraction of the commercial fishing industry in Cameron Parish can be expected. Parish leaders should be prepared to accommodate people

displaced from the industry in an attempt to retain them for the local labor force in an alternative form of employment.

The forecast for water transportation in Louisiana looks promising. Dr. Loren Scott predicts growth in the number of jobs in non-rail transportation (water transportation and trucking) in the next two years. As mentioned in the infrastructure section of this report, it is vital that Cameron Parish proceed with port development planning activities.

The outlook for coastal recreation and tourism activities is mixed. Tourism is down slightly in New Orleans for the first quarter of 1997 (Guyman). Since New Orleans is the major draw for the state, this could hurt the overall state numbers. However, the casinos in Lake Charles and Shreveport continue to draw visitors from Texas and Oklahoma. Casino visitation should cause tourism in the western half of the state to remain strong. The number of Cameron Parish visitors should continue to grow with the designation of the Creole Nature Trail as a National Scenic Byway. In order for Cameron Parish to take advantage of tourism's economic potential, the parish must provide visitors with an opportunity to spend some money.

Local commerce. Some of the biggest winners in the recent U.S. economy, in terms of employment, have been in the services, financial, and wholesale/retail trade sectors. As stated earlier, these sectors, plus construction, make up a big portion of local commercial activities.

In the United States, employment in wholesale/retail trade increased by 4.7 percent in the first half of the 1990s, and the financial sector increased employment by 2.95 percent. The biggest gains were in the services sector. Between 1989 and 1994,

employment increased by 21.63 percent. Within the services sector, growth industries included business services, +31.38 percent; amusement and recreation services, +30.34 percent; health services, +26.04 percent; and social services, +31.15 percent.

Part of this impressive growth can be explained by the strength of the overall economy, but much of it is being driven by advances in technology. This is particularly true in the business services industry. If the economy remains strong, local commercial activities throughout the state should continue to grow. Loren Scott predicts growth in trade, services, and construction over the next two years, while economists at the Federal Reserve Bank in Atlanta see only moderate growth in trade and a construction slowdown in Louisiana. Service sector growth should stabilize in amusement and recreation services and health services, but continued growth is expected in business services because of continued advances in technology.

## Strengths

Cameron Parish possesses several strengths from the commerce and industry standpoint, and they were cited in earlier sections of this report. Others are present, but not obvious, and should be elicited from the leaders and community-at-large as part of any future economic development planning. They are presented below in no particular order.

- Quality of life attributes: natural beauty, low crime, recreation, improving public schools
- Proximity to Lake Charles, Beaumont/ Port Arthur, and Houston
- Oil and gas exploration at an increasing distance offshore and Cameron in a good position to capitalize

- Established history in the oil and gas and commercial fisheries industries
- Strong entrepreneurial spirit among many
- · Waterways access
- Eagerness to tackle the future

#### Weaknesses

It is important that Cameron understand its shortcomings and seek ways to overcome or mitigate them. Planning requires frankness and constructive criticism. The study team observed the following weaknesses, again in no particular order.

- Deteriorating wetlands and land loss, which are affecting agriculture, fisheries, other businesses and landowners
- Insurance expensive and often difficult to obtain, vulnerability to floods, hurricanes, and eroding wetlands
- Difficulty in obtaining conventional real estate mortgages in western parts of the parish, as result of coastal erosion
- Loss of hurricane buffer provided by the beach rim and marsh west of Holly Beach
- Unavailability of land
- Deteriorating roadways and nonexistent rail transport
- Inefficient ferry connection across Calcasieu Ship Channel and to Monkey Island
- Dependence on few economic sectors for jobs and income, declining business and tax base
- Lack of preparedness for the future of the parish, a clear and articulated vision needed

## **Opportunities**

#### Immediate and Near-Term Action

There are several opportunities in Cameron Parish for business and industrial

development. But before these opportunities can be realized, many of the weaknesses cited above will need to be addressed and citizenry must prepare and improve the community in order to sustain the entire process. Cameron must strive to be viewed by prospective developers and citizens alike as a community in which it is conducive to operate businesses and industries. There are several steps that Cameron will want to consider as it explores business and industrial development strategies.

Step 1. Update Cameron's directory of business and industry. The last inventory was completed in 1990 and needs periodic updating. The effort was cosponsored by Cameron Telephone Company, the Louisiana Cooperative Extension Service, Sea Grant and several civic groups. Such a project would be an excellent undertaking for the Chamber of Commerce.

Simultaneously, a compilation needs to be made concerning available industrial development properties within the parish. This inventory should include site locations along with facts and figures concerning available infrastructure, utilities, etc. The Economic Development Task Force, parish officials, Chamber of Commerce leaders, utility companies, the Department of Economic Development, and the Port of Lake Charles should have access to this information in order to quickly respond to business prospects for the area. The project might also be one that the Chamber of Commerce can undertake, in cooperation with several of the organizations noted above.

Step 2. The parish's industrial development interests need to determine a development direction and goals. There needs to be broad-base support for any initiatives and the Cameron community, particularly the

business and service sector, must help identify a track and set priorities. This will help form active partnerships.

Step 3. Once the general direction is established, an economic development strategy can be planned that carefully considers "how to get there from here". That is, what approach(es) should be used. No one can develop that strategy for Cameron Parish. Neither Sea Grant nor the Louisiana Cooperative Extension Service (LCES) can do it, nor should a consulting company. It must be a parish-led effort that involves the community's leadership and the citizenry through committees. Sea Grant, LCES, IMCAL and others can, however, offer guidance and advice on some of the best approaches.

There are several approaches that can be used to carry out the strategies. The two discussed below were the subject of most discussions during the team's visit to the parish. Under any circumstance, it is important to remember that a successful business and industrial development strategy for Cameron Parish, is one that matches the parish's existing and potential resources and tools. Any strategy must be tied to the basic economic realities.

Whatever plan is chosen, it must be forward looking. Planning should involve at least a 10-year horizon. The problems faced by Cameron Parish did not begin within the last year, so it is logical to assume that these problems cannot be solved quickly. There is no quick fix. The parish will want to carefully plan and target opportunities to match its strengths while seeking to overcome weaknesses. Regional cooperation will be essential. Links with regional development interests such as IMCAL, the Southwest Louisiana Chamber of Commerce, and the port commissions in the area must be strengthened.

## Industrial recruitment approach.

Cameron is not unlike other Louisiana parishes in which creating new jobs through industrial recruitment of foreign and domestic industries has enjoyed considerable favor as a desirable technique for stimulating economic development. But to make such an approach the centerpiece of Cameron's future economic development efforts has to be weighed against the changing nature of the U.S. and global economies and other important trends. For example, in the last two decades there have been considerably fewer industrial relocations, making industrial attraction one of the least effective approaches for coastal Louisiana's economic development Cameron's industrial development specialists must also consider the fierce nature of the competition for new facilities. Estimates are that somewhere between 12,000 and 15,000 economic development organizations annually pursue 1,000 to 1,200 new facility locations.

If Cameron chooses an industrial recruitment approach as a key component of its development strategy, the leaders should devote more attention to attracting firms that are closely linked to the existing manufacturing and service base, namely those dependent on waterfront access. A strong and competitive sector that supplies existing industries will enhance the parish's attractiveness.

Though not as relevant to Cameron, a distinct, recent national recruiting trend has been for economic development leaders to devote considerably more attention to attracting service and wholesale/retail trade businesses. Targeting specific businesses and industries is an extremely important goal-setting step in the recruitment process. Targeting ought to realistically take into account factors such as (1) the parish's

existing employment, skills, and income mix; (2) its natural resource base and location; and (3) the current infrastructure and potential for improvements and expansion. The vital employment information that appears in the shift-share analysis that accompanies this assessment should help isolate the potential job growth associated with how local employers are faring competitively within their national markets.

Cameron, for instance, has a high concentration of natural resource-based industries and could choose to capitalize on such concentration and add to its existing base of industrial and support services. Or it may decide to emphasize diversification of its industrial base so that its economy will not risk collapse should those industrial sectors experience a decline similar to the one experienced in the mid to late 1980s. The logical answer is a strategy that does both. It should be a strategy that capitalizes on and seeks to support the presence of existing operations, while pursuing new and different businesses and industries that are compatible with the community and can be sustained over the long haul.

Decision-making, when it comes to targeting and recruiting, involves more than just seizing opportunities. It requires a great deal of input, introspection, candor and realism, and careful analysis and objective consideration of relative strengths and weaknesses vis-à-vis specific opportunities. There needs to be a clear understanding of trends and outlooks for the "prospects" and the internal and external factors that are affecting such expansion. A market analysis would be quite helpful in this regard. External factors to be examined might include the following: What types of industries are growing nationally? Are they capturing a larger share of employment?

Is this trend true for the state and region? Which industries are growing more rapidly in the state and region than nationally? What is the potential that this growth trend will continue? What role do international accords such as NAFTA play in the U.S. outlook for the industry?

Internal factors need to be examined as well. How skilled is the labor force? Is the condition of the infrastructure adequate to handle particular types of industries and businesses? Is land developed and available? If so, who controls it? Industries targeted with this level of detail can clearly direct industrial and business recruitment efforts.

# Retention and expansion approach.

Efforts to retain industrial and business enterprises are essential for communities facing decline as well as those that simply want to improve their economic position. Experts feel that appropriate policies and support should be generated so that retention is accorded at least the same consideration as attraction. The difficulty is that although such programs are very inexpensive and community-oriented, they are hard to implement because unless they are accompanied with a great deal of publicity, the successes have a relatively low level of visibility. Attraction strategies have more public support and visibility. Yet retaining and aspiring to ultimately expand a 100employee firm within Cameron is likely to have as much, if not more, ultimate impact on the parish's economic well-being than recruiting a 100-employee firm.

Retention is an attractive business and industrial development goal because it can help maintain jobs and income for Cameron, while creating an opportunity for business and industrial expansions. Research indicates that existing businesses account for 40 to 70 percent of the net change in total

employment. Although most new jobs are created by new and expanding businesses, the impact of closing or downsizing a company such as Zapata-Haynie in a community such as Cameron can have serious and, in some instances, devastating implications.

A retention or resident industry program for the parish is proposed in the longer-term opportunities section below.

Step 4. Once a plan is designed, parish leaders must implement it and monitor the results over a period of time. A plan that sits on a shelf is not a plan, it is simply a dream. It is important to remember that business and industrial development takes time and effort. Monitor the results of parish efforts in light of activities and new developments at the state, federal, and global level. The current global economic environment is dynamic. Development ideas that worked 10 years ago will not work today. Likewise, a strategic plan that works today will probably not work 10 years from now. If the parish does not stay abreast of current trends and modify its strategic plan accordingly, it will continue to lag farther and farther behind. Modify the plan as needed. It should be "a work in progress".

## Longer-Term Action

Cameron Parish Resident Industry
Program. The parish should undertake a
Cameron Parish Resident Industry Program
within the next year or so. Louisiana Sea
Grant has offered to assist the parish in such
an endeavor. The Resident Industry
Program would be a business and industrial
development project aimed at assisting its
existing firms. But before embarking on an
assistance program, there is a need for a
mechanism for pinpointing firms' problems,
concerns, and opinions. A visitation
program would be such a mechanism.

Trained volunteers would act as parish "ambassadors" and in this capacity would gather information on development difficulties, economic concerns, and opinions of Cameron as a place to do business. Once aware of these issues, local leaders can begin assisting the firms by whatever means possible. The Chamber of Commerce might consider taking the lead in such an effort.

Louisiana needs a statewide program of this type. A Cameron Parish Resident Industry Program could well serve as a model for the rest of the state. This type of work is not as glamorous as a ribbon-cutting ceremony at a new plant, but it helps undergird the existing base and shows the resolve of local leaders regarding the sustainability and growth of what already exists.

As part of the Cameron Parish Resident Industry Program, the parish should work with IMCAL and McNeese's Small Business Development Center and set up a small business education program. This program would seek to inform small business owners about the virtues of operating in the mainstream economy. It has come to our attention that many small business owners do not collect and pay state sales tax. In the near term, it might be difficult for these businesses to take on an accounting system that would allow them to track sales and pay taxes. However, in the long term, their businesses would become more efficient, and they would be able to do more business in the mainstream economy.

Other opportunities. To prepare for any opportunity that might arise, the parish should coordinate efforts of all development groups. Right now there is a Chamber of Commerce, an Economic Development Task Force, a Tourism Commission, and two port commissions. These groups need to better coordinate and work together.

Not enough can be said about networking with other interests in the region and state, whether it is tourism development, port and transportation development, or organizations exploring means for coping with changes in other sectors. It is simply essential. In particular, there is an urgent need for a collaborative approach with Lake Charles for port development matters. There are also some emerging urbanization problems beginning to affect the northern part of the parish in particular (sewage services, water supplies, solid waste disposal). Regional approaches are needed to solve many of these crucial problems; otherwise, little long-term progress can be made.

# Chapter References

- 1996 Louisiana Summary: Agriculture and Natural Resources. Louisiana State Agricultural Center.
- Bendavid-Bal, Avrom. Regional and Local Economic Analysis for Practitioners. Fourth edition, 1991.
- Central Gulf of Mexico: Comparison of Tracts Receiving Bids. (1997): 1 pg. http://www.mms.gov/omm/goms/ images/graphics/cgomwd.html.
- County Business Patterns, 1993 and 1994 on CD-ROM [machine-readable data file]/ prepared by the Bureau of the Census. Washington: The Bureau [producer and distributor], 1996.
- County Business Patterns, 1993 and 1994 on CD-ROM/prepared by Data Access and Use Branch, Data User Services Division, Bureau of the Census. Washington: The Bureau, 1996.
- Guynn, Jack. The Outlook for the Economy and Reflections on Fed Policymaking. Federal Reserve Bank of Atlanta. (April 30, 1997): 7 pgs. http://w.frbatlanta.org/sp\_press/speeches/sp043097.htm.

- High Oil Well Production Marks Shell's Mars Project Start Up. http://www. shellus.com/news/press080896.html.
- Jamal, A.M.M., James A. Richardson, and Loren C. Scott. *The Louisiana* Economic Outlook: 1997 and 1998. Baton Rouge: Louisiana State University, 1996.
- Louisiana Sea Grant College Program.

  Plaquemines Parish: Challenges and
  Opportunities. Baton Rouge: Louisiana
  Sea Grant Communications Office,
  1996.
- Minerals Management Service Gulf of
  Mexico OCS Region: Deepwater
  Development Systems in the Gulf of
  Mexico Basic Options. (April 1, 1997):
  2 pgs. http://www.mms.gov/omm/gomr/
  homepg/offshore/deepwatr/options.html.
- Morse, George W., ed. The Retention and Expansion of Existing Businesses. Iowa: Iowa State University Press, 1990.
- Murray, Jim. Community Economic
  Development Strategies for Small,
  Coastal Communities Manual.
  University of Wisconsin Cooperative
  Extension Service.
- Resource Base Likely to Work in Louisiana's Favor. 5 pgs. http://www.frbatlanta.org/publica/region\_updat/v9n4\_5.htm.
- Standard Industrial Classification Manual.
  Executive Office of the President and
  Office of Management and Budget.
  1987.
- Turner, R.E. Wetland Loss in the Northern Gulf of Mexico: Multiple Working Hypotheses. Estuaries, Vol. 20, No. 1, March 1997. pp. 1-13.

# PHYSICAL INFRASTRUCTURE

Michael Liffmann, Assistant Executive Director, Office of Sea Grant Development Ted Falgout, Executive Director, Greater Lafourche Port Commission

## **Existing Situation**

Utilities. Electric power is supplied to homes, businesses, and industrial facilities in Cameron Parish by Gulf States Utilities (GSU) and the Jefferson Davis Electric Cooperative (JDEC). GSU is an operating company for the Entergy Corporation, which supplies 1.1 million customers throughout Louisiana. JDEC is one of 13 electric distribution cooperatives which jointly own Cajun Electric Cooperative. Some 5,000 consumers in Cameron Parish are served by this cooperative.

The two companies that provide natural gas to Cameron Parish are ENTEX and United Gas Pipeline Company. ENTEX provides natural gas service to approximately 1,500 residential, 200 commercial, and two industrial customers.

Five public water systems serve the parish—Cameron (approximately 1,000 customers), Hackberry serving the communities of Hackberry, Johnson Bayou, and Holly Beach, Creole (approximately 450 customers in the Creole/Front Ridge area), Grand Lake/Sweet Lake (approximately 1,000 customers), and Grand Chenier/Oak Grove (900 customers).

Highways. Cameron's main transportation arteries are state highways 27 and 82. State Highway 27 loops through the parish and provides connection to Interstate 10 and the Lake Charles metropolitan area. State Highway 82 runs along the coast and provides an east-west route between Texas and south central Louisiana. All of Highway

27 and a portion of Highway 82 were recently designated as the Creole Nature Trail National Scenic Byway, one of 16 around the country. Other key state highways in the parish are numbers 384, 390, 1142, 1143, and 1144.

Highway 82 is in serious jeopardy. The highway is not only an integral transportation artery for southwest Louisiana and southeast Texas, but also a hurricane evacuation route for the communities of Holly Beach, Constance Beach, Peveto Beach, Ocean View Beach, and Johnson Bayou. In addition, it is also a line of defense against the encroaching Gulf of Mexico. According to an April 1997 preliminary feasibility report prepared by DNR's Coastal Restoration Division and DOTD and entitled, "Holly Beach to Constance Beach Shore Protection," if Highway 82 and the chenier "... are not stabilized, there will be a catastrophic loss of highly productive and valuable coastal marsh."

Such stabilization will require substantial public investments for maintenance and reinforcement. Citizens and officials alike refer to the current approach of maintaining the integrity of Highway 82 as "...a band-aid for a multimillion dollar effort that requires a long-range plan." The same preliminary feasibility report estimated that the highway preservation efforts would cost between \$24 million and \$84 million.

Another key concern for vehicular traffic is the ferry crossing of the Calcasieu River Ship Channel. Vehicles must now use the

24-hour toll service, and average daily traffic, according to the Department of Transportation and Development, often exceeds 1,000 vehicles. The system is frequently down for maintenance purposes and, in addition, the flammable/hazardous nature of many of the materials carried in commercial vehicles further restricts the expeditious crossing. For a number of years, local leaders have sought the construction of a high-rise fixed or mid-level moveable bridge. Preliminary cost estimates range from \$31 million for a mid-level moveable bridge with a vertical lift span to \$51 million for a similar bridge with twin swing spans, and \$44 million for a highlevel, fixed structure. A two-lane tunnel has been estimated to cost \$83 million. Some con-sideration has been given to adding a second ferry in lieu of a bridge crossing.

The parish has no rail or air service. The nearest commercial aviation facility is the Lake Charles Regional Airport. There are no private airports in the parish at this time, although several landing fields can accommodate small airplane traffic. In addition, several helicopter services use Cameron locations as staging bases for their offshore operations.

Water transportation. Water transportation remains a major form of transportation for the parish. The Calcasieu Ship Channel, Mermentau River, and Gulf Intracoastal Waterway (GIWW) are the primary routes for the movement of waterborne cargo to and from the parish. Most goods are transported in interstate commerce to destinations east and west along the GIWW (118 million tons in 1995) and to and from private and public terminals along the Calcasieu Ship Channel in the vicinity of Lake Charles (47 million tons of freight traffic in 1995).

At this time, there are no public port facilities in the parish, although two port commissions. East Cameron and West Cameron, were established in 1968 by the state legislature. The East Cameron Port Commission's (East Cameron) jurisdiction is limited to wards one and two in the eastern part of the parish, and it has dedicated its efforts entirely to insuring safe navigation for shallow-draft (nine-foot) vessels on the lower Mermentau River. Extensive private development has taken place along the Mermentau's banks and according to U.S. Army Corps of Engineers statistics, some 740,000 tons of freight traffic were moved on that waterway in 1995. It levies a threemills ad valorem tax, that to date has generated approximately \$800,000. These funds are currently being held in escrow pending the outcome of litigation concerning rights-of-way.

The West Cameron Port Commission (West Cameron) has jurisdiction in wards three through six. It has been given the task of actively pursuing development opportunities associated with the properties owned by the parish on Monkey Island and Highway 27 along the Calcasieu Ship Channel and Calcasieu Pass. West Cameron was only reactivated recently, and it has the authority to levy up to three mills of ad valorem taxes. The Commission's leaders, however, have been devoting most of their effort at investigating development opportunities and obstacles. Most of the recent attention has been dedicated to resolving issues dealing with access via a bridge (versus the current ferry) to Monkey Island and studying the possibilities of an anchorage area in the Hackberry vicinity for deep-draft vessels calling on the Port of Lake Charles. Once these opportunities have been fully explored and planned, then West Cameron may consider requesting millage funds from the residents.

The U.S. Army Corps of Engineers conducted a study in 1992 to explore the economic feasibility and environmental implications of enlarging the southern half of the so-called Cameron Loop that is used by the offshore oil and gas industry, and commercial and recreational fishing vessels. The Loop is a bendway off the Calcasieu Ship Channel with an authorized 12-foot by 200-foot channel whose southern half has never been maintained. The Corps looked at alternative channel depths but concluded that none of the plans provided average annual benefits to the nation greater than the average annual costs.

**Industrial development**. Over the years, Cameron's industrial development—notably seafood processing and support operations for the oil and gas sector—has taken place on properties owned by private interests, usually along a waterfront located in the southern part of the parish, particularly in the vicinity of the town of Cameron. Prime industrial properties are in short supply. A considerable portion of the parish is owned by the federal and state governments and most private landowners are reluctant to part with lands that have been family possessions for decades. In addition, it is costly to develop in this environment because of regulations and condition of the terrain. The demand has spurred interest in additional lands for industrial development, particularly in the vicinity of Hackberry and Cameron, and a great deal of attention has focused on Monkey Island.

The island was obtained in 1994 from the federal government, which had formerly used it as a site for a U.S. Coast Guard station. The parish owns the property on Monkey Island proper (76 acres) and 57 acres across the Calcasieu Ship Channel from the island (Section 32). It is considered valuable because it includes nearly

2700 feet of deep draft access and over 2000 feet of shallow draft frontage. The property can only be developed if land access is dramatically improved. To date, vehicular traffic can only get to the island via a small barge-ferry that is owned and operated by the state of Louisiana. Efforts are underway to plan and construct a bridge.

#### Outlook

Infrastructure is a major concern for Cameron Parish. The needs are substantial as is the price tag that accompanies them.

Examples of the some of the major public works infrastructure needs include:

- From \$40-80 million are needed for a span or tunnel across the Calcasieu Ship Channel to expedite vehicular traffic and enable storm evacuations.
- An estimated \$23-84 million are urgently needed within the next five years to prevent structural failure on Highway 82 in the vicinity of Holly Beach and Constance Beach. Emergency measures in 1997 alone cost \$3.0 million.
- Needed coastal restoration priority projects are valued at nearly \$36 million for the Calcasieu/Sabine Basins and \$8.5 million for the Mermentau Basin.
- The Corps of Engineers estimates \$500,000 to \$1.7 million first costs (plus annual costs of up to \$300,000) are needed for enlarging the Cameron Loop and enabling industrial development and improved navigation access.
- Some \$ 3.0 million are needed for the Hackberry anchorage project that would afford services to the ships anchored and awaiting berths at the Port of Lake Charles complex.
- Approximately \$1.0 million are needed for a bridge connecting to Monkey Island.

This would be the first of several stages for the industrial development of the area. The 1997 Capital Outlay Bill included \$300,000 in Priority 2 and \$700,000 in Priority 5.

 The \$1.4-million Cameron jetty pier fishing project is vital to tourism and recreation development efforts and would provide outstanding land-based access for anglers.

In addition, deferred maintenance resulting from the parish's financial crisis in the late 1980s and early 1990s will also be very costly. Police Jury president Brent Nunez estimated that in 1986, for example, some \$3.0 million were spent on Parish road improvements. Today, no funds are dedicated for such purposes. Monies are also needed to connect the parish's multiple water systems and enable many of the predominantly rural residents to comply with sewage discharge regulations.

The urgent need for these and other public works improvements is further complicated by a changing federal funding environment, one that is certain to affect every state and county in the nation. The outlook is for difficult times ahead, not just for Cameron but for all parishes in the state. The primary reason is the so-called federal fiscal devolution process where Congress returns more responsibilities to the states (and localities). According to David Hale with Zurich Kemper Investments, Congress, in its push for a balanced federal budget by the beginning of the next century, can be expected to reduce federal assistance to the states by 15-20 percent. Over the decades from 1960 to 1990, the federal grants-in-aid system flourished. The federal government transferred funds to states and localities for a whole host of public purposes ranging from construction of essential physical infrastructure to financial and medical assistance for the poor.

Louisiana is currently in reasonably good financial shape, but great fiscal stresses could result in the next few years if the state's increased responsibilities coincide with a recession. It would not be unreasonable to anticipate that this situation would set the stage for dramatic policy changes, such as additional deferred maintenance policies and the privatization of many more state and local enterprises and services.

Privatization has been and will continue to be a dominant theme for economic reformers, particularly relative to public services and facilities. Private companies supply about 85 percent of the nation's electricity, but the public sector still owns and operates practically all highways, airports, ports, and waterworks systems. Cameron could be faced with having to consider such options in the not too distant future.

These same issues are also likely to affect proposed public port and industrial development projects, particularly in Monkey Island, the Cameron Loop, and properties along the Calcasieu Ship Channel. Public-private partnerships are going to be needed, and the parish will need to deal with the issue of generating revenues to help pay for costs of construction and maintenance.

## Strengths

Cameron's strategic location in southwest Louisiana and adjacent to the Gulf of Mexico is its biggest strength. It is located geographically in relative proximity to the deepwater tracts of the central Gulf of Mexico that have spurred much of the miniboom in oil and gas exploration and production. This renewed interest in offshore production, along with technological innovations that have made it easier to locate onshore and nearshore deposits,

have considerable implications for Cameron Parish. The parish is already experiencing some of the more positive impacts—tax revenues are up, unemployment is down, income has risen, etc.

But attention should be given to insuring that these strengths not become weaknesses or liabilities. Funding will have to be devoted to public services, such as infrastructure, which need upgrading and maintenance. Priorities will have to be established by the community at-large. It is virtually impossible to convert the tremendous needs into reality with such a small population (and tax) base, given the external environment depicted above regarding federal and state funding.

## **Opportunities**

Opportunities are discussed below in terms of immediate, near term, and long term. Immediate projects refer to the ones that can be done now. Near term opportunities can be realized within the next two years, while long-term ones require five or more years.

#### Immediate Action

Industrial development interests have noted that there is no comprehensive inventory of developable properties for Cameron Parish. Such a listing can easily be made a project of the Cameron Chamber of Commerce or Economic Development Group and prepared in consultation with utility companies, private landowners, IMCAL, both port commissions, and local banks.

In light of the extensive list of public works projects that are needed throughout the parish, the Monkey Island Bridge issue must be expedited. Industrial development will not take place without it. Once capital outlay funding is secured (currently Priority

2 and 5), design and construction should be expedited, and the Police Jury, in concert with the Economic Development Group and the West Cameron Port Commission should fast-track the master planning for Monkey Island. In the words of Ted Falgout, the executive director of the Greater Lafourche Port Commission (Port Fourchon) and a member of this study team, "...deepwater drilling presents a great opportunity for Cameron..." but the potential cannot be realized without the proper facilities and services.

Those individuals developing a port plan would benefit from a visit to Port Fourchon to observe industrial development in that area and its accompanying impacts, both positive and negative. In addition, the master plan for the island should include the needs of the commercial and sport fishing interests in the region. Visits should be made by the planning committee to Pleasure Island in nearby Port Arthur, Texas, Grand Isle, and the Venice/Empire area in Plaquemines Parish to see several marinas (commercial and recreational) and charter fishing operations that have been developed in that area.

As stated above Highway 82 is in imminent danger. Its protection must be made a top priority for the entire parish, in fact, Louisiana. In the coming weeks and months, Cameron will have an opportunity to reaffirm the urgent nature of this and other coastal restoration issues, by actively participating in "Coast 2050," a strategic planning effort being led by the Louisiana Department of Natural Resources. The planning initiative also involves the Louisiana Wetlands Authority, CWPPRA Task Force and local governments. Coast 2050 involves consolidating earlier restoration plans and obtaining meaningful local input, not just public comments, in an attempt to present a unified state plan.

#### Near-Term Action

The parish, in cooperation with IMCAL and the Imperial Calcasieu RC&D, needs to take a very serious look at the status and needs of roads, streets, water systems, sewage and solid waste disposal systems, etc. and prepare a plan. This is needed in order to rank and undertake projects that involve millions of dollars of infrastructure needs. Particular attention should be given to avoiding the pitfalls of intraparish battles associated with project development. Despite the practice in earlier years, the parish can ill afford to build similar projects in each of the wards, and an agreed-upon process of project prioritization, based on urgent need, will help move things along.

IMCAL, the West Cameron Port Commission, and navigation interests in the Hackberry area propose the establishment of an anchorage area. The intent would be to provide a service for deep-draft navigation interests along the Calcasieu Ship Channel, notably the vessels calling on the Port of Lake Charles and nearby terminals. Traffic congestion along the docks in Lake Charles causes delays and associated increases in costs to navigation. The anchorage concept has been advocated as a means for reducing vessel delays and improving safety by providing chandlering, bunkering, and other services from the Hackberry area as the vessels await berths in Lake Charles.

The project has reached a point at which funding is critical, and its future depends on the interest of the Lake Charles-area maritime community, notably the Port Commission. Unless this interest and a financial commitment is secured, the project is not likely to take place in the near-term.

In 1992, the U.S. Army Corps of Engineers began a reconnaissance study for the Port of Cameron located on the Cameron Loop.

The Loop is divided into northern and southern halves, and the Corps was asked to determine the economic feasibility and environmental soundness of enlarging the southern portion. According to the Corps' rigorous national planning and design criteria, average annual costs for alternative channel dimensions were always greater than the average annual benefits returned for all the plans. The Corps thus suspended the study and placed the project in an inactive category. But times have radically changed, and Cameron leaders should consider requesting that the Corps or the state of Louisiana (through DOTD) revisit this project in light of the increased deepwater activity that has been witnessed throughout the region.

A master development plan for Monkey Island and the port property across the channel should also be prepared in the near term. It is not essential that a staff be in place to oversee such an effort. A preliminary plan could be prepared by reputable consulting engineers at a relatively low cost, perhaps even gratis. The possibility of obtaining an additional ferry from DOTD for the Calcasieu Ship Channel crossing should be explored, as this presents an interim solution to traffic congestion and delays.

## Longer-Term Action

Cameron's greatest advantage from an industrial development standpoint is its proximity to the Gulf of Mexico, and deepwater drilling presents an outstanding opportunity. Cameron has a long history and tradition as a service center for the offshore oil and gas industry, and there is a large cluster of deepwater developments south of Cameron and Galveston. Cameron, in the words of team member, Ted Falgout, has the opportunity to become "Port Fourchon West," or a staging area for the

new gener-ation of offshore support vessels that are on average 250 feet long, having beam widths of 50-60 feet and requiring 20 feet of draft. But the window of opportunity is a relatively small one (up to five years) as Cameron faces stiff competition from Sabine Pass and Galveston.

According to Falgout, infrastructure and adequate funding are a prerequisite. Monkey Island and the port and private property across the channel are excellent from the standpoint of size and waterfront access. But a fixedspan bridge to the island is a necessity, and a complete port master development plan needs to be prepared as a step in the process. Such a master plan must address the issue of local port development funding through an ad valorem tax. The community must take control of its destiny in regard to this type of development. It can no longer entirely rely on federal and state monies. But local funding will only become a possibility if the community becomes involved in the planning and education processes, and thus made aware of how its tax dollars will be dedicated to such an endeavor. It becomes an issue of faith and trust in local government.

#### Chapter References

- Cameron Parish: In Profile. Entergy Louisiana.
- Cameron Parish: Louisiana's Gateway to the Gulf. Cameron Police Jury.
- Coastal Wetlands Planning, Protection, and Restoration Act. Summary of Priority Project Lists 1-6. Report Series No. 2. Louisiana Dept. of Natural Resources. Baton Rouge. May 1997.
- Guynn, Jack. The Outlook for the Economy and Reflections on Fed Policymaking. Federal Reserve Bank of Atlanta. April 30, 1997. 7 pgs. http://www.frbatlanta.org/sp\_press/speeches/sp043097.htm.

- Hale, David. Will Federal Devolution Set the Stage for a State and Local Privatization Boom in the Next U.S. Recession? 28 July 1996. 5 pgs. http://www.kemper.com/lite/curious/global\_economy/feddev1.html.
- Holly Beach to Constance Beach Shore Protection: Preliminary Feasibility Report.

  Louisiana Dept. of Natural Resources and Louisiana Dept. of Transportation and Development. April 1997.
- Plaquemines Parish: Challenges and Opportunities. Coastal Economic Strategy Series. Louisiana Sea Grant. Baton Rouge. 1996.
- Port Construction and Development Priority Program. Third Ann. Rept. Dept. of Transportation and Development. 1996.
- Port of Cameron, Louisiana: A Reconnaissance Study. US Army Corps of Engineers. New Orleans District, February 1992.
- Preliminary Feasibility Study: Proposed Calcasieu Lake Ship Channel Crossing. Cameron Parish, Louisiana.
- Report of Examination. Pleasure Island Commission. Port Author, Texas. 30 September 1996.
- Representatives Alario, Leblanc, and Downer and Senators Barham and Hainkel. *House Bill No. 2.* 95 pgs. Regular Session, 1997.
- Resource Base Likely to Work in Louisiana's Favor. V9, N4. (October-December): 5 pgs. http://www.frbatlanta.org/publica/region\_updat/v9n4\_5.htm.
- Saving Our Good Earth: A Call to Action.

  Barataria-Terrebonne National Estuary
  Program. Thibodaux, La. 1995.
- Sutten, Kerry. Fiscal Devolution: The Impact on State Budgets. 8 pgs. http://www.nemw.org/devo.htm.
- Synthesizing Devolution: Ecosystem
  Protection and State Environmental
  Management Program. The Council of
  State Governments. Lexington, KY. 1997.

# COMMUNITY LEADERSHIP: REINVENTING GOVERNMENT

Dr. Deborah Tootle, Assistant Professor, LSU Population Data Center
Dr. Sandy Dooley, Specialist, Louisiana Cooperative Extension Service
Brenda Henning, Assistant to the Executive Director, Office of Sea Grant Development
Michael Liffmann, Assistant Executive Director, Office of Sea Grant Development

Strong leadership is essential for sustained economic development to take place in Cameron. Furthermore, such leadership must be found beyond the traditional, governmental arena. Cameron, much like other parishes in the state, has historically relied on its elected officials to carry the overwhelming share of leadership responsibilities. The leadership burden needs to be better distributed with civic and business groups, and the citizenry at-large. The task at hand is daunting, in light of the national and global trends and Cameron's needs. particularly in the areas of public infrastructure, coastal wetlands and fisheries, and coastal recreation and tourism

Thus, economic development responsibilities need to be shouldered by a much broader leadership base. Community buy-in is essential and it can only be secured by involving more people, from diverse backgrounds with a variety of views. They need to be sought out, trained and nurtured, and given more responsibilities, even at the risk of creating possible political rivals. In this very competitive, global environment it is simply not enough to have natural resources. adequate infrastructure, sufficient services. and other attributes unless adequate and ample leadership can help provide direction, planning assistance, and support for implementation.

While communities may not be able to influence global forces, community leaders can promote economic development by

(1) removing the social barriers associated with development in small towns and rural areas while (2) taking advantage of the characteristics of these areas that can facilitate development. One of the most effective means identified in the community economic development literature involves developing existing or indigenous economic and social resources and infrastructure. In this way, the community can better meet the daily needs of its residents and provide a foundation for sound economic development.

Community development in rural areas and small towns faces special social conditions that interfere with community action, or collective efforts to solve local problems. One problem is the population of small towns. Because of their size, small towns have difficulty in meeting the daily needs of their residents. Distance from larger cities, major centers where better jobs, crucial services, and information resources are concentrated, is also a problem. As residents look to other locations and sources to fulfill their needs, their local commitments and interests are weakened.

Social conflicts can present formidable barriers to community development. One common source of community conflict is the pursuit of particular outcomes by special interest groups rather than the pursuit of an overarching, shared interest. Therefore, community leaders need to be prepared to solve conflicts and develop shared shortand long-term goals.

Leadership and organization are prerequisites for long-term success. Experience
has reaffirmed this belief. Those communities that possess a willing and motivated
local leadership are able to learn, organize,
and convert their new-found knowledge into
success. Most typically, economic
development leaders (1) stand to gain from
development; (2) are eager to see the
community grow and develop; and (3) are
very positive and proactive individuals.
The country is moving toward decentralized
decision-making, and thus the role of
community leaders in Cameron Parish is
going to become increasingly important.

Securing new leaders is a first step in planning for the future. They can come from a variety of places. They can emerge because an issue or concern poses a threat to their personal world; or they respond to being told they are needed and can do the job. Sometimes they are nurtured as young people because they have an obvious leadership quality; or they are retirees wanting to give something to the community. Leaders come from all segments of society for a variety of reasons, but each must have willingness to work for the good of the community.

Cameron has several organizations that can help expand the leadership base. The Chamber of Commerce and Lions Club are the most prominent groups and in a position to recruit new members and take on additional economic development responsibilities. Church groups and commercial fisheries associations might also consider becoming active in the field, particularly in the conflict resolution realm.

Leadership is no longer just being in charge. It involves facilitating, motivating, learning, mentoring others, and collaborating and cooperating with diverse groups and individuals. It involves improving the

quality of life for a community. Good leaders do not worry about the traditional hierarchy of leadership or of being elected. They just do it, pulling together the resources they need while realizing that resources are human as well as financial.

Leaders today have a difficult job. It's not easy changing from the old ways of decision making based on the old rules to new ways based on new rules. They deal with issues of everyday life that the old structure of government and competing interest groups have limited ability to address. There are no stand-alone issues or concerns; each overlaps others, producing fewer clear boundaries for problem solving.

Because of these changing roles in government and the needs of communities, many parishes have reconsidered their form of government. About a third of the state's parishes have concluded that, whereas the Police Jury system served them well during many years when administrative and legislative functions could be consolidated, there is now a need to separate these functions. Nineteen parishes have opted for a new system that enables them to better execute parish-wide decisions.

Cameron Parish should consider such a change in light of the challenges and opportunities that are described throughout this report. Too many of the issues that confront Cameron, notably those in community and economic development, are parishwide in nature. It is extremely difficult for a ward-based system, such as the Police Jury, to agree on parishwide directions. A unifying executive voice, elected at-large, is needed in order to compete in this intense state, national, and global arena. There must be a vision, a strategy, and planning that leads to a unified front. Ideas and projects must be prioritized

with everyone working toward a common goal to their successful conclusion.

It might also be time for Cameron Parish to consider the possible incorporation of several communities that have distinct needs and are unable to meet them under the present system. Perhaps a mayor-alderman system can be considered for the towns of Cameron, Hackberry, and Holly Beach.

Background. Parishes in Louisiana may select from the following types of local government: the police jury, home rule charter (parish council), and commission. The commission form of government has been available since 1914, but no parish has ever had an election to adopt this type of government. Currently, 19 of the 64 parishes have home rule charters, and this includes four city-parish consolidations—Orleans, East Baton Rouge, Terrebonne, and Lafayette.

Police Jury. Police jury powers are limited through legislative statutes and the state's constitution, and the basic structure of the police jury is set by law. Each ward is entitled to one police juror and additional jurors are in proportion to parish population. Therefore, the number of police jurors in each parish varies from as few as five to as many as 16.

The police jury is both a legislative and administrative body. Legislative functions include enacting ordinances and resolutions, establishing programs, and setting policy. Administratively, the police jury prepares the budget, hires personnel, spends funds, negotiates contracts and, in general, directs the activities under its supervision. The police jury has some flexibility as to how administrative duties can be carried out and can centralize these duties to some extent. This responsibility may be delegated to the police jury president, who is selected from

among the jurors, or a manager may be hired, or committees may be formed within the jury, or administrative duties may be left to the entire jury. Usually, police juries have no provisions for a strong chief executive officer. If committees are formed, they work with the parish officials in their respective functions and report regularly to the police jury. They may suggest changes in the regulations governing their particular activities, but all their actions must be approved by a majority of the members of the police jury.

Cameron's police jury is no exception. Its legislative functions include "enacting ordinances and resolutions, establishing programs, and determining policy." As an administrative body, "...it prepares the budget, hires personnel (approximately 100 employees), spends money, negotiates contracts, and directs the activities under its supervision" (Cameron Parish Development Board, 1990).

Its specific responsibilities include the "...construction and operation of roads and bridges, drainage, fire protection (11 fire stations), waterworks (six districts), parks and recreation (six facilities), airports, hospitals, ambulance services, port commissions, libraries, health units, solid waste divisions, industrial development boards, civil defense, mosquito control, courthouse and other public buildings, senior citizens' services, sewerage districts, drainage (five districts), veterans aid, food stamps, agriculture districts, and county agents, youth services, voter registration, licenses and permits, and coastal zone management."

Historically, jurors have tended to be biased in the representation of their wards. This favoritism is a logical result of a juror's role as a legislator who represents the constituency that elected him in the first place. This also means that the parish as a

whole is not represented. The most frequently cited reasons for abandoning the police jury system have been the lack of efficiency, the aforementioned representation issue, and low cost effectiveness, which most believe stem from the structure and organization of the system itself.

Home Rule Charter. Home rule is limited self-government in the organization and management of local affairs. A home rule charter provides the structure and organization, powers and functions of the parish, which may include the exercise of any power and performance of any function necessary.

There are two ways that the local government of a parish may secure home rule powers: (1) creation of a Parish Charter Commission and approval by the voters of a home rule charter. The commission may be appointed by the police jury, or the police jury may call an election to elect such a Commission, or the voters may call for the election of a Parish Charter Commission by petition of not less than 10 percent or 10,000 of the resident registered voters, whichever is fewer. The commission must consist of not less than seven nor more than 11 members who continue in office until a charter is accepted or rejected by the voters.

(2) Voters may give a police jury additional general powers by voting favorably for a proposition for that purpose. However, structure, organization, powers, and functions of the police jury are still mandated by law.

There are several types of home rule charters, and Cameron should investigate the advantages and disadvantages of each type. The President-Council Charters are more prevalent and typically provide for a strong, full-time chief executive, elected at large.

The president normally has strong appointment and veto powers, including an item veto over appropriations. In some parishes, the president is the administrative manager as well as chief executive. In other parishes, he appoints a chief administrative officer or assistant to fill that role.

Caddo Parish has the only true Council-Administrator Charter now operating in the state. While Caddo's organizational chart looks similar to that of a police jury with a manager, the role of the administrator differs significantly from that of the manager. The Caddo home rule charter clearly separates legislative and administrative functions. Although appointed by and serving at the pleasure of the council (referred to as a commission), the administrator has both the responsibility and authority to supervise parish operations.

For 20 years, Plaquemines Parish operated under the only true commission form of government at the parish level in the state. The 1966 home rule charter set up a fivemember commission, elected at large but with district residence requirements. The commissioner from each district headed a specific department. As the result of a reapportionment case, a 1982 court order forced the parish to expand the commission to nine members, all elected from singlemember districts. The administration was further divided to give each commissioner a department to head. This unique structure was quite expensive, particularly considering the small parish population. Parish voters in 1986 selected the presidentcouncil form of government to replace the commission in 1987. Under the new charter the president is a strong chief executive and the nine-member council, elected from districts, have no administrative role in those functions placed under the president.

The city-parish consolidation is a structural adaptation which may provide unified government in a metropolitan area. The solution is more complete when the metropolitan area is contained within one parish, but it can be very effective in reducing governmental fragmentation even where only the central city and its parish can be combined. New Orleans has a strong mayor-council form of government with a seven-member council (five elected from districts and two at large). The council selects its own presiding officer. East Baton Rouge Parish has a strong mayor-president council form of government, which has incorporated modern administrative structure and procedure. The Terrebonne Parish Consolidated Government has a strong president-council form, which provides for an adequate separation of the legislative and executive branches.

In 1988 St. Bernard Parish adopted the president-council form of government with seven councilmen (one is elected from each of the five districts, two are elected at-large). The parish had a declining economic base and found that it had to actively solicit business prospects. With the administrative problems that come with a growing population, it found that it needed a political system that encouraged cooperation and provided for a strong leader and council with the whole parish's interest in mind. They wanted a system that provided for sufficient checks and balances of the president as well as the councilmen (Chapman). The parish worked for many years for this type of government, and in November 1988 their home rule charter passed by a vote of 73 percent.

In Lafourche, the Police Jury was eager to obtain the power that a home rule charter could give them. So it appointed a 21-member commission to draft a charter, and

it submitted a document containing many changes but virtually retaining Lafourche's traditional structure of government. The commission became embroiled over two controversial issues and to avoid opposition included these alternate proposals, to the form of government and apportionment of jury membership, on its charter ballot (Kleinpeter). Lafourche was the first parish to vote on a home rule charter, and on August 14, 1976, the parish approved a 16-member parish council with 15 members elected from single member districts and a president elected at large.

Drafting the home rule charter is not an easy task, and care should be taken since it can only be amended or repealed through a majority vote at an election held for that purpose. Members of the commission spend long hours and sometimes years working on the document that is presented to the voters of a parish. The members elected for the commission should be selected from those who have the interest of the entire parish in mind. Much can be learned from parishes that now have home rule charters, the problems they encountered, what should be changed about their charter, and what seems to work best. But in each situation the charter is tailored to a parish's specific needs.

### Chapter References

Bergon, Patrick. "Louisiana Parish Government - Origin and Evolution." Louisiana Parish Government, February, 1991, pp. 45-46.

Chapman, Ron. The St. Bernard Voice. Sept. 30, 1988.

Duhl, Leonard J. "Leadership in American Communities." National Civic Review, v. 86, no. 1, Spring 1997, pp. 75-79.

Kleinpeter, Barbara. The Daily Comet. August 10, 1976.

- Lafourche Parish Home Rule Charter. October 1, 1976.
- "Louisiana Parish Government Structure."
  Louisiana Parish Government
  Association, http://www.lpgov.org/facts.
  pp. 1-5.
- Police Jury Manual. Police Jury
  Association of Louisiana. Louisiana
  Parish Government Association. Sixth
  Edition. June 1996. pp. 33-36.
  St. Bernard Home Rule Charter
- St. Bernard Home Rule Charter Commission, Home Rule Charter for St. Bernard Parish, Louisiana. November 1988.

Appendix A

Cameron parish, located on the southwest corner of the state, has the largest land mass of any parish covering 1,400 square miles or about 900,000 acres. Much of this land (750,000 acres) is considered to be coastal wetlands. According to the U.S. Bureau of the Census, the population for the parish has declined about 4% from 1990-1994.



Table A1: Population Statistics for Cameron Parish, Coastal Study Parishes, and Louisiana

	1980	1990	% Change (1980-1990)	2000*
Cameron	9,336	9,260	-0.81%	9,640
Coastal Study Parishes‡	N/A	667,855	N/A	N/A
Louisiana	4,205,900	4,219,973	+0.3%	4,518,300
Louisiana Average per Parish	65,717	65,937	+0.3%	70,598
Cameron as a Percent of Coast	N/A	1.39%	N/A	N/A
Cameron as a Percent of LA	0.22%	0.22%	N/A	0.21%
Coastal Parishes as a Percent of LA	N/A	15.83%	N/A	N/A

Source: Louisiana Population Data Center.

The study area includes the nine coastal parishes. Only Westbank is included in Jefferson Parish.

<sup>\*</sup>Projected by Louisiana Population Data Center

Table A2: Population Estimates for Coastal Study Area, 1990-1994

	1990	1991	1992	1993	1994	% Change 90-94
Cameron	9,260	9,208	9,084	8,993	8,912	-3.7581%
Iberia	68,297	68,935	69,554	70,317	70,782	3.6385%
Jefferson*	207,109	209,032	210,640	210,689	210,936	1.8478%
Lafourche	85,860	86,196	86,318	86,669	86,912	1.2253%
Plaquemines	25,575	25,509	25,750	25,397	25,454	-0.4731%
St. Bernard	66,631	66,510	66,568	66,783	66,984	0.5298%
St. Mary	58,086	58,133	57,862	57,311	57,184	-1.5529%
Тептевоппе	96,982	98,323	99,379	99,688	100,359	3.4821%
Vermilion	50,055	50,062	50,323	50,602	50,794	1.4764%
Total	667,855	671,908	675,478	676,449	678,317	1.5665%
Louisiana	4,220,164	4,241,394	4,273,122	4,290,371	4,314,974	2.2466%

Source: Population Estimates, & Population Distribution Branches US Bureau of the Census

<sup>\*</sup>Estimate of Westbank of Jefferson Parish only.

Table A3: Population per Square Mile, Median Age, and Education levels for Cameron Parish and Louisiana

	1970	1980	1990
Cameron Population / square mile	5.70	6,60	7.10
Louisiana Population per square mile	81.00	94.50	96.90
Cameron Median Age	N/A	26.90	30.60
Louisiana Median Age	N/A	27.40	31.00
Cameron High School Graduates*	32.40%	44.40%	N/A
Cameron College Graduates <sup>8</sup>	3.8%	6.90%	N/A
Louisiana High School Graduates	42.20%	57.70%	N/A
Louisiana College Graduates	9.00%	13.90%	N/A

Source: Statistical Abstract of Louisiana 1990 and 1994.

Table A4: Personal Income and Income per capita for Cameron Parish and Louisiana

	1990	1991	1992	1993
T.P.L. <sup>‡</sup> - Cameron*	\$111,130	\$113,861	<b>\$</b> 120,5 <b>20</b>	\$124,545
T.P.L <sup>‡</sup> -Louisiana*	\$60,228,038	\$63,956,324	\$67,837,306	\$71,271,127
Per capita - Cameron	\$12,061	\$12,365	\$13,269	\$13,849
Per capita - Louisiana	\$14,281	\$15,079	\$15,876	\$16,612
Cameron T.P.L. as a % of Louisiana	0.185%	0.178%	0.178%	0.175%
Cameron per capita as a % of Louisiana	84.455%	82.001%	83.579%	83.367%

Source: Statistical Abstract of Louisiana 1990 and 1994.

<sup>\*</sup> As a Percentage of population 25 years and over.

<sup>&</sup>lt;sup>‡</sup> Total Personal Income

<sup>\*</sup>Personal income in thousands of dollars

Table A5: Statistics on Public Assistance for Cameron Parish and Louisiana

	1990	1991	1992	1993	% Change (90-93)
Total Transfer Payments <sup>†</sup> . Cameron	\$13,896	\$15,536	\$17,665	N/A	27.12%
Total Transfer Payments† - Louisiana Average*	\$170,331	\$194,048	\$220,474	N/A	29.44%
AFDC <sup>‡</sup> - Cameron	\$156,000	\$137,000	\$135,000	N/A	-13.46%
AFDC <sup>‡</sup> - Louisiana Average*	\$3,066,000	\$3,113,563	\$3,037,453	A/N	-0 93%
Number of children helped by ARDC <sup>‡</sup> - Cameron	161	138	126	132	-18.01%
Number of children helped by AFDCt - Louisiana Average*	3,105	3,065	3,020	2,906	-6.41%
Number of households in Food Stamp Program - Cameron	312	288	321	365	16.99%
Number of households in Food Stamp Program - LA Average*	3,966	4,109	4,350	4,412	11.25%

Source: Statistical Abstract of Louisiana 1990 and 1994.

<sup>†</sup>Transfer Payments in thousands of dollars.

<sup>‡</sup>Aid to Families with Dependent Children

\*Louisiana Average is the average per parish.

Table A6: Employment and Earnings Statistics by Sector for Cameron Parish

	1661	16	1992	92	1993	13	1994	25	% Change 1990-1994	1990-1994
	Employment	Earnings*	Employment	Earnings*	Employment	Earnings*	Employment	Earnings*	Employment	Earnings
Agriculture	233	\$1,629	227	\$1,592	222	\$1,599	221	\$1,772	-5.15%	8.78%
Mining	835	\$31,365	119	\$26,375	165	\$24,774	581	\$26,056	-30.42%	-16.93%
Construction	83	\$1,437	91	\$992	72	\$1,133	19	\$1,226	-19.28%	-14.68%
Manufacturing	236	\$8,764	235	\$8,514	217	\$8,917	213	\$9,732	-9.75%	11.05%
Transportation & Public Utilities	863	\$26,133	118	\$27,063	\$88	\$28,833	912	\$29,736	2.68%	13.79%
Wholesale	182	\$4,248	219	\$6,038	172	\$5,729	202	\$6,907	%66'01	62.59%
e Retail	357	\$4,496	348	\$4,447	371	\$4,480	393	\$4,881	%80'01	8.56%
Finance, Insurance, & Real Estate	140	\$2,577	76	\$1,499	82	\$1,216	69	106\$	-50.71%	-65.04%
Services	574	\$7,498	588	\$7,438	<b>L19</b>	\$9,171	695	\$7,339	-0.87%	-2.12%
Government	925	\$18,324	937	\$19,275	961	\$20,057	1,013	\$21,420	9.51%	%06'91
Fotals	4,428	\$106,471	4,209	\$103,233	4,190	\$105,909	4,240	\$109,970	-4.25%	3.29%
Comman Dagional Economic Information	al Francousin	Information		Donarimon	t of Common	co Franchi	or and Classe	Cistom II C Panarimont of Commerce Fronomics and Clatistics Administration Russon of	tration Rues	on of

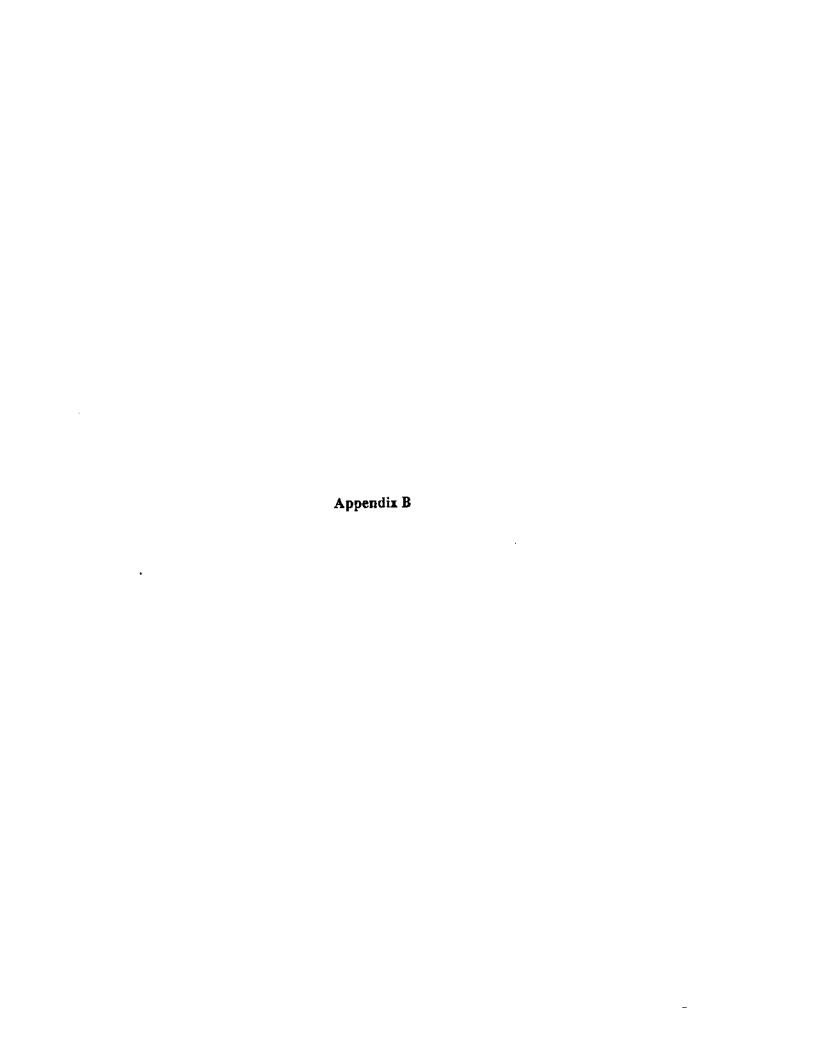
Source: Regional Economic Information System, U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis, Regional Economic Measurement Division.

\*Earnings in thousands of dollars.

Table A7: Employment Data and subsequent change from 1985-1993 for U.S., Louisiana, and Cameron Parish

	Sil	US Emp	Change		Lonistana Emm.	Entr.	Change		Comerce Nam	1,000	Observe	
Sector	1985	1993	*	%	1985	1993	#	%	1985	82	*	8
Mining	943,372	608,277	-335,095	-35.52%	81,489	44,629	-36,860	45.23%	329	95	-234	-71.12%
Construction	4,479,533	4,524,110	44,577	1.00%	98,535	94,557	-3,978	4.04%	143	252	109	76.22%
Manufacturing	19,433,606	18,183,381	-1,250,225	-6.43%	177,735	180,903	3,168	1.78%	200	205		2.50%
Transportation &Public Util.	4,815,535	5,621,550	806,015	16.74%	108,124	86'.98	-11,326	-10.48%	466	429	-37	.7 94%
Wholesale	5,625,007	6,258,154	633,147	11.26%	90,708	84,013	-6,695	-7.38%		7	-32	-28.83%
Retail	16,851,827	16,851,827 19,776,732	2,924,905	17.36%	291,237	304,570	13,333	4.58%	244	286	5	17.21%
Fin., Ins., Real Estate	6,004,136	6,905,493	901,357	15.01%	85,087	79,918	-5.169	-6.07%	29	88	12	25 17%
Services	21,543,425	21,543,425 32,258,944	10,715,519	49.74%	316,592	483,097	166,505	52.59%	605	830	225	37.19%
Totals	79,696,441	79,696,441 94,136,641	14,440,200	18.12%	1,249,507	1,368,485	118,978	9.52%	2,165	2,260	95	4.39%

Source: County Business Patterns, U.S. Department of Commerce, Bureau of the Census, 1985 and 1993.



# **Economic Analysis**

The analysis techniques used are strictly tools which help us define the larger picture of the Cameron Parish economy, and as such it is important not to get bogged down in the details of the data. For example, there are times when businesses change their processes. It then becomes difficult to interpret which category to place them in. For that reason, there may be instances where certain businesses appear to have been left out, when in reality, they are listed under a different category.

The source for these data was "County Business Patterns," which provides employment data by place of work. "County Business Patterns" is published annually by the U.S. Census Bureau. There are certain limitations to these data. "The data generally represent the types of employment covered by the Federal Insurance Contributions Act (FICA). Data for employees of establishments totally exempt from FICA are excluded, as are self-employed persons, domestic service workers, railroad employees, agricultural production workers, most government employees, and employees on ocean borne vessels or in foreign countries." [CBP Documentation]. Because of the nature of the data, employment is underreported.

## Shift-Share Analysis

## What is Shift-Share Analysis?

Shift-Share Analysis is a tool used to analyze employment in a parish economy. It helps us compare with how others are doing.

### Why do we use Shift-Share Analysis?

Our goal in using shift-share analysis is to explain the shifts in parish employment over a given period and to help parish leaders make plans for economic development.

## How do we use Shift-Share Analysis?

We isolate the factors that affect employment and observe the effect each factor would have if nothing else changed.

#### What are the factors?

- ♦ Growth Effect
- ♦ Industry Mix Effect
- ♦ Share Effect

#### What do these factors tell us?

- ♦ The Growth Effect shows the degree of change in employment attributable to the total change in employment in that sector of the larger economy as a whole. (Here, we will look at Cameron Parish as it relates to the United States and as it relates to Louisiana.) For example, if water transportation in Cameron Parish had grown at the same rate as the national growth rate in the transportation and public utilities sector, Cameron Parish would have added 32 jobs in this industry. (See National Growth Column Table B2.)
- ♦ The Industry Mix effect shows the change in employment attributable to changes in individual industries. It explains the effects of the distribution of employment among faster and slower growing industries compared with the national distribution. For example, the water transportation industry declined at the national level. Because of this national decline, Cameron Parish water transportation employment would have been expected to decline by 52 jobs. When we add the growth effect and the industry mix effect, we see the potential change in employment attributable to economic forces outside the area. We would expect parish employment in water transportation to decline by 20 jobs.
- ♦ The Share Effect is what is left over. It shows the amount that employment in each industry changed relative to its own industry at the national level. It is a measure of whether the parish is gaining or losing national share in the industry. If the parish economy follows the same course as the economy as a whole, this number will be zero. The variation from zero tells us how much employment the parish gained or lost compared with what it should have gained or lost in relation to the larger economy (U.S. or state). In the water transportation industry, Cameron Parish lost nine more jobs than it should have lost.

#### What are the implications to Cameron Parish?

The bottom line in using Shift-Share Analysis is to show how the industries within Cameron Parish fared compared with the U.S. and the state of Louisiana. Between 1985 and 1993, employment in the U.S. grew by 18.12 percent and employment in Louisiana grew by 9.52 percent. During the same period, employment in Cameron Parish grew by 4.39 percent. Just looking at these numbers, we can tell that Cameron Parish fared worse than the U.S. and the state of Louisiana as a whole. With Shift-Share Analysis, we can point to the numbers in the Parish Share column to see how many jobs the parish gained or lost due to the performance of local employers relative to the nation or the state.

#### Location Quotient

# What is the Location Quotient?

The location quotient is an analytical ruler used to measure relative employment concentration. If all numbers are close to one, the parish economy is roughly diversified to the same extent as the U.S. economy.

# Why do we use the Location Quotient?

We want to know in which industries Cameron Parish's employment is concentrated. The location quotient contributes to the overall picture of the strengths and weaknesses of the parish. Leaders can then target industries which are compatible with existing industries, or they can target areas of need within the parish.

# What does the Location Quotient tell us?

- ♦ If LQ=1: industry employment in the parish and in the U.S. is concentrated to an equal degree. (In 1994 Cameron Parish and U.S. employment were roughly concentrated equally in depository institutions.)
- ♦ If LQ<1: parish employment in the industry is concentrated less than in the U.S. (In 1994 Cameron Parish employment in general merchandise stores was one fourth as concentrated as in the U.S.)
- ♦ If LQ>1: parish employment in the industry is concentrated more than in the U.S. (In 1994, Cameron employment in oil and gas extraction was approximately 25 times as concentrated as in the U.S.)

# What are the implications to Cameron Parish?

Location quotients do not have right or wrong answers. They can tell us where the strengths and weaknesses of the parish lie and possibly where economic development efforts should concentrate.

Firms often locate near other similar businesses in order to benefit from external economies of scale. A location quotient greater than one relative to the U.S. can suggest possible areas of strength for the Parish to target new businesses or expand existing business opportunities within that industry. In Table B5, we see several areas in which Cameron Parish employment is more concentrated than the U.S. These areas include heavy construction, the manufacture of food and kindred products, water transportation, and business services.

A location quotient less than one relative to the U.S. can suggest areas of weakness in the parish. Some weakness is unavoidable. For instance, the location quotient for local and suburban transit is zero. This stands to reason since the parish has no major metropolitan population centers. Capitalizing on parish needs as potential business opportunities for investors inside and outside the parish can turn other weaknesses into strengths. Some striking examples include the need for hotels, general merchandise stores, and apparel and accessory stores.

Table B1: Employment Data and Subsequent change: United States; 1985-1993

CCODE	TITLE	1985	1993		Nohange 35 534
	Mining	943,372	608,277	-335,095	35.529
000	Metal mining	45,217	49,491	4,274	9.459
200	Coat Mining	179,731	113,948	-65,783	-36,601
000	Oil & Gas extraction	475,263	257,694	-217,569	-45.78 <sub>7</sub>
8	Mining - nonmetallic minerals	100,562	95,952	-4,610	<u>-4.5</u> 81
	Construction	4,479,533	4,524,110	44,577	1.007
500	Building construction	1,163,113	1,096,289	-66,824	-5.751
<del>200</del> —	Heavy construction other than buildings	691,223	679,578	-11,645	-1.689
		2,604,779	2,731,774	126,995	4.881
700	Special trade contractors		18,183,381	-1,250,225	6.431
	Manufecturing	19,433,606			
000	Food & Kindred products	1,420,440	1,498,078	77,638	5.471
00	Tobacco products	52,701	37,189	-15,512	-29.431
200	Textile mill products	678,977	615,683	-63,294	<u>-9</u> .321
300	Apparel	1,124,962	972,060	-157,902	-13.501
	Lumber & wood products not furniture	656,713	675,081	18,368	2.801
100			476,488	-19,194	-3.87
500	Furniture & fixtures	495,682			
500	Paper & allied products	618,088	627,746	9,658	1.561
700	Printing, publishing	1,416,096	1,500,580	84,484	5.97
300	Chemicals & allied products	859,121	851,720	-7,401	- 861
900	Petroleum refining & related	130,320	112,984	17,336	-13.30
		766,096	915,166	149,070	19.46
000	Rubber & misc. plastics		104,747	-49,281	-31.991
100	Leather & Leather products	154,028		<del> </del>	
200	Stone, clay, glass, and concrete	546,132	471,639	74,493	-13.64 <sup>4</sup>
300	Primary metal industries	777,543	655,556	-121,987	-15.69
400	Fabricated metal (not machinery & transp.equip)	1,499,318	1,371,072	-128,246	<b>-8.55</b> '
	Industrial & commercial machinery	2,104,486	1,749,735	-354,751	-16.66
500		2,082,766	1,424,351	-658,415	-31.61
900	Electronic not computer				-9.54
700	Transportation equipment	1,770,477	1,601,554	-168,923	
800	Measuring, analyzing, & controlling instruments	615,253	878,379	263,126	42.77
900	Misc. mfg. industries	378,070	375,501	-2,569	68
	Transportation & Public Utilities	4,815,535	5,621,550	806,015	16.74
		267,259	366,657	99,398	37.19
100	Local & suburban transit	1,286,227	1,633,543	347,316	27.00
200	Motor freight transp.				10.48
400	Water Transportation	181,495	162,478	-19,017	
500	Transportation by air	485,810	689,644	203,834	41.96
600	Pipelines, except natural gas	17,165	17,143	- <u>72</u>	13 <sup>t</sup>
		277,336	363,103	85,767	30.93
700	Transportation services	1,282,616	1,299,658	17,042	1.33
800	Communications		924,373	99,979	12.13
900 _	Electric, gas, & sanitary services	824,394			11.26
	Wholesale	5,625,007	6,258,154	633,147	
000	Wholesale-durable	3,165,867	3,414,441	248,574	7.85
100	Wholesale nondurable	2,170,192	2,564,260	334,068	15.39
100	Retail	16,851,827	19,776,732	2,924,905	17.36
	Bidg materials, hardware, garden supply, mobile homes	585,380	696,228	110,848	18.94
200	Bidg materials, hardware, galiden supply, moule having	1,941,599	2,141,964	200,365	10.32
300 _	General merchandise stores		3,027,828	432,737	16.68
400	Food Stores	2,595,091			7.45
500	Automotive dealers & gasoline service stations	1,854,647	1,992,774	138,127	
	Apparel & accessory stores	1,033,574	1,194,121	160,547	15,53
600	Home furniture, furnishings, & equipment	630,753	754,024	123,271	<u> 19.54</u>
700		5,302,103	6,727,618	1,425,515	26.89
800 _	Eating & Orinking places		2,422,923	289,476	13.57
900	Misc. Retail	2,133,447			15.01
	Finance, Insurance, & Real Estate	6,004,136	6,905,493	901,357	
2000	Depository institutions	1,587,852		507,197	31.94
000	Nondepository credit institutions	743,092	483,133	-259,959	34.96
100	NONDERDON CREATE UNDERSON	337,550	449,826	112,276	33.26
200	Security & commodity brokers	1,252,773	1,570,356	317,583	25.35
300	Insurance carriers			102,589	18,54
400	Insurance agents, brokers, and service	553,418	656,007		16.64
500	Real Estate	1,144,636	1,335,048	190,412	
700	Holding & other investment offices	193,316		60,856	31.4
	Services	21,543,425	32,258,944	10,715,519	
	Hotels, rooming houses, camps, & other lodging places	1,264,269	1,527,126	26 <u>2,857</u>	20.79
000	Hotels, rooming nouses, camps, or other roogs of places	1,069,180	1,252,777	183,597	17.1
200	Personal services	4,272,201	5,832,261	1,560,060	
300	Rusiness services			227,984	
500	Automotive repair, services, and parking	675,822	903,806		
	Misc. repair services	326,509		112,986	
חתמי		228,535	500,889		
	Motion pictures	768,045		433,203	
2008	The state of the s	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			
7600 7800 7900	Amusement & recreation services	ድ የየድ ፍደቡ	1 10 40 3 110		
'800 '900	Amusement & recreation services Health services	6,336,550		776 019	فالخصان
7800 7900 3000	Health services	685,456	962 374	276,918	
900 900 3000 3100	Health services Legal services	685,456 1,517,158	962 374 1,967,024	276,918 449,866	29.
900 900 3000 3100 3200	Health services Legal services Educational services	685,456	962 374 1,967,024	276,918 449,866	29.6 57.
7800 7900 8000 8100 8200 8300	Health services Legal services Educational services	685,456 1,517,158 1,290,845	962 374 1,967,024 2,028,694	276,918 449,866 737,849	5 29.6 57. 5 108.
900 900 3000 3100 3200	Health services Legal services Educational services Social services Museums, art galleries, botanical &zoological gardens	685,456 1,517,158 1,290,845 35,449	962 374 1,967,024 2,028,694 73,874	276,918 449,866 737,849 38,425	5 29 6 57 50 108
900 900 100 100 200	Health services Legal services Educational services	685,456 1,517,158 1,290,845	962 374 1,967,024 2,028,694 73,874	276,918 449,866 737,849 38,429 510,53	5 29 6 57 50 108

Table B2: Cameron Parish Shift-Share Analysis relative to United States, 1985 - 1993

SICCODE	117.6	1985	1983	Achange	Michenge	Netional	Industry	Potentlat	Pariet
		Employment	Emphayment			Growth		Change	Share
000	Mining	329	96	-234	-71.12%	0		0	
200	Weta ming	0		0	%0	0	0	0	0
3	Anthracite Mining	0		0	80	0		0	
1200	Coal Mining	0		0		0		0	0
1300	Oil & Gas extraction	329	95	-234	-71.12%	-117	-	151-	#F
3	Wirling - nonmetallic minerals	0				0		0	0
		329	95	-234	Totals	-117	3.4	151	-93
	Construction	143	252			0	0	0	-
1500	Building construction	0	33		1	6	-		) [
1600	Heavy construction other than buildings	88	189		1	•		> *	19.
1700	Special trade contractors	45	33		44 44%	•	-	-	2 6
	(1)	143	252	8		- 6	4 6	3 6	79.
	Manufacturing	200	205	2	5	10		70	
2000	roducts	99	171	) 4c	30.0	3 4	ع د	5 0	>
2100	Tobacco products	C	-			•		200	•
2200	Textile mill products	2	7			9		3	D
2300	Apparel	> <		>  6		<b>&gt;</b> (		o	0
2400	Lumber & wood products not furniture	3 6		2 0		0		0	0
2500	Furniture & fixtures	0 6	9 0	٥				200	0
2600	Paper & allied products	0	•			2 6		3	<b>D</b>
2700	Printing, publishing	> 0	•	> <	80	9		3	0
2800	Chemicals & allied products	0	0			9		ם י	י בריים ביים
2900	Petroleum refining & related	<b>3</b> N	7	7	3	2		0	0
3000	Rubber & misc. plastics		-	-   -	3	2 9		5 0	20 (
3100	Leather & Leather products		2 6	5 6	8 8	9 0		0	P
3200	Stone, clay, class, and concrete	2 ~		1	5	7		3	9
3300	Primary metal industries	- 6	0	-/-	- 100.007			•- (	9
3400	Fabricated metal (not machinery & transp equip)	> 6"	2 6	> 0		9 0		5	٥
3500	machine	12	17	)		5		2 0	2 6
3600	Electronic not computer	0	0	0		C	1	2 0	9 6
3700	Transportation equipment	0	0	0		•		3 6	7
3800	Measuring, analyzing, & controlling instruments	0	0	0		6		> 0	9 6
3900	Misc, mfg. industries	0	0	0				0	9 6
		200	205	3	Totals	-12	1	) VC	7
	Transportation & Public Utilities	466	429	.37	-7.94%	0		0	0
4100	Local & suburban transit	0	0	0		0	-	0	0
4200	Motor freight transp.	55	7	-11	-20.00%	on on	9	15	36
4400	Water Transportation	191	162	82.	-15.18%	32	-52	.20	6,
4500	Transportation by air	173	33	-140	-80.92%	23	3	73	.213
4600	Pipelines, except natural gas	0	0	0	%0	0	0	0	0
4700	Transportation services	0	0	0	%0	0	0	0	0
4800	Communications	0	0	0	%	0	0	0	0
4900	Electric, gas, & sanitary services	47	190	143	304.26%	•	7	9	137
	-77:	466	429	-37	Totals	7.8	7	74	=
			1			-		17.7	

Source: Bureau of the Census; County Business Patterns, 1985, 1993

l		۶	•	)
ŀ		Š	ý.	
		, 000 7		
	- Gold C. C. William Charles Nett Nation Application of the control of the contro		מממט ב	
	3	2		
	7	9	)	
	9	7	)	
,	-	>		
,	; <	_	:	Ì
i	0100	<u>מ</u>		
:	ţ	֖֡֡֝֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֡֡֜֜֜֜֜֜֜֜		
ć	7	5		ĺ
- 1	מכותי	3		
•	ב	-		
4 44	_			
Ċ	Ţ	)		
ċ	_	i		
1	נו נו	1		1
(	0			
_	_	•		

Wholesale Employment Employ 111 Employ employ 22 52 59
111 52 59
52
59
3
111
74.6
1
? \$
2 8
26
12
7
0
61
13
244
10
5 1
74
3
3
7
0
7
0
0
29
605
7
17
352
٧
0,0
, c
0 6
110
17
0
9
0
σ
) c
5 6
07
cna
2,165

Table B3: Employment Data and Subsequent change: Louisiana; 1985-1993

200 Cc 300 Oi 400 Mi 500 Bu 600 Hi 700 Sp 2000 Fc 2100 Tc 2200 Tc 2300 Ai 2400 Ls 2500 Fc 2300 Pc 2300 Pc 2300 Pc 3300 Cc 2300 Pc 3300 Cc 2300 Pc 3300 Cc 2300 Pc 3300 Cc 2300	Metal mining Coal Mining Dil & Gas extraction Mining - nonmetallic minerals Construction Building construction other than buildings Special trade contractors Manufacturing Food & Kindred products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Pipelines, except natural gas Transportations services Communications	81,489 17 42 68,326 2,194 98,536 21,525 26,321 50,457 177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046 67,286	44,629 9 23 38,602 1,813 94,557 13,884 35,826 44,245 180,903 18,759 10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	36,860 -8 -19 -29,724 -381 -3,978 -7,641 9,505 -6,212 3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 -662 -549 -11,326 996 940 -11,486 -1,366 20 -1,486 -1,366 -1,366	-45.23 -47.06 -45.24 -43.50 -17.37 -4.04 -35.50 36.11 -12.31 -17.23 -17.23 -17.23 -17.23 -17.23 -17.23 -17.23 -17.23 -17.23 -17.23 -18.63 -18.63 -18.63 -19.73 -10.40
200 Cc 300 Oi 400 Mi 500 Bu 600 Hr 700 Sp 2000 Fc 2100 Tc 2200 Tc 2300 Ar 2400 Ls 2500 Fc 2300 Pc 2300	Coat Mining Dil & Gas extraction Mining - nonmetallic minerals  Construction  Building construction other than buildings Special trade contractors  Manufacturing Food & Kindred products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Wyater Transportation Transportation by air Pipelines, except natural gas Transportation services	42 68,326 2,194 98,536 21,525 26,321 50,457 177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,565 7,194 799 4,046	23 38,602 1,813 94,557 13,884 35,826 44,245 180,903 18,759 10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-19 -29,724 -381 -3,978 -7,641 9,505 -6,212 3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,728 -2,384 662 -11,326 996 940 -11,486 -1,366 20	-45.24 -43.50 -17.37 -4.04 -35.50 36.11 -12.31 -17.97 -233.33 287.78 -25.71 -13.93 -16.72 -11.16 -2.87 -5.63 -5.63 -25.31 -20.34 -5.071 -10.40 -5.071
300 Oi 400 Mi 500 Bi 600 Hi 700 Sp 1000 Fe 1000 Te 1200 Te 1200 Te 1200 Pi 120	Oil & Gas extraction  Mining - nonmetallic minerals  Construction  Building construction other than buildings  Special trade contractors  Manufacturing  Food & Kindred products  Tobacco products  Textile mill products  Apparel  Lumber & wood products not furniture  Furniture & fixtures  Paper & allied products  Printing, publishing  Chemicals & allied products  Petroleum refining & related  Rubber & misc. plastics  Leather & Leather products  Stone, clay, glass, and concrete  Primary metal industries  Fabricated metal (not machinery & transp.equip)  Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Wyater Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	68,326 2,194 98,536 21,525 26,321 50,457 177,735 18,943 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,5655 7,194 799 4,046	38,602 1,813 94,557 13,884 35,826 44,245 180,903 18,759 10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-29,724 -381 -3,978 -7,641 9,505 -6,212 3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,728 -2,384 662 -11,326 996 940 -11,486 -1,366 20	-43.50 -17.37 -4.04 -35.50 36.11 -12.31 1.78 -97 233.33 287.78 25.71 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.50 -20.34 10.64 -50.71 -10.40 60.25 -26.41 -10.42 -36.25 -36.27 -18.95 -2.50
400 Mi 500 Bi 600 Hi 700 Sp 2000 Fc 2100 Tc 2200 Tc 2300 Ai 2400 Lt 2500 Pc 2600 Pc 2700 Pc 2800 C 2900 Pc 3300 R 3300 Pc 3300 Fc 3300 Fc 3300 Fc 3300 Fc 3400 Fc 3500 Tc 3500	Mining - nonmetallic minerals  Construction  Building construction other than buildings  Special trade contractors  Manufacturing  Food & Kindred products  Tobacco products  Tobacco products  Textile mill products  Apparel  Lumber & wood products not furniture  Furniture & fixtures  Paper & allied products  Printing, publishing  Chemicals & allied products  Petroleum refining & related  Rubber & misc. plastics  Leather & Leather products  Stone, clay, glass, and concrete  Primary metal industries  Fabricated metal (not machinery & transp.equip)  Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Wyater Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	2,194 98,536 21,525 26,321 50,457 177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,565 7,194 799 4,046	1,813 94,557 13,884 35,826 44,245 180,903 18,759 10 5,045 10,639 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-381 -3,978 -7,641 9,505 -6,212 3,168 -184 -7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,728 -2,384 662 -11,326 996 940 -11,486 -1,366	-17.37 -4.04 -35.50 36.11 -12.31 1.78 -97 233.33 287.76 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.53 10.64 -50.71 -10.40 60.25 -26.41 -10.46 -4.51 -36.27 -4.51 -36.27
500 Bu 600 Hu 700 Sp 1000 Ft 1000 Tt 1000 Sp 1000 Ft 1000 Sp 1	Construction  Building construction Heavy construction other than buildings Special trade contractors  Manufacturing Food & Kindred products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Wyater Transportation Transportation by air Pipelines, except natural gas Transportation services	98,536 21,525 26,321 50,457 177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,5655 7,194 799 4,046	94,557 13,884 35,826 44,245 180,903 18,759 10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-3,978 -7,641 9,505 -6,212 3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,728 -2,384 662 -11,326 996 940 -11,486 -1,366	-4.04 -35.50 36.11 -12.31 1.78 -97 233.33 287.78 257.71 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 10.64 -50.71 -10.40 60.29 -26.41 -10.49 -26.45 -36.27 -18.99 -2.50 -
600 Hi 700 Sp 700 Sp 700 Fo 700 Sp 700 Fo 700 Sp 700 Fo 70	Building construction Heavy construction other than buildings Special trade contractors  Manufacturing Food & Kindred products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Wyater Transportation Transportation by air Pipelines, except natural gas Transportation services	21,525 26,321 50,457 177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,565 7,194 799 4,046	13,884 35,826 44,245 180,903 18,759 10 5,045 10,639 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-7,641 9,505 -6,212 3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366 20	-35.50 36.11 -12.31 1.78 -97 233.33 287.78 25.71 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 -20.34 10.64 -50.71 -10.40 60.25 -26.41 -10.40 60.25 -26.41 -10.40 60.25 -26.45 -36.27 -18.95 -25.50
600 H: 700 Sp 70	Heavy construction other than buildings Special trade contractors  Manufacturing Food & Kindred products Tobacco products Tobacco products Tobacco products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Wyater Transportation Transportation by air Pipelines, except natural gas Transportation services	26,321 50,457 177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	35,826 44,245 180,903 18,759 10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	9,505 -6,212 3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366 20	36.11 -12.31 1.78 -97 233.33 287.78 25.71 13.93 -16.72 -11.16 2.87 -5.63 90.50 64.38 -25.31 10.64 -50.71 -10.40 60.25 -26.41 -26.42 -26.41 -26.42 -26.42 -26.42 -26.43 -26
700 Sp 700 Sp 700 Fr 700 Fr 700 Tr 700 Tr 700 Tr 700 Tr 700 Fr 700 Fr 700 Pr 700 Tr	Special trade contractors  Manufacturing Food & Kindred products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	50,457 177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 20,851 31,665 7,194 799 4,046	44,245 180,903 18,759 10 5,045 10,639 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-6,212 3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,49 -11,326 940 -11,486 -1,366 20	-12.31 1.78 -97 233.33 287.76 25.71 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 10.64 -50.71 -10.40 60.25 -26.41 -10.40 -10.
000 FG 100 TG 200 TG 300 AJ 400 LU 500 FG 600 PG 800 PG 80	Manufacturing Food & Kindred products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. Industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	177,735 18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 3,1665 7,194 799 4,046	180,903 18,759 10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,563 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	3,168 -184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,496 -11,486 940 -11,486 -1,366 20	1.78 - 97 233.33 287.76 25.71 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 -20.34 10.64 -5.071 -10.40 60.25 -26.41 -10.40 60.25 -26.41 -10.40 60.25 -26.41 -10.40 60.25 -26.41 -20.40 -20.25 -20.41 -20.40 -20.25 -20.41 -20.40 -20.25 -20.41 -20.40 -20.25 -20.41 -20.40 -20.25 -20.41 -20.40 -20.25 -20.41 -20.40 -20.25 -20.41 -20.40 -20.25 -20.45 -20.2
100 TG 200 TG 200 TG 300 A) 400 L1 500 Fi 600 PG 600 PG 800 C 8000 PG 800 PG 80	Food & Kindred products Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. Industries Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	18,943 3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 20,851 31,665 7,194 799 4,046	18,759 10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,563 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-184 7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,49 -11,326 940 -11,486 -1,366 20	-97 233.33 287.78 25.71 13.93 -16.72 18.67 -11.16 -2.87 -5.63 -90.50 64.38 -25.31 -20.34 10.64 -50.71 -10.40 60.29 -26.41 -10.46 -26.45 -36.27 -18.95 -25.50
100 TG 200 TG 200 TG 300 A) 400 L1 500 Fi 600 PG 600 PG 800 C 8000 PG 800 PG 80	Tobacco products Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Printing publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. Industries Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	3 1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	10 5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	7 3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,429 -11,326 940 -11,486 -1,486 20	233.33 287.76 25.71 13.93 -16.72 18.67 -11.16 2.87 -50.50 64.38 -25.31 -20.34 10.64 -50.71 -10.40 60.29 -26.41 -10.46 -4.51 -10.46 -2.53 -
200 Te   300 A   4400 Ls   500 Fi   600 Pc   600	Textile mill products Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	1,301 8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	5,045 10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,563 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	3,744 2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,728 -11,326 996 940 -11,486 -1,366 20	287.76 25.71 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 -20.34 10.64 -50.71 -10.40 60.29 -26.41 -10.44 -36.25 -36.27 -18.98 -2.50
300 A 400 Lt 500 Fi 600 P 600 P 800 C 900 P 800 C 900 R 1100 Lt 1200 S 1300 P 1400 F 1500 Ir 1600 E 1700 T 1800 M 1700 T 1800 M	Apparel Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	8,622 11,172 927 10,339 10,476 28,185 11,393 2,127 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	10,839 12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	2,217 1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,49 -11,326 940 -11,486 -1,366 20	25.71 13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 -20.34 10.64 -50.71 -10.40 60.29 -26.41 -10.49 -36.27 -18.99 -25.50
1400	Lumber & wood products not furniture Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	11,172 927 10,339 10,476 28,185 11,393 2,127 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	12,728 772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	1,556 -155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,49 -11,326 940 -11,486 -1,366 20	13.93 -16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 -20.34 10.64 -50.71 -10.40 60.29 -26.41 -10.49 -36.27 -36.27 -18.99 -2.50
500 Fi 600 P	Furniture & fixtures Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	927 10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	772 12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-155 1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -5,49 -11,326 996 940 -11,486 -1,366 20	-16.72 18.67 -11.16 2.87 -5.63 90.50 64.38 -25.31 10.64 5.48 -50.71 -10.40 60.29 -26.41 -10.48 -36.27 -36.27 -18.98 -2.50
100   Post   100	Paper & allied products Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	10,339 10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,565 7,194 799 4,046	12,269 9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	1,930 -1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366 20	18.67 -11.16 -2.87 -5.63 -90.50 64.38 -25.31 10.64 -5.46 -50.71 -10.40 60.29 -26.41 -10.45 -4.51 -36.27 -18.99 -2.50
1700   Pr   1800   C   1900   Pr   1900	Printing, publishing Chemicals & allied products Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries  Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	10,476 28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	9,307 28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-1,169 808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,366 940 -11,486 -1,366	-11.16 2.87 -5.63 90.50 64.38 -25.31 -20.34 5.46 -50.71 -10.40 60.21 -10.44 26.62 4.51 -36.27 -18.99 2.50
Second   C   Second   Second   C   Second	Chemicals & allied products  Petroleum refining & related  Rubber & misc. plastics Leather & Leather products  Stone, clay, glass, and concrete  Primary metal industries  Fabricated metal (not machinery & transp.equip)  Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	28,185 11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	28,993 10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	808 -641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366 20	2.87 -5.63 90.50 64.38 -25.31 -20.34 5.46 -50.71 -10.40 60.23 -6.62 4.51 -36.27 -18.99 2.50
9000 PA 1000 R 1100 L 1200 S 1300 P 1400 F 1500 In 1500 In 1500 IT 1500 V 1500 T 1600 P 1400 V 1500 T 1600 P 1400 V 1500 T 1500	Petroleum refining & related Rubber & misc. plastics Leather & Leather products Stone, clay, glass, and concrete Primary metal industries Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	11,393 2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	10,752 4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-641 1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366	-5.63 90.50 64.38 -25.31 10.64 5.46 -50.71 -10.40 60.29 -26.41 -10.41 26.62 4.51 -38.27 -18.99 2.50
1000   R   1100   L   1200   S   1300   P   1400   E   1500   Ir   1500   Ir   1500   M   1400	Rubber & misc. plastics  Leather & Leather products  Stone, clay, glass, and concrete  Primary metal industries  Fabricated metal (not machinery & transp.equip)  Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. Industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	2,127 219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	4,052 360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	1,925 141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 940 -11,486 -1,366	90.50 64.38 -25.31 -20.34 10.64 -50.71 -10.40 60.25 -26.41 -10.42 4.51 -36.62 -4.51 -38.27 -18.95 -2.50
1100 L9 1200 S 1300 P 1400 F 1500 Ir 1500 Ir 1500 M	Leather & Leather products  Stone, clay, glass, and concrete  Primary metal industries  Fabricated metal (not machinery & transp.equip)  Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	219 7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	360 5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	141 -1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 940 -11,486 -1,366	64.38 -25.31 -20.34 10.64 5.46 -50.71 -10.40 60.29 -26.41 -10.46 26.62 4.51 -36.27 -18.99 2.50
1200   S   1300   P   1400   F   1500   Ir   1500	Stone, clay, glass, and concrete  Primary metal industries  Fabricated metal (not machinery & transp.equip)  Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	7,154 3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	5,343 2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-1,811 -674 1,362 496 -5,728 -2,384 662 -549 -11,326 940 -11,486 -1,366 20	-25.31 -20.34 10.64 5.46 -50.71 -10.40 60.29 -26.41 -10.46 26.62 4.51 -36.27 -18.99 2.50
1300   P   1400   F   1500   Ir   1500	Primary metal industries  Fabricated metal (not machinery & transp.equip)  Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. Industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	3,313 12,799 9,090 11,296 22,926 1,098 2,079 108,124 20,851 31,665 7,194 799 4,046	2,639 14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-674 1,362 496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366 20	-20.34 10.64 5.46 -50.71 -10.40 60.29 -26.41 -10.46 26.62 4.51 -36.27 -18.99 2.50
1400   F   1500   Ir   1600   E   1700   T   1800   M   1800   M   1400   M   1400   M   1500   T   1800   T   1800   T   1800   M	Fabricated metal (not machinery & transp.equip) Industrial & commercial machinery Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. Industries Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	12,799 9,090 11,296 22,926 1,098 2,079 108,124 3,741 30,851 31,665 7,194 799 4,046	14,161 9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	1,362 496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366 20	10.64 5.46 -50.71 -10.40 60.29 -26.41 -10.48 26.62 -36.27 -18.99 2.50
1500	Industrial & commercial machinery  Electronic not computer  Transportation equipment  Measuring, analyzing, & controlling instruments  Misc. mfg. industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	9,090 11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	9,586 5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	496 -5,728 -2,384 662 -549 -11,326 996 940 -11,486 -1,366 20	5.46 -50.71 -10.40 60.29 -26.41 -10.48 26.62 4.51 -36.27 -18.99 2.50
100   E   1700   T   1800   M	Electronic not computer Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. industries Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	11,296 22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	5,568 20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-5,728 -2,384 -662 -549 -11,326 996 940 -11,486 -1,366	-50.71 -10.40 60.29 -26.41 -10.48 26.62 -36.27 -18.99 2.50
1700 T. 1800 M. 1900 M	Transportation equipment Measuring, analyzing, & controlling instruments Misc. mfg. Industries Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	22,926 1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	20,542 1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	-2,384 662 -549 -11,326 996 940 -11,486 -1,366	-10.40 60.29 -26.41 -10.48 26.62 4.51 -36.27 -18.99 2.50
100   L   100   M   100   M   1100   L   1200   M   1400   M   1500   T   14500   T   14	Measuring, analyzing, & controlling instruments  Misc. mfg. Industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	1,098 2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	1,760 1,530 96,798 4,737 21,791 20,179 5,828 819	662 -549 -11,326 996 940 -11,486 -1,366	60.29 -26.41 -10.44 26.62 4.51 -36.27 -18.99 2.50
1100 L 1200 M 1400 V 1500 T 1600 P 1600 P 1600 C 1800 C	Misc. mfg. Industries  Transportation & Public Utilities  Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	2,079 108,124 3,741 20,851 31,665 7,194 799 4,046	1,530 96,798 4,737 21,791 20,179 5,828 819	-549 -11,326 996 940 -11,486 -1,366 20	-26.41 -10.48 26.62 4.51 -36.27 -18.99 2.50
4100 L 4200 M 4400 V 4500 T 4600 P 4700 T 4800 C 4900 E 5000 V 5100 V 5200 E 5300 G 5400 F 5500 A 6600 A 6600 C	Transportation & Public Utilities Local & suburban transit Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	3,741 20,851 31,665 7,194 799 4,046	96,798 4,737 21,791 20,179 5,828 819	-11,326 996 940 -11,486 -1,366 20	-10.48 26.62 4.51 -36.27 -18.99 2.50
1200 M 1400 V 1500 T 1600 P 1700 T 1800 C 1900 E 1500 V 15100 V 15100 P 15100	Local & suburban transit  Motor freight transp.  Water Transportation  Transportation by air  Pipelines, except natural gas  Transportation services	3,741 20,851 31,665 7,194 799 4,046	4,737 21,791 20,179 5,828 819	996 940 -11,486 -1,366 20	26.62 4.51 -36.27 -18.99 2.50
1200 M 1400 V 1500 T 1600 P 1700 T 1800 C 1900 E 1500 V 15100 V 15100 P 15100	Motor freight transp. Water Transportation Transportation by air Pipelines, except natural gas Transportation services	20,851 31,665 7,194 799 4,046	21,791 20,179 5,828 819	940 -11,486 -1,366 20	4.51 -36.27 -18.99 2.50
1400   V   1500   T   1600   P   1700   T   1800   C   1900   E   15000   V   15000   C   15000   F   15000   A   15000   E   15000   A   15000   E   15000   A   15000   E   15000   A   15000   E   150000   E   1500000   E   1500000   E   1500000   E   1500000   E   1500000   E   15000000   E   150000000   E   1500000000000000000000000000000000000	Water Transportation Transportation by air Pipelines, except natural gas Transportation services	31,665 7,194 799 4,046	20,179 5,828 819	-11,486 -1,366 20	-36.27 -18.99 2.50
1500 T 1600 P 1700 T 1800 C 1900 E 15000 V 15100 V 15200 E 15300 G 15400 F 15500 A 15500 A 15500 A	Transportation by air Pipelines, except natural gas Transportation services	7,194 799 4,046	5,828 819	-1,366 20	-18.99 2.50
1600 P 1700 T 1800 C 1900 E 1000 V 1000 V 1000 P 1000 P 10	Pipelines, except natural gas Transportation services	799 4,046	819	20	2.50
4600 P 4700 T 4800 C 4900 E 5000 V 5100 V 5200 E 5300 G 5400 F 5500 A 5600 A 5600 E	Transportation services	4,046			
4800 C 4900 E 5000 V 5100 V 5200 E 5300 G 5400 F 5500 A 5500 A 5500 A 6500 E			4000		
4800 C 4900 E 5000 V 5100 V 5200 E 5300 G 5400 F 5500 A 5500 A 5500 A 6500 E	Communications	47.000	4,223	177	4.37
5000 V 5100 V 5200 E 5300 G 5400 F 5500 A 5500 A 5500 A 5500 A 6500 A		17,356	16,546	-810	
5100 V 5200 E 5300 G 5400 F 5500 A 5600 A 5600 A 5600 A	Electric, gas, & sanitary services	19,476	21,084	1,608	8.26
5100 V 5200 E 5300 G 5400 F 5500 A 5600 A 5600 A 5600 A	Wholesale	90,708	84,013	-6,695	-7.3
5200 E 5300 G 5400 F 5500 A 5600 A 5600 E 5800 E	Wholesale-durable	52,675	46,353	-6,322	-12.00
5300 G 5400 F 5500 A 5600 A 5700 H 5800 E 5900 N	Wholesale-nondurable	36,032	36,323	291	.8
5300 G 5400 F 5500 A 5600 A 5700 H 5800 E 5900 N	Retail	291,237	304,570	13,333	4.5
5300 G 5400 F 5500 A 5600 A 5700 H 5800 E 5900 N	Bldg materials, hardware, garden supply, mobile homes	11,457	10,482	-975	-8.5
5500 A 5600 A 5700 H 5800 E 5900 N	General merchandise stores	37,097	38,035	938	2.5
5500 A 5600 A 5700 H 5800 E 5900 N	Food Stores	49,600	56,112	6,512	13.1
5600 A 5700 H 5800 E 5900 N	Automotive dealers & gasoline service stations	32,998	33,797	799	
5700 H 5800 E 5900 N	Apparei & accessory stores	19,730	16,856	-2,874	-14.5
5800 E 5900 N	Home furniture, furnishings, & equipment	10,335	10,704	369	3.5
5900 N 6000 C	Eating & Drinking places	88,631	101,386	12,755	
6000	Misc. Retail	32,101	31,101	-1,000	
	Finance, Insurance, & Real Estate	85,087	79,918	-5,169	
	Depository institutions	27,465	28,917	1,452	5.2
	Nondepository credit institutions	12,906	5,823	-7,083	
	Security & commodity brokers	1,867	2,019	152	
	Insurance carriers	15,218	14,594	-624	
6400 1	Insurance agents, brokers, and service	10,720	10,934	214	
	Real Estate	12,550	14,065	1,515	
	Holding & other investment offices	2,887	2,737	-150	
	Services	316,592	483,097	166,505	
7000 H	Hotels, rooming houses, camps, & other lodging places	19,991	20,541	550	
7200 F	Personal services	15,434	16,579	1,145	
	Business services	62,037	81,285	19,248	
	Automotive repair, services, and parking	9,761	12,470	2,709	
	Misc. repair services	9,387	11,244	1,857	
	Motion pictures	1,640	3,202	1,562	
7800   f		9,069		4,206	
	Motion pictures	92,506	187,109	94,603	
	Amusement & recreation services	13,968		3,415	-
	Amusement & recreation services Health services		17,383	+	
	Amusement & recreation services Health services Legal services		1 26 204	7,288	
8300 !	Amusement & recreation services Health services Legal services Educational services	19,006	26,294	9,072	
	Amusement & recreation services Health services Legal services Educational services Social services	19,006 18,500	27,572		/^~
8600	Amusement & recreation services Health services Legal services Educational services Social services Museums, art galleries, botanical &zoological gardens	19,006 18,500 343	27,572 1,336	993	
8700	Amusement & recreation services Health services Legal services Educational services Social services	19,006 18,500	27,572 1,336	993 6,479	

Source: Bureau of the Census; County Business Patterns, 1985-1993

Table B4: Cameron Parish Shift-Share Analysis relative to Louisiana, 1985 - 1993

SICCODE	4114	1006	1993	Achance	Mehanda	State	Industry	Potential	Parish
		Employment	Employment			Growth	¥	Change	Share
	Mining	329	95	-234	-71.12%	0	0	0	0
1000	Metal mining	0	0	0	%0	0	0	0	0
1100	Anthracite Mining	0	0	0	%0	0	0	0	0
1200	Coal Mining	0	0	0	%0	0	0	0	0
1300	Oll & Gas extraction	329	95	-234	-71.1	-149	9	.143	-91
1400	Mining - nonmetallic minerals	0	0	0		0	0	0	0
		329	95	-234	Totals	-149	9	-143	. <del>.</del>
	Construction	143	252	5	76.22%	0	0	0	0
1500	Building construction	0	33	33	-	0	0	0	33
1600	Heavy construction other than buildings	68	189	100	112.36%	7	99	32	69
1700	Special trade contractors	54	30	-24	-44.44%	-5	+		-17
		143	252	601	<b>Totals</b>	9	32		84
	Manufacturing	200	205	S	2.50%	0	0		0
2000		166	171	2		6	49		7
2100	Tobacco products	0	0	0	!	0	0		0
2200	Textile mill products	0	0	0		0	0		0
2300	Apparel	0	0	0		0	0		0
2400	Lumber & wood products not furniture	0	0	0		0	0		0
2500	Furniture & fixtures	0	0	0		9	0		0
2600	Paper & allied products	0	0	0		0	0		•
2700	Printing, publishing	0	0	0	%0	0	0		•
2800	Chemicals & allied products	0	0	0		0	0		0
2900	Petroleum refining & related	7	14	~	100.0	٥	Ŧ		7
3000	Rubber & misc, plastics	0	0	0		0	0		0
3100	Leather & Leather products	0	0	0		0	0	0	0
3200	Stone, clay, glass, and concrete		0	7-	-100.00%		-2		¥.
3300		o	0	0			0		0
3400	Fabricated metal (not machinery & transp.equip)	40	m	0		0	0		0
3500	in the	17	17	0	%0	0	-		7
3600	Electronic not computer	0	0	0		0	0		0
3700	Transportation equipment	0	0	0		0	0		0
3800	Measuring, analyzing, & controlling instruments	0	0	0		0	0		0
3900	Misc. mfg. industries	0	0	0.	%	٥	0	0	0
		200	205	5	<b>Fotals</b>	P	-7	7	*
      -	Transportation & Public Utilities	466	429	-37	-7.94%	٥	0	0	0
4100	I ocal & suburban transit	0	0	0	%0	0	0	0	0
2007	Motor freight transb.	55	7	11-	-20.00%	φ	80	2	<del>.</del>
4202	Water Transportation	191	162	-29	-15.18%	-20	64	69-	\$
0044	Transportation by air	173	33	.140	-80.92%	-18	-15	-33	-107
1,000	Disaling except natural das	0	0	0	%0	0	0	0	0
4600	Transportation convices	0	0	0	%0	0	0	0	0
4700	Communications	0	0	0		0	0	0	0
4800	Electric day & sanitary services	47	190	143	304.2	ç	5	4	139
4900	: 1	466	429	-37	Totals	49	24	96-	69
		-							

Source: Bureau of the Census; County Business Patterns, 1985, 1993

Table B4: Cameron Parish Shift-Share Analysis relative to Louisiana, 1985 - 1993

Service stations   Emperature   111   111   111   111   111   111   111   111   112   112   113   113   113   113   113   113   113   113   114   115   11	SICCODE	TTE	1986	1967	- Ampleon	No. Propose	1			
Wholesele-charable   Wholesele-charable   Wholesele-charable   Wholesele-charable   Section				Posterior S		20000	1	mauatry	FORMULE	Parien
Wholeesler charble   52   22   30   57   59   4   5   5   5   5   5   5   5   5   5				79	ε.	L		Ħ	Caracina	Ш.
Minotesale-nondurable   111   279   27   13.954   4   6   7   7   7   7   7   7   7   7   7	5000	Wholesale-durable	52	20	8 8		1	7		
Bidg malerials, hardware, garden supply, mobile home   11   79   32   70   72   75   71   71   71   71   71   71   71	5100	Wholesale-nondurable	3 3	77.5	3		1	7-		
Bidg materials, hardware, garden supply, moble home   111   279   327 278   4   5   5   5   5     Christal merichandre agriden supply, moble home   10   28   472   17.21%   0   0   0   0     Christal merichandre agriden supply, moble home   10   28   472   17.21%   0   0   0   0     Automotive dealers & gasciline service stations   15   30   30   30   30   30   30   30     Automotive dealers & gasciline service stations   15   30   30   30   30   30   30   30   3			SC.	)6	7-		7	9		-2
Budg materials, hardware, gainder supply, moble horn   244   226   42   7273   9   0   0   0   0     Food Stores   Gainder Supply, moble horn   10   14   4   40,00%   2   6   6   0   0   0   0     Food Stores   Gainder Supply, moble horn   10   14   4   40,00%   2   6   6   6   0   0   0   0   0     Food Stores   Gainder Supply, moble horn   10   14   5   100,00%   4   6   6   0   0   0   0   0   0     Food Stores   Gainder Stores stations   10   14   17   17   17   17   17   17   17			111	79	-32		4	m		
Change interchance garden supply, mobile horner   40   28   112   30.00%   2   -6   -3     Change interchance sources cardions   51   146   40.00%   4   60.00%   1     Automotive dealers & gasonine service cardions   51   30   146   50   51.00%   4   6   72     Automotive dealers & gasonine service cardions   7   30   4   57.14%   0   1   1     Earling & Orining places   7   24   226   32.79%   1   1   1     Earling & Continue furnishings & equipment   61   41   20   32.79%   0   0   0     Earling & Continue furnishings & equipment   61   41   22   32.79%   0   1   1     Earling & Continue furnishings & equipment   61   41   7   25.37%   0   0   0     Misc. Retail futions   7   24   286   42   72.83%   0   0   0     Retail futions   7   24   286   42   26.37%   0   0   0     Retail futions   7   24   286   24   26.37%   0   0   0     Retail futions   7   24   286   24   26.37%   0   0   0     Retail futions   7   24   286   24   27   28   28   28   28   28     Holding A other investment offices   7   28   27   28   28   27   28   28	6200	Retail	244	286	42	17.21%	0			L
Change Stores   Contraction   Contraction	3500	irden supph, mobile	9	28	21-	.30 00%			<u> </u>	d
Food Stores   Food Front Front Stores   Food	2300		10	14	*					
Automotive dealers & gasoine service statione   15   30   15   100.00%   1   1   1   1   1   1   1   1   1		Food Stores	85	148	8					
Appare & accessory stores			4	2	3 4	ľ				3.
Home funitive, furnishings, & equipment		2	2 6	OS "	5	Ì				15
Editing & Dirking places   Color of the control o					4		0			7
Misc. Rejail Activity pages   61   41   20   3279%   3   6   9   9		S	0	0	0					0
Frience   Insurance & Real Estate   67   84   17   256   75   776   17   18   18		Calling & Utinking places	61	41	-20					
Depository institutions   Colored State   Co	ļ	MISC. Ketail	13	22	6				İ	
Depository institutions   A		- 1	244	286	42	Į.	-			
Depository institutions		urance, &	29	84	17		ļ			
Nondepository credit restrutions   3   0   -3   -100.00%   0   -1   -1		Depository institutions	47	63	7					
Security & commodity brokens   3   0   3   100,00%   0   0   0   0     Insurance carriers   7   1   1   1   1   1   1   1   0   0   0		Nondepository credit institutions	~		2 6	ľ	? `			
Figuration of the control of the c		Security & commodity brokers	3 (		اد					
Insurance agents, brokers, and service		Institute carriere	3	<b>D</b>	?	4	0	_		7
Real Estate agents, blokers, and services			<b>'</b>	0	-7		_	0		-7
Holding & other investment offices   7   13   6   86 71%   0   1   1   1   1   1   1   1   1   1		insurance agents, prokers, and service	0	6	<b>O</b>		0	0		
Holding & other investment offices		Keal Estate	7	13	9	85				
Holding & other investment offices	1		0	O	0			- 0		
Hotels, rooming houses, camps, & other lodging place			o	C	0		2	> 0		
Hotels, rooming houses, camps, & other lodging place			67	BA	2	Totale	9	יי		
Hotels, rooming houses, camps, & other lodging place		Services	200	1000	7 7	ĕ	?	9		
Personal services         1		P Athen to J	cpa	830	225		0	0		
Business services         17         10         -7         -41,18%         9         -8         7           Automotive services         352         487         735         38,35%         185         -76         109           Automotive repair, services         91         13         -78         -85,71%         48         -30         16           Misc. repair services         91         13         -78         -85,71%         48         -30         16           Amusement & recreation services         0		a orner loaging	1	98	79	1,128.57%	7	?		
Automotive repair, services, and parking         352         487         735         38.35%         185         -76         109           Misc. repair services         and parking         6         3         -3         -50.00%         3         -1         2           Motion pictures         bMotion pictures         0	T	Business sessions	17	10		-41.18%	6	4		Φ
Multiculate repair, services, and parking         6         3         -3         -50.00%         3         -1         2           Misc. repair services         91         13         -78         -85.71%         48         -30         18           Amusement & recreation services         3         23         20         666.67%         2         0         0           Health services         77         138         61         79.22%         40         38         78           Legal services         77         18         7         5.88%         9         -5         4           Educational services         0         0         0         0%         0         0         0           Social services         6         7         1         16.67%         3         0         0           Museums, art galleries, botanical & zological gardens         0 <td< td=""><td>Ī</td><td></td><td>352</td><td>487</td><td>135</td><td>38.35%</td><td>185</td><td>92-</td><td></td><td>ĺ</td></td<>	Ī		352	487	135	38.35%	185	92-		ĺ
Motion pictures         91         13         -78         -85.71%         48         -30         78         -95.71%         48         -30         78         -90         70	ĺ	ivices, an	9	3	3	-50.00%	3	٦	2	
Amusement & recreation services         3         23         20         666.67%         2         0         0           Health services         77         138         61         79.22%         40         38         78           Health services         17         138         61         79.22%         40         38         78           Legal services         17         18         7         67         7         67         7         7           Educational services         0         <	1	Misc. lepail selvices	6	13	-78	-85.71%	<b>8</b> †	30	18	1
Amusement & recreation services         3         23         23         20         666.67%         2         0         2           Health services         17         138         61         79.22%         40         38         78           Legal services         0         0         0         0         0         0         0         0           Educational services         6         7         1         16.67%         3         0         0           Social services         6         7         1         16.67%         3         0         0           Musseums, art galleries, botanical &zoological gardens         0		Market pictures	0	0	0	%	0	0	0	
Featifications		Amusement & recreation services	E)	23	50	666.67%	2	0	2	
Educational services         17         18         7         5.88%         9         -5         4           Educational services         0         0         0         0%         0	1	Health services	77	138	61	79.22%	40	38	78	
Educational services         0         0         0         0%         0	1	Legal services	17	18	1	5.88%	6	Ą	7	
Social services         6         7         1         16.67%         3         0         3           Museums, art galleries, botanical &zoological gardens         0         0         0         0%         0	Ī	Educational services	0	0	0	%0	0	0		
Museums, art galleries, botanical &zoological gardens         0		Social services	9	~	1	16.67%	-	-	"	C
Membership organizations         9         21         12         133.33%         6         -2         3           Engineering, acctg, rsrch, mgt, & related services         0         24         24         100.00%         0		anical	0	0	0	%0	0	0	, 0	, [
Engineering, acctg, rsrch, mgt, & related services         0         24         24         24         100.00%         0			GD.	21	12	100	4		0 ~	9 5
Misc services         20         0         -20         -100,00%         11         -29         -18           605         830         225         Fotals         319         -116         203           2 165         2 260         05         620         448         442         442		<b>∞</b> 5	0	24	24	100.00%	0	0		24
605 830 225 <b>Totals</b> 319 -116		Misc services	20	0	2	-100.00%	Ŧ	-29	148	7
165 2 260 05 2000 17444 449			605	830	225	Totals	319	-116	202	26
			2 165		90	Con-		2	3	27

Source: Bureau of the Census; County Business Patterns, 1985, 1993

Table B5: Cameron Parish Location Quotients; 1985 - 1994

בסיים ביים	וכוסון מופו בככמוסו לאכייכונג, וכככ			1		4000	4004	4004	4000	4000	1001
SICCODE TITLE	TITLE	1985	1986	1987	1360	200	1880	200	7661	200	***
	Mining	Ì			-	,	ľ	ľ	•	1	1
1000	Metal mining	0	0	0	0	o†	0	5	5	5	<b>&gt;</b>
1100	Anthracite Mining	Б	0	0	0	0	0	0	0	0	0
1200	Coa Maina	0	0	0	0	0	0	0	0	0	0
1300	Oil & Gas extraction	25.49	33.6	20.74	17.18	10.15	7.01	18.84	40.03	15.35	24.69
1400	Mining nonmetallic minerals	0		0	0	0	0	0	0	0	0
2	nstr.	-					,			<u> </u>	
1500	Building construction	0	0	0	1.05	96.0	0.91	1	1.17	1.25	1.35
1600	Heavy construction other than buildings	4.74	5,53	17.69	15.22	15.45	15.62	16.7	17.77	11.58	12.75
1700		0.76		1,23	0.77	0.5	1.48	0.49	0.55	0.46	0.56
3	Manufacturino	-									
2000	Food & Kindred products	4.3	4,58	3.91	6.27	80.3	7.16	2.28	3.67	4.76	3.11
2100	Tobacca products	0	0	0	2.61	4.95	0	0	0	0	0
2200	Taylia mill products	0	0	0	0	Q	0	0	0	0	0
2300	Amarel	0	0	0	0	0	0		0	0	0
2400	I umber & wond products not furniture	0	0	0	0	!					0.18
2500		0	0	0	0	0		0	0	0	0
2600	Paper & alied products	0	0	0							0
2700		0	0	0		0	o	0	0	0	0
2800	Chemicals & allied products	0	0	0	0		0		0	0	0
2900	Petroleum refinitin & related	1.96	C	0	}				0	5.17	5.34
2005	Rubber & misc. plastics	0	0	0.17	9	0	 !				0
2100	Leather & Leather products	0	c	0		ļ	0			0	0
3200	Stone clay glass and concrete	0.47	0.23		0	0		0	0	0	0
3300	Primary metal industries	0		0							0
3400	Fahricated metal (not machinery & transpiedulo)	0.07	0.08	0.09	0	O	0	0	0.09	0.09	0.09
3500	al machinery	0.3	0.35	0.39	0.36	0.33	0,33	0.33	0.45		0.41
3600	Flectronic not computer	0	0	0	0	0	0			0	0
3700	Transportation equipment	0	0	0	0	0		0			٥
0085	Measuring analyzing & controlling instruments	0	0	0	0	0	0		0		0
3400	į.	0	0				0			0	0
] }; }i	Transportation & Public Utilities										
4400	ŧ	0	0	_							0
0014	Motor freight franso	1.57	1.01	0.1	<u>L</u>	0.15	$\vdash$	0.14	٥	-	1.68
1100	Worker Transhortation	38.74	39.75	45.6	L.	52.97			60.0	4	33.33
4400	Transportation by air	13.11	5.56	5.59		4.2	3.82	3.41		1.99	2.03
000	Chalings according nas	0	0	0	0			0		0	0
4600	1	0	0		4.19	0	0	0	٥	0	•
4/00	I allabou (attorio occupante de la companya de la c	0	0	•	0.1	60'0	0	0		0	0
4800	The state and & continues services	2.1	2.41	3.1	4.49	4.17	3.59	5.91	5.06	8.57	8.5
4900	Election god a chiminal					i					

Source: Bureau of the Census; County Business Patterns, 1985, 1993

Table B5:Cameron Parish Location Quotients; 1985 - 1994

SICCORE TITLE	TT:	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
30000	Caclo 4/4	3	3	Š	3	3	3	3	1	3	
0	Wildresald	4	6		0	Č		5			200
5000	Wholesale-durable	9.0	0.82	<u>ا</u> ز	79.0	0.61	0.64 40.0	0.62	٥. چ	0.27	0.25
5100	Wholesale-nondurable	-		1.36	1.13	1.24	1.29	1.29	1.67	0.95	0.82
	Retail					<b></b>					
5200	Bldg materials, hardware, garden supply, mobile home	2.52	1.65	2.25	1.74	1.37	1.7	1.63	1.82	1,68	1.75
5300	General merchandise stores	0.19	0.21	0.2	0.26	0.31	0.16	0.22	0.27	0.27	0.27
5400	Food Stores	1.39	1.67	1.86	1.81	1.53	1.68	1.71	1.94	2.04	2.48
5500	Automotive dealers & gasoline service stations	0.3	0.36	0.22	0.47	0.54	0.44	0.54	0.53	0.63	0.57
5600	Apparel & accessory stores	0.25	0.27	0.12	0	0	0.19	0.09	0,1	0.1	0
5700	Home furniture, furnishings, & equipment	0	0	0.2	0	0	0	0	0	0	0
5800	1	0.42	0.17	0.2	0.14	0.19	0.2	0.19	0.16	0.25	0.17
5900	Misc. Retail	0.22	0.28	0.19	1.39	1.26	0.58	0.71	0.31	0.38	0.31
	Finance, Insurance, & Real Estate										
0009	Depository institutions	1.09	1.18	1.27	1.04	1.56	1.52	1.35	1.15	1.23	1.12
6100	Nondepository credit institutions	0.15	0.15	0.15	0	0	0	0	0	0	0
6200	Security & commodity brokers	0.33	0.33	0.31	0.28	0.29	0.27	0	0	0	0
6300	Insurance carriers	0.2	0.22	0.2	0.09	0.08	0.08	0	0	0	0
6400	Insurance agents, brokers, and service	0	0	0	0	0	0	1.07	0.43	0.57	0.45
6500	Real Estate	0.22	0.24	0.44	0.41	0.29	0.27	0.36	9.0	0.41	0.31
0099		0	0	0	0	0	0	0	0	0	0
6700	Holding & other investment offices	0	0	0	0	0	0	0	0	0	0
	Services										
7000	Hotels, rooming houses, camps, & other lodging place	0.2	0.52	1.41	1.27	1.12	1.05	1.03	1.15	2.35	1.19
7200		0.59	0.37	0.22	0.37	0.57	0.53	0.29	0.32	0.33	0.34
7300	Business services	3.03	3.15	3.37	3.45	3.73	3.53	4.06	3.44	3,48	3.33
7500	Automotive repair, services, and parking	0.33	0.17	0.17	0.3	0.14	0	0.13	0.14	0.14	0.45
7600	Misc. repair services	10.25	10.22	6.52	5.73	19.6	4.16	4.68	0.62	1.24	0.28
7800	Motion pictures	0	0	0	0	0	0	0	0	0	0
7900	Amusement & recreation services	0.15	0.15	0.32	0.4	0.52	0.22	0.34	0.53	8.0	0.58
8000	Health services	0.45	0.47	0.13	0.11	90'0	0.05	0.06	0.09	0.55	0.75
8100	Legal services	0.92	0.77	0.76	0.68	0.43	0.68	0.65	0.63	0.78	0.93
8200	Educational services	0	0	0	0	0	0	0	0	0	0
8300	Social services	0.17	0.18	0	0	0	0.15	0.14	0.14	0.14	0.14
8400	Museums, art galleries, botanical &zoological gardens	0	0	0	0	0	0	0	0	0	0
8600	Membership organizations	0.22	0.22	0.55	0.32	0.29	0.37	0.59	0.39	0.42	0.51
8700	Engineering, acctg, rsrch, mgt, & related services	0	0	0	0.5	0.45	0.24	0.22	0.25	0.39	0.29
8900	Misc services	0.57	0.49	0.43	0.99	0	0	1.03	0	0	0

Source: Bureau of the Census; County Business Patterns, 1985, 1993