



The Lafourche Parish Comprehensive Resiliency Plan

Adopted by Lafourche Parish Council
April 8, 2014



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The Lafourche Parish

Comprehensive Resiliency Plan

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Introduction

Living with water...[®]

Lafourche Parish residents treasure the Parish's beautiful natural scenery, its fishing, recreation, historic towns, Cajun culture, quality of life, and hospitable neighbors. These characteristics keep people coming to Lafourche Parish to live and work. Parish residents know that Lafourche offers tremendous natural assets and a welcoming place to call home. Wherever you live in Lafourche Parish, you are connected to the water — be it up the bayou in Thibodaux, down the bayou in Galliano, or next door to the Gulf of Mexico in Port Fourchon —
the water provides the economic sustenance and cultural heritage that defines living in Lafourche Parish.



Why is a Comprehensive Resiliency Plan important?

While there is much to treasure in the Parish, the act of living near water can have its challenges, and residents understand the need to protect wetlands and coastal areas to ensure that they can maintain their current high quality of life.

Most of Lafourche Parish's current assets and future potential are because living with water is integrated into all aspects of parish life. Tremendous potential exists in the future with the expansion of Port Fourchon, the increasing tourism opportunities, the educational benefits of Nicholls State University, and the growth of the shipping and logistic industries as well as the preservation of agricultural lands and sugar cane production. Living with water has tremendous advantages and challenges, and residents understand the need to address coastal issues in the near and long term in order to continue to sustain current lifestyles. Many residents who participated in the planning process are directly affected by landscape changes due to erosion, subsidence and sea level rise, making it important to understand these impacts on the Parish's long-term resilience.

Throughout the planning process residents indicated that a key issue is **the need to preserve wetlands, plan for anticipated future land loss and for coastal restoration.** If it is not addressed, much of the parish will be at risk in the future. The Parish has many initiatives addressing these coastal restoration issues and the continuing impacts of subsidence, sea level rise and storm surges on the lives of Parish residents.

The Lafourche Parish Comprehensive Resiliency Plan is a strategic document meant to maximize opportunities, reduce risks, and ensure that the Parish remains a great place for current and future generations.

The Plan seeks to look comprehensively at coastal issues along with other important issues facing the Parish, such as the need for diverse jobs and housing, a desire for improved transportation facilities, and improving the quality of life of current and future residents. The Plan proposes policies, programs and tools to reduce the overall vulnerability of the Parish and ultimately, is intended to make the Parish more resilient in the future. It reflects the knowledge, expertise and aspirations of the Parish's residents and is a blueprint for how the community will grow and change over time in a way that preserves the Parish's many assets and ensures that it remains a great place for current and future generations, while also preparing for a new era of changes. It also identifies areas of improvement needed so that the Parish is prepared to deal with future growth and increased land loss as it occurs.

The Plan lays out the future development of the Parish in pictures and images, maps, and written goals and strategies. Collectively, these will serve as a guide for residents and policy makers on how to invest in roads and infrastructure, public facilities and development. The goal of the Plan is to enhance the quality of life of existing and future citizens by planning strategically – in concert with local input – for future population growth and the corresponding development.

*A
primary
concern of residents
is the need to plan for
anticipated future land loss
and support coastal restoration
efforts in order to protect
the lifestyle that Lafourche
citizens love and value.*

The Lafourche Parish Comprehensive Resiliency Plan and the Vision are not regulatory documents.

Instead, once adopted, the Plan will be used to guide Parish development and investment decisions in a manner aligned with the community's vision. The Plan will also provide the planning framework needed to be eligible for future funding opportunities through the state, the RESTORE Act, and other programs requiring an adopted plan for grant eligibility. RESTORE is a Federal bill that redirects 80% of the civil penalties from BP Oil spill to the Gulf States for restoration and mitigation projects. In addition, the Planning Commission and Parish Council will consider recommendations and strategies in the Plan before making development decisions or adopting or approving ordinances or regulations, as required by state law. The successful implementation of the Vision and the Plan will take a concerted effort by Parish leaders, area businesses, community leaders, residents, staff, and investors.

What is the purpose of a Vision document?

The Vision serves as a high-level, graphic and descriptive summary of the Plan.

The public engagement effort involved citizens across the Parish to ensure broad representation and gather important local insights.

Based on many months of public input, the Vision for Lafourche Parish is intended to capture citizens' shared "vision" for the future, a vision that includes **coastal restoration, economic growth, strong communities, and preservation of the many natural, cultural and historic resources that Parish residents hold dear.** This shared vision for the future of the Parish is communicated using the Vision map to illustrate key concepts, along with a short narrative of the community's desired future. The Vision also describes how the Plan was developed, highlighting important aspects of the public engagement activities and the guiding principles used to develop the Plan.

The Vision and the Plan are rooted in the wisdom of the Parish's stakeholders and citizenry.

An advisory committee comprised of Parish residents from diverse backgrounds worked with the planning team to ensure that the process reflected the needs and culture of the Parish. The public engagement effort involved citizens across the Parish in a combination of **stakeholder interviews, parish-focused public workshops, specific topic workshops, interest group presentations, surveys, and an up-to-date project website and Facebook page** which ensured broad representation and provided key local insights. Through these efforts, which reached out to residents in all parts of the Parish – north, central and south – stakeholders generously shared their opinions, ideas, and future visions.

Along with more traditional printed flyers and posters, the planning team established a website and Facebook presence to capture residents' attention and to gather important feedback.

Stakeholder interviews and interest group presentations were conducted with a variety of public and private entities. These included community leaders, social service agencies, utilities, local, state and federal governmental agencies and officials, economic development groups, business and property owners, schools,



non-profits, and housing and transportation organizations. Stakeholders were asked to share their perspectives on the opportunities and challenges in the Parish, its positive attributes, their overall views on living in the Parish, and their hopes for the future.

The planning team hosted three parish-wide workshops and two topic area workshops. At the parish-wide workshops, held in Thibodaux, Mathews and Galliano, citizens were asked to provide their input about key questions for the future of the Parish. The topic area workshops explored different opportunities to expand and coordinate the tourism industry, and discussed ideas to grow the economy and increase access to the rest of the state and nation.

After the workshops, the team identified populations who had not participated in the project input through interviews, presentations and workshops and met one-on-one with members of those communities to ensure that input was received from all parts of the Lafourche community.

Throughout the planning process, a variety of outreach methods, such as email blasts, posters, flyers and postcards were used to communicate to a wide spectrum of audiences. Team members attended local festivals to get the word out about the Plan and to receive survey feedback on initial strategies. The project website was a key element of the public engagement and included project news, events, documents, and presentations (www.planlafourche.com). In addition, citizens and stakeholders were invited to participate through an online survey posted on the website.

The feedback gathered through the public involvement process provides the foundation of the Plan and the Vision. The goals, recommendations and strategies within the Plan provide a standard. In this way, the Plan's outcomes are consistent with the stakeholder's core values and will move the Parish toward the residents' collective vision of the future.

Gathering Important Ideas

Working in small groups, parish-wide workshop participants were asked the following questions. Their input was captured on large-scale maps and then presented to the rest of the participants at the end of the workshop.

- Where new growth should and should not occur?
- What the general look and feel that new growth should take?
- What type of jobs and services are needed in the Parish?
- What kinds of transportation improvements are desired?
- What kinds of park and trail improvements are desired?



Guiding Principles

Guiding principles are a summary of Parish citizen's core values. They answer the questions: **“What values do we want to retain and enhance as we move into the future?”** and **“What is most important to us?”** Having a clear understanding and agreement of these values provides a basis for the goals, recommendations and strategies within the Plan and ensures a standard for their evaluation. In this way, the Plan's outcomes are consistent with the stakeholder's core values and will move the Parish toward the residents' collective vision of the future.

Creating the Guiding Principles

The Lafourche Parish guiding principles were established through citizen and stakeholder input at the beginning of the planning process, and have been continually refined throughout the plan development.

They are grouped into three topics:

- Enhance Our Safety and Increase Our Resiliency
- Create a Livable Community
- Make Our Economy Strong



Enhance Our Safety and Increase Our Resiliency

Residents are concerned about the impacts of land loss and the need for coastal restoration. They live in the Parish knowing that their homes and businesses are vulnerable to storms, flooding and storm surges, land loss and saltwater intrusion. High-priority guiding principles to address these concerns and to make the Parish more safe and resilient include:

- Plan for anticipated future land loss and coastal restoration; create plans to support the State's Coastal Master Plan for a Sustainable Coast and RESTORE Act and other potential funding sources.
- Invest in infrastructure improvements, from improved roads and levees to restored wetlands. Plan for, and prioritize, infrastructure and other needs to ensure efficient recovery from storms. Restore the region's natural hydrologic function, where possible. Preserve wetlands and areas along bayous and other waterways.
- Continue to implement the Parish's hazard mitigation plan to prepare for natural disasters such as flooding and storm events. Promote the importance of public readiness. Reduce the time to restore essential services following storm events. Improve methods for taking care of those who cannot care for themselves including children, elderly, disabled, and pets during times of natural disaster.
- Preserve Lafourche Parish's unique cultural heritage and build on the many assets derived from this culture. Improve resiliency through learning from examples of the cultural practices of people who have lived with the water for decades.

Create a Livable Community

Parish residents expressed a desire to increase the quality of life of all residents and to create a community in which their children and their children's children want to continue to live. Guiding principles to improve the quality of life for both long-term and new residents include the following:

- Improve the Parish's recreational facilities

by providing more opportunities such as neighborhood parks and recreational facilities for youth sports in all parts of the parish.

- Expand the selection of transportation within the Parish by providing for walking and biking and providing public or alternate transportation services parish wide.
- Create vibrant entertainment and arts centers in towns and city centers to attract and retain youth.
- Make Bayou Lafourche a central natural, recreation and tourism amenity and build off this vast cultural asset by locating additional recreational facilities along the bayou and increasing places to access the water for boating and canoeing.
- Strengthen the Parish's educational system, from pre-school to job training and higher education. Expand on the quality educational programs at Nicholls State University and the Parish's community colleges to develop a highly educated, job-ready citizenry.
- Develop a mix of housing types to meet population forecasts and to provide quality housing for the aging population, for young families wanting to live and work in the Parish, for relocating workers employed in the oil and gas and ship building industries, and for youth and families needing affordable housing opportunities. Ensure that a variety of types and styles of housing are available throughout the Parish.
- Implement innovative water management strategies in new and existing housing and commercial development to ensure that the water is an asset and contributes to the quality of life Parish residents desire.
- Preserve Lafourche's unique Cajun and Native American cultures and emphasize these community and lifestyle values.

Make Our Economy Strong

Lafourche residents want to protect and enhance their existing industries while at the same time diversifying the Parish's economy by exploring new ways to build on the natural and cultural assets that are the foundation of the current economy. Assets include the ability to live off of the water and share these experiences worldwide through tourism, ship building, fishing, agriculture, and Port Fourchon. Priority principles to make a stronger economy include:

- Protect natural resources, agricultural lands and the sugar cane industry and continue to use these assets to build the economy.
- Grow the tourism sector, with an emphasis on bringing together the Parish's history, culture and natural assets. Promote tourism activities such as fishing and ecotourism opportunities and catering to French speakers that build off the cultural heritage of the Parish.
- Provide educational opportunities through technical training or programs at Parish's community colleges, Nicholls State University and Fletcher Technical College that build a workforce with skills that match future employment demands.
- Promote the entrepreneurship values that are strong in the Lafourche culture. Create an environment that encourages the Parish's entrepreneurial spirit.
- Capture more individual spending locally by providing needed stores and services so residents can travel less and reinvest in their community.
- Support the expansion of LA 1 and Highway 3235 and other roadway improvements needed to enable industry and provide a safe and resilient community.
- Target new businesses that are related to industries that have potential for growth in the parish such as health care and logistics.
- Provide transportation facilities and services to ensure that workers have easy access to jobs.

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Chapter 1:

The Lafourche Vision

Envision the Future

The Lafourche Vision captures the dreams and inspiration of Parish residents and stakeholders. The Vision draws upon input from parish residents. The following narrative and map illustrate how the Parish might look and feel in the future. The Plan that follows the Vision describes the planning and implementation that will be necessary to realize this vision.

Lafourche residents envision their future as...

...a safe and resilient community that celebrates its cultural heritage.

The coastal protection networks that include expanded and new levees, restored wetlands, and effective coastal barrier islands help make Lafourche residents feel secure. Drainage follows the region's natural hydraulic patterns and lessens the need for forced systems. Coastal land is restored and the rate of land loss is reduced. Wetlands that have lost their tree stands through saltwater intrusion are slowly coming to life again, and residents in lower Lafourche feel safer and better protected.

When storms do beat down on coastal Lafourche, needed infrastructure is in place for managing the water and maintaining safety at all levels of the community. Residents are informed about dealing with storms and coastal impacts. Emergency readiness programs are in place to lessen the economic and disruptive impacts of regular storm events through the provision of raised shelters and services, evacuation procedures, utility restoration programs, and creating more resilient developments.

The community values the many cultures and traditions that give Lafourche its character, from the Cajun heritage and the Native American roots to the new residents who come to Lafourche to work in shipping, oil and gas, or one of the new emerging industries. Traditional

Strategy Topic Areas

The Plan includes strategies for a more resilient Lafourche Parish. The strategies are grouped into eight overarching topic areas, which are introduced on the following pages.

- Land Use
- Resiliency and Hazard Mitigation
- Culture and Recreation
- Housing Choices
- Transportation Connections
- Infrastructure
- Economic Development
- Coordinating Effectively

resiliency and practices for living with water serve as a foundation for maintaining a high quality of life in all parts of the Parish north, central and south.

...a community with a strong, diverse economy and a trained employee base.

Lafourche has a diversified economy that is based on the historic trends of fishing, oil and gas, sugar cane, and ship building. Port Fourchon serves as a specialized logistics center for the Gulf coast and has diversified its services. New employment centers in the US 90 and Highway 308 area provide new, high-quality logistics and technology-oriented industries. Businesses and industries work closely with Nicholls State University and Fletcher Technical College to provide quality, targeted training to maintain an employment pool. With the growth of employment centers and additional housing, more commercial, retail and services

are provided within the Parish, retaining a larger proportion of the income within the Parish.

...a community with diverse resilient housing choices and amenities.

New housing is built with resiliency in mind. Houses and neighborhood service areas are raised so that they are more protected from storm surges and flooding. Residential infill housing is designed so that it does not impact adjacent homes, and new subdivisions provide adequate utilities, connections and water management.

A new mixed-use town center and main street is located near the intersection of US 90 and Highway 308 to provide housing for an emerging economic center and logistic facility. The new town center contains local residential and commercial centers, with shops and offices, single-family homes,

Vision Map Categories



City Center:

The largest regional center within the parish, includes major offices, shops, civic, and cultural facilities and multifamily housing.



Town and Neighborhood Center:

Local residential and commercial centers, includes local shops and offices, and single-family homes, townhomes and multifamily housing.



Special Economic Zones:

Key economic centers, includes major ports and the proposed multimodal distribution center.

townhomes, and multifamily housing. Additional centralized main streets and town centers are located in Lockport, Larose, Galliano, Golden Meadow and Thibodaux. These centers provide a variety of housing types and amenities that are attractive to the expanding workforce and provide needed housing selections, from executive and family housing to workforce, retirement and other affordable housing choices.

...a community with increased access to jobs and bayous.

New connections separate industrial and truck traffic from local traffic, creating a safe and efficient roadway network along the bayou. LA 1 is completed, as is Highway 3235, and access on these truck-oriented, high-traffic roads is managed to protect the traffic flow. People traveling through the parish, or transporting goods down the bayou have clear access without having to mix with local residential traffic. New connections are created along LA 1 and Highway 308 to enable local traffic access away from the main roadways. Pathways and sidewalks are provided where possible to increase walking and biking travel options, and a public transportation system provides transportation between Thibodaux, Houma and Golden Meadow.

Access to the Parish's many amenities, including the bayou and recreational areas, are provided so residents and tourists can experience and appreciate Lafourche's unique culture. Leeville is a recreational and tourist center where people enjoy fishing, ecotourism activities, and boat access to the marsh and the coast. Bayou plazas provide new recreational amenities for tourists who want to visit the bayou and enjoy the Cajun food.

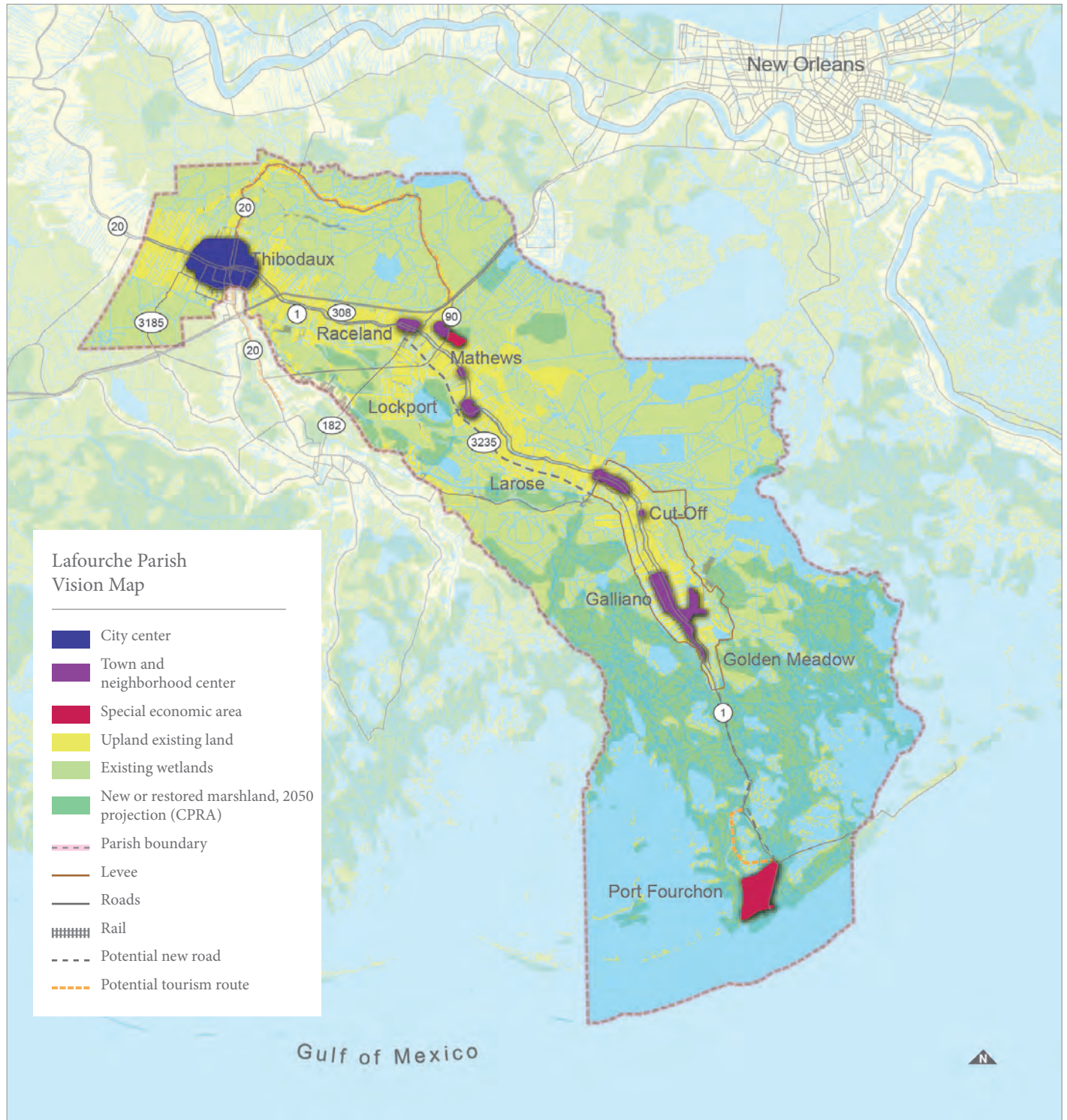
... community and region that works together for the health and safety of coastal Louisiana.

Regional coalitions continue to work to protect coastal areas and provide a safe environment for coastal residents. Lafourche Parish works with adjacent parishes to ensure that protection and restoration measures are in place to the benefit of all coastal parishes. Parishes share in service provision and support restoration activities.



The Vision Map

The Vision Map shows the desired land use patterns of the Lafourche Parish Vision. This map, based on input from the public workshops, reflects city centers, town and neighborhood centers and special economic areas in the northern, central and southern parts of the Parish. This map should be used when considering future development decisions and investments.



Land Uses in the Vision

The Vision mirrors existing development patterns and also includes some new approaches to arranging the layout of neighborhoods, community centers and employment areas, and promotes infill development in existing centers.

City Center

The City Center is the regional hub that provides concentrated regional job and commercial activity supported by a mix of housing types and a range of educational opportunities. The City Center includes pedestrian-oriented and mixed-use development as well as more traditional neighborhoods and commercial centers. Civic and open spaces provide an inviting atmosphere for pedestrians as well as a diversity of uses, generating opportunities for people across the region.

The City Center includes educational, institutional and business campuses such as Nicholls State University. These areas work together to provide a complete community with a range of single-family and multi-family housing, as well as a variety of offices.

Town and Neighborhood Centers

Located in the higher land, up and down the bayou, town and neighborhood centers are home to many traditional neighborhoods of single-family detached homes. Single-family dwellings are the dominate land use in these areas. Some shops, restaurants or institutional land uses such as schools and religious centers that serve neighborhood residents may be located at the edges or at key intersections. Neighborhood parks should provide open space for families.



These areas rely primarily on cars for access, although traffic on neighborhood streets is expected to be low. Pedestrian and bicycle paths and safe routes to school and public facilities is important in these areas. Newly developed neighborhoods should provide increased pedestrian access to community services through shorter block lengths, sidewalks and greenbelts with hike and bike trails.

Town and neighborhood centers also provide service and job destinations and include restaurants and a range of retail and commercial uses. In addition to jobs and services, these areas provide a variety of housing, including multifamily housing in low- to mid-rise apartment buildings or condominiums. Landscaping and urban design in these areas should enhance the resident's experience.



Special Economic Areas

Key economic centers include major ports, the sugar cane refinery, ship building operations, other industrial areas and a proposed multimodal distribution center. Special economic areas represent major employment, transportation or shopping destinations and are typically separated from one another and residential neighborhoods. Industrial areas often locate near major roads and rail lines. Evolving technology and the need for freight movement through the Parish, the State and to the rest of the country means these existing and new areas can offer good opportunities for jobs. Logistics and warehousing, a growing industry with a strong potential for upward mobility of skilled workers, would thrive in the parts of the parish with high levels of road and rail access. Special economic areas provide important concentrations of employment within the Parish that provide support to many parish residents.

Upland Existing Lands

Upland existing lands are those areas that are vacant or in agricultural, forest, parks and open space, residential, commercial, industrial or civic uses. Retention of agricultural and forestry lands is a primary goal of many residents. This area is more sparsely developed than the city, town and neighborhood centers, but will see additional development in the future. Development should primarily be focused in infill areas in existing towns and community centers. New neighborhoods, and community and commercial centers should be developed in ways that are consistent with the goals, policies, and actions in this plan, and should be sensitive to traditional development patterns, and address pedestrian and bicycle access, efficient and shared access to major highways, and connections to other community centers.

Existing Wetlands

Existing wetlands are beautiful natural marsh and swamp areas that play an important function as they reduce storm damage and coastal erosion, and also provide one of the most productive ecosystems on earth. These areas should not be developed and measures to preserve and sustain this valuable resource is important to the future of the parish.

Land Use

What is the land use vision?

In the next twenty to thirty years, growth and expansion of urban areas occurs in places with good existing infrastructure capacity. The Parish has planned for future land loss and population growth, resulting in quality infill and redevelopment in the existing communities of Thibodaux, Raceland, and Larose.

Why is this important?

Coordinating expansion efforts and intentions for growth between different communities and government agencies at the local and regional level will ensure growth happens in a logical manner supportive of other Parish-wide goals.

What can we do?

Expansion will occur on approximately 5,000 acres of developable land throughout the parish, but primarily around the communities of Thibodaux, Larose, Raceland and Lockport due to the high level of existing infrastructure and flood protection from levees. It should comprise a balanced mixture of community neighborhoods, community centers, and employment centers. Facilitating cooperation between local and regional entities will establish common expectations and practices for annexation and areas of new growth.

A concept-level land use map will provide a basis for coordinating expansion efforts, and to gauge the appropriate spatial relationships and balance between community neighborhoods, community centers and employment centers, such as downtown areas in Thibodaux and Lockport, and Thibodaux's medical district.



Land Use Goals

- * Plan for future land loss and population growth parish-wide.
- * Create complete communities that provide access to transportation options, housing, recreation, education, retail, and employment all in proximity to one another.

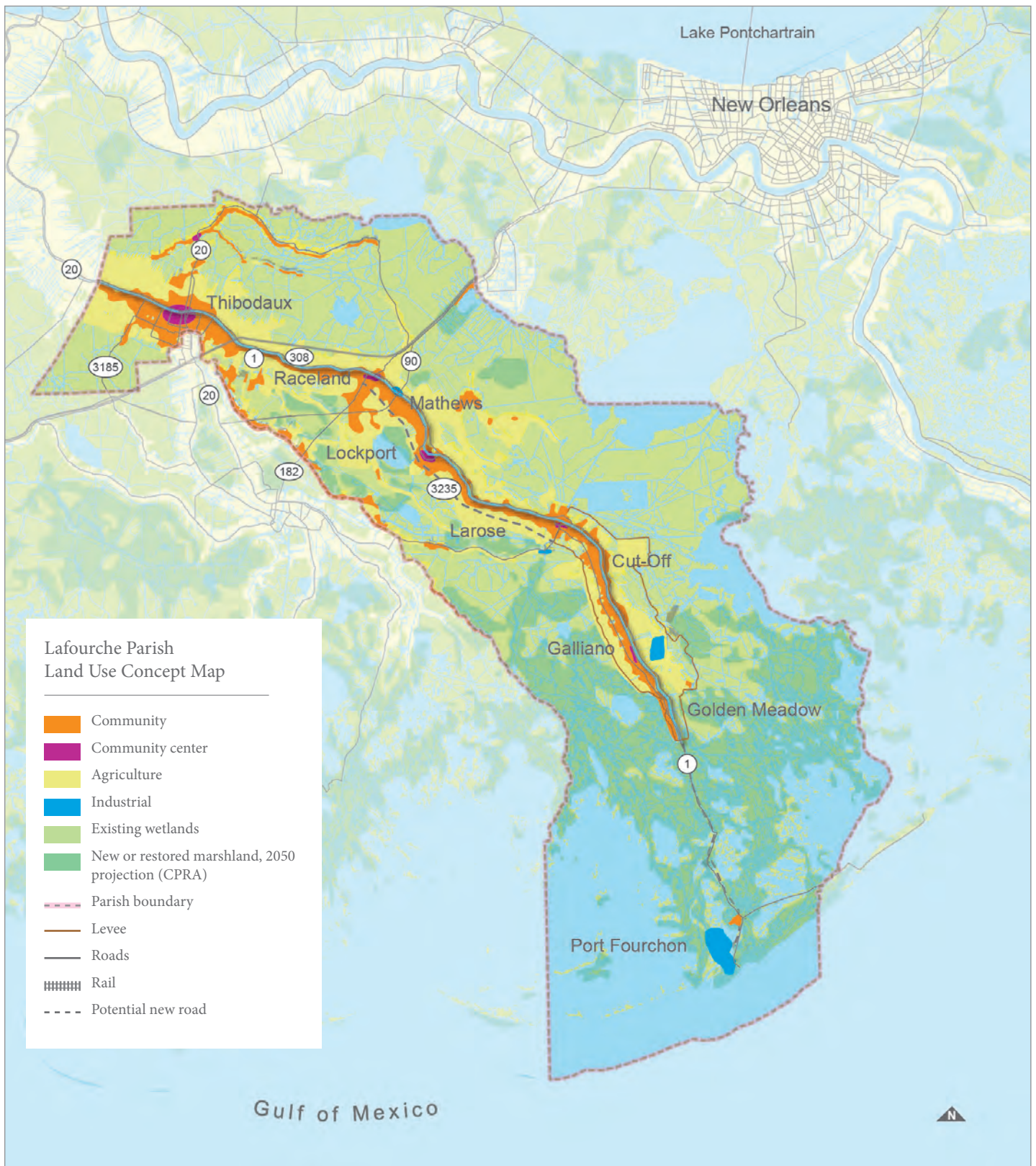


Figure 1: Land Use Concept Map

Resiliency and Hazard Mitigation

What is the resiliency vision?

A resilient Lafourche will be a parish where:

- Structural and non-structural protection measures improve every community's level of flood protection.
- Economic centers are resilient and hardened to potential floods and storms, and bounce back quickly.
- Hydrologic and wetlands restoration provide storm buffering capacity, simultaneously generating new, quality habitats for wildlife, and increasing the local populations' access to nature and recreational opportunities, while also building upon a growing ecotourism sector.

Why is this important?

Water is a major part of the life in Lafourche. Most of the economy is founded on goods and services, like oil and seafood produced in the Gulf. Water based recreation – fishing, boating, hunting and bird-watching – are major regional and national draws.

Focusing on improved resiliency is central to minimizing the impact of storm and flooding events on human health and safety, economic vibrancy, and natural resources. A principle of increased resiliency also refers to maximizing economic vibrancy and diversity, so the parish is not vulnerable in the case of a downturn in any one particular industry.

What can we do?

Strategies to increase resiliency will facilitate economic diversification, and provide a solid framework for implementation of structural and non-structural measures to increase local storm buffering capacity. A major component of resiliency also involves continued expansion of policies and programs to protect and restore wetlands and other natural areas.

Structural vs. Non-structural Flood Protection

STRUCTURAL: levees, restoration and protection

NON-STRUCTURAL: physical and programmatic measures

PHYSICAL: elevation, acquisition, flood proofing, enforcement of building codes

PROGRAMMATIC: land use planning, hazard mitigation planning, flood insurance requirements, land use ordinances, building codes, higher regulatory standards, public education, adaptation, mitigation

From the Coastal Protection and Restoration Authority's 2012 Coastal Master Plan.



Strategies to improve hydrologic conditions and slow land loss include marsh and maritime forest ridge creation, sediment diversion, and offshore protection infrastructure. Hydrologic and wetlands restoration will:

- Increase environmental, social and economic resiliency
- Create new habitats for wildlife and improve existing habitats
- Restore natural ecosystem functions that serve to protect and prevent further land loss and structural damage
- Improve quality access to nature and recreation opportunities that can be leveraged into a thriving ecotourism economy. This tourism industry can capitalize on Lafourche's natural assets in a way that preserves and enhances them while also contributing to economic vitality.

Smaller-scale efforts such as structural elevation and timely restoration of essential services will also contribute to a resilient Lafourche Parish.

Resiliency and Hazard Mitigation Goals

- * Establish areas where site level development should occur that will enhance long-term resiliency and align with the Vision map.
- * Improve resiliency to floods and other natural disasters by utilizing best practices for coastal development.
- * Identify and pursue preventative measures that will reduce damages from future hazards.
- * Enhance public awareness and understanding of disaster preparedness.
- * Continue work to lower insurance premiums.

Culture and Recreation

What is the recreation, cultural and historic resources vision?

The residents of Lafourche envision a Parish-wide parks and recreation network with highly accessible parks, ample playing fields, and numerous connecting trails and greenways for hiking and biking. Agricultural land and activities, such as sugarcane fields and shrimping, will be protected and elevated in visibility as integral parts of local culture and values.

Why is this important?

Improving the quality of life for residents will be achieved by protecting the things they love and enhancing opportunities for enjoying those cultural experiences. Preserving Lafourche's unique local culture, as well as highlighting its natural resources, will provide a solid framework for protecting community values and building a vibrant and resilient local economy.

What can we do?

Conservation and restoration efforts will transform Bayou Lafourche into a recreational amenity and regional attraction for birding, fishing and hiking, reinforcing Lafourche's regional reputation as a sportsman's paradise. Continuing to implement previously approved projects, such as the 2007 Bayou Lafourche Corridor Plan, is critical. The projects recommended in this plan addresses a variety of strategies to reach the Parish's recreation and cultural resources vision, including:

- Create new trail systems to provide greater walking and biking access and to link neighborhoods to and along the bayou.
- Create and enhance access to neighborhood and community parks and boat ramps.
- Restoration of eco-parks and protected areas.
- Expand opportunities for habitat viewing, birding, environmental education, and hunting.

- Create more places to play and relax, such as sports fields.
- Develop recreational programs and special use facilities for exercise and education.

It is also critical for the Parish to coordinate with Jean Lafitte National Park in support of the Park's vision. Individual components of this vision have been expressed in response to the Louisiana Coastal Protection and Restoration (LACPR) Plan of 2009, but are well-aligned with the Parish's recreation, cultural and historic resources vision and coordination with the Park will provide a central information source for the historic sites within Lafourche.

The National Park Service's vision calls for construction techniques that minimize habitat destruction (especially in the proposal to build a new outer ring levee system), consideration of altering waterways to help restore a more naturally functioning hydrology, measures to counteract land loss, and preservation of natural and cultural resources with minimal disruption of cultural and socioeconomic uses of the Bayou. The Jean Lafitte Park vision also supports Lafourche's vision for resiliency, saying "structural modification of the delta, such as building levees and other forms of surge barriers and gates, are doomed to failure if restoration is not pursued quickly and aggressively."

Culture and Recreation Goals

- * Coordinate recreation districts and agencies to enhance access for all Lafourche residents to the highest quality leisure, cultural and natural resources.
- * Plan cultural assets and recreational facilities for future growth.

Housing Snapshot

Rental housing is becoming increasingly desirable for mobility and flexibility, but there is currently limited rental housing supply in Lafourche where only 24% of the housing supply is rental units, compared to 26% in the Houma-Thibodaux metropolitan statistical area, Louisiana 33%, and the nation 35%.

Existing housing is dominated by owner-occupied, single-family units on small and large lots. There will be increased demand for both of these housing types, but also a need for more multifamily units, mobile homes, and townhomes than currently exist. In fact, 49% of anticipated future housing need is in compact, single-family or townhomes, and 20% in multifamily units.

Housing Choices

What is the housing vision?

Lafourche Parish has a balanced housing mix to meet the needs of future residents.

Why is this important?

Housing needs in the Parish are changing and will continue to change as the population ages and becomes increasingly diverse. Though projected population growth for the Parish over the next twenty years is moderate (a need for approximately 15,000 new units is estimated¹), it is clear that the existing quantity and types of housing stock will not meet expected future demand. Emerging housing market trends will require providing housing for multiple generations, including baby boomers in their 60's and 70's, generations X and Y, and first- and second-generation immigrants.

What can we do?

An effective strategy for meeting future housing needs will be to integrate new housing types and ownership opportunities into existing housing stock. This can include both owner- and renter-occupied apartments in rehabbed buildings with a mix of affordable and high-end units. Small multifamily developments will best fit the scale of Lafourche's towns. Two- to three-story townhomes and live-work units will be a good fit for transitional neighborhoods (i.e., those on the outskirts of town centers). New single-family homes can be constructed on smaller lots to accommodate more households in a given area. The potential for new mixed-use centers could also provide townhomes and live-work units. There is also a strong community preference for structures built to FEMA's base flood elevation to protect homes from flood damage and ensure flood insurance rates are affordable.

Housing Goals

- * Create housing options that meet the need of future residents.
- * Ensure that resiliency is considered in new building types.

¹ Source: State of Louisiana Forecast and Balanced Housing Model

Transportation Connections

What is the transportation vision?

Lafourche Parish has a system of waterways, roads, and trails that supports the Parish's economy, responds to the desires and needs of citizens, and makes the Parish more accessible to visitors who wish to experience the culture and beauty of this special place.

Why is this important?

Lafourche is primarily served by two two-lane roadways – LA 1 and Highway 308. These roads are used by travelers traversing through the Parish – from Thibodaux to the Port – school buses delivering children, and residents accessing driveways, shopping and services. An crash can shut down a roadway for hours. LA 3235 in the southern part of the Parish was built to facilitate truck traffic, however it is being compromised by uncontrolled access from adjacent uses, which creates tremendous conflicts and unsafe conditions between travelers moving at high speeds through the Parish and local traffic accessing their homes, located along the highway.

Transportation problems and issues can rarely be solved by large, sweeping improvement like the construction of a large highway or putting in additional traffic signals. Incorporating Complete Street principles that look at many options for future road designs in the Parish at an early stage is essential to developing a healthy, robust transportation system. Complete Streets principles can be implemented on local roads by Parish Council resolution and on State Roads by enforcing DOTD Complete Streets policies in Lafourche Parish. Complete streets are intended to incorporate multiple modes of transportation options within a single roadway network including bikeways, parking, sidewalks, planting buffers, and transit ways.



Transportation Goals

- * Increase roadway capacity and safety.
- * Improve the quality of transportation system and expand transportation options, including a long-term rail strategy to serve Port Fourchon.



Infrastructure for the Future

What is the infrastructure vision?

Lafourche excels in meeting residents' health and safety needs by improving the built environment as a means of enhancing protection, improving economic health, creating community cohesion and providing recreational opportunities.

Why is this important?

Lafourche needs increased capacity to meet the needs of Parish residents in an efficient and cost-effective manner and to handle storm and flooding events while promoting human health and safety. Infrastructure supporting the protection and enhancement of natural resources will improve quality of life and also increase the Parish's ability to leverage these resources as local economic drivers.

What can we do?

Infrastructure upgrades in the next five years will catalyze Lafourche Parish's progress toward being a place that better meets the health and safety needs of its residents.

Pump upgrades will improve the parish's ability to recover quickly from storm events. Capacity will be increased from 300 cubic feet per second to 1,000 cubic feet per second, and natural gas backups will ensure continuation of these essential services in case of electrical system failure.

A new recreation center will be built in a central Parish location, increasing opportunities for improved health and wellness, social well-being and community cohesion for a large number of Parish residents. A drop-off facility for discarded materials at a central location (the old Raceland Landfill site) will facilitate increased rates of recycling throughout the Parish, and reduce the amount of waste being deposited in the Bayou. This will not only lower the costs of trash pickup throughout the Parish, but also enhance wildlife habitat and human enjoyment of local natural resources.

Ongoing marsh creation as a strategy for increased storm buffering capacity will help slow gulf-wide land loss, and also provide additional high-quality wildlife habitat and opportunities for ecotourism. Many other ongoing projects and programs will continue to focus on restoring and beautifying the coast, wetlands and potable water resources within the Parish.

Infrastructure Goals

- * Amend guiding documents and regulations to align with the Lafourche Parish Drainage Master Plan.
- * Plan to enhance and maintain service to existing development and plan for adequate service to growth areas.

Economic Development Opportunities

What is the economic development vision?

Lafourche Parish's economy is expanded through the entrepreneurial spirit of residents. The economic growth helps retain young people in the Parish, with new jobs in emerging sectors filled by well-trained employees who enjoy living and working in Lafourche Parish.

Why is this important?

Lafourche Parish's population is stable with a modest growth rate anticipated. The Parish's 2011 population is estimated at 96,666. Between 2000 and 2010 the parish had a 0.7% growth rate. The largest segment of Lafourche's population is under twenty years of age; with the parish's future population following national trends and becoming older on average, as the baby boomers generation group ages. While the state forecasts minimal or no growth between 2010 and 2030, based on current local, state and national trends, the Plan expects an annual average growth rate of at least 0.5%, or over 10,000 new residents, in 2030.

The Parish job growth rate between 2005 and 2010 was 13%, which is more than double the state's job growth rate for the same time period. The majority of this job growth was in new private sector jobs, with less than 100 new jobs in farm employment and no job growth in the government sector. Given the national and regional economies, employment is strong in Lafourche Parish. The strongest employment, compared to state levels is in the transportation & warehousing, forestry & fishing, and management sectors. Lafourche is low in retail trade, health care, manufacturing, and several other service areas, compared to state levels in these sectors.

The Parish added about 7,000 new jobs between 2005 and 2010, with 4,500 of these occurring in the top five growth industries in the Parish. Of these 7,000 new jobs, 2,681 were in the Transportation and Warehousing sector alone. Almost 3,000 new jobs were created by entrepreneurs or proprietors, representing a 7% change between 2005 and 2010.



Another important factor is that the Parish is “under-retailed” in several categories, while others are over-supplied. Many people have indicated that they have to go to Houma for shopping, medical care and other services. This gap creates an opportunity for future growth.

Nationally, the labor pool is shrinking with the projection of having more jobs than workers in the next several decades. Cities are competing for employees and there is a trend to create livable, quality communities that will attract and retain employees to fill future jobs and fuel the local economy.

What can we do?

Given these trends, it is important to develop strategies to capitalize on the Parish’s entrepreneurial spirit, its economic base, and emerging trends and address the challenge of retaining young people to live and work in the Parish by creating an environment that embraces innovation.

Strategies to achieve economic growth in the medical, high-tech and business fields; the information technology sector; and education and healthcare industries are clear opportunities to expand the local economy and to provide jobs that have a future and that will be in demand and of interest to a younger population. In addition, to attract and retain young people, the Parish will need to place an emphasis on providing new housing choices, education and training, a quality school system and a diverse social and cultural lifestyle. Entrepreneurs and small businesses will need a variety of working environments from flexible office space to affordable warehouses. Much of this type of growth and cultural development is anticipated to occur in and around Thibodaux.

Additionally, the Parish and Port’s efforts to expand and diversify Port Fourchon will provide many opportunities for job growth in the Parish. Given the Port’s proximity to deep water means that less dredging is necessary to accommodate larger container shipping, which opens up the Port for potential uses beyond the current support of the drilling industry.

A third opportunity area is coordinating and expanding the Parish’s tourism program to build on the many offerings the parish now has and to create a consolidated tourism program that is nationally and internationally marketed.

Economic Development Goals

- * Strengthen economic development coordination within the Parish, regionally and state-wide.
- * Build the economy on existing Parish assets.
- * Create workforce training programs that develop skills of existing residents to match industry needs.

Coordinating Effectively

What is the coordinating effectively vision?

All parts of Lafourche Parish work together and there is close coordination with the cities in the Parish as well as with other coastal parishes. The coordination of diverse areas of the Parish make the whole Parish stronger and more resilient.

Why is this important?

What happens in one part of the parish closely impacts other parts. Likewise, the coastal parishes are so interconnected that one parish's actions can affect the others' actions. In addition, there are many opportunities for shared and coordinated services.

What can we do?

There are several levels of coordination that will enhance the quality of life and health and safety of the Parish. Implementation of the Plan will be most successful with the coordinated effort of Lafourche Parish, working with representatives from adjacent Parishes and other governmental organizations or agencies, both within and outside of Lafourche Parish.

LOCAL COORDINATION

Both the Parish and Thibodaux could benefit from increased coordination to ensure that consistent development goals exist to enhance each. The Parish, Thibodaux, Lockport, and Golden Meadow should consider establishing a planning area that goes beyond the current boundaries of their city limits as a "joint planning area." Changes in this joint planning area would be reviewed for consistency in development and cooperative opportunities for service provision. In addition, the cities and Parish could address the potential, if any, of future annexation areas, allowing both entities to plan accordingly. Other areas that could be considered jointly by Parish and local governments include:

- Facilitating common development standards
- Coordinating sewerage and other facilities
- Economic recruitment opportunities
- Provision of an integrated trail system
- Coordinated transportation planning
- Coordinated stormwater management within levees

COORDINATION WITH ADJACENT PARISHES

Water management, transportation and economic development are three areas that cross parish boundaries. Parishes need to coordinate to ensure that water management practices do not negatively affect adjacent parishes. Similarly, new economic opportunities will arise and a coordinated planning effort would ensure that quality developments take place that benefit the entire coastal region, while protecting the special characteristics of each parish.

REGIONAL COORDINATION

The Parish should continue to work with the HTMPO and the Houma-Thibodaux Metropolitan Planning Organization which very successfully provides coordinated transportation, planning and organizational assistance to the region and serves as a coordinating agency.

STATE COORDINATION

Louisiana Economic Development, the Department of Transportation and Development, the Coastal Planning and Restoration Agency, the Department of Environmental Quality and the Department of Health and Hospitals, as well as other state agencies, are instrumental in implementing policies at a statewide level that ensure the health and safety of the state's citizens.



Coordinating Effectively Goals

- * Provide efficient, effective and coordinated services to the public.
- * Enable residents and business owners to have healthy and satisfying lives in a comfortable and safe natural environment.
- * Focus on education and training by coordinating with public schools, technical schools, community colleges and Nicholls State University.
- * Provide leadership training to emphasize accountability, transparency and continuing education for elected and appointed officials, nonprofit and business leaders.
- * Through coordination, increase the sustainability of Lafourche Parish and enhance the long-term viability of region.

Strategic Action Plan

This section details short-term strategic actions that should be undertaken immediately or initiated in a short period of time – 1 to 2 years at the most. These are the first steps that the Parish should take to move the Parish towards the shared vision and to address the most high-priority issues identified by stakeholders. If these implementation measures are completed, it will make a significant impact on the quality of life in the Parish. A complete list of long-term strategies and actions can be found in **Chapters 4 through 11. Chapter 12: Implementation** (page 169) provides timing and lead agency information for these action items.

Implementation of the Comprehensive Resiliency Plan will take a coordinated effort by elected and appointed officials and committees, businesses, nonprofit organizations and residents.

Top 13 Strategic Actions:

1. Create an umbrella Economic Development Organization that coordinates the many Economic Development organizations, and interacts with state, national and international economic development initiatives.
2. Certify one property through the Louisiana Economic Development certification system.
3. Develop and adopt access management and complete streets standards for existing and new roadways.
4. Adopt resiliency design standards for residential construction. Develop prototype plans for resilient development that can be used off the shelf by developers and residents. Include prototypes for market rate and affordable housing. Prototypes should be flexible enough to be modified with changing FEMA and NFIP standards.
5. Partner with the Port Authority to support diversification of the port and airport and development of the industrial park around the airport
6. Coordinate with Parish municipalities and adjacent parishes. Create annexation and development agreements with municipalities to coordinate long-term development and the provision of services. Coordinate with Terrebonne Parish to develop service agreements along boundaries and to address water management and resiliency issues in a regional context.
7. Inventory recreational facilities in all districts. Create a shared use program to maximize services to Parish residents.

- 8.** Adopt the Bayou Lafourche Corridor Study and the South Central Bicycle and Pedestrian Plan as part of the Comprehensive Resiliency Plan. Prepare a Bayou Trail Study and develop a pilot project to be led by the Lafourche Parks and Recreation Department. Integrate the bayou plaza concept and prepare an implementation plan for a trail system and plazas.
- 9.** Complete a comprehensive review and update of the subdivision ordinance to ensure that it is aligned with the comprehensive plan.
- 10.** Prepare a small area plan for the Raceland and Mathews area taking into consideration:
 - Addressing the conversion of US 90 to I-49 and associated impacts
 - Attracting and planning for new businesses to locate to the area
 - Supporting and enhancing current residential, commercial, government, and school facilities
 - Investigating and enhancing infrastructure to support additional transportation systems, water, and sewage
 - Improving and enhancing the appearance along Bayou Lafourche, LA 1 and LA 308
- 11.** Prepare a small area plan for Larose to take into consideration:
 - Strengthening the presence of the historical town
 - Investigating current conditions along LA 3235, its possible expansion and the need to incorporate safety measures into the roadway system
 - Creating recreational opportunities on Bayou Lafourche and expanding the current overall recreational facilities in Larose by connecting them to adjacent areas
 - Continuing a vital atmosphere for commercial and residential development
- 12.** Explore various funding options for the completion of LA 1 to create better transportation access to Port Fourchon and use the corridor to strengthen the overall resiliency of south Lafourche.
- 13.** Develop a parish-wide Capital Improvement Program and align CIP funding priorities with the goals of the Comprehensive Resiliency Plan.

Chapter 2: *Profile of the Parish and its People*

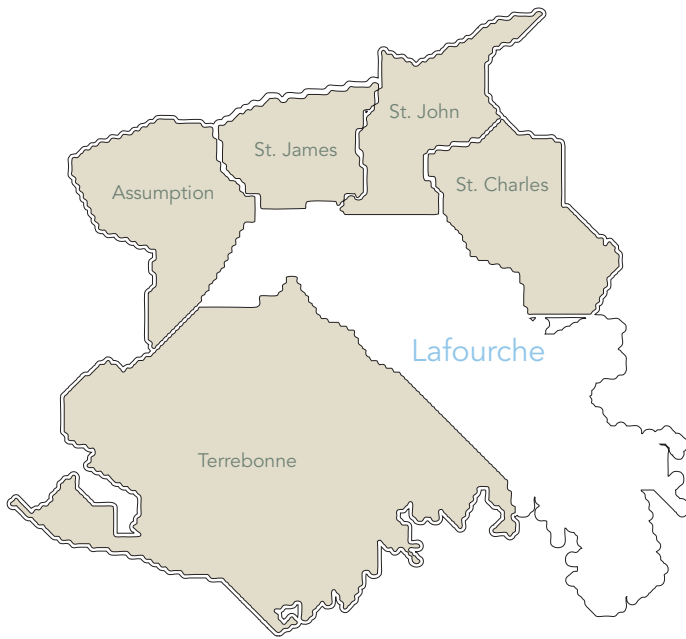
Lafourche Parish Today

In planning for a resilient Lafourche it is important to understand how growth pressures in the region and state might affect the Parish. This chapter provides an overview of Lafourche’s geographic, economic and cultural roles within the region and the state, and summarizes its demographics and population characteristics. This analysis, combined with detailed input from hundreds of community members and stakeholders, helps to paint a picture of the Parish’s trends, assets and opportunities.

Brief Background of Lafourche Parish

Lafourche Parish is located in southeast Louisiana approximately 90 minutes south of Baton Rouge and one hour west of New Orleans. Known for its “longest main street in the world (Bayou Lafourche), the Parish’s culture has been influenced by its Cajun, French and Spanish heritages. Native tribes originally inhabited the area currently known as Lafourche Parish as early as 1686. The Lafourche Parish landscape features marshes, sandy ridges, bodies of water, and natural levees. Louisiana is known as the “Sportsman’s Paradise,” Lafourche Parish boasts a natural habitat for a wide range of wildlife such as deer, nutria, alligators, fish, and shellfish.





The Parish is bordered by the Gulf of Mexico to its south, Terrebonne Parish to the west, Assumption Parish to the northwest, St. John Parish and St. James Parish to the north, and St. Charles Parish and Jefferson Parish to the east. There are three incorporated municipalities in Lafourche Parish: Thibodaux, the Parish seat, Lockport and Golden Meadow.

Lafourche Parish covers 1,469 square miles and has a population of 96,000 people, according to the 2010 U.S. Census. Historically, development concentrated on the natural ridges along waterways, but as the Parish grows, development is spreading to more low-lying areas such as former croplands in the northern parts of the Parish.

Lafourche Parish operates under a Home Rule Charter. The Parish is governed by a council, with nine members elected from single member districts and one member elected at-large to serve as the Parish President. The President oversees the administration of the Parish government and manages the budgeting of all parish activities. The President does not have the power to vote on the council, but participates in all council meetings and presents Parish business reports to the council.

The Parish within the Context of the South-Central Louisiana Region

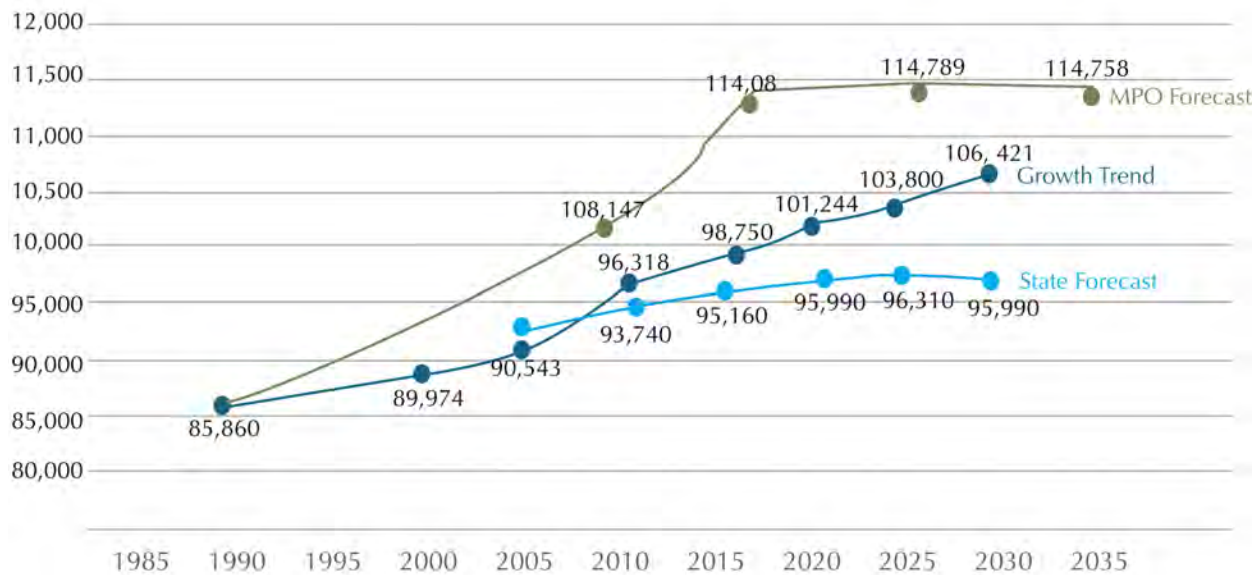
The South Central Region of Louisiana is one of eight designated Economic Development Districts (EDD) in the state, and is coordinated by the HTMPO, a not-for-profit regional economic development and planning agency. The South Central Region is comprised of six neighboring parishes, two of which (Lafourche and Terrebonne) are “bayou parishes” situated directly on the Gulf Coast. Lafourche and Terrebonne contain the Houma-Thibodaux Metropolitan Statistical Area (MSA). The other three parishes—St. James, St. John the Baptist, and St. Charles—are “river parishes,” characterized by adjacency to the Mississippi River.

POPULATION

Lafourche Parish’s population is stable with a modest growth rate anticipated. The Parish’s 2011 population is estimated at 96,666. Between 2000 and 2010 the parish had a 0.7% growth rate. The largest segment of Lafourche’s population is under twenty years of age; with the parish’s future population following national trends and becoming older on average, as the baby boomers age. While the state forecasts minimal or no growth between 2010 and 2030, based on current local, state and nation trends, the Plan expects an annual average growth rate of at least 0.5%, or over 10,000 new residents, by 2030.

Within the South Central region of Louisiana, Lafourche Parish has the second largest population after Terrebonne Parish (Table X). Between 2000 and 2010 Lafourche’s population grew by 7.05%, exceeding the regional rate of 6.73%. Only St. Charles and Terrebonne Parishes had more relative population growth.

Figure 2: Growth Rate Projections 2010-2035



Source: Louisiana Population Projections: Lafourche Parish (2009). Middle Series; US Census Bureau; 1990=2010. (Starred values); +2007 projection estimate (MPO)

DEMOGRAPHICS

Age-wise, the composition of Lafourche's population is comparable to other Parishes in the South Central Region; about 7% of the population is below school age, 21% of school age, and 12% retirement age. The median age in the Parish is 36.5, compared with a low median age of 35.0 in Terrebonne and a high of 38.9 in Assumption Parish. Lafourche is unique in its larger share of American Indians (at 2.8%, only Terrebonne has a higher proportion), with the neighboring nearby Houma Nation infusing distinct cultural assets and traditions into the Parish's population.

Overall, however, Lafourche is somewhat less ethnically diverse than its regional neighbors, with the relatively smallest African-American population (13.2%). In contrast, African-American populations in St. John the Baptist and St. James Parishes are both over 50%. Hispanic and Latino populations are relatively small but continue to grow, at just over 4% in Lafourche in 2010. In Lafourche the Asian population is small (0.7%) and primarily of

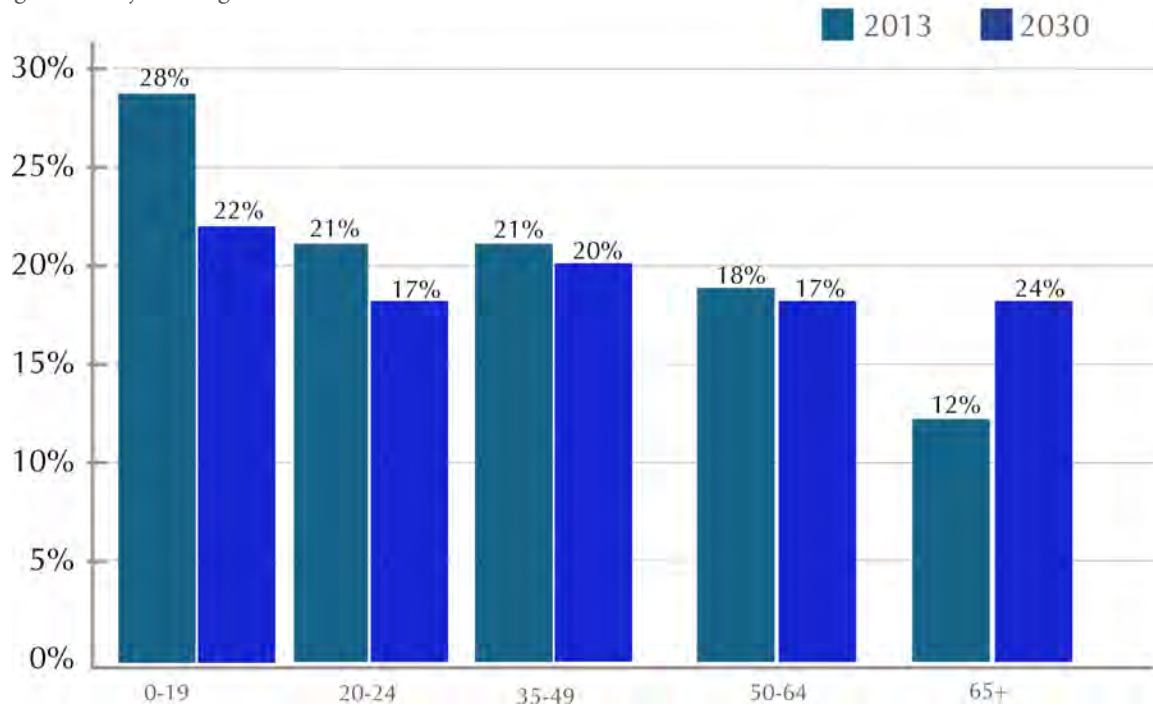
Vietnamese ethnicity. Almost 20% of Lafourche's population speaks a language other than English at home, compared to only 8.8% in the state of Louisiana.

INCOME

As of 2009 Lafourche's average per capita income was the highest in the region at \$42,205 (compared to a low of \$32,719 in St. James Parish and a second-highest per capita income of \$39,049 in Terrebonne Parish). In 2009 Lafourche exceeded both the state (\$37,632) and the nation (\$39,635) in average per capita income. Between 2007 and 2009, Lafourche had the second-highest growth rate in per capita income (12%) while St. James Parish had the highest at 13% growth. This was much more growth than both the state (0.6%) and the nation (0.01%). In general the river parishes have slightly higher average wages in most job and industry sectors (South Central Comprehensive Economic Development Strategy, 2012) as they are more urbanized and closer to the higher-paid New Orleans job market.

CHAPTER 2: Profile of the Parish

Figure 3: Projected Age Profile



Source: Louisiana Population Projections

Table 1: Population change in Lafourche Parish 2000-2010 compared to the U.S., Louisiana and its parishes

Area	Total Population 2000	Total Population 2010	Total Change	% Change 2000-2010	Average Annual % Change
United States	281,421,906	308,745,538	27,323,632	9.71%	0.97%
Louisiana	4,468,976	4,533,372	64,396	1.44%	0.14%
Assumption Parish, LA	23,388	23,421	33	0.14%	0.01%
Lafourche Parish, LA	89,974	96,318	6,344	7.05%	0.71%
St. Charles Parish, Louisiana	48,072	52,780	4,708	9.79%	0.98%
St. James Parish, Louisiana	21,216	22,102	886	4.18%	0.42%
St. John the Baptist Parish, Louisiana	43,044	45,924	2,880	6.69%	0.67%
Terrebonne Parish, Louisiana	104,503	111,860	7,357	7.04%	0.70%

Source: U.S. Census Bureau

Table 2: Ethnic profile for Lafourche Parish compared to the U.S., Louisiana and its parishes

Area	Total	% Hispanic or Latino*	% White	% Black or African American	% American Indian or Alaska Native	% Asian	% Other
United States	308,745,538	16.3%	63.7%	12.2%	0.7%	4.7%	2.3%
Louisiana	4,533,372	4.2%	60.3%	31.8%	0.6%	1.5%	1.5%
Assumption Parish, LA	23,421	2.1%	65.9%	30.4%	0.6%	0.2%	0.8%
Lafourche Parish, LA	96,318	3.8%	78.0%	13.2%	2.7%	0.7%	1.6%
St. Charles Parish, Louisiana	52,780	5.0%	66.2%	26.4%	0.3%	0.8%	1.3%
St. James Parish, Louisiana	22,102	1.2%	47.4%	50.4%	0.2%	0.1%	0.7%
St. John the Baptist Parish, Louisiana	45,924	4.7%	40.0%	53.1%	0.3%	0.7%	1.2%
Terrebonne Parish, Louisiana	111,860	4.0%	68.6%	18.8%	5.6%	1.0%	2.0%

Source: U.S. Census Bureau

* Percent (%) ethnicity is percentage of total population for each place.

EMPLOYMENT

After Terrebonne, Lafourche has generally had the lowest levels of unemployment in the region between January 2009 and March 2012. The region as a whole has lower unemployment than both the state and the nation. The 2012 Comprehensive Economic Development Strategy developed by HTMPO found that these figures may be slightly misleading because they do not take into account self-employed workers or sub-contractors that may be out of work, or workers who have experienced reductions in wages and/or hours and are now underemployed. While unemployment is generally

higher in the river parishes, employment levels in the bayou parishes have historically been closely linked to energy markets and thus are more vulnerable to sudden downturns in the oil industry. The river parishes have slightly more diversified economies.

CHAPTER 2: Profile of the Parish

Area	2007	2008	2009	Growth 2007-2009
Assumption	\$31,798	\$33,936	\$34,951	\$3,153
Lafourche	\$37,716	\$40,203	\$42,205	\$4,489
St. Charles	\$34,842	\$36,404	\$38,154	\$3,312
St. James	\$28,967	\$31,070	\$32,719	\$3,752
St. John the Baptist	\$31,115	\$32,973	\$34,372	\$3,257
Terrebonne	\$35,519	\$38,005	\$39,049	\$3,530
Louisiana	\$35,340	\$36,091	\$37,632	\$2,292
United States	\$39,392	\$40,166	\$39,635	\$243

Table 3: Per Capita Income 2006 to 2007:
Lafourche compared to surrounding
parishes, Louisiana state and the U.S.

Source: Bureau of Economic Analysis. February 2012.

Area	2008	2009	Growth 2008-2009	State PCI	National PCI
Assumption	6.4%	\$34,951	6.7%	94%	84%
Lafourche	7.4%	\$42,205	6.6%	111%	100%
St. Charles	3.8%	\$38,154	4.5%	101%	91%
St. James	6.4%	\$32,719	7.3%	86%	77%
St. John the Baptist	4.9%	\$34,372	6.0%	91%	82%
Terrebonne	7.5%	\$39,049	7.0%	105%	95%

Table 4: 2008 PCI Growth
and as a percentage (%) of
national growth

Source: Bureau of Economic
Analysis. Printed 4/27/2010.

Industry Mix

Compared to the river parishes, the economies of Lafourche and Terrebonne are much more heavily weighted toward commercial fishing, transportation, off-shore oil drilling, and supporting activities. One of the observations of the 2012 Comprehensive Economic Development Strategy was that large numbers of workers in the oil and commercial fishing industries are retiring. Lafourche Parish in particular is facing severe shortages in skilled labor to fill demand in ship building, construction, fabrication, and oil rig maintenance.

Table 5: Unemployment by Parish Compared to State and National Unemployment 2008-2012

	January 2009	December 2009	January 2010	December 2010	January 2011	December 2011	January 2012	March 2012
Assumption	7.1%	9.4%	11.4%	10.8%	13.3%	9.4%	11.5%	10.1%
Lafourche	3.6%	5.2%	6.0%	4.9%	6.3%	4.2%	5.3%	5.9%
St. Charles	5%	6.7%	7.7%	6.3%	8%	6.0%	6.7%	6.2%
St. James	9.3%	10.1%	11.7%	11.4%	13.6%	10.4%	11.9%	10.9%
St. John the Baptist	6.7%	9.3%	10.7%	9.4%	11.1%	7.7%	8.9%	8.2%
Terrebonne	3.8%	5.5%	6.5%	5.3%	6.4%	4.3%	5.3%	5.0%
HTMPO Average	5.92%	7.70%	9%	8.02%	9.78%	7%	8.27%	7.72%
United States	8.5%	9.7%	10.6%	9.1%	9.5%	8.3%	8.8%	8.4%

Source: LA Works. 2012

Note: January increases reflect post-Christmas seasonal drop in employment.

Table 6: Annual Average 2010 Weekly Wages

	Overall Average	Mining	Transport & Warehouse	Utilities	Manufacturing	Construction	Professional & Tech	Healthcare & Social Assistance
River Parishes	\$889	\$2,130	\$1,081	\$1,325	\$1,301	\$971*	\$1,320	\$851
St. Charles	\$1,095	\$1,218	\$1,358*	\$1,762*		\$1,029*	\$1,414	\$684
St. James	\$1063	\$1,348	\$1,178	N/A	\$1,745	\$783*	\$1,185	\$645
St. John the Baptist	\$891	\$1,209	\$939	\$1,155	\$1,591	\$956	\$931	\$690
Bayou Parishes	\$873	\$1,476*	\$1,369	\$1,476	\$1,104	\$1,064	\$961*	\$754
Assumption	\$742*	\$1,630	\$970*	\$1,149	\$1,374	\$805	\$825*	\$344
Lafourche	\$905	\$1,476*	\$1,438	\$900*	\$1,061	\$1,123	\$828	\$753
Terrebonne	\$862	\$1,475*	\$1,228*	\$869*	\$1,078	\$1,036*	\$1,014	\$804

Source: LA Works. 2012

*Indicates reduction in average weekly wages in occupational category.

Table 7: Population Categories in Lafourche Parish

Population	Parish	U.S. Average	Description
Mainstream Families	31%	12%	Middle and working class families with children living at home, modestly priced homes (including mobile homes), living outside of urban areas, high car ownership, age 25-54.
Striving Singles	17%	11%	Young, lower income (less than \$30K), often service jobs or part time work, living in towns and satellite cities, apartments, enjoy outdoor sports, entertainment.
Cautious Couples	11%	10%	Over 55, mix of singles, couples and widows; working class roots, high home ownership rate, sedate lifestyle.
Mid-life Success	11%	13%	Childless singles and couples in 30s and 40s, college educated, professional and middle class, suburban and living outside of urban areas, consume latest technology, travel.
Other	30%	54%	Population that does not fall under one of the categories above.

Source: Nielsen 2013 Demographics Reports.

Note: January increases reflect post-Christmas seasonal drop in employment.

Understanding the People

To better understand the people of Lafourche beyond statistics and numbers, the planning team relied on a different kind of data, called psychographics, which studies and categorizes people according to their attitudes, aspirations, and other criteria. This kind of information is often used in market research and is helpful in informing a number of areas in comprehensive planning such as identifying desired housing types and understanding market trends for economic development activities.

According to this research, about one third of the population can be characterized as belonging to working class families with children. A smaller proportion (about 17%) is comprised of younger, single people, many working in the service industry. Other prominent population groups include

middle-aged and older working-class singles and couples, many of whom are homeowners; and childless professionals in their 30's and 40's. Residents generally fall into four categories: mainstream families, striving singles, cautious couples, and mid-life success.

Compared with the U.S. average, a larger proportion of parish residents fall into the “mainstream families” and “striving singles” categories. The high number of singles in the area points to a need to provide a variety of housing types, interesting urban environments, and job training.

Urban Area Profiles

THIBODAUX (33.6 SQUARE MILES)

Thibodaux's population has tripled in the last 60 years, and this does not include the surrounding subdivision and businesses that have built outside of the city limits.

Thibodaux's downtown mixes restored Creole double gallery corner buildings with a Beaux Arts courthouse, art deco and Italianate office buildings, Queen Anne and West Indian bungalows and jazzed-up Acadian cottages. Depending on the night, downtown either hops with loud college nightclubs or lazes along with casual dinners or drinks with friends. One of the drinking establishments, the Red Goose Saloon is the old Red Goose Shoe Store, with the earliest use of the building being a post office that provided the country's first rural route delivery west of the Mississippi River.

Although, Thibodaux's historic downtown was once its commercial center, parking concerns, space constraints and competition from large chain stores have shifted the city's primary retail market across the bayou along North Canal Boulevard (LA 20).

LOCKPORT (7.6 SQUARE MILES)

Lockport's old district, located in the nook of the bayou 16 masonry bank buildings to the remnants of the lock that gave the town its name. The old district lives purely for preservation now and includes the classically restored former Louisiana Power & Light (LP&L) District Office building (Figure 22) and the old LP&L power plant, which has been renovated into a crafts/theatre building with a large deck over the bayou.

While the town's merchant trade and shrimp canning heyday are in its past, the sounds of shipbuilding resonate south of Lockport on LA 308. The Bollinger Shipyard Bollinger has survived and thrived. Its Lockport yard is the administrative heart of the company, which specializes in quick repair and in Coast Guard and Navy vessel new construction.

GOLDEN MEADOW (34.4 SQUARE MILES)

In the 1940s, Golden Meadow was really the only defined "town" south of Lockport and north of Grand Isle. It was a wild place of toppling derricks and well blow-outs. While Golden Meadow boomed even louder with oil, the town makes less noise now. Its rhythm is slower, sleepier. It still resembles a charming fishing village accented by the miss-mash of trawl booms that stretch from the dockside boats to the sky. But family-run groceries are disappearing, as have the great numbers of packing sheds, shrimp-drying platforms and icehouses. The seafood industry still bustles here, but it no longer depends on Golden Meadow for its wholesale trade.

As for the dominant industry, the oilfield is well established now. Oil and gas companies are currently focused on drilling in depths as great as 10,000 feet and beyond as technology opens new frontiers.¹

¹ "Bayou Lafourche From Donaldsonville to the Gulf of Mexico An Evolving Landscape 1941-2003." Rodney E. Emmer, Woody Falgoux, and Cullen Curole. Access at www.ceshost.com/btnef_bayoulafourche/client_files/editor_files/BLafourcheWPA.PDF

LAFOURCHE PARISH HISTORY

In Lafourche Parish and South Louisiana, a complex blend of French, Spanish, German, African, Irish, and Native American influences created a unique regional culture. Early European settlers encountered a descending fork of the Mississippi River that mapmakers had named “LaFourche Des Chetimachas.” This distributary bayou, its name soon shortened to “LaFourche,” served the settlers as a means of communication, a method of transportation, and a source of fresh water.

Beginning in the early 1700’s, waves of settlers arrived in South Louisiana from greatly varied cultural backgrounds and political influences. These included several different groups of French descent (Canadian traders, Acadians from Nova Scotia and New Brunswick, French royalists, Bonapartists, apolitical French civilians, French soldiers, French from the West Indies), Spaniards (from Spain, the Adaeseños from Texas-Mexico, and the Isleños from the Canary Islands), Germans (arriving as early as the Spanish period and continuing into the nineteenth century), Irish, Africans, and a variety of Caribbean transplants.

Control of the frequent bayou overflows played an important role in the early residents’ settlement pattern. Laws held each landowner responsible for the construction and maintenance of a bayou levee for his own protection and that of his neighbors. Land grants had a width of less than 600 feet but with tremendous depth. A pattern developed consisting of a narrow bayou front farm with a long “ribbon” of land streaming behind it. Each had access to the bayou, and each had fewer levees to maintain. Historians, taking note of the unique pattern of housing development, with one residence after another lined up fronting for about 50 miles from Thibodaux to Golden Meadow, began referring to it as “the longest street in the world.” It is said that a baseball thrown from “front yard to front yard” could be started in Thibodaux and end in Golden Meadow an hour later.

Lafourche’s residents took advantage of having the bayou for a front door and the swamp as their back yard. The bayou contained an unlimited food supply that could be eaten or bartered. The swamps and marshland contained abundant animal life which could be hunted for food or for their pelts.

Many of settler groups blended with the Louisiana Native American groups (some aboriginal tribes and others who resettled in the area during the eighteenth and nineteenth centuries). Some Native Americans retain their own unique cultures, virtually unmodified by European contact in a number of ways. The French-speaking black Creoles of the Southwest Louisiana prairie lived alongside the Cajuns and were often free-men-of-color and landowners. While remaining racially distinct from their Cajun neighbors, they share many cultural traits, including the food, Mardi Gras, Catholicism, musical repertoire, and often the French or Creole language. But one of their most significant contributions is zydeco, a distinctly black Creole music known for its blending of French songs and African/Caribbean rhythms.

Source: louisianafolklife.org and diginlafourche.com

Chapter 3: *Building the Plan*

Public Input

The Lafourche Parish Government, supported by an advisory committee of appointed officials and agency representatives, hosted a range of activities to gather input from Parish stakeholders. Extensive public engagement for the project involved citizens from across the parish. Parish residents and stakeholders shared important broad and local insight through a combination of stakeholder interviews, Parish-wide and topic area public workshops, participation at local festivals, as well as the project website, on-line surveys, and the project Facebook page. This public input was used to develop a variety of scenarios or possible futures to explore. Parish stakeholders provided feedback on the scenarios which guided development of the vision and goals and strategies.

Parish-wide Workshops

To help build the scenarios, participants created sixteen vision maps during one of three parish-wide workshops. Participants used a set of scaled land use “game pieces” representing different building types and possible types of growth within the Parish. The “game board” consisted of parish-wide maps showing land use and development constraints such as wetlands and major utilities; planned transportation infrastructure and proposed new streets; and significant civic and cultural facilities. People worked together in groups ranging from 5 to 10 with a facilitator that helped them get their ideas on paper.

Focus Area Workshops

Workshops for two focus areas were also conducted for economic development and for tourism. These two topics were chosen because they were identified during the parish-wide workshops as areas that need additional attention.

These mapping exercises allowed participants to drill down to specifics at a local level to discuss pressing needs. Results of the focus area workshops were used to develop the strategies of the Plan.

Scenarios for Lafourche

Scenario 1: Current Trend

Scenario 1 represents current development trends in the Parish, which consist primarily of low-density uncoordinated growth across the landscape, including development of marshlands, and limited wetland restoration efforts outside the levee system. In this scenario, housing is provided in large-lot subdivisions and very low-density rural developments scattered throughout the Parish. Additional subdivisions off of LA-3235 in the southern portion of the Parish also exist. A small amount of mixed-use development occurs in Thibodaux. In this scenario, new employment areas would be located primarily in Thibodaux, Raceland, Larose, and Galliano.

Scenario 2: Thibodaux Urban Center Metropolis

Scenario 2 represents a future in which Thibodaux grows as a regional center for health, high tech and business. In this scenario, the majority of new jobs and new housing are located in the northern part of the Parish, in and around Thibodaux. Thibodaux attracts and retains more millennials (born in the early 1980s or after) and Nicholls State University expands its education programs and draws more people for both healthcare-related and culinary study, along with other educational programs.

Scenario 3: Port Expansion

In Scenario 3 Port Fourchon becomes the most significant attractor for business and industry in the area. Industrial services and business opportunities aligned with the port grow stronger. The port expands in size and diversifies the imports and exports that it processes. An inter-modal distribution center is built to help move goods to market. The southern portion of the Parish continues to draw a large number of workers from out of state to work off-shore and in port-aligned businesses.

Scenario 4: Tourism Focus

Scenario 4 represents a future in which Lafourche Parish becomes an even greater regional draw for recreation and tourism. Lafourche is known not only for its reputation as a sportsman's paradise, but also for its well-organized cultural and eco-tourism opportunities. Bayou Lafourche is beautified and becomes an attractive amenity for the community with high-quality public docks and beautiful parks along the bayou. River trips and tours are more common and inter-governmental agency collaboration increases to efficiently promote the Parish and accommodate visitors.

Testing Ideas with the Public

Following development of the scenarios and draft Vision, the planning team held additional open houses in north, central and south Lafourche to obtain feedback. In addition, team members attended the Lockport Food Festival and the Firemen's Fair to obtain input on the Vision and initial plan strategies. This input, recorded on surveys both in person and online, helped shape the vision and strategies.

Learning from Scenarios

Land use scenarios help us understand the opportunities, constraints, and trade-offs of different approaches to growth. The Plan Lafourche workshop results revealed several different general approaches to future growth in the Parish. From the workshop results, the team developed four scenarios that represented a range of approaches for accommodating the approximately 5,000 acres of future growth. The total of 5,000 acres corresponds with the expected population increase growth based on state projections. Future growth is expected to include a mix of housing, employment, commercial and natural areas.

The four alternative scenarios, developed for Lafourche were created in response to the key themes communicated through interviews, surveys and public workshops. Those key themes can be summarized into the following categories:

1. Promote and improve recreation amenities
2. Grow the tourism sector
3. Protect the Parish's agriculture
4. Expand housing options
5. Improve safety and reduce flood damage
6. Improve infrastructure and reduce traffic
7. Grow the economy

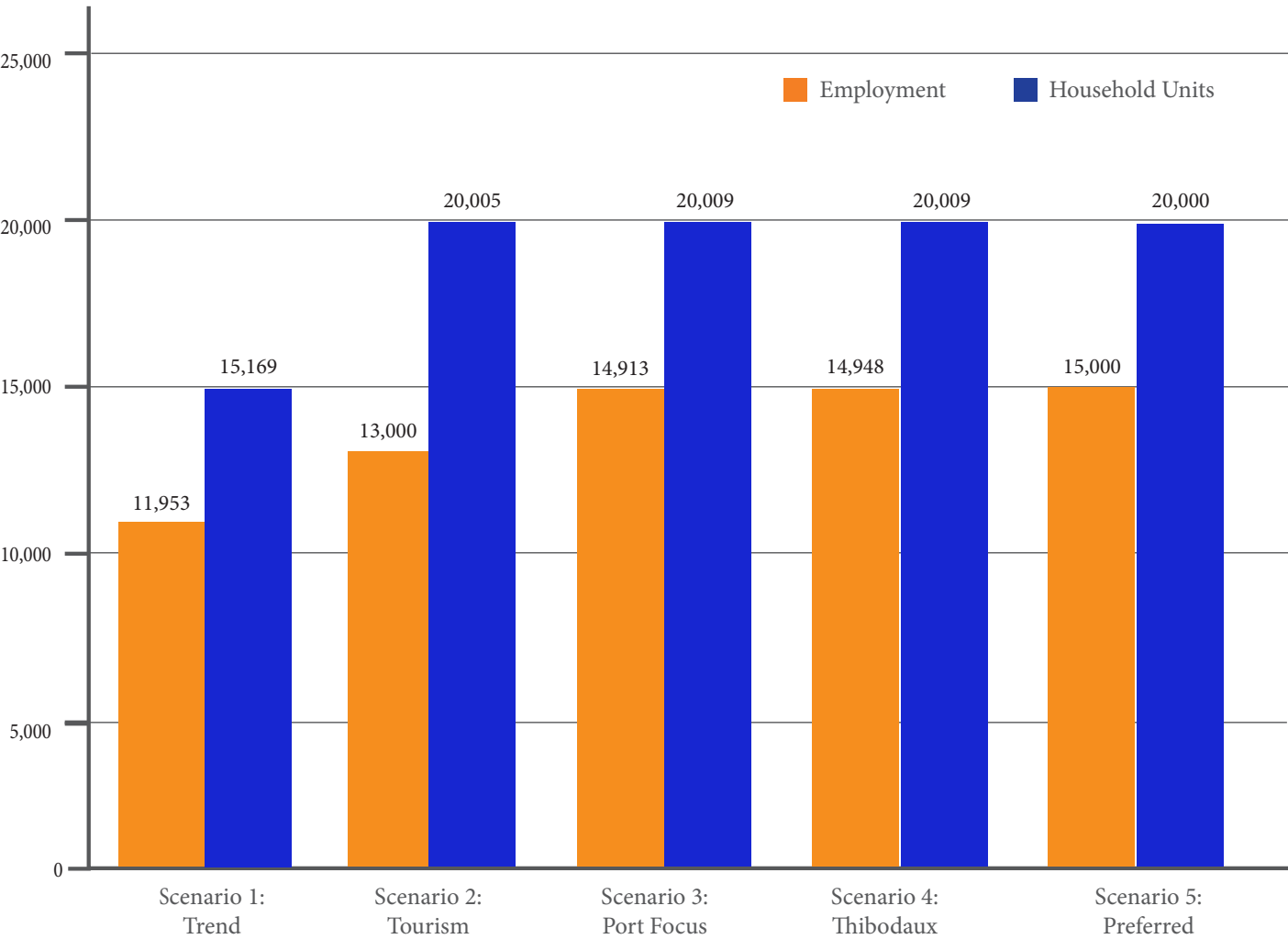
To build the scenarios, the team used the same basic design principles as in the workshop. It involved identifying infrastructure, accounting for environmental constraints, evaluating existing land uses, and then identifying new land uses. The result is a virtual representation of the Parish after it has grown by 5,000 acres. The scenario maps are similar to a land use map, in that land uses are classified with colors that represent different types of housing and business.



Scenario Comparison

To understand the impacts of each of the scenarios, the team compared and analyzed a variety of likely outcomes that would result from each scenario, such as the types of housing units, anticipated job sectors and employment types, and land consumption. The comparisons shown in figures 4 through 12 illustrate that while each of the scenarios varied in outcomes, with the Port Expansion and Tourism Scenarios showing the most dramatic differences, there are benefits to all three of the alternative scenarios: tourism, port focused and urban. These benefits include more diverse and affordable housing opportunities, an increase in the types of jobs available, an emphasis on creating communities that will attract and retain the Parish’s youth, and a unified effort to enhance the many tourism offerings in the Parish.

Figure 4: Scenario Comparison



Source: Envision Tomorrow Scenario Builder, Fregonese Associates, 2013

Figure 5: Walk and Transit Friendliness (0 - 1 scale)

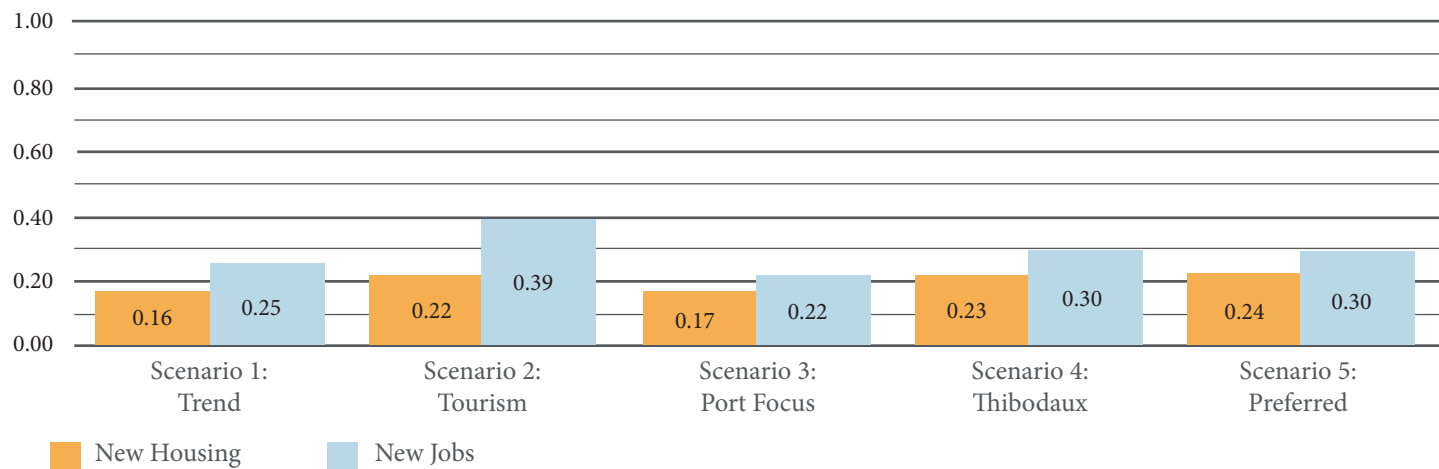


Figure 6: Agricultural Land and Open Space (acres)

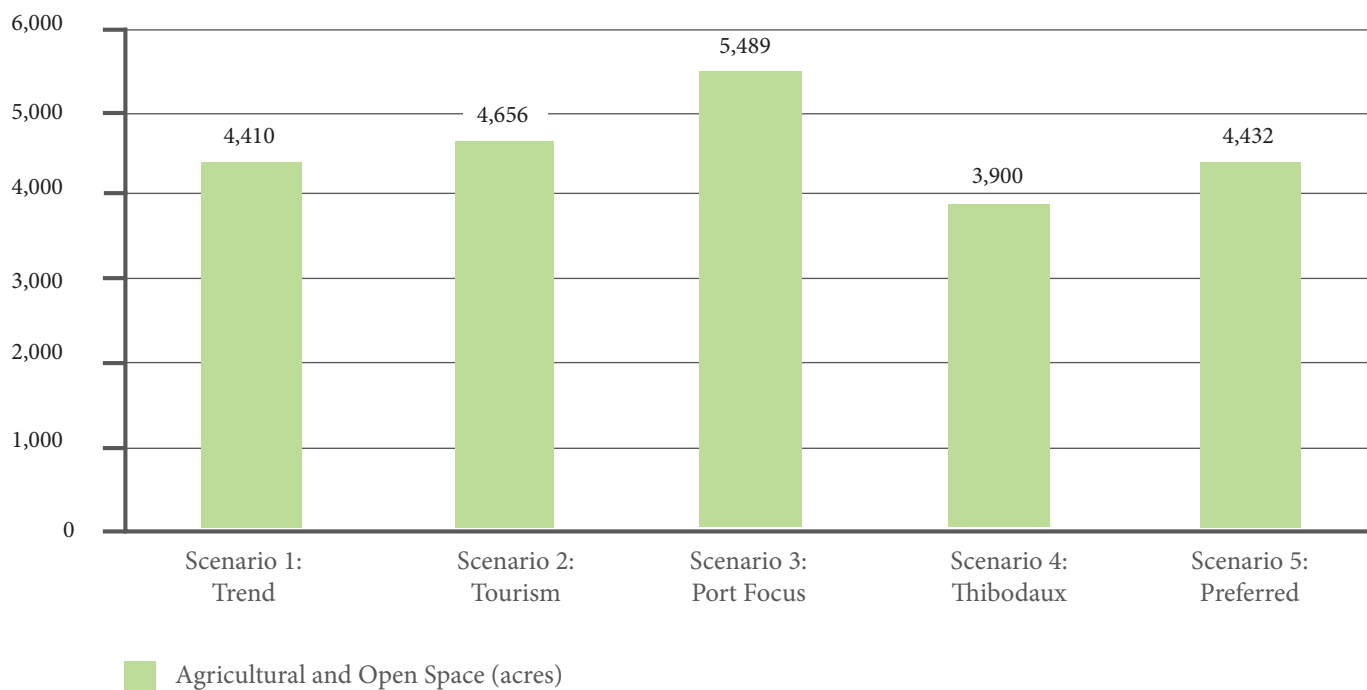


Figure 7: Land Consumption (acres)

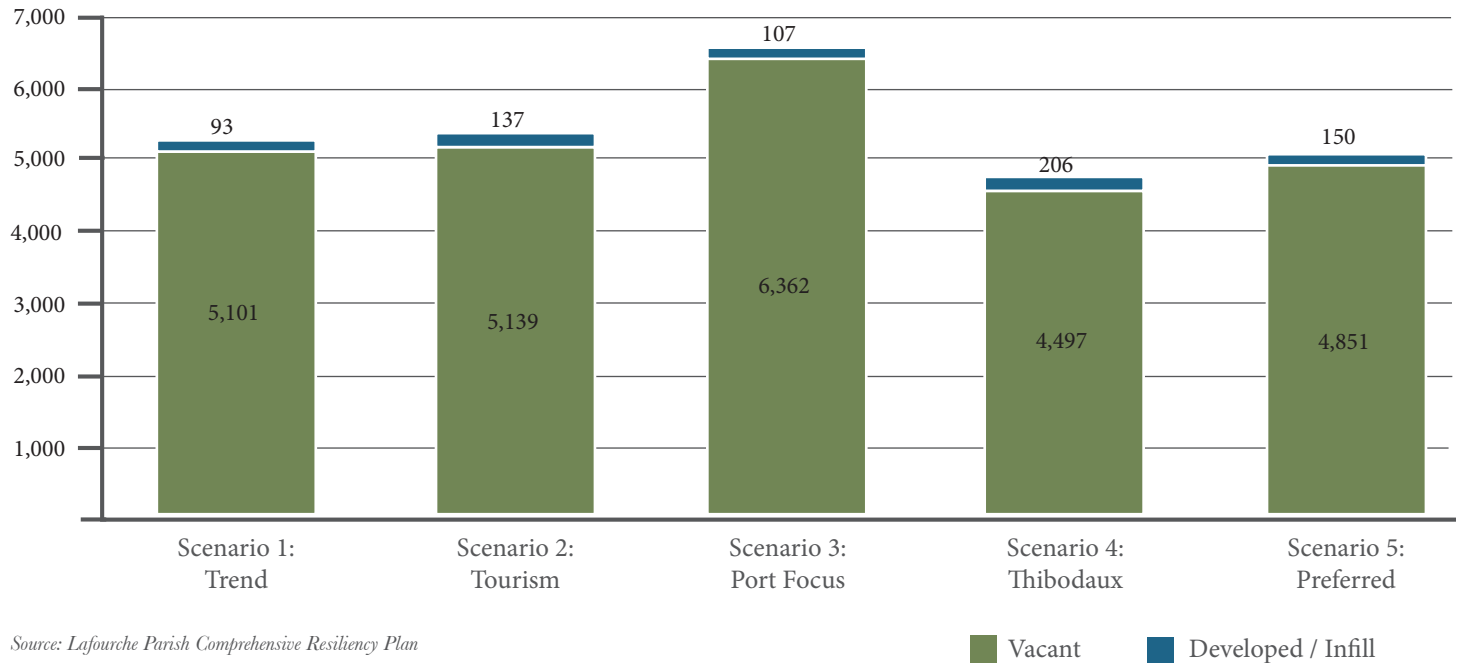


Figure 8: New Impervious Surface (acres)

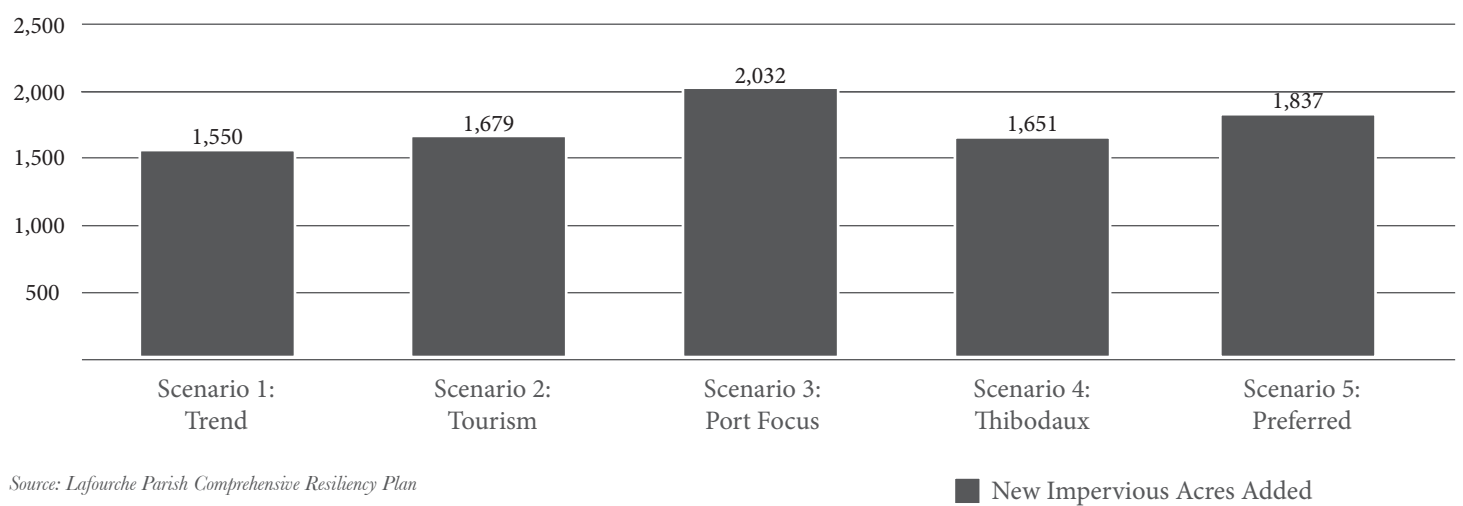
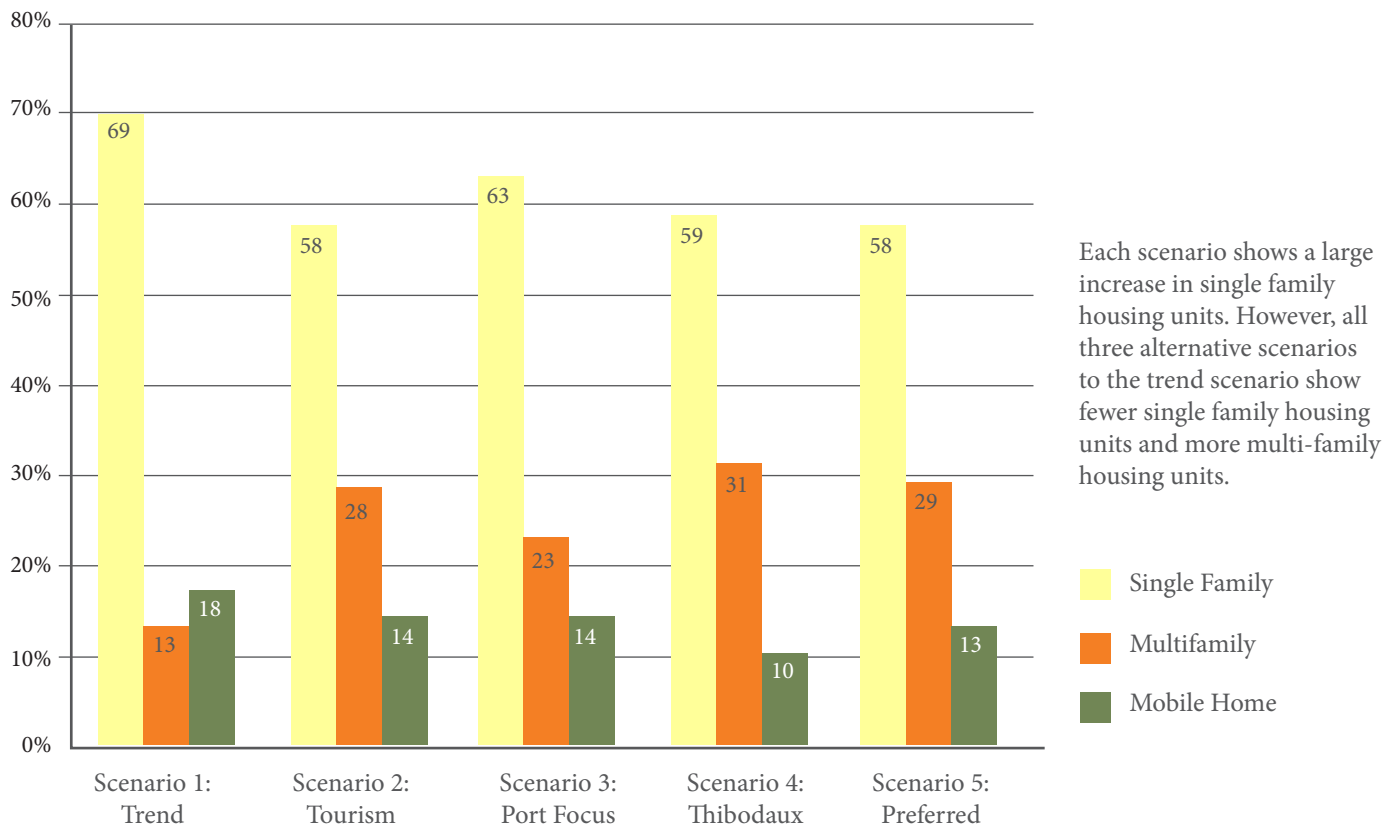
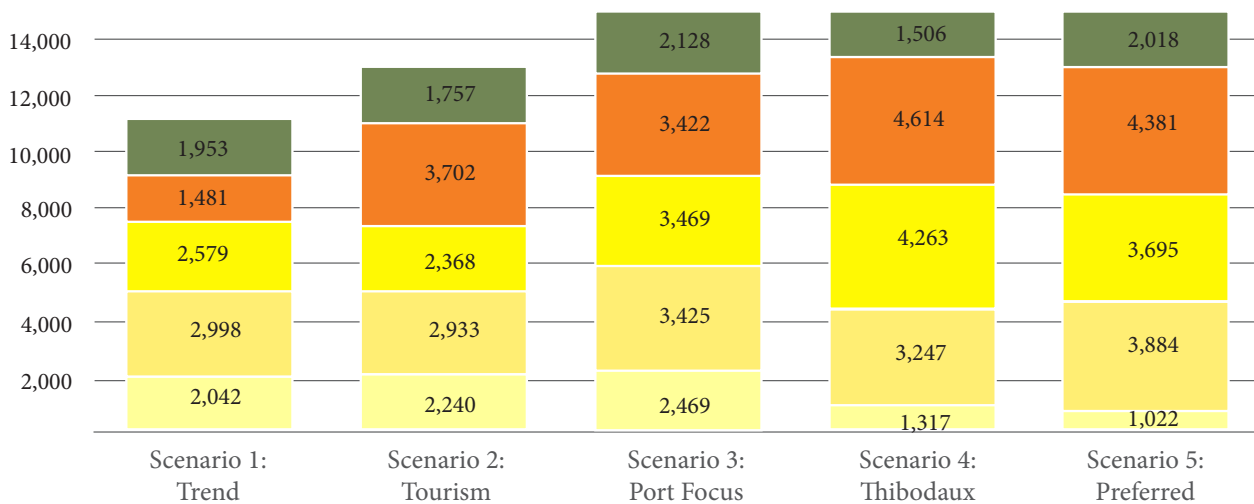


Figure 9: Housing Units by Type per Scenario



Source: Lafourche Parish Comprehensive Resiliency Plan

Figure 10: Housing by Type per Scenario

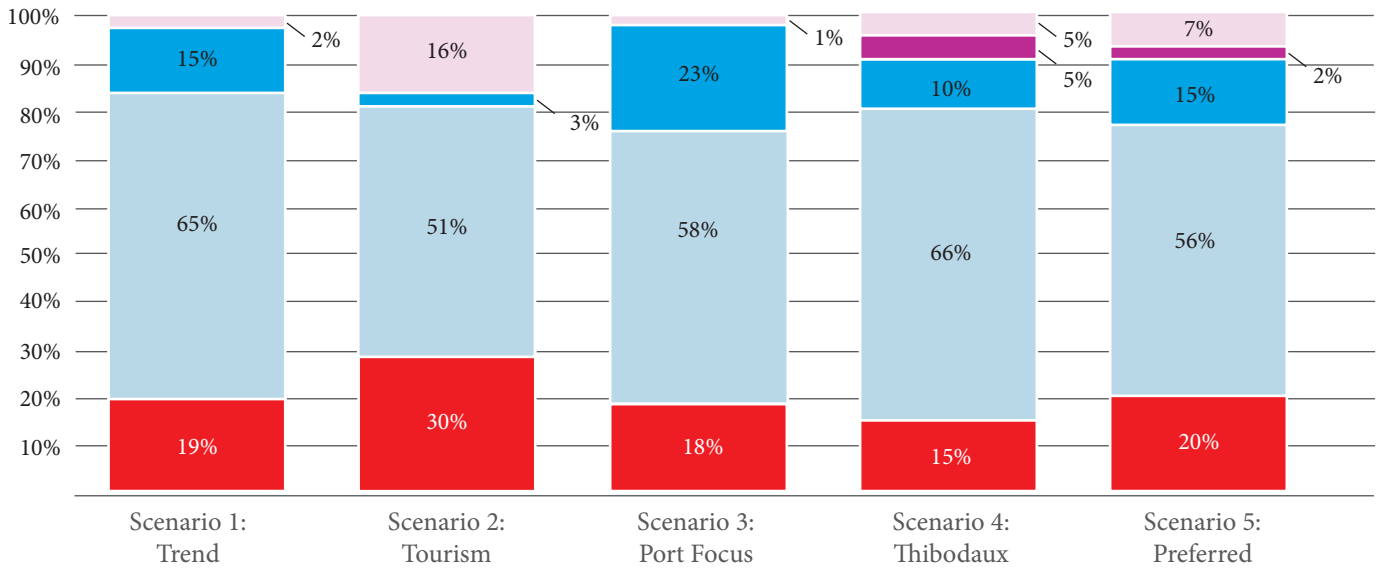


Source: Envision Tomorrow Scenario Builder, Fregonese Associates, 2013

All scenarios but the Trend Scenario suggest a larger Multi-family housing unit stock, largely in response to increased demands for rental housing.

■ Large Lot Single Family ■ Conventional Lot Single Family
■ Small Lot Single Family ■ Multifamily ■ Mobile Home

Figure 11: Employment Mix



Source: Envision Tomorrow Scenario Builder, Fregonese Associates, 2013

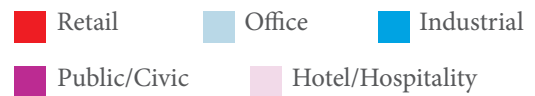
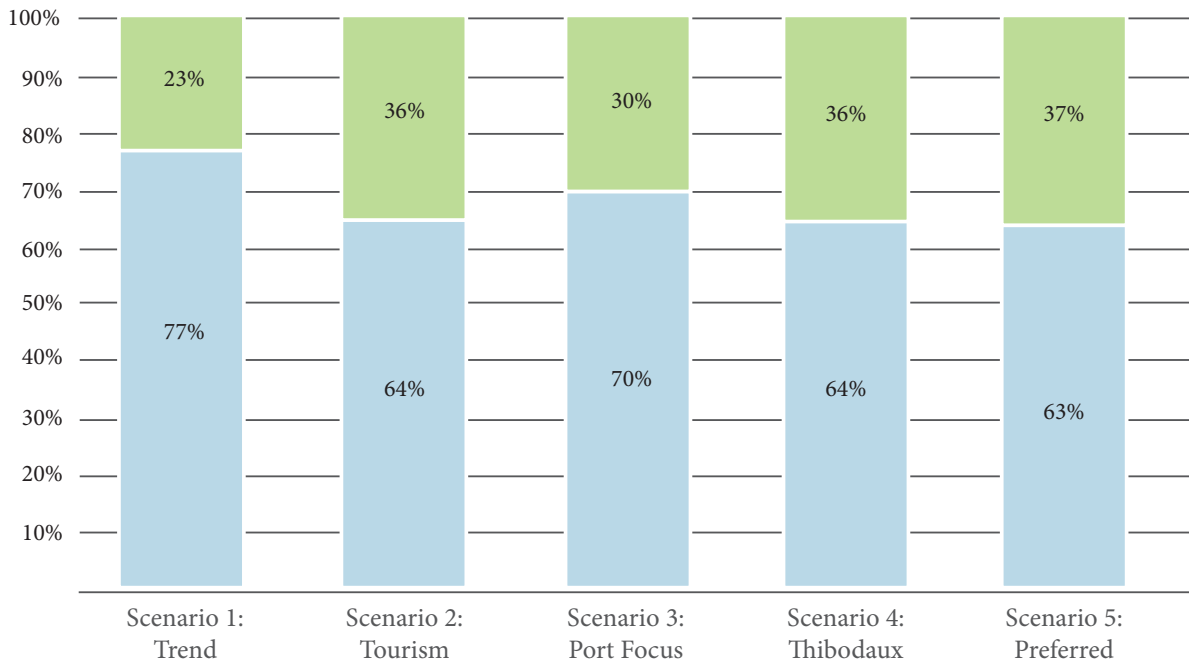


Figure 12: Owner / Renter Mix



Source: Envision Tomorrow Scenario Builder, Fregonese Associates, 2013

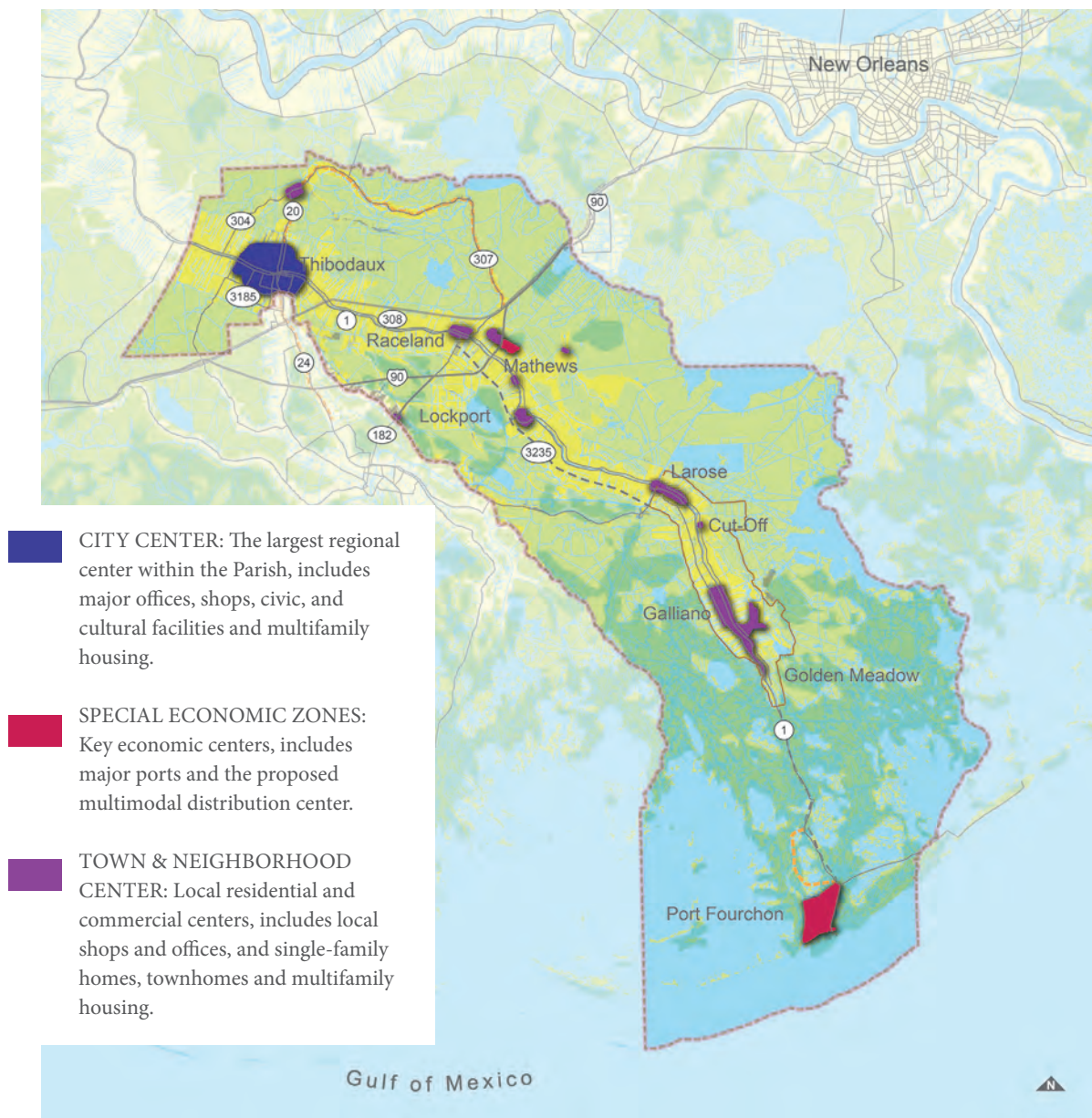


Scenario Conclusions

Rather than choosing a single scenario to explore for the future, stakeholders showed a strong preference for combining the best from each of the scenarios. Drawing on these ideas provides a vision that promotes:

- A safe and resilient community that celebrates its cultural heritage
- A community with a strong, diverse economy and a trained employee base
- A community with diverse and resilient housing choices and amenities
- A community with increased access to jobs and bayous
- A community and region that works together for the health and safety of coastal Louisiana

Figure 13: Scenario 5, Preferred



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Chapter 4: *Land Use*

Introduction

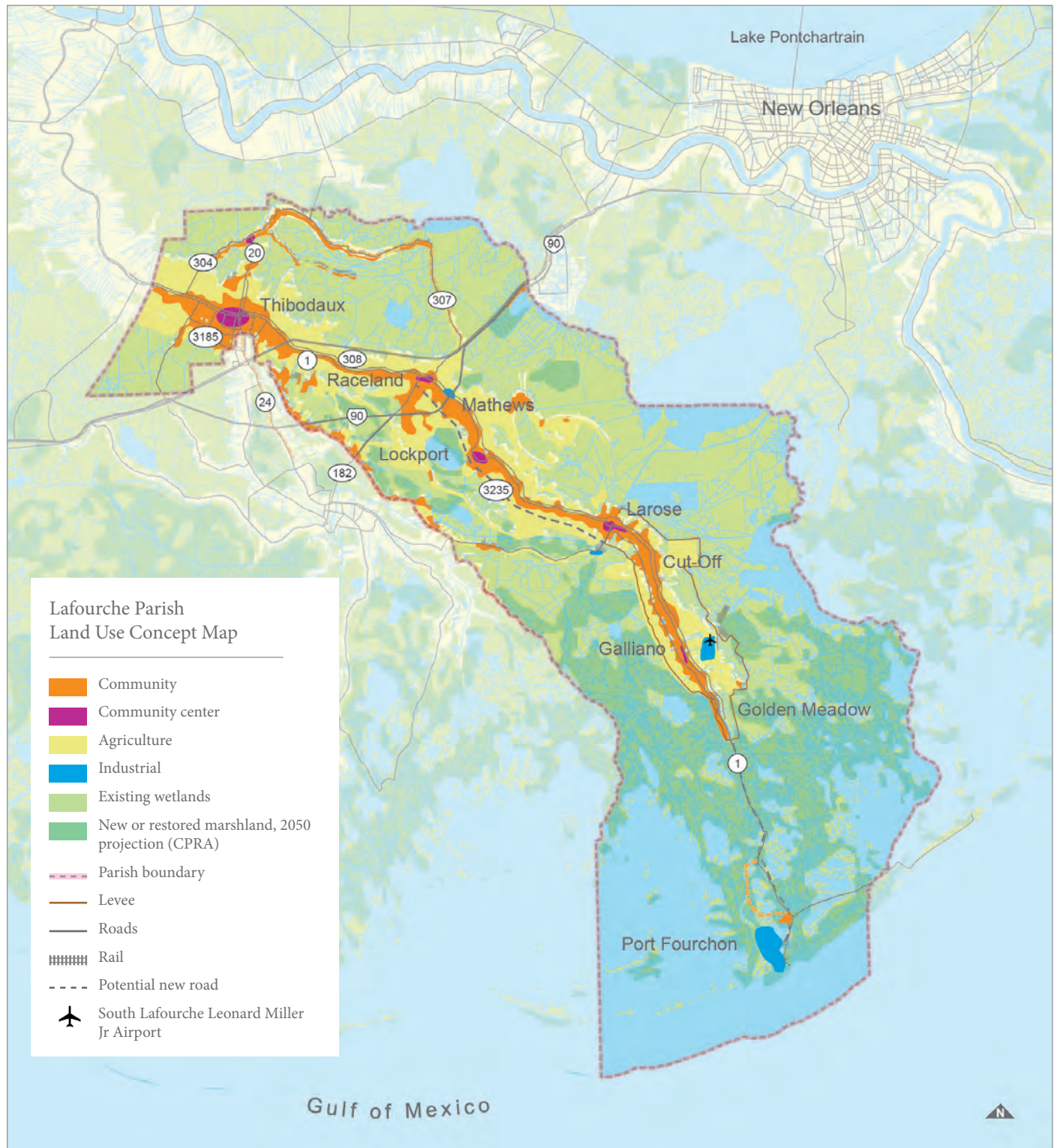
Planning for a resilient future means that Lafourche Parish grows in ways that both retains existing residents and attracts new residents. In order to build a prosperous future for the Parish, current land uses and future land use needs must be identified and planned. This plan points to areas of the Parish that are: safe and secure; preserved for recreational use by hunters, fishers, birders, and boaters; in need of greater support for industry and business; prioritized for the preservation of agriculture; and where coastal hazards, land loss and flooding is most likely to occur. By considering these land uses and the parish can strategically plan for a resilient Lafourche.

The best places for the creation of new jobs and new housing will be in and near existing employment and city centers. The infrastructure in these areas has the capacity for growth and the property is more protected from current and future coastal hazards. Conservation of natural areas and marshes is key for the continued health of the parish and for increased storm buffering capacity.

Land Use Goals

- 1. Plan for future land loss and population growth parish-wide.**
- 2. Create complete communities that provide access to transportation options, housing, recreation, education, retail, and employment all in proximity to one another.**

Figure 14: Land Use Concept Map



This concept-level land use map provides a basis for coordinating expansion efforts. It also is a tool for gauging the appropriate spatial relationships and degree of balance between community neighborhoods, community centers and employment centers such as downtown areas, Port Fourchon and Thibodaux’s medical district.

Background

A Brief History of Land Use in the Mississippi Delta

THE DELTA BEFORE MODIFICATION

The Mississippi Delta was formed over thousands of years from sediment deposited during periodic flooding of the Mississippi River, which built up land in the water channel. The highest, driest land was thus directly adjacent to the waterway, with the land sloping downward as it moved away from the River, and transitioned into lowland wetlands and marsh. Prior to settlement by Europeans, Coastal Louisiana was inhabited by numerous American Indian groups, including the Chitimacha, Houma and Choctaw in and around the area now comprising Lafourche Parish.

As coastal Louisiana was colonized by the French and Spanish beginning in the 16th century, settlement occurred primarily along the River in these narrow strips of high, dry land, which served as natural levees to protect against damage from flooding. The French arpent system of land division shaped development into long, narrow parcels along navigable rivers, in order to maximize the number of land owners with access to both river frontage and cultivable land.

HUMAN MODIFICATION OF THE DELTA

With such a settlement pattern, the location of the riverbanks became fixed- whereas before the river had shifted over time under the influence of a thousand-year deltaic hydrological cycle. Before European settlement, coastal Louisiana was the site of extensive maize agriculture. However, the 18th and 19th centuries saw the development of large sugar cane plantations in the rich soils of the delta, coinciding with the arrival of the first African slaves in Louisiana.

It is during this time that the state's levee system was greatly expanded to enable continued production and export of sugar cane. This system has altered the landscape and hydrology of

THE ARPENT SYSTEM

The arpent system was primarily transferred by French settlers, who established long narrow property lots throughout Canada and the US. This method provides a valued resource at one end (usually a waterway or road) and unproductive land at the other end (such as marshes or mountains), with a swath of fertile land in between. According to the U.S. Bureau of Standards: 1 linear arpent = 191.835 American feet

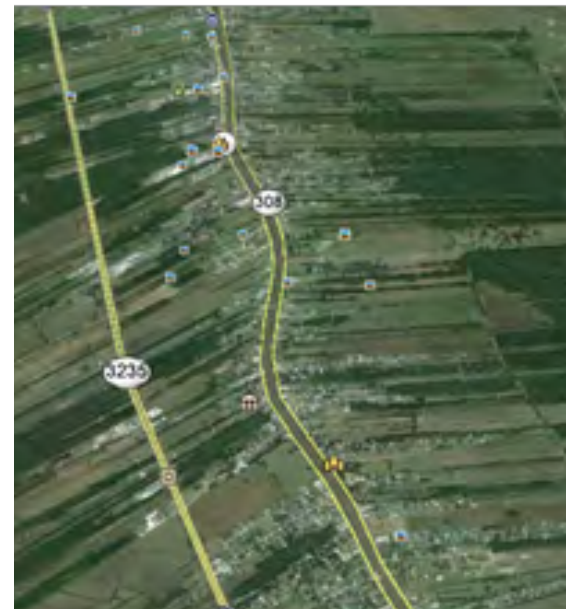
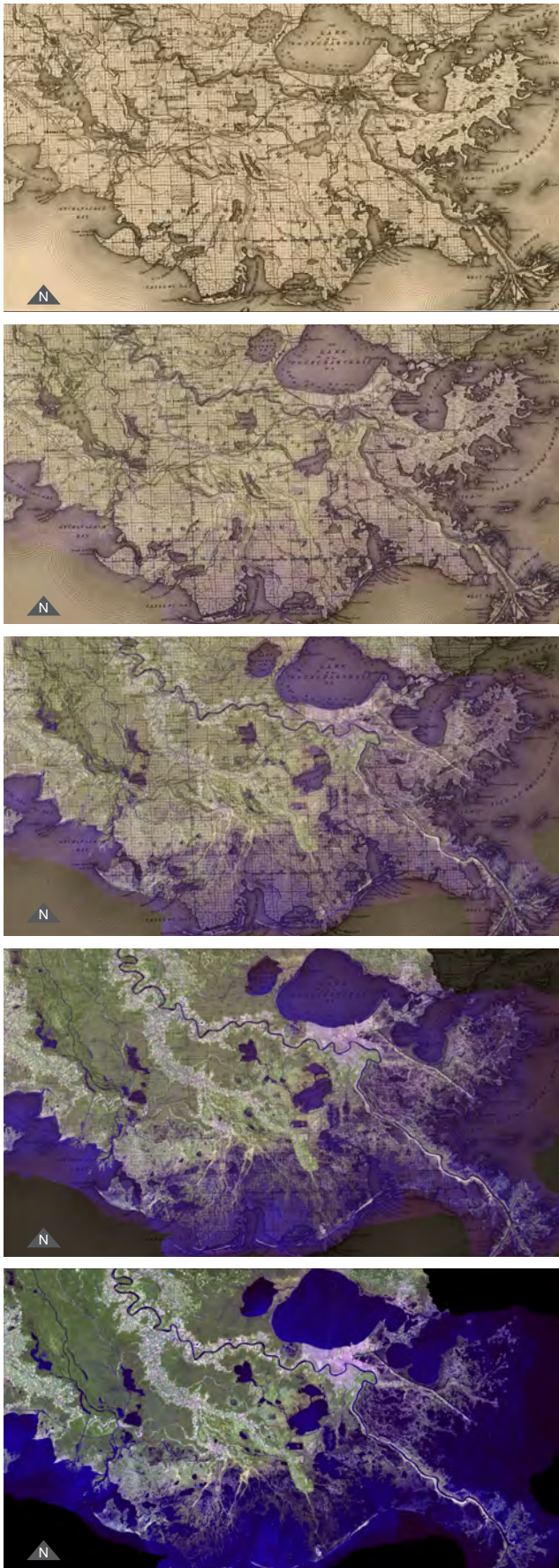


Figure 15: Example of Arpent division of land in Lafourche Parish. Source: Google Earth



the delta, interrupting the cycle of sediment deposition that replenished land formations and made some areas high and dry enough to be habitable. Additionally, legislation in the mid-19th century to encourage draining of swamps for agriculture, development, and privatization of federally-held land encouraged settlement in lower lands, and resulted in further modification. The long-term consequences of such modifications are far-reaching and have major implications for land use and settlement patterns going forward.

Land Loss

The combination of hydrologic modification, with other human activities, in addition to naturally-occurring phenomena have resulted in—and will continue to contribute to—significant land loss in Coastal Louisiana.

Removal of sediment for levee construction, dredging for oil and gas exploration and water transport, as well as natural erosion, subsidence and sea level rise all contribute to a complex feedback loop that is increasing the rate of land loss.

BEST PRACTICES MANUAL FOR DEVELOPMENT IN COASTAL LOUISIANA

Extensive information on the history and dynamics of land loss in Coastal Louisiana can be found in the Best Practices Manual for Development in Coastal Louisiana (2012), which also provides community- and site-level strategies for “living with water,” rather than “fighting the water.” The Manual also includes case studies of other communities around the world that have had to adapt land use patterns in the face of challenging hydrological features. The Manual can be found at <http://coastal.cpex.org/>.

Figure 16: Louisiana Historic Coast Line

Source: CLEAR Landscape Change Module: Preliminary Draft Coastal Protection and Restoration Authority Master Plan, UTM Zone 15N NAD83, Coastal Louisiana Ecosystem Assessment and Restoration (2007)

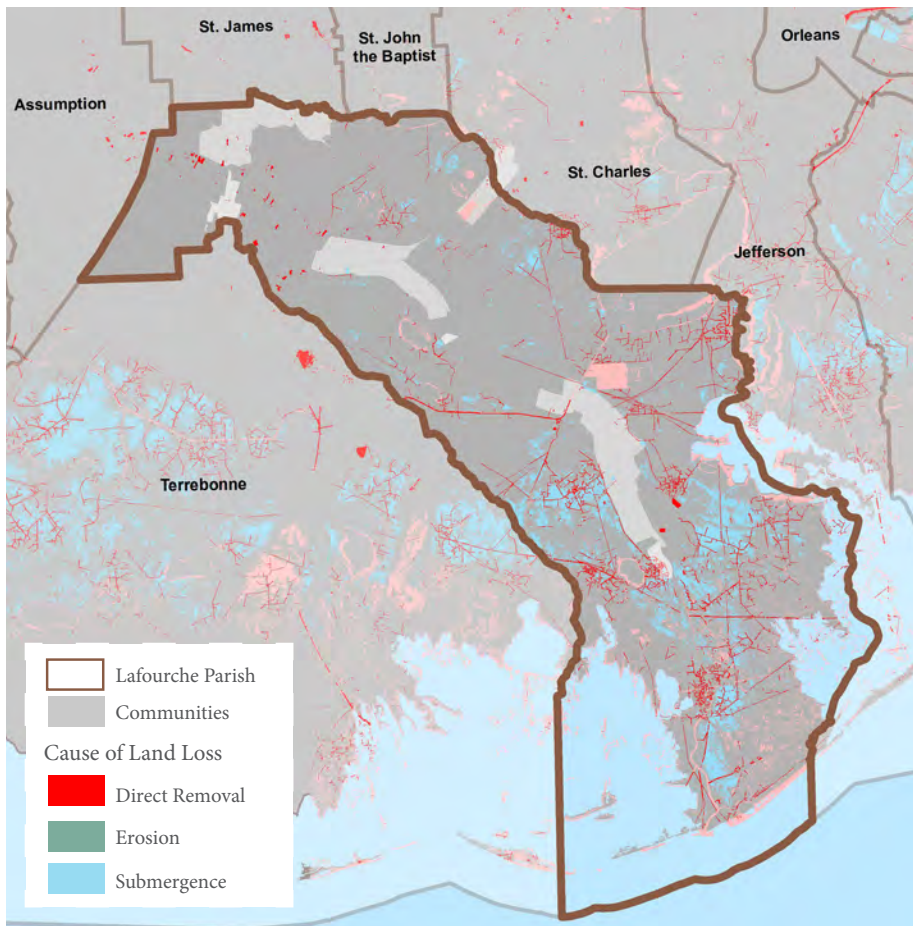


Figure 17: Predicted Future Land Loss in Lafourche (due to direct removal, erosion, or submergence)

Source: USGS 2012

According to an International Panel on Climate Change (IPCC) 2007 report, there is strong evidence of sea level rise during the 20th century, and the rate is expected to increase in the 21st century. Globally, the average sea level is predicted to rise 7 to 23 inches in this century. National Oceanic and Atmospheric Administration's (NOAA) measured sea level trends vary across the Gulf, with the highest readings being in the vicinity of southeast Louisiana. The U.S. Geological Survey (USGS) estimates that Louisiana has lost 1,900 square miles of coastal wetlands since 1932. While there is no single cause of the wetland and land loss, human actions continue to be a contributing factor.

A few of the many environmental impacts of land loss include: habitat fragmentation, saltwater intrusion and the introduction of invasive species. From a land use perspective, this means the total

area that is suitable for development is greatly reduced, as storm buffering capacity declines (an important role of the wetlands and marshes that are now becoming increasingly submerged in coastal waters), and damage to homes, businesses and infrastructure escalates.

LAND LOSS IN LAFOURCHE

Immediate and anticipated land loss, as well as limited storm buffering capacity outside of the levees, has already led to visible changes in settlement patterns; between 2000 and 2010 population density has been shifting away from the coastline, becoming more concentrated inland.

Figure 17 illustrates the USGS's predictions of future land loss (over the next 50 years) in the Parish due to a combination of direct removal (i.e. dredging), erosion and submergence.

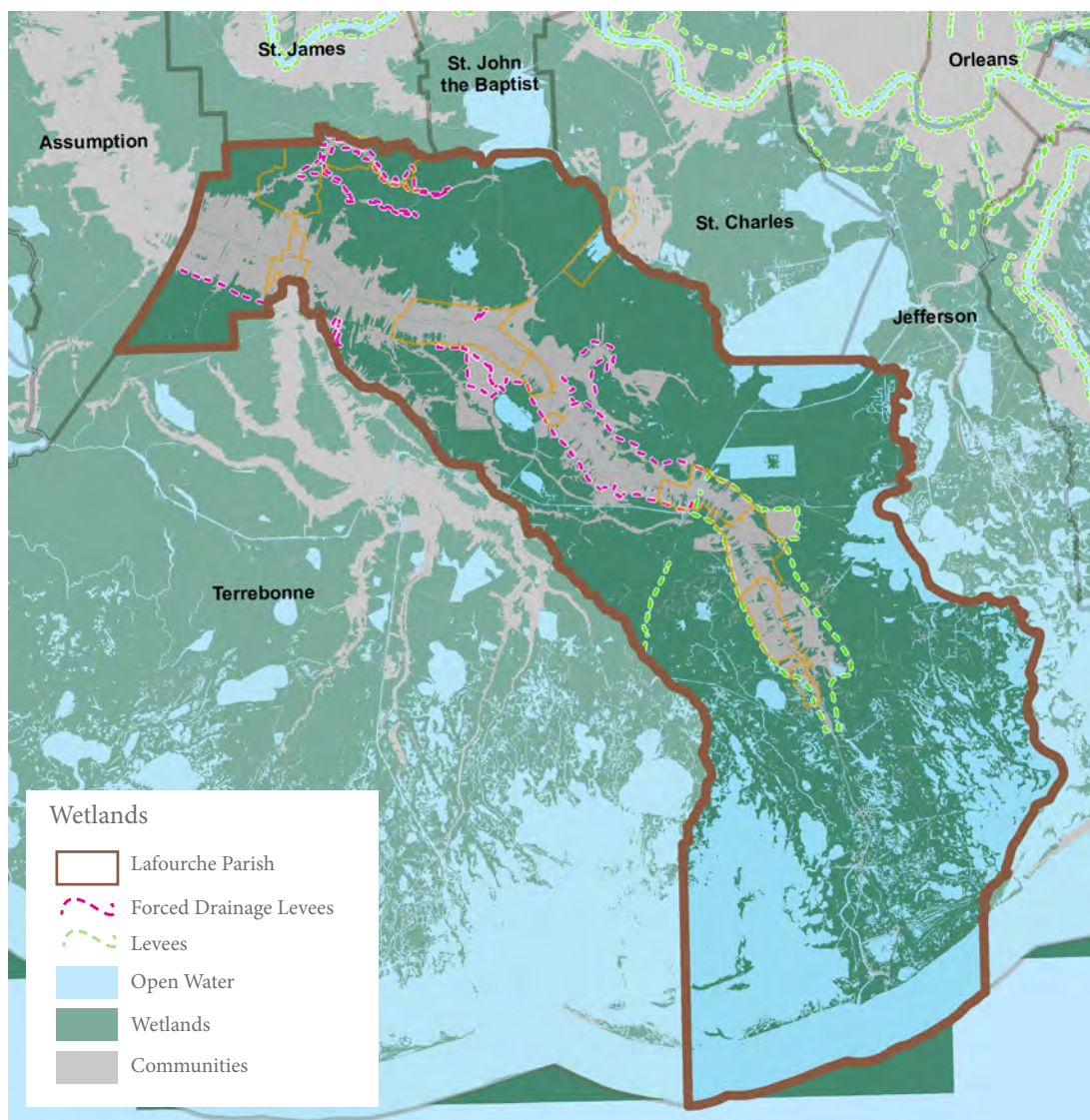


Figure 18: Wetlands Inside the Parish Boundary

75% of the area is covered by wetlands.

Source: National Wetlands Inventory 2012, US Department of Fish & Wildlife

Table 8: Land Area in Lafourche Classified as Wetlands (2010)

Land Class	Square Miles	Percent (%)
Wetlands	948.1	65
Non-wetlands	255.4	35
Total*	1459	100

Source: National Wetlands Inventory 2012, US Department of Fish & Wildlife (wetlands); Lafourche Drainage Master Plan, 2008, T. Baker Smith (land use), Louisiana Speaks Master Plan, Danos Brown, 2008 (land use)

* The total area for all land classes is greater than total land area in the previous chart. That is because some of the area identified as wetlands in the wetlands chart overlaps with areas classified as water in chart above.

Table 9: Land and Water Area in Lafourche Parish (2010)

Parish Overall	Square Miles	Acres	Percent (%)
Total Area	1472.1	942,000	100
Water	390.3	249,796	26.5
Land	1081.8	692,204	73.5

Source: National Wetlands Inventory 2012, US Dept. of Fish & Wildlife, 2012 (wetlands), T. Baker Smith and Danos Brown, 2008 (land use)

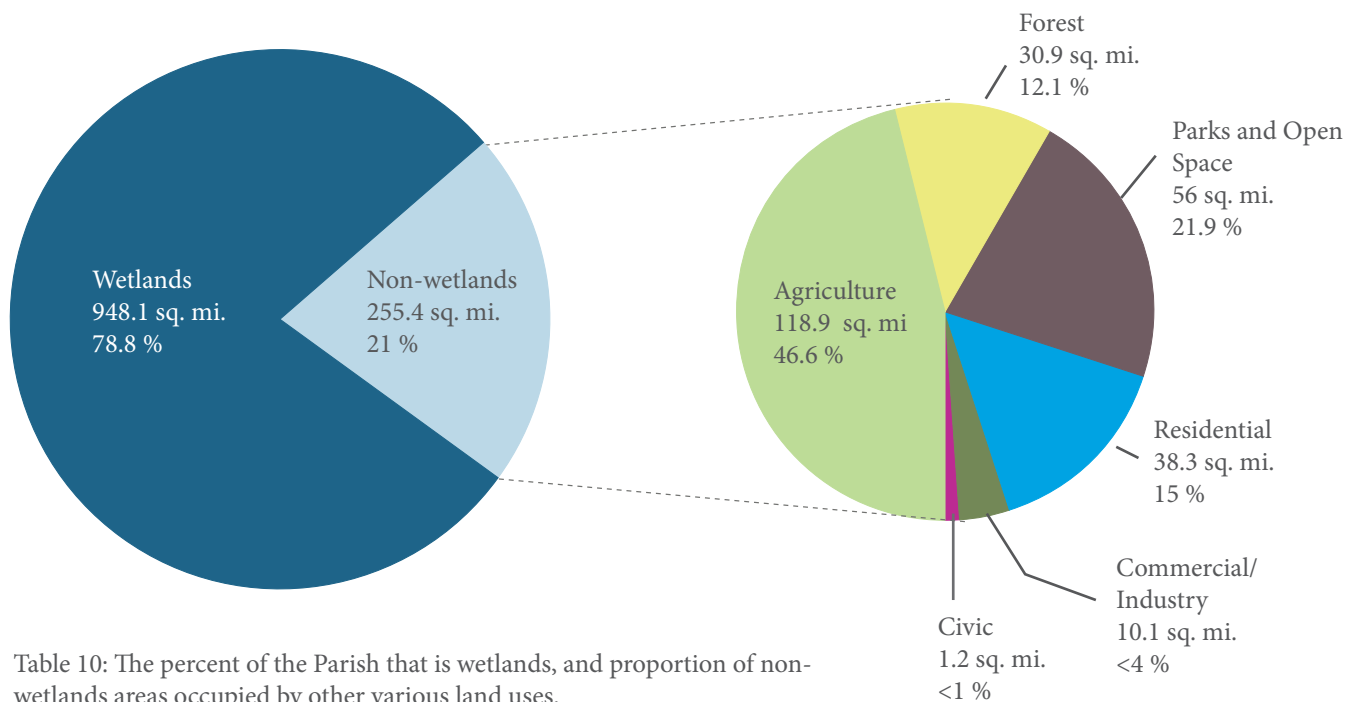


Table 10: The percent of the Parish that is wetlands, and proportion of non-wetlands areas occupied by other various land uses.

Source: National Wetlands Inventory 2012, US Department of Fish & Wildlife (wetlands); Lafourche Drainage Master Plan, 2008, T. Baker Smith (land use), Louisiana Speaks Master Plan, Danos Brown, 2008 (land use)

Land Use in Lafourche

Lafourche's population and employment centers are located along the portion of Bayou Lafourche that lies behind levees on land with forced drainage. In addition to occupying an area that is more than 25 percent water (Table 9), almost 80 percent of the land area in Lafourche is classified as wetlands (Table 10).

Within the non-wetlands area of Lafourche, land uses (Figure 10) are divided between agriculture (46.6%), parks and open space (over 21.9%), forest (12.1%), residential (15.0%), commercial/industrial (4.0%) and civic uses (less than 1.0%). The location of these different uses is illustrated by the map in Figure 18, which also differentiates between single-family and multifamily residential and identifies underdeveloped areas. Forest land is grouped under the agriculture/cropland category.

Over the next 20 years, in order to accommodate the projected population growth, new development will be necessary and will include a mix of housing, commercial and industrial uses. It is anticipated that this new development will occupy about 5,000 acres of land. Encouraging new development near and within existing communities and creating opportunities for new generations to live within the Parish is part of the vision for an economically sound and resilient future. In addition to the traditional large lot, single family development, Lafourche will need housing and commercial services for people who seek smaller, high-quality housing. These new homes will include options that are desirable both for both first-time job seekers and retirees.

Expanded housing options will better meet the needs of Lafourche's demographically shifting population. Nationally, housing preferences are trending toward safer, more walkable neighborhoods, including homes on smaller lots that are closer to schools, shops, and jobs.



Thibodaux

Downtown Cores

THIBODAUX

Thibodaux is the Parish's largest incorporated area and has a Planning and Zoning Commission and City Council that oversee development activities. While the population within city limits is only about 15,000, the adjacent unincorporated areas include a population of almost three times the City of Thibodaux's. The City is a tourist destination, frequented by visitors from New Orleans desiring to experience authentic Cajun culture.

Opportunities

Downtown Thibodaux is built along the banks of Bayou Lafourche and is home to some of the best preserved examples of historic architecture in the parish. Downtown Thibodaux is an ideal place to create opportunities for an urban environment, more welcoming to students, younger people, retirees, and others seeking smaller housing units close to entertainment and culture.

The Jean Lafitte National Historic site, located in Thibodaux, is a national draw and could be further elevated to serve as a gateway to the other historic areas down Bayou Lafourche.



Examples of future housing types that could be located in Lockport.

Current planning projects

The Thibodaux Comprehensive Zoning Ordinance and the Subdivision Ordinance are currently being revised and improved as part of a community visioning and zoning update process. As of fall 2013, the City of Thibodaux is reviewing their flood damage reduction ordinances as well as conducting a downtown parking study with the aim to enhance the livability of downtown.

Moving forward, new commercial development is expected to locate largely within the City limits, but residential and recreational areas will likely continue to expand to the east and west.

LOCKPORT

Lockport, with 2,500 residents, is the Parish's second most populous incorporated area. Lockport is located along the Company Canal. Lockport's strategic location along this canal has kept it a viable location for business since its incorporation in 1899.

Today the city's neighborhoods are traditional urban layout of Southern Louisiana with few

alleys, open roadside swales and numerous historic shotgun houses. The city includes a small downtown, a community theater, a boat museum, and community park with a boat launch, walking trail, and playground.

New commercial development is taking place along Highway 1, which was built as a bypass around the historical downtown. The City Council regulates lands uses and development through Lockport's Subdivision and Zoning Code.

The location of Lockport makes it an ideal place for development both in their new and old areas. Downtown Lockport is well positioned to support pedestrian amenities to complement the boat museum, theater, and park. An opportunity exists to connect the park with the Bayou Boardwalk along LA 308 using the Rita Bridge. Development and building restoration opportunities exist throughout the city including the potential for infill development on vacant lots.

Future development is likely to occur in the western and southern portions of the city due to the good roadway access and availability of vacant or redevelopable land. In the northern and eastern sections outside of the city, opportunity exists for residential and commercial infill development. One of the key focus areas for employee retention and attraction is supporting the boat building industry.

GOLDEN MEADOW

Golden Meadow is the least populous of the towns in Lafourche Parish and is the southernmost settlement within the South Lafourche levee. Golden Meadow's location as the furthest south protected area within the Parish and the closest town to Port Fourchon has resulted in housing and commercial growth closely tied to Port Fourchon and the local fishing industry.

Golden Meadow's Oak Ridge City Park includes a boat launch and a playground. This park has space for additional activities, including a weekly market. It could also serve as a trailhead for trails along the Bayou or connecting natural areas around Golden Meadow.

Golden Meadow does not have a traditional downtown, but the commercial center is located up and down the bayou in a horizontal mixed-use fashion. A system of boat docking and business services takes advantage of the proximity to the gulf and the protected area of the bayou.

New development is occurring along LA 3235 and moving away from central Golden Meadow. There is limited space for new development within the municipal boundaries of Golden Meadow so it will be important to plan for existing and future development areas, including infill development that supports the existing city center.

Town Centers

Several established unincorporated areas along the bayou are experiencing both commercial and residential growth. Proper infrastructure is needed to support the growth in these areas. Development guidelines that will both enhance and streamline development should be considered for each area. In addition, the Parish can use this plan as a guide for increasing the capacity of infrastructure networks, thereby directing growth to desired areas.

When new development takes place, it is ideal to look at existing connections to recreational areas (such as bayous and swamps), along with adjacent housing areas. In addition, parking lots should be seen as an asset to development by providing connections to one another and beautifying the existing commercial area to make additional development more attractive and compatible with the surrounding area.

RACELAND

Raceland's location along major travel routes makes it attractive for commercial, industrial, and residential redevelopment.

Raceland's old town center and retail centers are natural areas for mixed use redevelopment and infill. A trail system along the Bayou is another opportunity to enhance quality of life; Raceland would be able to seek funding for a trail system through the Safe Routes to School program, which aims to enhance walkability to and around the schools. There are possibilities for connecting Raceland and Mathews via pedestrian pathways that would allow residents in Raceland and Mathews more access to more diverse services and businesses.



Concept of possible development for a more walkable Mathews

Future development should be consistent with and contribute to the Parish's culture and beauty. This is especially true for the area located near the future interchange of US 90 and I-49.

Raceland is anticipated to grow in the future. Potential opportunities include a mixed-use center with housing, services, office and retail uses along 308, as well as a potential logistics center to support the transfer of goods to and from Port Fourchon to the north of 308. A logistics center, that supports the Port, with access to other parts of the parish, Louisiana, and the United States would open up Port Fourchon for future expansion. Nationally freight transportation has become more important than ever – the system is the nation's link to the global economy and the conduit for ensuring that consumer and business needs are met.

MATHEWS

Mathews is the governmental and shopping destination for central Lafourche. It is also home to the only major hospital within the Parish between Thibodaux and Golden Meadow. One of the Parish's three high schools is located in Mathews.

And the community recently opened a popular Saturday Central Market. The area has experienced significant residential growth in the last 30 years and demonstrates potential for future commercial development.

The current strips of retail in Mathews are aging. There are opportunities to improve pedestrian and vehicular safety in and around the community's center. Redevelopment and infill will help to revitalize the old town center and retail areas.

LAROSE

Larose is located at the junction of the intercostal waterway and Bayou Lafourche, a desirable location for commerce and a jumping-off point for water-related recreational activities.

The town's access to water and the Larose Regional Park and Civic Center are significant community assets and make Larose ideal for attractive Bayou-side development. The community's strategic location and the existing roadway and sewerage infrastructure make it a candidate for infill development.

Opportunities for improving quality of life include sidewalk improvements with the commercial areas and neighborhoods, and prioritizing access to the bayou. The potential for a boat launch and marina should be studied and could coincide with the existing Larose Regional Park and Civic Center.

The historical aspect of Larose should be celebrated. By using the church and surrounding area as a strength for the area, the town can gain even more identity as the area begins to attract and retain employees from the businesses on the bayou.

Small, Unincorporated Communities

Des Allemands, Choupic, Chackbay, Kraemer, Gheens, Bayou Blue, Galliano, Leesville, and Cut Off are also expected to experience growth and should grow in a way that celebrates and contributes to the area's unique culture and historic structures. As opportunity occurs, community leaders should partner with business owners and developers to encourage development that enhances the community and provides a range of housing opportunities to support future development.

Employment Centers

Across the Parish are various areas that can be identified for future employment centers. Development in these centers can be encouraged by directing infrastructure investment to these potential growth areas, thereby providing needed services and access to potential commercial and residential uses.

PORT FOURCHON

Port Fourchon is the Parish's biggest generator of economic activity. The sea port primarily services domestic deep-water oil and gas exploration, drilling and production in the Gulf of Mexico. The port currently services more than 90% of the Gulf of



Bayou Lafourche



Our Lady of the Rosary Church, Larose

Mexico's deep-water oil production and the area provides 16-18% of the US oil supply.

Workers from throughout the region and the nation travel to Port Fourchon to work. Employees stay on land anywhere from a few days to a few weeks or months before leaving for off-shore assignments. There is a shortage of short-term housing in the Parish and a need for quality housing to meet workers' needs. While most workers travel by single occupancy vehicles, there is also a need for port worker transportation to and from housing. Additional information and recommendations related to the Port are located in the Economic Development Chapter.

BAYOU LAFOURCHE

The Bayou itself is an employment center, but the uses vary from north to south. In the north, the bayou is used almost purely for recreational purposes, with an emphasis on the Jean Lafitte National Park. Recreational boating is an important part of the culture of Lafourche. Access should be preserved and could be expanded to promote additional activities on the Bayou.

In the central and southern parts of the Bayou, boat building and fishing activities surpass other recreational uses. Dredging in these areas is a priority to ensure passage for industry vessels. Bayou-side preservation is crucial for water quality and retaining and attracting boaters who are drawn to the Bayou by the natural landscape and wildlife.

Residential Neighborhoods and Subdivisions

Cities and towns along the bayou are home to smaller lot development and multi-family housing units. Larger lot single family homes are frequently located in-between cities. When new subdivisions are planned, links to recreational networks – trails, bayous and parks – should be prioritized. Prioritizing existing natural and historic sites when developing housing will help to reinforce Lafourche Parish as a cultural and recreational destination. To increase connectivity and provide for efficient use of the roadway system, new subdivisions should provide for future connections between adjacent subdivisions.

Buildings and infrastructure should be designed and constructed with adjacent properties and provisions for sewerage in mind. New development should not expand the risk of flooding on adjacent properties and should consider National Flood Insurance Program's (NFIP) Community Rating System (CRS) credits. Adopting and implementing uniform development standards to avoid or mitigate

environmental impacts will speed the process of making long-lived and low-impact development practices widespread in Lafourche Parish (see pages 80-81 for diagrammed approaches to flood protection).

The family subdivision is a crucial part of Lafourche and should be preserved. The current code should be evaluated to ensure these developments continue to address the needs of families wishing to subdivide their land.

Agricultural

SUGAR CANE

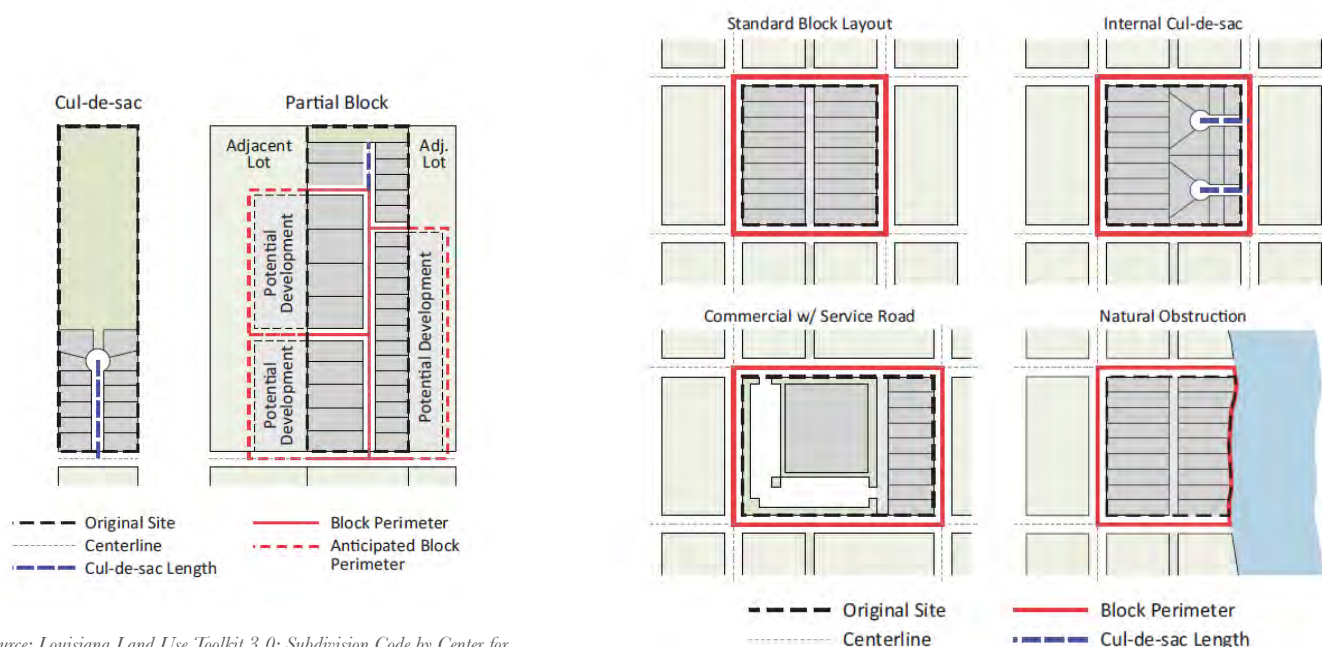
Sugar cane fields are a tremendous economic and cultural asset to the Parish. In recent years, the loss of sugar cane to residential and commercial uses has been increasing. Loss of agricultural land should be tracked and land that is viable for agriculture purposes should be kept in agricultural uses to the full extent possible.

Recreational and Natural Areas

Bayou Lafourche provides a range of recreational opportunities, including fishing, bird watching, canoeing and pirogue activities. The Bayou provides an ideal location for rowing events, both competition and individual recreational uses. Additional options should be explored, including using the Bayou for university rowing teams.

Areas outside the levees should continue to be restored to ecological health by enhancing their potential for contributing to their storm buffering capacity, conservation or restoration of wildlife habitat, agricultural or seafood production, and the emergent local ecotourism economy. Residential development and most types of commercial development should be discouraged outside the levees through the floodplain management review and permitting process. Goals, strategies, and locations for maximizing land resources outside the

Figures 19: Possible Connections on Arpent Lots for Future Block Systems



Source: Louisiana Land Use Toolkit 3.0: Subdivision Code by Center for Planning Excellence.

levees are detailed in the Economic Development and Culture and Recreation Chapters.

BAYOU LAFOURCHE

Development along Bayou Lafourche should correspond with both private and public use of the Bayou. As sites along the Bayou are identified for public access, these sites should correspond with commercial and residential activity. This includes adjacent development and links to development nearby. In addition, developers and residents should be clearly advised where state servitude lie as to not hinder the flow of Bayou Lafourche.

FOURCHON BEACH

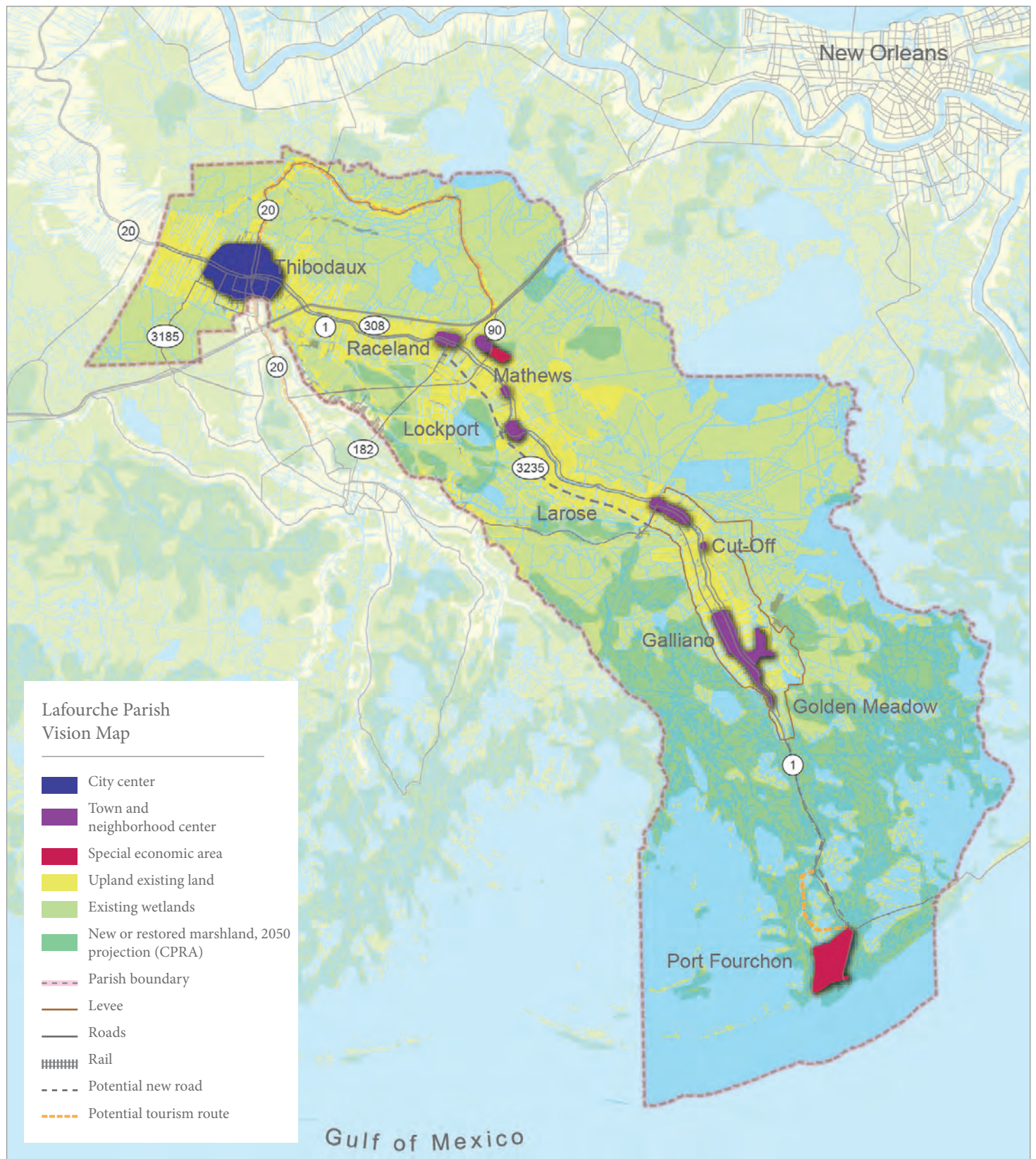
Fourchon Beach is a good location for public beachfront access and recreation. The South Lafourche Beachfront Development District, the entity charged with promoting recreation at Fourchon Beach, recently adopted its South Lafourche Beachfront Strategic Plan Document, which identified goals for enhancing the beach. These goals of that plan

included public access to the beach and other amenities, parking, restrooms, changing areas, and showers. The parish should explore funding and implementation of key components of the South Lafourche Beachfront Strategic Plan Document

LEEVILLE

Leeville is Lafourche Parish's first cultural district and is the gateway to the Gulf of Mexico. Located outside the levee, the incorporation of resilient building techniques should be used to address both flooding and wind impacts. Leeville is an ideal location for camps, vacation rentals, and quality extended-stay housing. This type of market will ensure the continuation of needed commercial services in the area, while catering to the fishermen who frequent the area.

Figure 20: Lafourche Parish Vision Map



Land Use Strategies

Lafourche Parish manages land use through the application of the subdivision ordinance, the State uniform construction code, and the Lafourche Local Coastal Zone Management Program. The Parish manages land use decisions throughout the unincorporated area of the Parish. Before building permits may be issued by Lafourche Parish for projects that require a Coastal Use Permit, authorization must be granted by the Louisiana DNR Office of Coastal Management.

Lafourche Subdivision Ordinance

The Parish regularly updates the Subdivision Ordinance. The most recent amendments were made in the fall of 2013 to incorporate recommendations from the Drainage Master Plan. Specific updates to be considered in the subdivision ordinance include the use of recreational vehicles (RVs) and trailer park subdivisions. RVs and trailer parks are increasingly becoming a standard for temporary housing. These uses are typically less able to withstand storm events and are sometimes perceived as eyesores by permanent residents. New guidelines for workforce housing should be considered to streamline the development process and give more flexibility to the design of the housing units. This change would assist companies providing workforce housing, while ensuring that the integrity of the existing neighborhoods are preserved.

The Subdivision Ordinance may also be updated to require minimum standards for parish park and recreation facilities. Establish requirements for parks to be provided at the following recommended levels of service as development occurs in the parish.

State Uniform Construction Code

The State Uniform Construction Code is applied throughout the state, and shaped through the Louisiana state uniform construction code council, a body of 19 members appointed by the Governor comprised of individuals with various professional backgrounds including construction, engineering, architecture, insurance and local government. The primary function of the council is to review and adopt the state uniform construction code, provide training and education of code officials, and accept all requests for amendments of the code, except the Louisiana state plumbing code.¹

The Parish should continue to monitor and conform to these standards to ensure compliance. By doing so it will assist with flood protection and overall homeowners insurance rates.

Louisiana and Lafourche Coastal Zone Management Programs

The regulatory role of the Coastal Zone Management Office is to “balance development and conservation,” and “balance multiple uses and limited coastal resources.” The Coastal Zone Management Program is administered locally through the Office of Coastal Management in Mathews. The area of the Parish falling into the coastal zone (most of Lafourche, but not including Thibodaux) are divided into Environmental Management Units (EMUs) which have been inventoried for their critical environmental resources.

¹ Source: Louisiana State Uniform Code Council

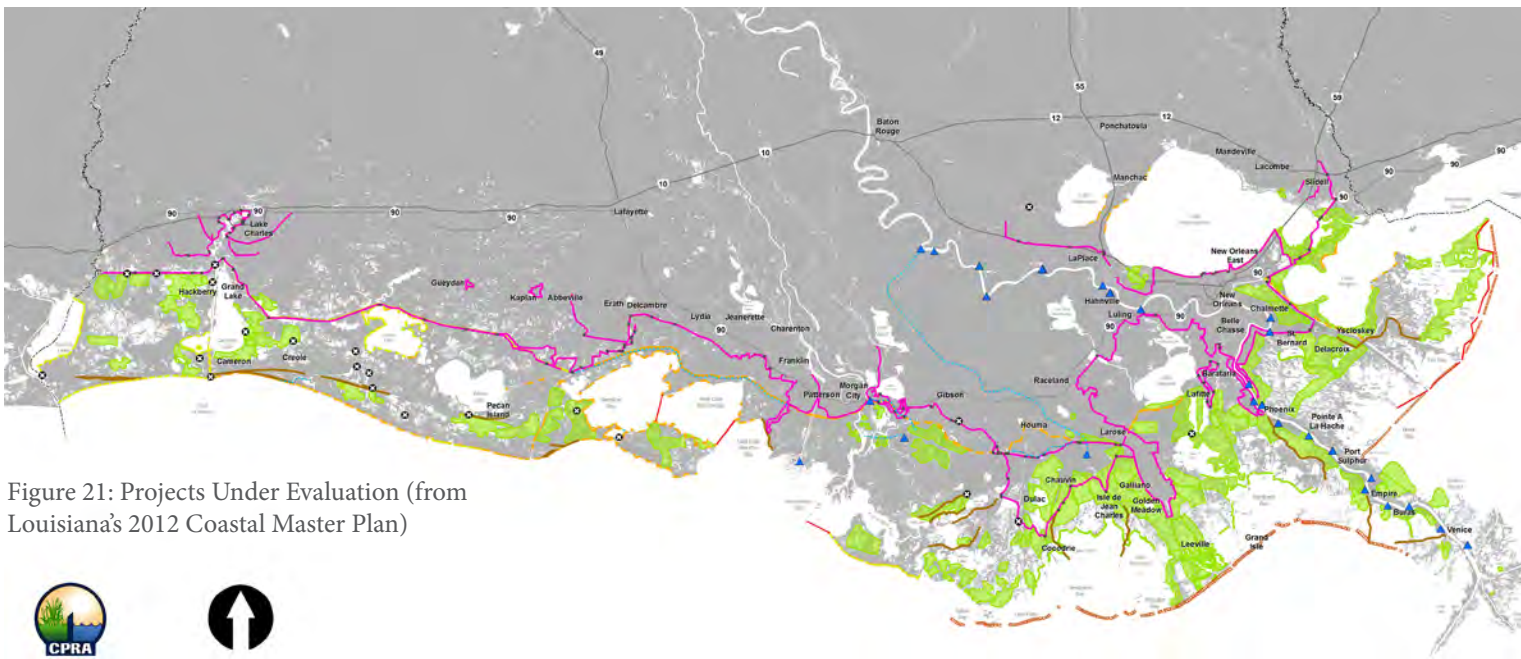
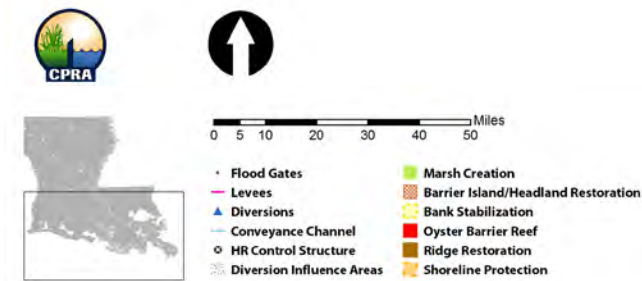


Figure 21: Projects Under Evaluation (from Louisiana's 2012 Coastal Master Plan)



Permits for development in the Coastal Zone are administered through the Coastal Use Permit (CUP) Program. Within the Coastal Zone, applications for CUP's are required for projects that may impact coastal waters such as any project involving dredge or fill, water control structures, bulkheads, oil and gas facilities, marina or residential development.

The CUP Program requires persons planning public, private, or commercial projects within the coastal zone to apply for authorization prior to construction of any project that is not exempt from regulation. A prime concern of the CUP Program is to regulate activities that may increase the loss of wetlands and aquatic resources, as well as to reduce conflicts between coastal resource user groups. The rules and regulations governing Coastal Use Permits is found in the Louisiana Administrative code under Title 43, Part 1, Chapter 7 §723 (pg. II-2).

Wetland conservation: Louisiana Coastal Wetlands Conservation Plan (LCWCP) program was enacted under the federal Coastal Wetlands Planning,

Protection, and Restoration Act (Public Law 101- 646, Title III – CWPPRA) by agreement with the Federal resource agencies. The goal and requirement of the Plan is to achieve no net loss of wetland value in the coastal areas of Louisiana as a result of developmental activities. Successful implementation enables Louisiana to reduce its match to federal restoration funds from 25% to 15%.

If a project is deemed “of local concern,” it can be permitted through a Parish-level Coastal Use Permit; giving the Parish an increased level of local control over activities and uses that would typically be regarded as uses of local concern but that would fall to state oversight in the absence of a local coastal management program.

Resources for Implementation

A number of plans and studies are available to guide development in Lafourche. In addition to several plans that are available on a state-wide basis, the Parish has been very forward-thinking in preparing studies addressing specific Lafourche

issues. The following list provides a short summary of some of the available plans and studies that should be referred to throughout future planning and development in Lafourche.

LAFOURCHE PARISH MASTER DRAINAGE PLAN, 2012

This plan researched available information and received public input to develop computer models that represent the “backbone” of the Parish’s forced and gravity drainage systems to help the Parish plan future drainage improvements. Forty-one individual forced drainage systems and one gravity drainage system were modeled under the project. Following public outreach, data gathering and review, Graphic Information Systems (GIS) inventory and a review of existing ordinances, the plan made project and policy recommendations to address the Parish’s drainage issues.

COASTAL USER’S GUIDE TO THE LOUISIANA COASTAL RESOURCES PROGRAM, 2013

The Coastal User’s Guide the Department of Natural Resources provides essential information needed by the public concerning the Louisiana Coastal Resources Program. This manual is a supplement to the Louisiana Coastal Resources Program Final Environmental Impact Statement (FEIS) which is the official program document for Federal approval pursuant to the Coastal Zone Management Act. This user guide provides concise and up-to-date information on how to apply for a coastal use permit and for projects on federally excluded lands. There is also information included concerning local parish programs. Find the plan at the Department of Natural Resources.²

THE BEST PRACTICES MANUAL FOR DEVELOPMENT IN COASTAL LOUISIANA

An easy-to-use resource, the manual explains and illustrates the latest available international, national and local best practices in coastal development and recommends relevant strategies at the community scale as well as site and building scales to assist communities in their efforts to preserve their way of life.

THE COASTAL MASTER PLAN 2012

Prepared by the Louisiana Coastal Protection and Restoration Authority this plan presents the opportunity for the state to take bold action to save the coast and secure south Louisiana’s future. The plan is based on a two-year analysis involving some of the state’s best scientists as well as national and international specialists. The state used this analysis to select 109 high performing projects that could deliver measurable benefits to Louisiana communities and coastal ecosystem over the coming decades. The plan proposes that with these projects fully funded, at the estimated cost of \$50 billion, and constructed, the state could substantially increase flood protection for communities and create a sustainable coast.³

LOUISIANA LAND USE TOOLKIT

The Land Use Toolkit is an online resource for local jurisdictions. The Toolkit contains a model set of development regulations that can be used to help guide future growth and development in a sustainable and economically competitive manner. The Toolkit is a shared resource from which parishes and municipalities can adopt a complete development code or select cafeteria-style from individual tools that meet their specific needs. A supplemental coastal toolkit with regulations geared

² www.gpo.gov/fdsys/pkg/CZIC-ht393.../CZIC-ht393-l8-c65-19xx.pdf

³ http://issuu.com/coastalmasterplan/docs/coastal_master_plan-v2?e=3722998/2447530

specifically to coastal areas is also available.⁴

THE HOUMA-THIBODAUX URBANIZED AREA METROPOLITAN TRANSPORTATION PLAN 2035

This plan was produced by the Houma Thibodaux Metropolitan Planning Organization for the Houma-Thibodaux Metropolitan Planning Organization (HTMPO). The MTP is a thorough portrait of current conditions and future projections that affect area transportation. The MTP looks at current conditions, including system inventory, land use and zoning information and related demographic data, and travel characteristics and markets. The MTP lists major road improvements and uses predicted traffic volumes for the years 2015, 2025, and 2035 to forecast the roads that will be “deficient,” meaning they will not be able to carry the projected traffic volume efficiently. Strategies are proposed to address deficiencies. The MTP also discusses public transit, roadway safety, bicycle and pedestrian transportation, security, and environmental mitigation.⁵

MASTER PLAN FOR BAYOU LAFOURCHE, 2012

Created by the Bayou Lafourche Fresh Water District, this plan provides guidance to the District to manage Bayou Lafourche for the many users, customers, residents and businesses along the Bayou.

BAYOU LAFOURCHE CORRIDOR PLAN, 2007

This plan was a joint effort by the Ascension, Assumption, and Lafourche Parish governments along with the municipalities of Donaldsonville, Napoleonville, Thibodaux, Lockport, and Golden Meadow. It identifies and expands upon existing cultural and ecological tourist attractions that offer economic benefits along the bayou and to propose new projects. It also analyzes and prioritizes these projects according to citizen’s desires.

LAFOURCHE PARISH HAZARD MITIGATION PLAN UPDATE (2010)

This plan is an update to the 2006 parishwide Hazard Mitigation Plan, which included the three incorporated communities in the parish, Thibodaux, Lockport, and Golden Meadow, and all unincorporated areas. The plan included updates to the risk assessment section, the hazard mitigation plan, and mitigations strategies, including a revised a list of priority projects. The updates were made to reflect the changing communities, landscapes and climate.

BAYOU REGION CLEAN WATER ACTION PLAN

An analysis was conducted of the existing treatment capacity of sewerage systems in Assumption, Lafourche, Terrebonne and St. Mary Parishes. There are only a very small number of systems that are owned and maintained by the Parish. There are a few public special sewerage districts that operate sewerage systems. The report identifies areas of anticipated population growth and whether sewerage capacity is available in these areas.

⁴ <http://www.landusetoolkit.com/> or <http://coastal.cplex.org/toolkit/>.

⁵ <http://htmpo.org/MTP.aspx>

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

The Comprehensive Economic Development Strategy, updated in 2012, coordinates regional economic development efforts between the different entities and agencies concerned. There are four main elements:

1. An analysis of the regional economy and the external trends and forces that impact it
2. A vision encompassed in the statement of the region's goals
3. The action plan developed to implement the goals
4. An evaluation to determine the effectiveness of the action

LAND USE VISION

In the next twenty to thirty years, growth and expansion of urban areas occurs in places with good existing infrastructure capacity. The Parish has planned for future land loss and population growth resulting in quality infill, redevelopment, and walkable neighborhoods in the existing communities of Thibodaux, Raceland, and Larose.

Policy Recommendations

Goal 1: Plan for future land loss and population growth parish-wide.

Strategy 1.1:

Adopt Plan Lafourche vision and land use maps to guide future development and investment.

Actions

- 1.1.1 Identify suitable and developable land in the Thibodaux, Raceland and Lockport area to locate a variety of housing types, creating a balance between single and multi-family, affordable and high-end rentals, and compact and large lot detached housing.
- 1.1.2 Identify locations for long-term green and open spaces, and determine whether they are candidates for restoration, conservation, recreation, agriculture, or a combination thereof.
- 1.1.3 Make a long-term commitment to fund a staff position for an Implementation Planner who is tasked with overseeing the implementation of the Comprehensive Resiliency Plan.
- 1.1.5 Review Capital Improvement Plan (CIP) recommendations and align CIP funding priorities with the goals of the Comprehensive Resiliency Plan.

Strategy 1.2:

Implement the strategic plan by creating policies that encourage infill, redevelopment, and new neighborhood development in existing Lafourche communities, thereby helping communities to undertake small area planning that supports the parish-wide vision.

Actions

- 1.2.1 Draft agreements between cities and Parish to coordinate which areas in the region should be the focus for infill, new growth, or agricultural conservation.
- 1.2.2 Coordinate plans for new infrastructure and services to distribute amenities evenly among the Parish population.
- 1.2.3 Coordinate plans to avoid or minimize negative development impacts across jurisdictions.

Goal 2: Create complete communities that provide access to transportation options, housing, recreation, education, retail, and employment all in proximity to one another.

Strategy 2.1:

Address community-level needs through small area planning.

Actions

- 2.1.1 Prioritize and incentivize infill development by identifying and banking properties in areas that are serviced by roads, water and sewer; through streamlining the permitting process for infill development; and by guiding development to established communities.
- 2.1.2 Collaborate with Parish communities to develop comprehensive small area plans in current or future population centers that address special areas of concern such as the need for affordable housing, the need for workforce housing, needs of underserved populations, and appropriate areas for infill development. Prepare community plans for the following areas: Port Fourchon, Galliano, Cut Off, Larose, Gheens, Lafourche Crossing, Chackbay/Kraemer, Fourchon Beach Plan update.
- 2.1.3 Create a small area plan that details the potential for creating over the long-term a Main Street environment in the US 90/LA-308 area.
- 2.1.4 Adopt current Bayou Lafourche Corridor and Pedestrian Bicycle Plans.

Strategy 2.2:

Adopt and Implement Development Standards at the community level using the Best Practices Manual for Development in Coastal Louisiana (2012), the Louisiana Land Use Toolkit and the Coastal Toolkit as guides.

Actions

- 2.2.1 Adapt strategies from the Best Practices Manual and Land Use Toolkit to fit community needs. Specific standards to consider for initial adoption include:
 - Establishing drainage development standards, and implement other drainage study recommendations to ensure that new development does not create drainage problems for existing uses.

- Developing access standards to keep roads and highways safe and connected.
 - Establishing setback standards that do not create site conflicts with neighboring buildings.
 - Enforcing existing bayou setback right-of-ways and ensure current standards are consistent with maintaining the integrity of public and private use of the bayou.
 - Adopting an ordinance requiring minimal landscaping standards along street frontages for commercial uses.
 - Adopting an ordinance requiring minimal parking standards for non-residential uses.
 - Evaluate housing in flood zones and recommend future construction that is consistent with the community character (i.e. pier elevation) and does not result in flooding of surrounding areas
- 2.2.2 Integrate adoption of development and design standards into small area planning processes.
 - 2.2.3 Implement small area plans and development/design standards.

Strategy 2.3

Create a program of community-level solutions to make small-scale improvements that address quality-of-life issues.

Actions

- 2.3.1 Prioritize community-level improvements. Package them together and create a small bond program to pay for them.
- 2.3.2 Projects could include improvements such as drainage improvements that address internal flooding within existing developments, sidewalk and neighborhood connections, and neighborhood parks and trails.

WHAT IS A SMALL AREA PLAN?

A small area plan is any plan that addresses the issues of a portion of a city or parish. It can engage issues and people at an intimate scale. The result can be a richly detailed plan that addresses the area's unique issues with tailored solutions. The small area planning process is designed to generate widespread stakeholder consensus that will lead to efficient adoption and implementation of the plan. Small area plans, ideally, are developed by property owners and area stakeholders and then implemented through zoning changes that allow the kinds of development described in the Vision.

A citizen advisory committee, which helps guide the small area planning process, is a group of informed citizen stakeholders including, but not limited to landowners, residents, business owners, architects, developers, and builders who have an interest in the area. This advisory committee should represent a full range of interests that meets on a regular basis to critically review analysis and products at each step of plan formation. In Lafourche Parish Small Area Plans will be directed by the Planning Commission.

STEP 1: COLLECT BACKGROUND INFORMATION, DEVELOP A COMMUNITY PARTICIPATION PROCESS

Step 1 will provide a context, data and the framework for conducting small area planning.

1. Define the planning area.
2. Develop a community participation program.
3. Conduct an existing conditions assessment.

STEP 2: DEVELOP A VISION

A vision captures the community's hopes for the future and guides the projects, programs and plans that will be identified to make the Vision a reality.

1. Prepare a vision for the community.
2. Present a graphic, written and pictorial vision of the community's aspirations.

STEP 3: PREPARE A PLAN THAT MOVES THE COMMUNITY TOWARDS THE VISION

Plans contain goals, objectives and strategies and should identify ways to create resilient, sustainable communities and achieve the vision identified in Step 2.

STEP 4: IDENTIFY APPROPRIATE IMPLEMENTATION STRATEGIES AND CREATE AN IMPLEMENTATION PLAN

1. Examine circumstances.
2. Prioritize implementation strategies.
3. Develop an action plan.
4. Identify issues.
5. Begin implementation.

Implementation tools cover a range of issues, including:

- Facilities
- Transportation
- Public investment tools
- Regulatory tools
- Environmental tools

STEP 5: IDENTIFY FUNDING SOURCES

Excerpted from the Best Practices Manual for Development in Coastal Louisiana, 2012

Chapter 5: Resiliency and Hazard Mitigation

Introduction

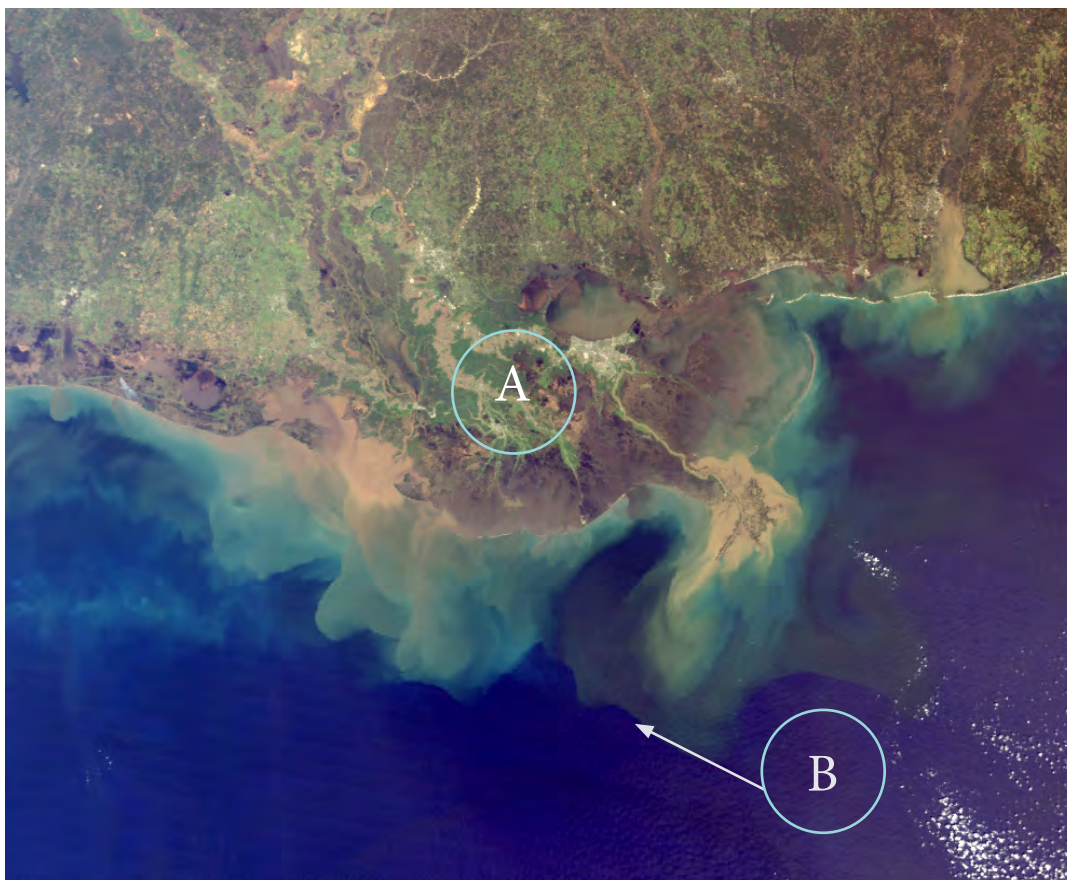
Resiliency starts with an understanding that Lafourche Parish is an integrated part of the far larger Mississippi River Delta. In turn, the delta is part of a larger, long-term, set of dynamic force that extends beyond the existing system of rivers and bayous, and over time, has shaped the region's land and created a complex and ever-changing landscape. Today, ongoing natural forces and human actions across the delta continue to contribute to these shifting conditions.

Lafourche Parish is built along a historic Mississippi River channel, which is now the much smaller Bayou Lafourche. The bayou's only consistent source of fresh surface water is located where it forks south away from the current Mississippi River channel, and is supplied with the aid of a small pump. Although the water no longer provides any river sediment to replenish the Parish's wetlands, it is still critical as the primary source of drinking water. Most of the settlement that occurred until the second half of the twentieth century was located on high ground, created by the sediment deposits left during the seasonal flooding of the river and bayou. Seasonal flooding created the characteristic topography and soil composition of the delta where more stable clay soils settle near the river and bayou channels and then transition into finer-grained silts and highly organic mucks as the ground moves down and further away. This natural process has created the Parish's current development patterns.

Resiliency is guided by an understanding of the surrounding delta, how the land in the Parish was created, and the characteristics of the soils and natural drainage patterns. Rising sea levels and a subsiding delta create conditions that threaten communities all along the coast, including Lafourche Parish.

Resiliency and Hazard Mitigation Goals

1. Establish areas where site level development should occur that will enhance long-term resiliency and align with the Vision map.
2. Improve resiliency to floods and other natural disasters by utilizing best practices for coastal development.
3. Identify and pursue preventative measures that will reduce damages from future hazards.
4. Enhance public awareness and understanding of disaster preparedness.
5. Continue work to lower insurance premiums.



Historically, the Mississippi River Delta was an ever-changing ecosystem with a Deltaic cycle that lasted 100 years.

A = Mississippi River confinement

B = Sediment falls of the continental shelf

Figure 22: Satellite View of the Mississippi's Sediment Flow into the Gulf

Source: NASA

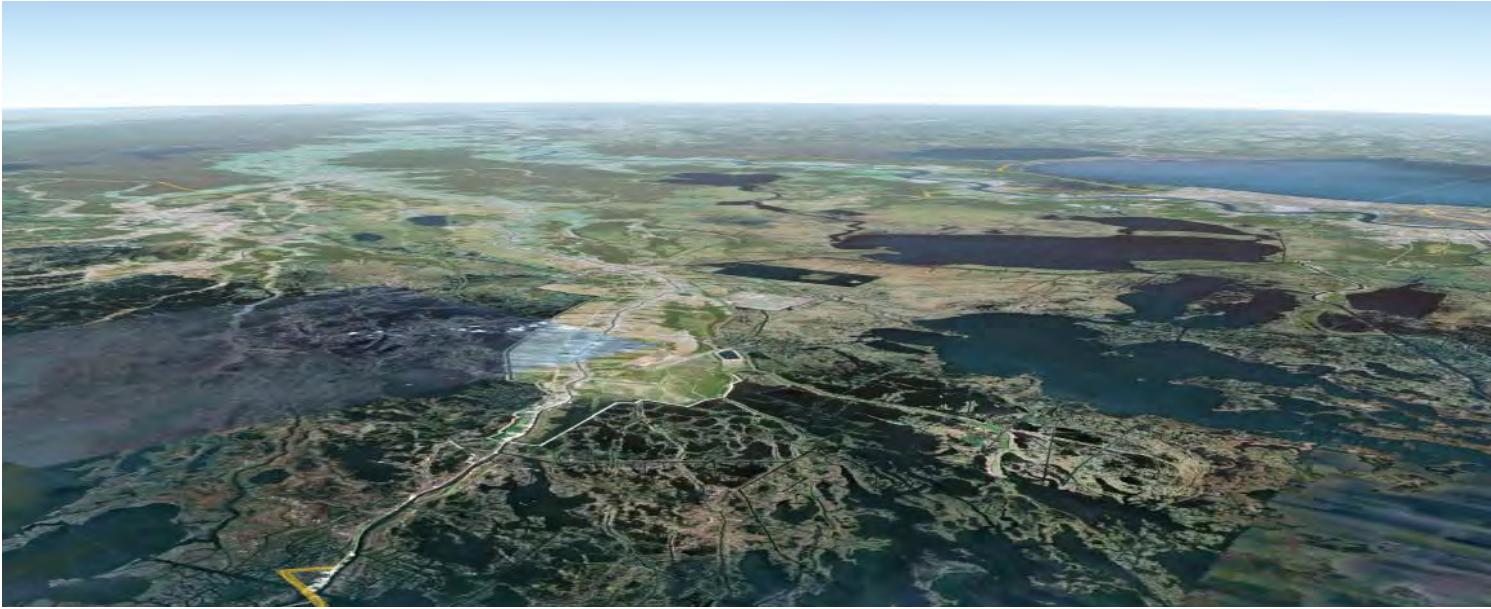


Figure 23: Satellite View of the Mississippi Delta

Source: Google Earth

Background

For many years Parish agencies have continued to address the many complex resiliency issues impacting the future of the Parish, with numerous policy makers, scientists, and community activists providing leadership on the issues facing coastal Louisiana. However, outside influences—both natural and manmade—continue to have an impact on coastal resiliency and need to be integrated into the Parish’s long-term systems. This chapter discusses the many influences, from the delta context to state and federal policies, and identifies opportunities for coordination to continue Parish resiliency efforts that will result in strengthening the Parish’s resiliency efforts and preserving natural and cultural amenities.

Understanding the context of the delta and focusing on improved resiliency is central to minimizing the impact of storm and flooding events on human health and safety, economic vibrancy, and natural resources. A principle of increased resiliency also helps to maximize economic vibrancy and diversity, so the Parish is not as vulnerable in the case of a downturn in any particular industry.

“Louisiana’s wetlands are being lost at a rate of approximately 25-35 square miles a year. Nationwide, more than 100 million acres, one-half of all wetlands, have been converted to open water or other habitats since colonial times. In Louisiana, wetlands are lost naturally through compaction and sinking, saltwater intrusion that kills vegetation, hurricane and storm damage, wind and wave erosion, lack of sedimentation, and other processes. Man-induced losses occur from dredging and spoil disposal, draining and filling of lands, levee building, canal digging, mineral extraction, agricultural practices, and industrial and urban expansion.” -- excerpt from “A Coastal User’s Guide to the Louisiana Coastal Resources Program” (2013)

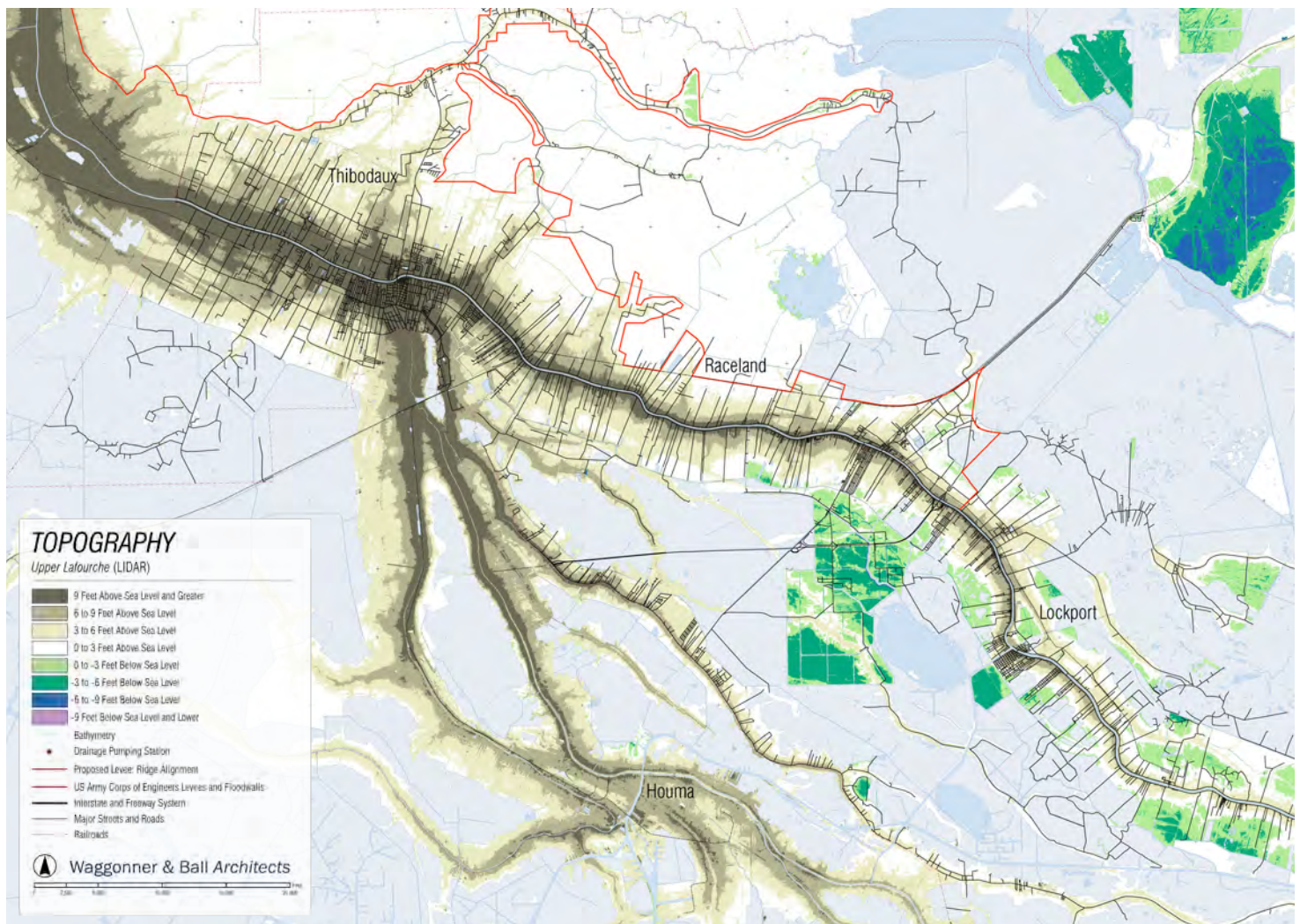


Figure 24: Topography in Lafourche

UNDERSTANDING THE DELTA CONTEXT

Within Lafourche Parish, each community sits on a thin finger of land that is protected by the surrounding swamps and marshes. High ground is close to and at sea level in the southern part of the Parish, and therefore easily inundated by commonplace storm surges if not protected by wetlands.

It is important to define risk in the long-term – taking into consideration overall changes to the landscape – and not just in terms of the short-term risks posed by a single rainstorm or hurricane. These reversible and irreversible processes alter the basic

topography and hydrology of the Parish and can have lasting effects on infrastructure, cost-benefit analyses for public works projects and development, quality of life, ecosystems, and how the Parish weathers major storm events now and in the future. Decisions made now must do more than simply address immediate and short-term risks, and must instead be informed by longer-term considerations, both historic and into the future. Soils and groundwater are typically overlooked in the short-term, and must be addressed, because damage caused by low groundwater levels and soil oxidation is irreversible and increases risk over time.

Presently, coastal Louisiana is experiencing increasing amounts of wetland loss, wetland alteration, and water quality degradation. Most of these are naturally occurring processes, such as subsidence, saltwater intrusion, sea level rise, hurricanes and other storms, and wind and wave erosion. Human intervention also speeds up wetland loss – canals and diversions causing elevated salt water intrusion, levees blocking natural silting and increased rates of subsidence due to forced drainage and to oil and gas activities are all manmade impacts. Saltwater intrusion creates changes in marsh types and may kill salt-sensitive vegetation.

The Land Use Concept Map (see page 54) illustrates land uses that are appropriate for the topography and hydrology of the region as shown in map 24. Community centers and infrastructure are shown in areas of the Parish that are located on higher ground. New and restored wetlands are identified in low lying areas, current wetlands and those that are expected to become wetlands in the future. Integrating the Parish's landscape into the planning process will help increase safety and resiliency by directing development and infrastructure outside of areas that are most vulnerable to flooding, and conserving open space for water storage and management in areas most susceptible to subsidence.

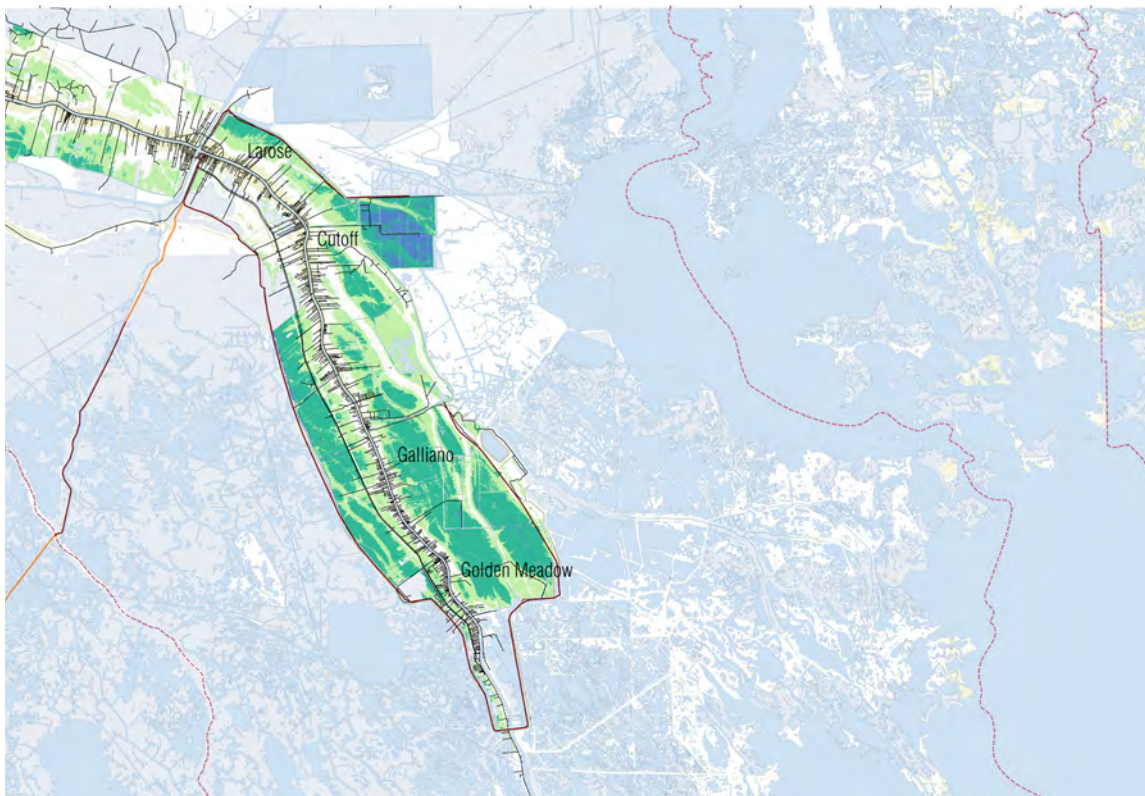
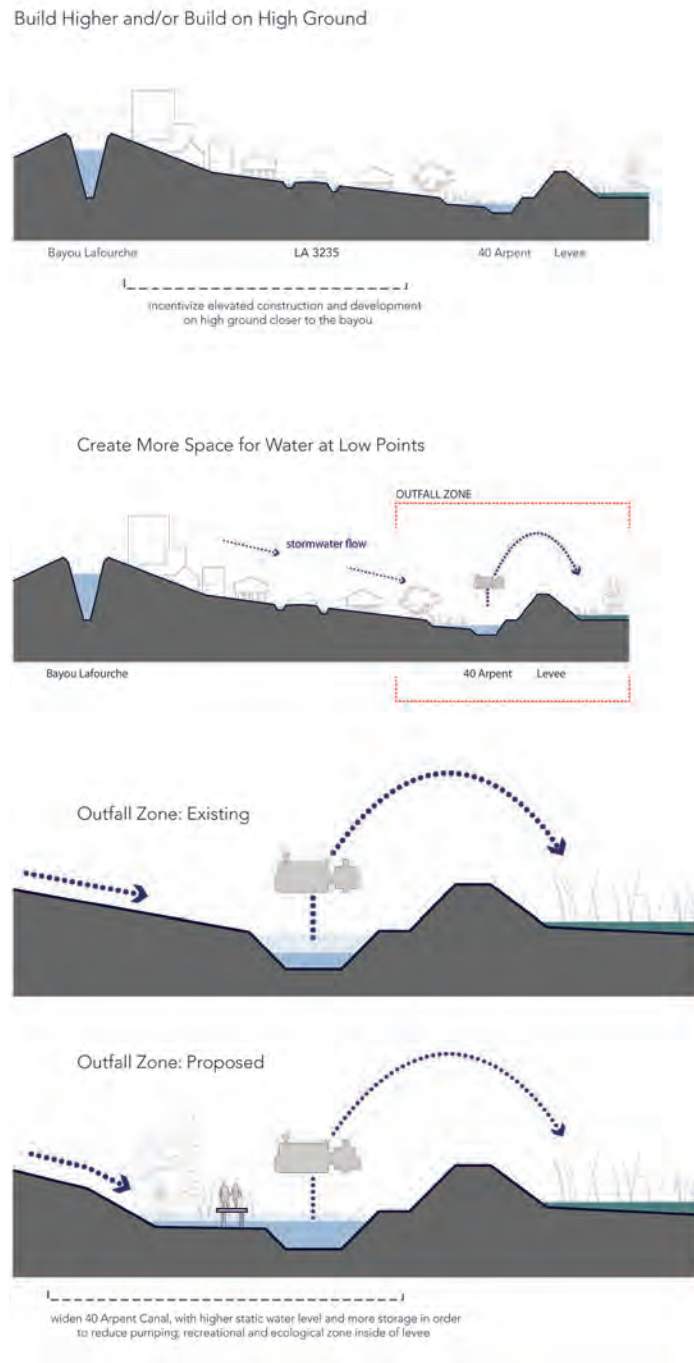


Figure 25: Approaches to flood protection



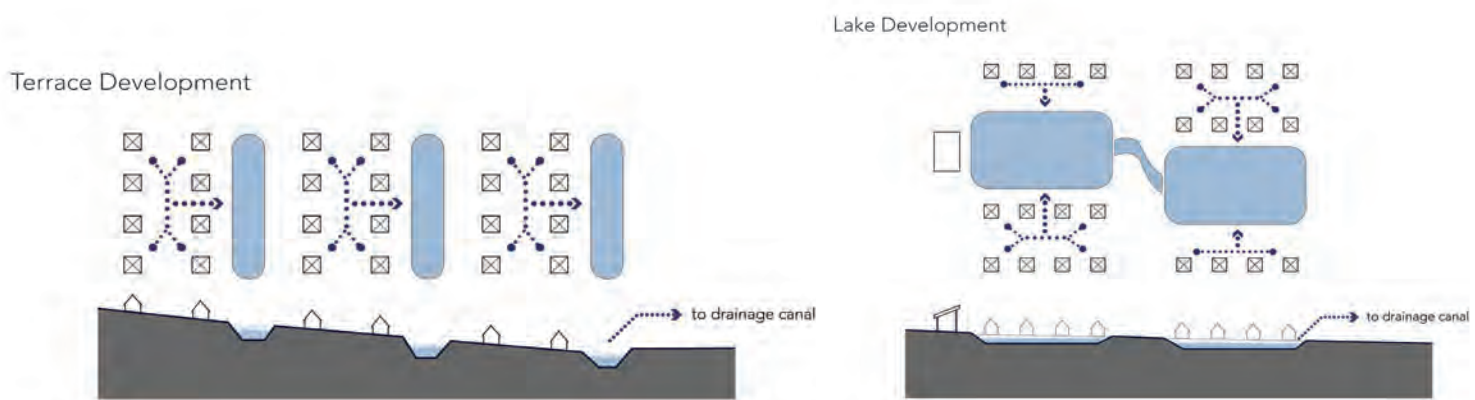
Resiliency & Mitigation Strategies

Louisiana's Comprehensive Master Plan for a Sustainable Coast

The *2012 Coastal Master Plan* was developed by looking 50 years into south Louisiana's future, applying scientific best practices and knowledge, and given those findings, identifying protection and restoration projects that will provide increased flood protection for all communities and ensure a sustainable and resilient coastal landscape in the years to come.

The *Louisiana Coastal Master Plan* focuses on protection and restoration and identifies 397 projects for evaluation in the *2012 Coastal Master Plan*. These projects include:

- **248 restoration projects** which help build or sustain land and contribute to risk reduction, since they help reduce storm surge. Restoration projects are grouped into the following efforts.
 - Barrier island/headland restoration
 - Hydrologic restoration
 - Marsh creation
 - Oyster barrier reefs
 - Ridge restoration
 - Sediment diversion
 - Channel realignment
 - Bank stabilization
 - Shoreline protection
- **33 structural risk reduction projects** which reduce flood risk in coastal communities by acting as physical barriers against storm surge. Structural measures include the following measures:
 - Earthen levee
 - Concrete wall
 - Floodgate
 - Pumps



- **116 non-structural risk reduction projects** that reduce flood risk in coastal communities by acting as physical barriers against storm surge. Non-structural projects can include the following measures:
 - Elevation
 - Flood proofing
 - Voluntary acquisition
 - Non-structural programmatic measures
 - Removing soil conditions before development

Projects that are of particular importance to Lafourche Parish include:

- Improved protection through levees.
- Marsh restoration through freshwater and sediment diversions.
- Ongoing issue of determining or predicting actual rates of relative sea level rise. NOAA's most recent forecasts for sea level rise are even higher than the numbers used in the Coastal Master Plan.

The current coastal conditions are due in large part to past decisions that have altered the natural processes of the coast. Both protection and restoration projects can support or impede these processes. In order to restore these processes and maintain those that exist today, the *2012 Coastal Master Plan* includes a wide array of restoration tools focused on using river resources and restoring the coast as a system of barrier islands, wetlands,

ridges, and swamps. The master plan also minimizes cross-basin levee alignments that would block natural exchanges. Projects in the master plan that may negatively impact natural processes, such as Morganza to the Gulf, will be designed to minimize those impacts as much as possible.

Protection Measures

LEVEES

The location and alignments of federal levees, such as the Morganza-to-the-Gulf system, will determine what is exposed to the Gulf and what is within man-made protection – and will have far reaching impacts on who and what is protected, and how those areas fare in the future. Frequent storm surges and reduced deposits from the Mississippi River have left Lafourche and its inhabitants increasingly vulnerable to storm surges.

A critical issue is determining the kinds of habitats that are supported inside and outside the levee system, for maximum short-term and long-term benefit. This analysis requires distinguishing between impounded vs. “natural” swamps, and relative advantages and disadvantages of each. The nature of the flows and the type, quality, nutrients, and speed and direction of the water back and forth through these barriers will determine the nature and quality of impounded areas.

10 MEASURES OF SUSTAINABLE DESIGN

Sustainable development considers environmental issues (natural patterns and flows), economic issues (financial patterns and equity), and social systems (human, cultural, and spiritual). Sustainable design is a collaborative process that involves thinking ecologically—studying systems, relationships, and interactions—in order to design in ways that remove rather than contribute stress from each of these systems.

SUSTAINABLE DESIGN INTENT & INNOVATION

Sustainable design is rooted in a mindset that understands humans as an integral part of nature and responsible for stewardship of natural systems. Sustainable design begins with a connection to personal values and embraces the ecological, economic, and social circumstances of a project.

REGIONAL/COMMUNITY DESIGN & CONNECTIVITY

Sustainable design recognizes the unique cultural and natural character of place, promotes regional and community identity, contributes to public space and community interaction, seeks to reduce auto travel and parking requirements and promote alternative transit.

LAND USE & SITE ECOLOGY

Sustainable design reveals how natural systems can thrive in the presence of human development, relates to ecosystems at different scales, and creates, re-creates, or preserves open space, permeable groundscape, and/or on-site ecosystems. In Lafourche an example of this principle in practice is building in compact form on higher ground and out side of floodplains.

BIOCLIMATIC DESIGN

Sustainable design conserves resources and optimizes human comfort through connections with the flows of bioclimatic region, using place-based design to benefit from free energies—sun, wind, and water.

LIGHT & AIR

Sustainable design creates a comfortable and healthy interior environment while providing abundant daylight and fresh air. Daylight, lighting design, natural ventilation, improved indoor air quality, and views, enhance the vital human link to nature.

WATER CYCLE

Recognizing water as an essential resource, sustainable design conserves water supplies, manages site water and drainage, and capitalizes on renewable site sources using water-conserving strategies, fixtures, appliances, and equipment.

ENERGY FLOWS & ENERGY FUTURE

Rooted in passive strategies, sustainable design contributes to energy conservation by reducing or eliminating the need for lighting and mechanical heating and cooling. Smaller and more efficient building systems reduce pollution and improve building performance and comfort. Controls and technologies, lighting strategies, and on-site renewable energy should be employed with long-term impacts in mind.

MATERIALS, BUILDING ENVELOPE & CONSTRUCTION

Using a lifecycle lens, selection of materials and products can conserve resources, reduce the impacts of harvest/manufacture/transport, improve building performance, and secure human health and comfort. High-performance building envelopes improve comfort and reduce energy use and pollution. Sustainable design promotes recycling through the life of the building.

LONG LIFE, LOOSE FIT

Sustainable design seeks to optimize ecological, social, and economic value over time. Materials, systems, and design solutions enhance versatility, durability, and adaptive reuse potential. Sustainable design begins with right-sizing and foresees future adaptations.

COLLECTIVE WISDOM & FEEDBACK LOOPS

Sustainable design recognizes that the most intelligent design strategies evolve over time through shared knowledge within a large community. Lessons learned from the integrated design process and from the site and building themselves should contribute to building performance, occupant satisfaction, and design of future projects.

Based on information from the American Institute of Architects.



The location and height of levees will also determine insurance rates, by drawing the line between those inside of certified levees, and those outside of the certified levees – with prohibitively high costs for those outside of the system likely. South Lafourche Levee District’s levees are not certified and are currently in FEMA’s Levee Analysis and Mapping Procedure (LAMP) process. The landward side flood risk is determined through the new levee analysis procedures. Once determined, the procedures are used to analyze the flood risk in the vicinity of the non-accredited levees and the results will be identified on the Flood Insurance Rate Maps (FIRMs) with the appropriate flood Zone designations.

This is critical because these levees protect key communities such as Galliano and Golden Meadow that are important to the identity and economy of the Parish as a whole. Certification of these levees by US Army Corps of Engineers will enable the Federal Emergency Management Agency (FEMA) to include these levees in evaluating levels of protection for each community and setting insurance rates.

DIVERSIONS

Planned diversions include the Davis Pond Fresh Water Diversion and the Mid-Barataria, Lower-Barataria, and Upper Breton Sediment and the Mississippi River Diversions. If all of these diversions were built they would provide a total

capacity of over 500,000 cfs, which is roughly equal to the average flow rate of the Mississippi. These diversions would also freshen the marshes in between the river and the Gulf, and reorient salt water and brackish water estuaries and their boundaries. Diversions may create changes in habitats and environmental conditions, including the possibility of redirected pollution to sensitive oyster nursery grounds. These diversions could affect wetland-based economies and the resiliency of the coast.

Development Principles

New development in Lafourche must take place on high ground and with water integrated into the landscape. Paradoxically, water within the levees is necessary to keep the Parish dry in the long term. This is because improved water management is critical to the soil health and stability that can allow Lafourche to maintain the precious elevation it still possesses.

Development principles to achieve projects that reflect the *AIA’s 10 measures of sustainable design* (opposite page) include:

- Coordinating new development with water management infrastructure by including stakeholder involvement, raising resident awareness and strategically investing in infrastructure that guides desired growth.
- Building higher and on higher ground.

Potential Tools for Implementing the Plan

Wetland Preservation

Wetlands provide multiple benefits to coastal communities, especially those at the farthest reaches of the coast where wetlands may be one of the few available lines of defense against severe storms. They also work to minimize land loss and soil erosion. Wetland building/rebuilding can be undertaken either as a public or private program and implemented at a variety of scales and levels.



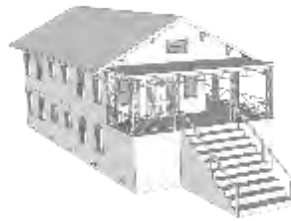
Forested ridge improvements result in the reduction of the wave action on top of tidal surge to a level below levee height.



Floating islands are man-made islands designed to restore growth and vegetation to shoreline.

Elevated Housing

One way to reduce risk of flooding to an existing house is to elevate habitable areas of the house above the 1% (100 year) flood level, or Base Flood Elevation (BFE). The BFE is the regulatory requirement for the elevation or flood proofing of structures. It is the computed elevation to which floodwater is anticipated to rise during the base flood. There are several ways to elevate an existing house, but regardless of the technique used, the home's foundation must be able to handle significant hydrostatic pressure, hydrodynamic pressure and debris impact. Homeowners should aim to raise the lowest occupied floor level at least one foot above the BFE of their property to reduce flood risk and to decrease the flood insurance rate.



Extend the walls of the house to raise the first floor and build a "false" floor.



Mangroves are a habitat and nursery ground for a wide variety of marine organisms as well as storm buffers that reduce wind and wave action.



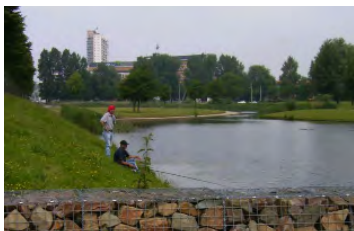
Convert existing lower floor(s) of the house to non-habitable space and living above.



Lift the entire house, with the floor slab attached, and build a new foundation to elevate the house.

Stormwater Management

Stormwater best management practices are used to intercept, retain and filter local runoff and storm water that originates on the site. Resilient storm water capture systems include, but are not limited to rain gardens, rain groves, circular depressions, planted storm water buffers, infiltration trenches, sand filters, bio-swales, porous paving, above ground cisterns, underground storm water chambers, preserved wetlands, tree protection areas, habitat protection areas, riparian buffers, constructed wetlands, parking lot detentions and vegetated ditches.



Zuider Park in Rotterdam is designed to act as a stormwater detention area for the surrounding neighborhoods.



Pervious paving allows water to infiltrate on a site level. Because different areas have different soil composition, design needs to be site specific.



Bioswales capture stormwater runoff, helping it to absorb into the ground and clean the water.



- Create more space for water at low points by adopting distinct policies for inside the levees and outside the levees and providing larger basins and outfall canals to control water levels.
- Increase investments to allow for management of water resources.
- Plan the ground before designing buildings to ensure that the long-term stability of soils and water flows provide a stable underlying structure that can be adapted to desired development types, rather than applying conventional drainage and site planning strategies. An example is to reduce the distance between storm drains and canals or detention/retention basins to allow for higher water levels, which can limit subsidence – this means that it makes sense to build buildings around lakes and waterways, not only for aesthetic purposes, but to provide long-term risk reduction through improved management of groundwater.

Lafourche Parish Hazard Mitigation Plan

Lafourche is vulnerable to a number of types of natural hazards. Of all the potential hazards, flooding is the most prevalent and the most frequent in the Parish. Flooding in the Parish is separated into four sub-categories: riverine, backwater, storm water, and storm surge. By identifying separate categories, the Parish is able to identify specific portions of the Parish prone to each type of flooding or hazard event. This approach defines both the varying causes of flooding hazards and determines vulnerability. Additional details, hazard profiles, vulnerability and risk assessments are in the Lafourche Parish Hazard Mitigation Plan.

The Lafourche Parish Hazard Mitigation Plan contains hundreds of mitigation projects such as drainage improvements, wind retrofitting, infrastructure hardening, and safe rooms. Projects were also put into pre-application formats

during the 2010 planning process and those pre-applications contain information ready to be put into a HMGP grant application as soon as funding becomes available.

Hazard Mitigation Project Types

Hazard Mitigation Grant Program (HMGP) funds may be used to fund projects that will reduce or eliminate losses from future disasters. Projects must provide a long-term solution to a problem resulting from hazards (e.g. the elevation of a home to reduce the risk of flood damages instead of pumps and sandbags to fight the flood). HMGP encourages a pre-disaster approach to project funding. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. Examples of projects include:

- Acquisition of real property for willing sellers and demolition or relocation of buildings to convert the property to open space use
- Retrofitting structures and facilities to minimize damages from high winds, earthquake, flood, wildfire, or other natural hazards
- Elevation of flood prone structures
- Development and initial implementation of vegetative management programs
- Minor flood control projects that do not duplicate the flood prevention activities of other federal agencies
- Localized flood control projects, such as certain ring levees and floodwall systems that are designed specifically to protect critical facilities
- Post-disaster building code-related activities that support building code officials during the reconstruction process

HMGP funds are typically available following federally declared disasters, however other types of mitigation funds are available annually. The Hazard Mitigation Plan identifies a comprehensive range of specific mitigation actions and projects to reduce and/or prevent future damage. The goals, strategies, and action items below include items from the Hazard Mitigation Plan that are eligible under FEMA's Hazard Mitigation Grant Program and those of the highest local priority.

FEMA Community Rating System

FEMA's community rating system (CRS) is a voluntary incentive program that recognizes community efforts beyond those minimum standards required by the National Flood Insurance Program. CRS operates in a manner similar to the private insurance industry's programs that grade communities on the effectiveness of their fire suppression and building code enforcement.

CRS currently provides discounts on flood insurance premiums from 5% to 45% for communities that take steps to reduce flood damage. Communities can score points for a wide array of measures, including enhanced mapping and regulatory standards, access to public information, flood damage reduction and flood preparedness. Lafourche Parish is currently working towards reenrolling in the CRS program.

DFIRM Appeal

Lafourche Parish has been in the Digital Flood Insurance Rate Map (DFIRM) Appeal process since they were issued by FEMA in 2009. Many base flood elevations throughout the southern end of the Parish increased by 5 to 11 feet on the preliminary DFIRMs compared to the effective FIRM maps the parish was utilizing for floodplain management purposes. The DFIRM appeal was prepared and submitted in September of 2009 and resulted in

FEMA re-evaluating their process for mapping coastal, non-accredited levees.

In summer 2013, Lafourche Parish joined a FEMA pilot program called Levee Analysis and Mapping Procedures (LAMP). Communities participating in the program will be granted a review of their non-federal levee systems. The goal of the program is to establish new rules for determining flood risk in areas with non-federal levee systems. The hope for many parish residents is that the FEMA review will result in approval of the local levees. If the local levees are shown to be sufficient, FEMA may revise the flood insurance maps which determine insurance premiums.

Five parishes that rely on their locally built levees for flood protection will participate in a FEMA pilot program aimed at setting new rules for determining risk in areas with non-federal systems. The Federal Emergency Management Agency does not presently recognize any protection offered by non-federal levees.

Best Practices Manual for Development in Coastal Louisiana

The *Best Practices Manual for Development in Coastal Louisiana*, explains and illustrates the latest available international, national and local best practices in coastal development and recommends relevant strategies at the community scale as well as site and building scale to assist communities in their efforts to preserve their way of life. The *Manual* provides policy guidance to help protect natural resources and hazards inherent to living in coastal Louisiana while developing a sustainable economy. Practices outlined in the *Manual* that would inform development policy are included in the following policy recommendations.

RESILIENCY AND HAZARD MITIGATION VISION

A resilient Lafourche will be a Parish where:

- Structural and non-structural protection measures improve every community's level of flood protection.
- Economic centers are resilient and hardened to potential floods and storms, and bounce back quickly.
- Hydrologic and wetlands restoration provide storm buffering capacity, simultaneously generating new, quality habitats for wildlife, and increasing the local populations' access to nature and recreational opportunities, while also building upon a growing ecotourism sector.

Policy Recommendations

Goal 1: Establish areas where site level development should occur that will enhance long-term resiliency and align with the Vision map.

Strategy 1.1:

Build higher and/or build on high ground.

Actions

- 1.1.1 Create incentives to encourage infill and redevelopment so as not to increase the footprint of developed areas and to create more drainage and flood protection. Incentives can include a selection of methods such as a streamlined approval process for permitting, reduced permitting costs, infrastructure assistance, and other economic development mechanisms.
- 1.1.2 In areas of new development establish and enforce standards that require development to be built on higher and more stable soils adjacent to the bayou and its distributaries.
- 1.1.3 Follow historic settlement patterns and building types with land uses organized by elevation and hydrology from high ground to low ground.

Strategy 1.2:

Coordinate new development with water management infrastructure.

Actions

- 1.2.1 Develop a community outreach and engagement plan to involve multiple stakeholders and partners in the design, protection and performance of infrastructure.
- 1.2.2 Create a public awareness program for residents to help them identify the functions of their infrastructure which will allow for more informed decision-making by the community as a whole. Emphasize the important role of water and sediments in the Parish's history and in its future.
- 1.2.3 Plan investments in existing and future infrastructure so it can be used as the basis for other kinds of investment and economic development, resulting in public dollars leveraging private investment and growth for the Parish.

Strategy 1.3:

Create more space for water at low points.

Actions

- 1.3.1 Identify areas that can serve as large basins and allow for wider outfall canals within the levees. This will increase storage capacity and allow for better control of water levels.
- 1.3.2 Develop outfall areas as a new kind of recreational zone.
 - Plan waterways and water bodies as recreational amenities.
 - Introduce associated wetlands in long-term phasing in order to clean water and to provide additional habitat and amenities on protected side of levees.
- 1.3.3 Locate aquatic facilities and other related development on elevated structures in the recreational zone, just inside of the levee.
- 1.3.4 Manage water resources through investment in waterways and water bodies to create a system of sustainable drainage infrastructure.
- 1.3.5 Create private economic opportunities through infrastructure investments.

Strategy 1.4:

Plan the ground before designing buildings.

Actions

- 1.4.1 Create prototype building plans in which the long-term stability of soils and water flows provides the underlying structure that is then adapted to desired housing types.
- 1.4.2 Reduce the distance between storm drains and canals or detention/retention basins allowing for higher water levels, which can limit subsidence.
- 1.4.3 Build buildings around lakes and waterways, not only for aesthetic purposes, but to provide long-term risk reduction through improved management of groundwater.

Strategy 1.5:

Promote and permit commercial and industrial development, including public and critical facilities in strict accordance with flood plain management, and other applicable state and federal regulations.

Actions

- 1.5.1 Establish and consolidate maps identifying hazard areas.
- 1.5.2 Guide future development away from hazard areas while maintaining other parish goals such as economic development and improving the quality of life.
- 1.5.3 Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.
- 1.5.4 Provide safe locations for files, records, and computer equipment.

Strategy 1.6:

Promote preservation and/or conservation of flood prone areas for Parish parks, recreation areas, and general flood plain management.

Actions

- 1.6.1 Participate in existing programs at the state and federal levels oriented to environmental enhancement and land conservation.
- 1.6.2 Expand and provide programs including land banking and preservation, areas. Locate priority bayou-side, outside levees, farming, nature trails, birding, fishing, areas.

Goal 2: Improve resiliency to floods and other natural disasters by utilizing best practices for coastal development.

Strategy 2.1:

Adopt a multiple line of defense strategy.

Actions

- 2.1.1 Develop and preserve natural lines of defense including:
- Land building
 - marsh creation
 - sediment diversion
 - barrier island restoration
 - Shoreline protection
- 2.1.2 Harden infrastructure including improving and adding where necessary
- Levees
 - Pumps

Strategy 2.2:

Use site-specific solutions to improve resiliency.

Actions

- 2.2.1 Cluster land uses on naturally high areas to reduce the area vulnerable to flooding and storm surge.
- 2.2.2 Adopt the practice of elevating buildings beyond minimum required elevations to reduce the likelihood of flooding.

Strategy 2.3:

Restore the region's natural hydrologic function, where possible.

Actions

- 2.3.1 Encourage plans and parking lot designs which integrate stormwater infiltration.

Strategy 2.4:

Preserve and rehab wetlands and sensitive areas along bayous and other waterways.

Strategy 2.5:

Coordinate with the CPRA and other state agencies on implementation of the State's Coastal Master Plan and adopt non-structural measures to support wise development in the Parish's coastal zone.

Actions

- 2.5.1 Continue to emphasize coordination between the Parish and state agencies working on non-structural issues in Louisiana.
- 2.5.2 Consider increasing the Parish's capacity and amending regulatory requirements, as appropriate, to ensure that goals are met in local land use planning, building codes, flood damage prevention ordinances, and risk reduction project funding.
- 2.5.3 Enact ordinances that require appropriate risk reduction standards.
- 2.5.4 Identify state funding and local financing opportunities to address identified needs and support implementation of resiliency programs.
- 2.5.5 Provide training programs on the state and parish resiliency programs and inform the public about the non-structural options available to them.
- 2.5.6 Inform the public about the risk of living in a flood hazard area.
- 2.5.7 Adopt resiliency development practices outlined in the Coastal Best Practices Manual, including:
- Assess infrastructure
 - Protect roads and street networks
 - Protect electrical networks
 - Elevate critical infrastructure
 - Protect water and sewerage infrastructure
 - Use sustainable water capture systems
 - Conserve and restore wetlands
 - Build low earthen barriers
 - Preserve community character
 - Elevate multiple buildings – elevate living space above BFE

- Prepare properties before flood
- Utilize innovative and adaptive buildings
- Strategic site development
- Use native plants for protection

- 2.5.8 Adopt risk-reducing standards as outlined in the Louisiana Coastal Land Use Toolkit to increase resiliency of development, including:
- Flood damage reduction standards
 - Stormwater management standards
 - Parking and site access standards
 - Borrow pits standards
 - Natural resource protection standards

Goal 3: Identify and pursue preventative measures that will reduce damages from future hazards.

Strategy 3.1:

Address repetitive flood damage in the Parish by mitigating repetitive losses.

Actions

- 3.1.1 Elevate, acquire, or reconstruct all repetitive loss and severe repetitive loss structures in the Parish.
- 3.1.2 Develop a decision matrix that deals with (severe) repetitive loss properties in the Parish.

Strategy 3.2:

Improve existing drainage infrastructure to protect current structures and future construction from localized flood events.

Actions

- 3.2.1 Widen drainage ditches and upgrade culverts to protect current structures and future construction from flood events.
- 3.2.2 Develop new green infrastructure that integrates into existing drainage systems for detaining and retaining stormwater.
- 3.2.3 Upgrade pump station capacity sizes and diversified so as to allow maintenance of water levels necessary to mitigate subsidence.
- 3.2.4 Ensure pump stations have adequate trash racks to ensure operation during a flood event.

Strategy 3.3:

Create new infrastructure or elevate or bury existing infrastructure to protect current structures and future construction from flood damage.

Actions

- 3.3.1 Provide additional pump station protection inside levee systems.
- 3.3.2 Install generators at all critical facilities.
- 3.3.3 Elevate roads with a flood history where feasible.
- 3.3.4 Elevate levee and floodwall heights to further protect current structures and future construction from storm surge.
- 3.3.5 Where feasible, bury power lines to improve chances of maintaining power during storm events.

Strategy 3.4:

Protect parish and municipal infrastructure from wind events.

Actions

- 3.4.1 Construct safe rooms.
- 3.4.2 Wind harden critical facilities.
- 3.4.3 Wind retrofit critical facilities, public buildings, or private buildings using window

film, screen, or shutters.

Strategy 3.5:

Team with state and federal agencies to reduce the effects of land subsidence.

Actions

- 3.5.1 Pursue coastal protection projects to reduce land subsidence in coastal areas.
- 3.5.2 Ensure accurate survey points are located throughout the parish to monitor continued subsidence.
- 3.5.3 Monitor agricultural activities and encourage farming practices that reduce soil compaction and limit acceleration of subsidence and identify farm land that is beneficial for coastal protection, in addition to farming.
- 3.5.4 Manage groundwater levels in developed areas to limit soil compaction and oxidation.

Goal 4: Enhance public awareness and understanding of disaster preparedness.

Strategy 4.1:

Provide public education for all hazards.

Actions

- 4.1.1 Continue to correspond closely with the media concerning hazard mitigation measures and plans.
- 4.1.2 Continue to provide educational brochures to libraries, schools and other public facilities including mitigation measures for all hazards including hurricanes, tornados, coastal/tropical storms, levee failure, coastal erosion, land subsidence, and saltwater intrusion.
- 4.1.3 Implement an all-hazard warning system to ensure proper citizen notification of

hurricanes, tornados, coastal/tropical storms, levee failure, coastal erosion, land subsidence, and saltwater intrusion.

Goal 5: Continue work to lower insurance premiums.

Strategy 5.1:

Work with other state and Parish leaders to mitigate recent insurance legislation so that property owners can afford to insure homes and businesses.

Actions

- 5.1.1 Continue to monitor and adapt to FEMA's Levee Analysis and Mapping Procedures (LAMP) to ensure all levees, regardless of certification, are considered when evaluating the Parish's risk.

Strategy 5.2:

Work to lower insurance premiums through participation in the FEMA Community Rating System (CRS).

Actions

- 5.2.1 Adopt and enforce development standards aimed to ensure successful enrollment in CRS.
- 5.2.1 Add new regulations reducing development density in flood plains.
- 5.2.3 Ensure that each political subdivision joins the CRS.
- 5.2.4 Encourage all jurisdictions continue to participate in the NFIP – the Parish, Thibodaux, Lockport, and Golden Meadow.
- 5.2.5 Establish a public outreach campaign to ensure all homeowners in floodplains are aware of the various types of coverage options under the NFIP.
- 5.2.6 Establish homeowner education program on flood mitigation measures.

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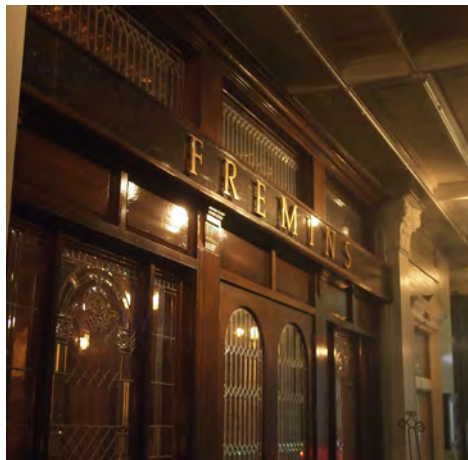
Chapter 6: *Culture and Recreation*

Introduction

There are many cultural and recreational assets to capitalize on in Lafourche. These range from neighborhood parks and playing fields, to opportunities for viewing wildlife and unique local Cajun and Houma Indian cultural and historical traditions. Knowing exactly what those assets are and what condition they are in will be key to planning for a more connected, more accessible and high-quality open space system. Keys to enhancing this system will include maintaining and enhancing existing parks and natural areas, as well as building new pedestrian and bike trails, expanding access to boat launches and the beach front, identifying cultural amenities and tying them to other assets, and restoring hydrologic function to surrounding wetlands.

Culture and Recreation Goals

- 1. Coordinate recreation districts and agencies to enhance access for all Lafourche residents to the highest quality leisure, cultural and natural resources.**
- 2. Plan cultural assets and recreational facilities for future growth.**





LAFORCHE PARISH GOVERNMENT: FEEDING AND FUELING AMERICA

"LAFOURCHE, A CELEBRATION OF LIFE" BY HANK HOLLAND. 2013

Background

Cultural Assets

Lafourche Parish is home to a rich variety of cultures – all living together but often retaining their distinct traditions and living patterns. An essay written by Maida Owens called “Louisiana’s Traditional Cultures: An Overview” (Adapted from the book *Swapping Stories: Folktales from Louisiana*) describes South Louisiana as a unique regional culture with a complex blend of French, Spanish, German, African, Irish, and Native American influences. Nicholas R. Spitzer has described rural South Louisiana as a cultural gumbo in which each of the different ingredients is identifiable, yet all have blended, affecting each other (Spitzer 1977). Yet, when one looks closer, one becomes aware of local variations that give Lafourche depth and variation.

The dominant regional culture of South Louisiana results from successive waves of French (Canadian traders, Acadians from Nova Scotia and New Brunswick, French royalists, Bonapartists, apolitical French civilians, French soldiers, French from the West Indies), Spaniards (from Spain, the Adaeseños from Texas-Mexico, and the Isleños from the Canary Islands), Germans, Irish, Africans, and a variety of Caribbean transplants. Many of these groups blended with the Louisiana Native American groups (some aboriginal tribes and others who resettled in the area during the eighteenth and nineteenth centuries). Some Native Americans retain their own unique cultures, virtually unmodified by European contact in a number of ways.

FIRST RESIDENTS

According to “Lafourche Parish: From the Beginning,” prepared for the Louisiana State Department of Education and the Barataria-Terrebonne National Estuary Program, two tribes of Chitimacha Indians lived in what is now Lafourche Parish. Bayou Lafourche was commonly known as the “River of the Chitimachas.” Before 1732, the Washa (Ouacha- means “hunting place”) had several villages along Bayou Lafourche. The villages were located at Supreme in Assumption Parish, Thibodaux, Raceland, and at Lockport. Today, Washa villages are being excavated on Golden Ranch Plantation. The second tribe of the Chitimacha was called the Chawasha (Chouacha-means “raccoon place”). They lived near Lake Salvador and Larose until the 1730’s when their village was destroyed. Using the lush and isolated areas of Bayou Lafourche, the Washa and Chawasha tried to sustain their natural way of life. Both of these tribes made a living by hunting, fishing, and gathering.

The early Lafourche Indians adapted well to coastal living and made their huts from palmetto leaves lashed to wooden frames. The Indians also built dugout canoes called “piragua” by the Spanish, built from cottonwood or cypress trees; they are called pirogues today.

Another major Indian group is the Houma (meaning “red”) Indians, who inhabited Terrebonne and the southern part of Lafourche Parish. Originally, east-central Mississippi was part of the Chakchiuma (meaning “red crawfish”). By 1682 the Houma had separated from the Chakchiuma and were living inland from the east bank of the Mississippi River just below the present border of Mississippi and Louisiana.



Field in Lafourche

The first encounter of the Houma Indians with Europeans was by LaSalle in 1682. In the year 1700, a bout with dysentery reduced their numbers substantially. They were attacked by the Tunica in 1708 and resettled just above New Orleans. In 1722, they were forced to move due to the pressure of white settlements. By 1730 epidemics introduced by the Europeans brought down the once numerous people to just four hundred. Their homes were wattle and daub construction mound type dwellings, which were built into the hillsides. They were arranged in a circular pattern of two rows with a large public area in the middle.

During the next 50 years the Houma Indians gradually drifted south into Terrebonne and Lafourche Parishes southwest of New Orleans. Today, the Houma Indians have petitioned for federal recognition and have over 17,000 members on their tribal roll in a six-parish area that includes Lafourche and Terrebonne Parishes. The Houma Indians primary administrative office is located in Lafourche Parish.



Downtown Thibodaux

Source: www.downtownthibodaux.org

LATER SETTLERS

Early European settlers explored a descending fork of the Mississippi River that mapmakers had named “LaFourche Des Chitimachas.” This distributary bayou, its name soon shortened to “LaFourche” served the early settlers well as a means of communication, a method of transportation, and a source of fresh water. The bayou was even used as a point of reference when giving directions. It was not long before a close knit community of farmers and fishermen had extended the length of the bayou village settlement for many miles, building side by side.

Control of the frequent bayou overflows played an important part in the early resident settlement pattern. Laws held each landowner responsible for the construction and maintenance of a bayou levee for his own protection and that of his neighbors. Land grants had a width of less than 600 feet but with tremendous depth. Many farmers and plantations in the 1700’s and 1800’s had a depth of at least a mile and a half. A pattern developed consisting of a narrow bayou front farm with a long “ribbon” of land streaming behind it. Each



Laurel Valley Village Plantation

Source: National Park Service



Jean Lafitte National Historical Park

Wetlands Tour Source: www.visitlafourche.com

had access to the bayou, and each had less levee to maintain.

In “Louisiana’s Traditional Cultures: An Overview,” Maida Owens describes how today’s Cajun culture resulted from the blending of several groups, primarily the Acadians, the descendants of French Acadians who were expelled from Nova Scotia by the British in 1755 and who began arriving in Louisiana in 1765. While still basically French, the area east of the Atchafalaya Swamp and along the Mississippi River and Bayou Lafourche between Baton Rouge and New Orleans received a significant influx of wealthy Lowland South planters of English descent. Those plantation owners influenced the area in many ways, particularly by teaching their slaves English rather than French. Also, being closer to New Orleans and on major transportation routes, the Germans, Spanish, French, English, and later the “Kaintucks” (Americans from up the Mississippi River) were more cosmopolitan than people in the swamps and on the prairies to the west. A large number of Germans arrived during the Spanish period, settled upriver from New Orleans along the German Coast, and provided most of the vegetable crops

needed by New Orleans. These Germans are not as easily identified today, because they gradually assimilated into the dominant French culture, and many of their names were translated into French or English (Reinecke 1985).

Living in relative isolation on the Louisiana bayous and being the dominant cultural group, the French-speaking Acadians, French nationals, French royalists, and French army officers absorbed the Germans, Spanish, British Americans, and Native Americans who settled among them or married into their families. During the late 19th century, large numbers of Midwesterners settled the Cajun prairie to take part in the newly developing rice industry and the railroad. Within a relatively short time period, many were absorbed into Cajun culture.

As of the 2010 census, the population of Lafourche parish by race was 78% white, 13.2% black or African American, 3.8% Hispanic or Latino, 2.7% American Indian, 0.7% Asian and 1.6% other.

Historic Sites

With the rich culture, Lafourche Parish has many historic and cultural sites which are well-known regional draws:

- **The Jean Lafitte National Historical Park & Preserve Acadian Cultural Center** offers visitors information on the history of early Spanish and French colonists, who settled the area in the mid-1700s. The lives of the Acadians (Cajuns) and others whose travels brought them to Louisiana's bayous are featured here. The Center displays historic recreation, clothing, home furnishings, religion, cuisine, and fishing through exhibits, artifacts, videos, and films. It also houses a 200-seat theater used for productions by the Thibodaux Playhouse, Inc., access to the bayou, and other programs.
- **Laurel Valley Village Sugar Plantation and Museum** is the largest surviving 19th and 20th century sugar plantation in the United States.
- **The Center for Traditional Louisiana Boat Building** offers boat building demonstrations, and information about the craft of traditional boat building.
- **The Edward Douglass White Historic Site** is a house museum surrounded by centuries old live oaks. Visitors can participate in tours of the house and grounds.
- The **Bayou Country Children's Museum** recently opened its doors and provides children with a hands-on education focused on Bayou's unique natural and cultural experiences.
- The Parish hosts a number of fairs and festivals throughout the year which draw local and out of town participants.

A listing of historic structures and places is included on pages 102-103 of this plan.

Culture & Recreation Strategies

Parks, Open Space, Trails and other Recreational Amenities

Lafourche Parish has eight separate recreation districts, each with their own taxing authority. The Parish Parks and Recreation Department assists with coordination between the separate districts in the Parish. The recreation districts include, Lockport; Raceland; South Lafourche; Thibodaux - Hero's Park; Chackbay, Choctaw, Kramer & Bayou Boeuf; Gheens; and Bayou Blue. Each district sets its own tax and provides separate recreational services for constituents. In addition, the City of Thibodaux has a Parks and Recreation Department.

It is critical for the Parish to coordinate with Jean Lafitte National Park in support of the Park's vision and coordinate Parish-wide historical sites with this center. Individual components of this vision have been expressed in response to the Louisiana Coastal Protection and Restoration (LACPR) Plan of 2009, but are well-aligned with the Parish's recreation, cultural and historic resources vision. Coordination with the Park will provide a central information source for the historic sites within Lafourche. The Lafourche Parish Area Convention and Visitors Bureau serves as the go-to point for visitor and tourist information about the Parish. They provide information on dining, accommodations, events, and activities in the Parish through their website and their office in Raceland.

Following the 2010 British Petroleum (BP) oil spill, which negatively impacted hundreds of miles of Louisiana coast line and crippled the fishing industry, British Petroleum funded the *Dig In!* program to increase tourism and encourage visitors to return to the Gulf. The *Dig In!* program provides information

about Lafourche Parish attractions, culture and maintains an online community events calendar.

The Parish is well-known for its natural assets. It is a sportsman's paradise and an excellent destination for the fishing and boating enthusiast. The Bayou is a multipurpose resource, providing drinking water for the Parish as well as a recreational destination. It is crucial that the quality of the water is preserved for all users. With The 2007 Bayou Lafourche Corridor Plan is a key instrument for realizing the Parish's goal to develop a well-connected system of quality recreational assets and facilities. The projects it recommends incorporate a variety of strategies to reach this goal, including:

- Create new trail systems to provide greater walking and biking access and to link neighborhoods to and along the bayou.
- Create and enhance access to neighborhood and community parks and boat ramps.
- Restore parks and conserve protected areas.
- Expand opportunities for habitat viewing, birding, environmental education, and hunting.

- Create more places to play and relax, such as sports fields.
- Develop parks as key components of Parish-wide water management system.
- Develop recreational programs and special use facilities for exercise and education.

Jean Lafitte National Historical Park's vision calls for construction techniques that minimize habitat destruction (especially in the proposal to build a new outer ring levee system), consideration of altering waterways to help restore a more naturally functioning hydrology, measures to counteract land loss, and preservation of natural and cultural resources with minimal disruption of cultural and socioeconomic uses of the bayou. The Park vision also supports Lafourche's vision for resiliency, stating "structural modification of the delta, such as building levees and other forms of surge barriers and gates, are doomed to failure if restoration is not pursued quickly and aggressively."



STATE OF LOUISIANA HISTORIC LISTINGS IN LAFOURCHE PARISH

Acadia Plantation

Thibodaux

Architectural Style: Queen Anne, Stick/Eastlake

Period of Significance: 1900-1924, 1875-1899

Bank of Lafourche Building, Oil and Gas Building,

206 Green St., Thibodaux

Architectural Style: Italianate

Period of Significance: 1875-1899

Bank of Lockport, Gouaux

Building, 111 Barataria St. , Lockport

Architectural Style: Romanesque

Period of Significance: 1900-1924

Bayou Boeuf Elementary School

Little Red Schoolhouse, 4138 LA

307, Thibodaux

Period of Significance: 1950-1974, 1925-1949, 1900-1924

Bouverans Plantation House

LA 1, Lockport

Architectural Style: Greek Revival

Period of Significance: 1850-1874

Breaux House

401 Patriot , Thibodaux

Architect, builder, or engineer:

Breaux, Lewis

Architectural Style: Queen Anne

Period of Significance: 1875-1899

Building at 108 Green Street

KTIB Radio Building,

108 Green St., Thibodaux

Period of Significance: 1900-1924

103 W. Third, Thibodaux

Architectural Style: Queen Anne

Period of Significance: 1900-1924

Chatchie Plantation House

Homewood, East of Thibodaux on LA 308 , Thibodaux

Architect, builder, or engineer:

Justin F. Gaude

Period of Significance: 1850-1874

Citizens Bank of Lafourche Citizens Finance Corporation Building,

413 W. Fourth St., Thibodaux

Architect, builder, or engineer:

Joseph A. Robichaux

Architectural Style: Beaux Arts

Period of Significance: 1900-1924

Dansereau House

506 St. Philip St., Thibodaux

Architect, builder, or engineer:

Henri Thiberge

Architectural Style:

Italianate, Second Empire

Period of Significance: 1875-1899, 1850-1874, 1825-1849

Frost House

612 St. Philip St., Thibodaux

Architectural Style: Colonial Revival

Period of Significance: 1900-1924

Golden Meadow High School

Golden Meadow Junior High School,

630 S. Bayou Dr., Golden Meadow

Area of Significance: Education

Period of Significance: 1925-1949

Grand Theatre

401 Green St., Thibodaux

Architectural Style: Classical Revival

Period of Significance: 1925-1949

House at 816 Jackson Street, 816

Jackson St., Thibodaux

Architectural Style: Queen Anne,

Stick/Eastlake

Period of Significance: 1875-1899

House at 914 Jackson Street

914 Jackson St., Thibodaux

Architectural Style: Greek Revival

Period of Significance: 1850-1874

Lafourche Parish Courthouse,

200 Green S., Thibodaux

Architect, builder, or engineer:

Favrot & Livaudais

Architectural Style: Beaux Arts

Period of Significance: 1900-1924, 1850-1874

Lamartina Building

700--704 W. Third, Thibodaux

Period of Significance: 1900-1924, 1850-1874

Laurel Valley Sugar Plantation, Laurel

Valley Village, NE of Thibodaux off

LA 308, Thibodaux

Architectural Style: Queen Anne, Renaissance

Period of Significance: 1900-1924, 1875-1899, 1850-1874

Ledet House, LA 308, E of Bayou

Lafourche, Raceland

Architectural Style: Gothic Revival

Period of Significance: 1850-1874

Lefort House, Omega Houes,

1302 Hwy. 1, Thibodaux

Architectural Style: Greek Revival

Period of Significance: 1850-1874

McCulla House, Raceland Bank and

Trust, Thibodaux Branch,

422 E. First, Thibodaux

Architect, builder, or engineer:

Robichaux, Joseph A.

Architectural Style: Queen Anne

Period of Significance: 1900-1924

Merchants and Planters Bank, Old LP & L District Office Building,
110 Main St., Lockport
Architectural Style: Classical Revival
Period of Significance: 1900-1924

Nicholls, Francis T., Junior College, Charles C. Elkins Hall,
906 LA 1 E, Thibodaux
Period of Significance: 1925-1949

Peltier House,
403 Canal Blvd., Thibodaux
Architect, builder, or engineer: Robichaux, Joseph A.
Architectural Style: Colonial Revival
Period of Significance: 1900-1924

Percy--Lobdell Building
314 Saint Mary St., Thibodaux
Architectural Style: Italianate
Period of Significance: 1900-1924

Rienzi Plantation House
LA 308, Thibodaux
Architectural Style: Greek Revival
Period of Significance: 1825-1849

Riviere Building, 405 W. Third, Thibodaux
Architect, builder, or engineer: Riviere, Thomas
Architectural Style: Italianate
Period of Significance: 1900-1924

Riviere House
208 Canal Blvd., Thibodaux
Architect, builder, or engineer: Henry Riviere
Architectural Style: Queen Anne
Period of Significance: 1900-1924

Robichaux House
322 E. Second St, Thibodaux
Architect, builder, or engineer: Robichaux, E.G.
Architectural Style: Queen Anne
Period of Significance: 1875-1899

Saint Joseph's Co-Cathedral and Rectory,
721 Canal Blvd., Thibodaux
Architect, builder, or engineer: Robichaux, Joseph A., Burton & Bendernagel
Period of Significance: 1900-1924

St. John's Episcopal Church and Cemetery,
702 Jackson St., Thibodaux
Architectural Style: Greek Revival
Period of Significance: 1825-1849

Thibodaux, Jean Baptiste, House, Rosella Planation House,
W of Raceland on LA 308, Raceland
Period of Significance: 1800-1824

Toups, Zephirin, Sr., House
1045 Bayou Blue By-Pass Rd., Thibodaux
Architectural Style: Greek Revival
Period of Significance: 1850-1874

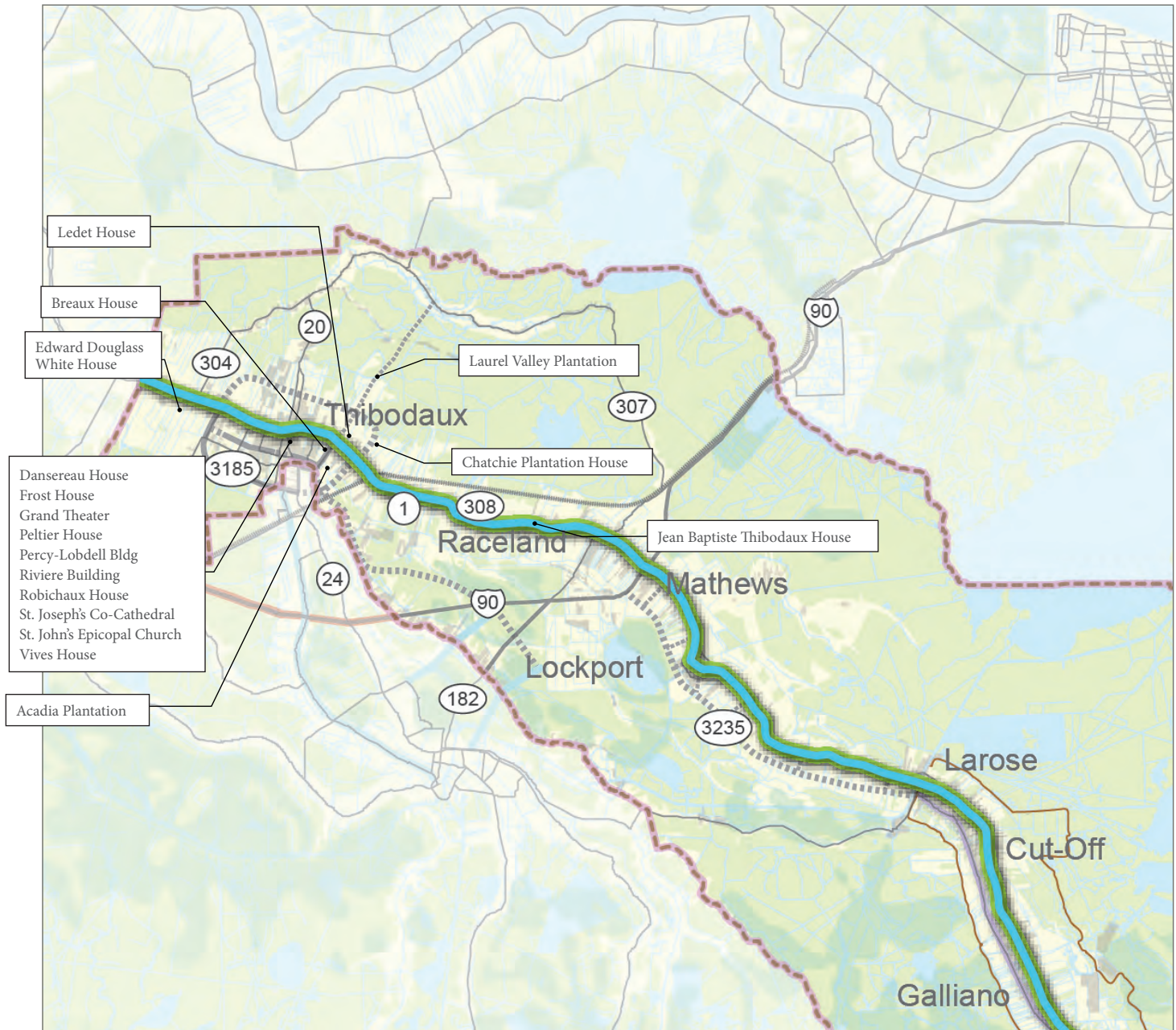
Vives House
923 Jackson St., Thibodaux
Architectural Style: Queen Anne, Stick/Eastlake
Period of Significance: 1875-1899

White, Edward Douglass, House, Edward Douglass White Louisiana State Commemorative Area, 5 mi. N of Thibodaux on LA 1, Thibodaux
Historic Person: Edward Douglass White
Significant Year: 1921, 1790, 1845
Area of Significance: Politics/ Government, Law
Period of Significance: 1900-1924, 1875-1899, 1850-1874, 1825-1849

Lafourche Parish Historic Districts Acadia Plantation Thibodaux (280 acres, 3 buildings, 2 structures)
Architectural Style: Queen Anne, Stick/Eastlake
Area of Significance: Historic, Non-Aboriginal
Cultural Affiliation: Rural, American
Period of Significance: 1900-1924, 1875-1899

Figure 27: Historic Resources Map

The map identifies a section of historic resources within Lafourche Parish. A more extensive list is located on the following page. Please note that not all resources are identified.



CULTURE AND RECREATION VISION

The residents of Lafourche envision a parish-wide parks and recreation network with highly accessible parks, ample playing fields, and numerous connecting trails and greenways for hiking and biking. Agricultural land and fishing activities, such as sugarcane fields and shrimping, will be protected and elevated in visibility as integral parts of local culture and values.

Policy Recommendations

Goal 1: Coordinate recreation districts and agencies to enhance access for all Lafourche residents to the highest quality leisure, cultural and natural resources.

Strategy 1.1:

Inventory and document parks and recreation facilities in the Parish.

Actions

- 1.1.1 Create a mapped inventory of all recreational facilities located within the Parish's eight recreation districts.
- 1.1.2 Develop a program based on the recreation inventory to market and share services, using a coordinated approach.
- 1.1.3 Upgrade existing park facilities to expand amenities – parking, fish cleaning, informational signs, attraction identification signage, and maps.
- 1.1.4 Assess water sources and flood/subsidence risk reduction opportunities inherent to parklands and system

Strategy 1.2:

Coordinate Lafourche Parish's recreation, cultural and historic resources with Jean Lafitte National Historic Park and Preserve, establishing the Park as a gateway to Lafourche's cultural and historical experience.

Actions

- 1.2.1 Support Jean Lafitte National Park's vision which focuses on restoring its ecosystem; improving hydrologic function; and providing a beautiful natural setting with many recreational and educational opportunities.
- 1.2.2 Establish Jean Lafitte as the gateway to Lafourche's historical and natural areas.
- 1.2.3 Continue to provide information about other historical sites throughout the Parish at Jean Lafitte National Park's visitor center.
- 1.2.4 Investigate expanding the Wetland Cultural Byway and implementing wayfinding techniques to link the national park, existing historical sites, and other attractions.

Goal 2: Plan cultural and recreational facilities for future growth.

Strategy 2.1:

Develop a parish-wide Parks and Recreation Plan to ensure adequate facilities are developed for future growth.

Actions

- 2.1.1 Identify and document needs based on the inventory and population projections.
- 2.1.2 Create a plan to fill gaps in needed parks and recreation sites, including new services and amenities.
 - Support and integrate the Beachfront District Plan into new plan.
- 2.1.3 Coordinate parks, develop as integral components of water management systems.
- 2.1.4 Establish requirements for parks to be provided at the following recommended levels of service as development occurs in the Parish.

National Recreation Standards based on the National Recreation Parks Association (NRPA)

	acres per 1,000 residents
Neighborhood Park	1
Community Park	5
Regional Park	7.5
Special Use Park	13.5

Strategy 2.2:

Support and promote tourist and activity destinations throughout the Parish.

Actions

- 2.2.1 Consider recreation and parks inside the subdivision ordinance, especially as it pertains to the vision and recreational map.
- 2.2.2 Enhance access to the natural resources and various wildlife habitat.
- 2.2.3 Support and promote activities such as golfing, birding, fishing, hunting, canoeing and camping.
- 2.2.4 Elevate Leeville as a destination for recreational and seasonal tourism.

Continue to implement the 2007 Bayou Lafourche Corridor Plan.

Actions

- 2.3.1 Prioritize recommendations that can be feasibly funded and completed in the near-term future.
- 2.3.2: Identify funding and implementation actions for the following:
 - A promenade along Company Canal in Lockport
 - A boardwalk trail system through publicly owned swampland forest in Lockport
 - A new seafood market and safe harbor marina in Golden Meadow
 - A nature park and marina in Larose

Strategy 2.4:

Build new, and renovate existing, bayou plazas along Bayou Lafourche.

Actions

- 2.4.1 Design public access facilities along the bayou with new and upgraded boat launches, water taxis and picnic areas to offer local families high-quality recreation opportunities, as well as attract visitors to enjoy the bayou and unique experiences of the Gulf's beautiful and diverse wildlife.
- 2.4.2 Consider developing ecoparks into the Bayou Plazas. Ecoparks are parks that build off the local culture and amenities, highlight the natural environment, attract animals, and support a variety of ecosystems. Ecoparks could include educational and recreational components and will focus on sustainability principles.

Strategy 2.3:

Housing Choices

Introduction

Based on projections for demographic shifts and changing housing preferences in the Parish, it is evident that expanded housing options are needed in order to meet future housing demand in Lafourche. There are promising market opportunities for development of additional rental housing, and for new housing types such as townhomes; compact, single-family housing; and a mix of high-end and affordable apartments.

Housing Goals

- 1. Create housing options that meet the needs of future residents.**
- 2. Ensure that resiliency is considered in new building types.**

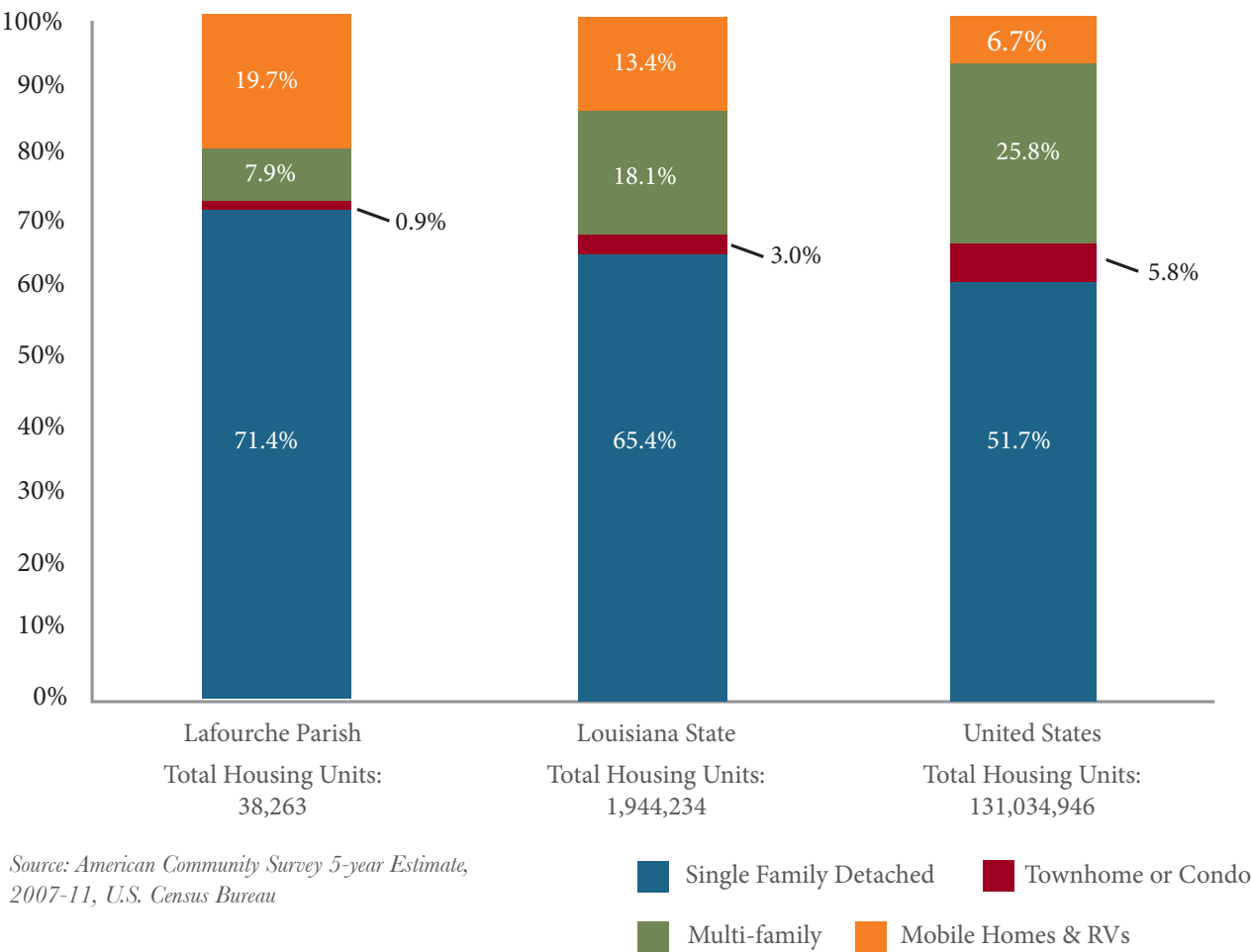


Housing in the Parish Today

Right now Lafourche has a slightly different mix of housing types than both the state and the country: it has a higher proportion of owner-occupied; large-lot, single-family housing, and a lower proportion of rental; multi-family; and compact, single-family housing. If regional housing preferences track with national trends, in the next twenty to thirty years Lafourche will have an undersupply of multi-family, rental and compact single family housing types, and a much narrower spectrum of housing choices than what the market demands.

Housing throughout Lafourche ranges from grand estates on large lots to trailers both as primary residences and camps. In Thibodaux many historic and older neighborhoods have retained their quality and charm. Thibodaux also has large

Table 11: Mix of Housing Types in Lafourche, Compared to Louisiana and the U.S.



Typical housing types in Lafourche Parish



areas in need of maintenance and improvements. Large new estates are being built on the fringes of Thibodaux and infill is occurring at a moderate rate.

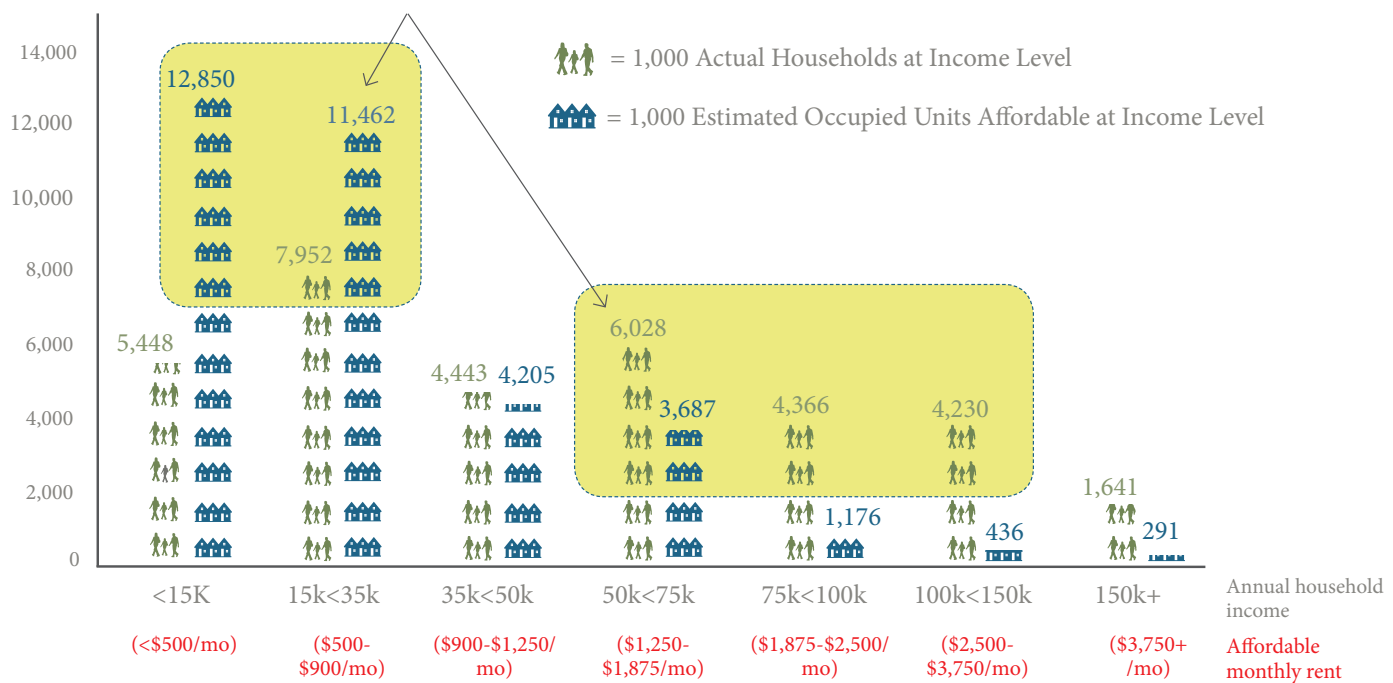
Moving south along the bayou, there continues to be a range of housing types, with manufactured homes alongside new brick homes and large historic estates. Housing is concentrated in town areas, but also lines LA 1 and LA 308 all the way down the bayou. It is common to see development patterns of one long street traversing east to west, bordered by

houses, and dead-ending into an agricultural field. A common practice in Lafourche parish, similar to the rest of Louisiana is for owners of large acreages to gift property to children and other family members. Historically in the Parish houses were raised; today many houses are built with slabs on grade.

LOW INCOME HOUSING

The Housing Authority of Lafourche Parish runs the Parish's public housing program. The authority currently owns seven apartment complexes with 206

Table 12: Mismatches provide opportunities to expand housing stock and types.



Source: American Community Survey 2006-2010, US Census Bureau

WHEN IS HOUSING CONSIDERED “AFFORDABLE?”

The amount of monthly rent that is considered affordable is calculated as 30% or less of monthly household income, as derived from annual household income. In Figure 29, households are grouped by income tax bracket to illustrate affordability of the current housing stock. To calculate the range of monthly rents that would be considered affordable for that income bracket, the high and low monthly incomes in each bracket are multiplied by .33. Beneath each bar, the income tax bracket is labeled in black text, and the range of affordable rents for that bracket is shown in red.

housing units for low and extremely low income residents. In addition, the authority has a housing program with 271 vouchers (in 2012). This Section 8 voucher program provides housing for clients in private markets. The authority pays landlords on behalf of low and very low income residents. The housing authority also supports two nonprofits and runs a loan guarantee program to assure mortgages to loan companies. The housing authority has a waiting list of over 200 people in need of 1, 2, or 3 bedroom family housing units. The authority has an 8 day open period to accept applications once every year to eighteen months. On average the authority takes in 300 applications over the eight day open period, for approximately 66 available units. The parish has a tremendous need for new multifamily rentals that can be rented at Section 8 levels.

Lafourche Parish’s Section 8 (Housing Choice Voucher Program) allows low income residents to find their own place and use the voucher to pay for all or part of the rent. In 2013 the U.S. Department of Housing and Urban Development awarded public housing authorities in Louisiana \$37,325,904 to be used to make major large-scale improvements to the state’s public housing assets.

Lafourche Parish received \$332,258 to support a maximum of 276 housing units.

It is important to note that the disproportionate number of housing units affordable at lower income brackets does not necessarily indicate an excess of quality, affordable housing options, but is likely a consequence of housing that has been damaged in storms or high-water events and abandoned. It is also likely that camps fall in this category.

WORKFORCE HOUSING

Workforce housing means a variety of housing types – single family homes, apartments, short-term stay units, condos – that are affordable to people of modest means. The generally accepted standard for housing affordability is for a household to pay no more than 30% of its annual income on housing. Families and individuals who pay more than 30% of their income on housing are at risk of having difficulty meeting essential needs such as food, clothing, medical care, and transportation. The lack of affordable workforce housing is a growing concern nationwide, including in Lafourche Parish.

Demand for new housing is expected to grow as job growth increases. As the economy recovers, the parish could face a critical shortage of housing for the area's workforce, particularly for short-term workers in the oil and gas industry near Port Fourchon. Local policies should provide reasonable and realistic opportunities for the creation of workforce housing, including multi-family housing especially in proximity of jobs and services.

NEW FLOOD INSURANCE AFFECTS HOUSING PATTERNS

The location of new households in Lafourche has changed over the last decade; new housing is still clustered around the Parish's largest employment centers, but it has shifted away from coastal and outlying areas (Figure 30). This shift may continue and be exacerbated by new and revised flood insurance rates through the Biggert-Waters Act 2012.

The Parish's Future Housing Needs

In the past, housing strategies were focused on providing single-family housing for families with children. Today, the majority of new households around the country are made

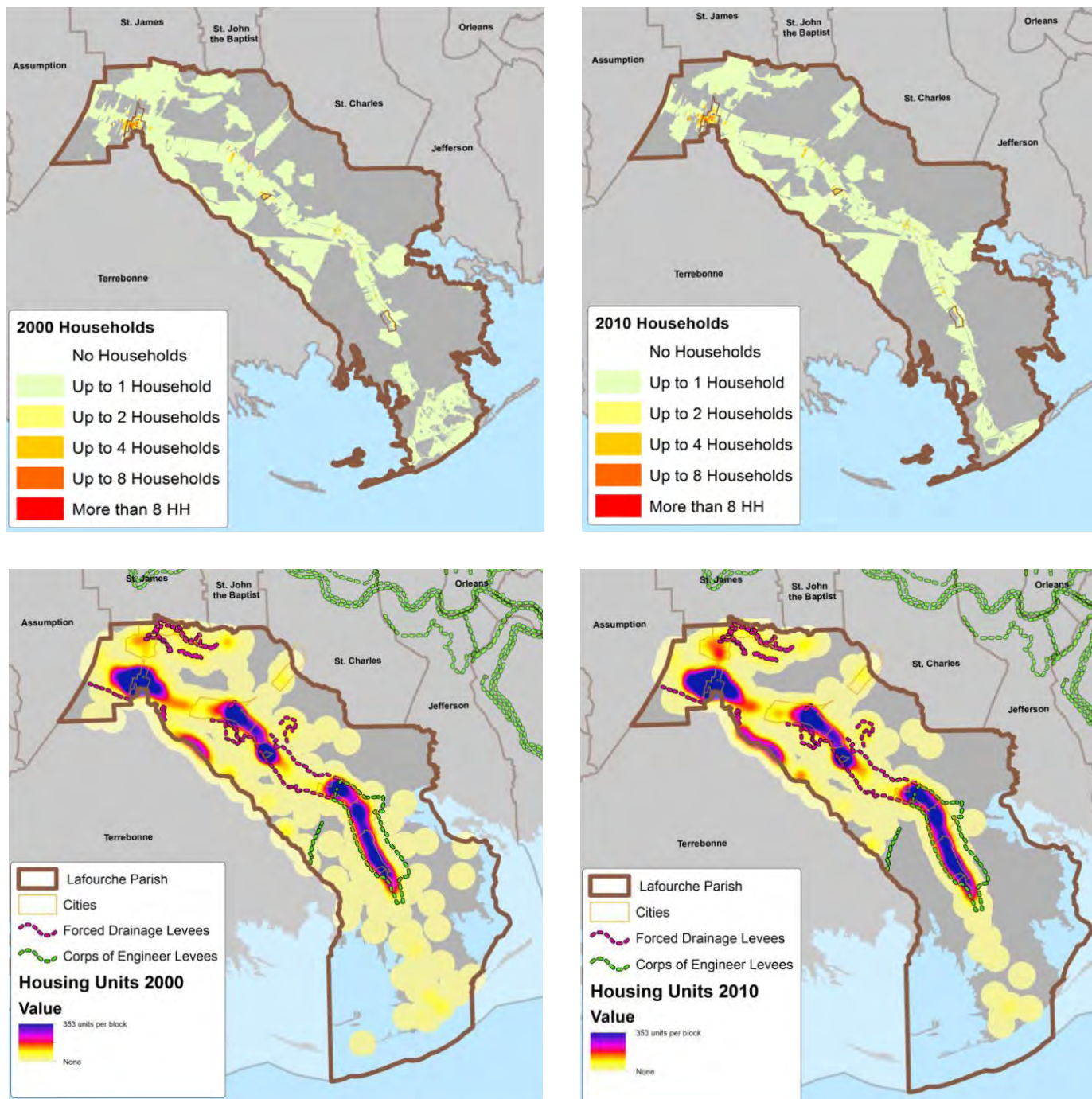
FLOOD INSURANCE REFORM ACT OF 2012

In July 2012, the U.S. Congress passed the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12) which calls on the Federal Emergency Management Agency (FEMA), and other agencies, to make a number of changes to the way the National Flood Insurance Program (NFIP) is run. Key goals of the legislation require the NFIP to raise rates to reflect true flood risk, make the program more financially stable, and change how Flood Insurance Rate Map (FIRM) updates impact policyholders.

The law requires changes to all major components of the program, including flood insurance, flood hazard mapping, grants, and the management of floodplains. The changes will mean premium rate increases for policyholders over time. The changes will be phased in over time, beginning in July 2013.

While many factors go into determining a property's full risk rate, the single most important is the elevation of the structure in relation to the Base Flood Elevation (BFE). A community's Flood Insurance Rate Map (FIRM) indicates the area of the community that has a 1% or greater annual chance of flooding. That area is called the Special Flood Hazard Area, or high-risk zone. The BFE is the elevation where there is a 1% or greater annual chance of flooding. For a property in the high-risk zone, you need to know the elevation of the structure in relation to the BFE. Generally, the higher the elevation above the BFE, the lower the flood risk. The information is shown on an Elevation Certificate, which is a form completed and signed by a licensed engineer or surveyor.

Figure 28: A comparison of housing development patterns from 2000 and 2010



Source: Parish Comprehensive Resiliency Plan

up of one or two people, a trend that is expected to continue into the future. These small households may be any age, ranging from students and young professionals to retired seniors.

The trend toward smaller households stems partially from aging baby boomers – a major demographic group nationally and in the Parish – who are more likely to have just one or two-person households. Many baby boomers will seek housing that is convenient, social, and low maintenance – like much of the housing found in medium to higher density neighborhoods. Additionally, younger adults – another important segment of the Parish’s population needed to support the labor pool – seek out diverse, pedestrian-friendly housing that is located closer to work and other daily destinations. Consumer research suggests that Generation Y represents the largest target group of people interested in living in urban environments.

Another factor impacting overall housing preferences is the current housing downturn facing

the nation. Renting is becoming an increasingly desirable option, and in many cases a necessity, for individuals and families. An increasingly mobile workforce values the flexibility that renting offers and ownership does not. Younger households and students also contribute to the rental demand nationwide. Research shows that over 70% of households headed by someone younger than 35 are renter-occupied, compared with only 18% of households headed by someone older than 60. This trend is projected to continue over the long term.

If local and national trends hold true, along with the Parish’s population and demographics forecasts, much of the Parish’s future demand for ownership units will be condominiums, smaller townhomes and compact single-family homes and multiplex housing with smaller footprints on smaller parcels. These products could run the spectrum from basic entry-level condos for first-time homebuyers to luxury townhomes and well-designed, small, single-family homes. To demonstrate this change, projections for current versus future housing demand in Lafourche

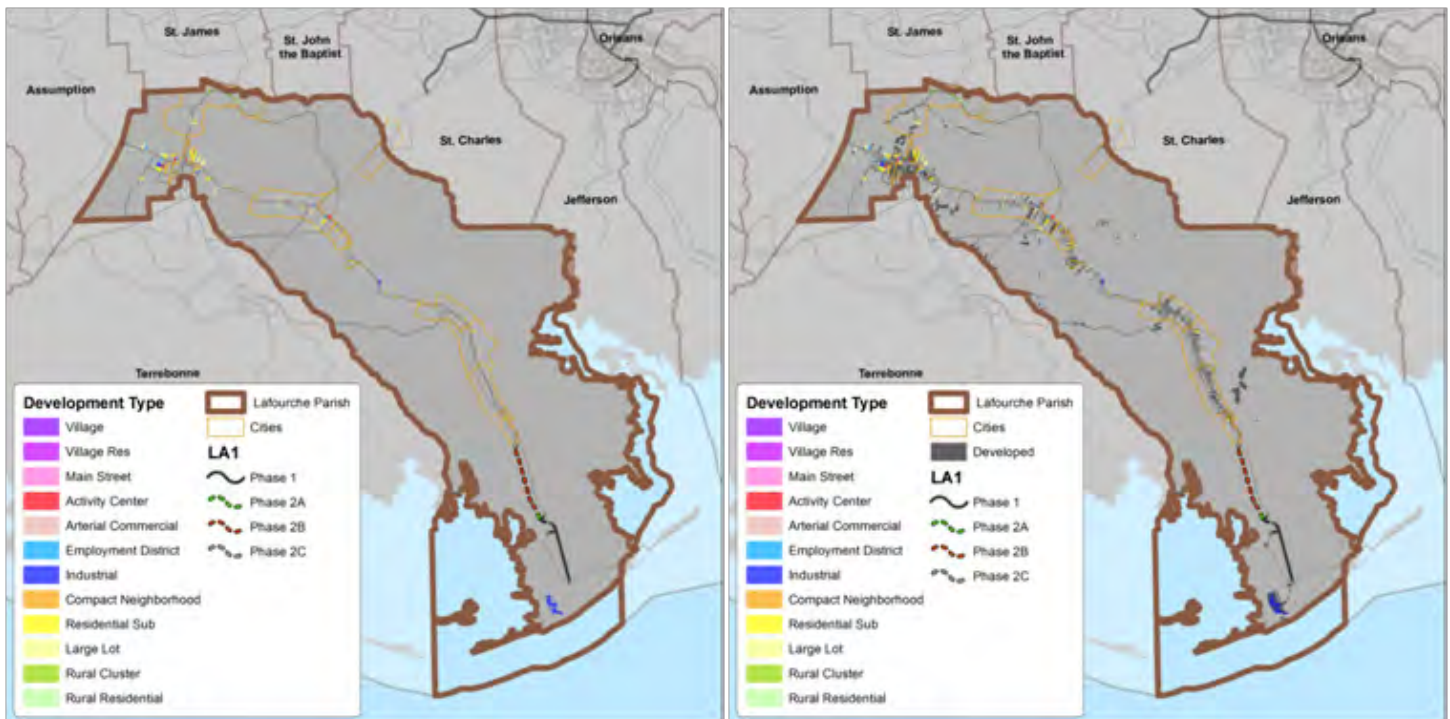
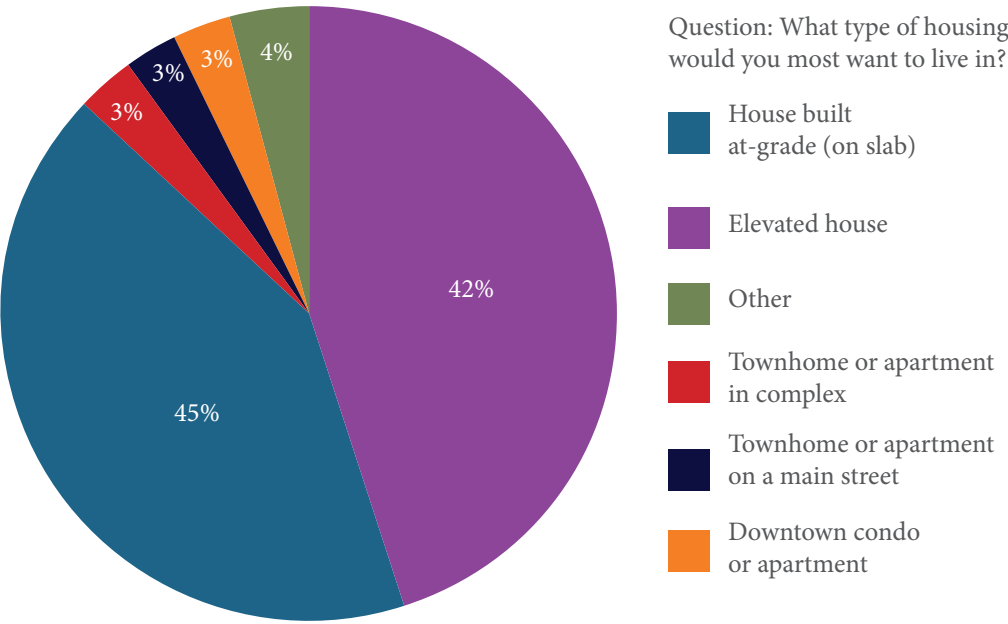


Table 13: Survey Results



show a flip in the proportion of large-lot, single-family units (decreasing from 49% to 20% of housing stock) and small-lot, single-family units (increasing from 24% to 49% of all housing stock).

While surveys and interviews of Lafourche residents and stakeholders show them almost evenly split between preferring elevated houses and houses built at grade on slab, in practice most people applying for building permits request houses built at grade.

In workshops, participants indicated a need and desire for a wider variety of housing types such as mixed use, small apartments and townhomes. People almost unanimously expressed a need for quality affordable rental units. At one focus group in the southern part of the Parish workers in the shipbuilding industry indicated that they had a severe difficulty in finding adequate housing for themselves and their families.

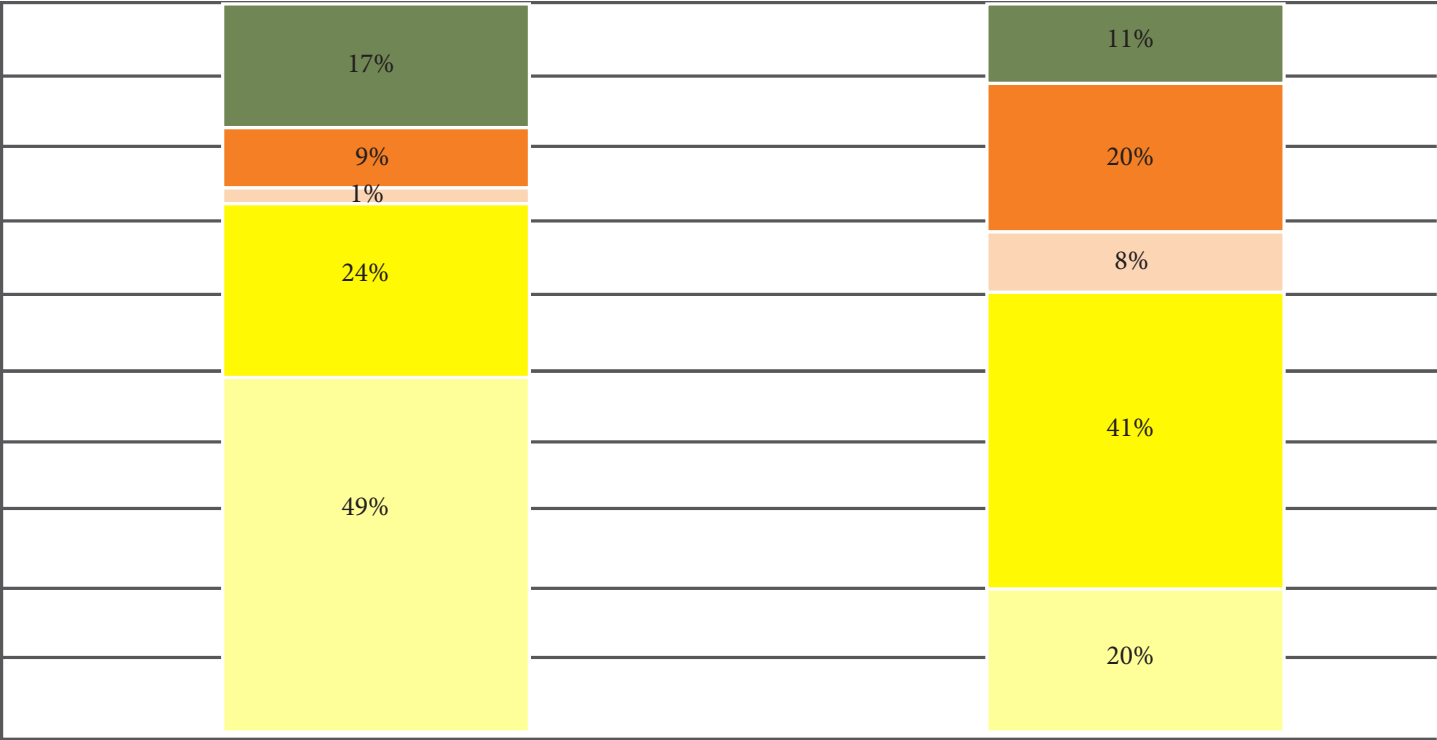
There is a significant need for housing for short-term and permanent workers in the oil, gas, ship

building, and technology fields. One way other communities and industries have addressed this need is through encouraging partnerships with employers to ensure adequate, affordable housing for workers.

The Parish and municipalities can provide services to areas where it makes sense to prioritize private development. Priority growth areas include:

- Thibodaux
- Raceland
- Mathews
- Lockport
- Larose

Table 14: Current vs. Future Housing Mix



Existing Lafourche Parish Housing Supply (2010)

Balance Housing Supply (2035)



Source: American Community Survey 5-year Estimate, 2006-10, U.S. Census Bureau, Fregonese Associates Blaanced Housing Model

HOUSING VISION

Lafourche Parish has a balanced housing mix to meet the needs of future residents.

Policy Recommendations

Goal 1: Create housing options that meet the need of future residents.

Strategy 1.1:

Increase housing options.

Actions

- 1.1.1 Conduct a housing needs assessment to determine the amount, location, condition and cost of rental and ownership housing in Lafourche Parish.
- 1.1.2 Partner with the housing authority and other entities to build affordable housing that creates a balanced housing mix, including assisted living and mixed income housing.
- 1.1.3 Encourage restoration and repair of existing housing, particularly housing located in areas with relatively lower flood risk, within existing towns, and in transportation-efficient locations throughout the Parish.
- 1.1.4 Use existing federal and state programs, public-private partnerships, and incentive programs to identify and meet the housing needs of low and moderate-income residents.
- 1.1.5 Work with property owners in the LA 1/ US 90 area to plan for development using land use, economic development and infrastructure tools.

Strategy 1.2:

Address the need for workforce housing for specific growing industries such as oil, gas, shipbuilding, and tech.

Actions

- 1.2.1 Use the results of the housing needs assessment to quantify the gap in short-term housing need and supply.
- 1.2.2 Partner with large employers to create workforce housing.
 - Encourage property owners in areas targeted for increased housing density, such as north of Larose, to advertise rental properties through established online marketplaces such as Craigslist.
 - Encourage employers to provide portable dwelling units in proximity to jobs for temporary worker housing.
 - Work with employers to create parish-wide regional transit partnerships from worker housing to employment centers.

Goal 2: Ensure that resiliency is considered in new building types.

Strategy 2.1:

Address the need for safe, resilient housing

Actions

- 2.2.1 Develop prototype plans that use resilient design and construction techniques and make available to residents.
- 2.2.2 Encourage the design of resilient structures that blend with the existing character.
- 2.2.3 Strengthen regulations that ensure new mobile homes are strong enough to withstand severe weather conditions.
- 2.2.4 Use prototype example plans for preferred housing types so that people who want to build infill housing can do so at reduced costs and with fast-tracked permitting.

Chapter 8: *Transportation* *Connections*

Introduction

The economy of Lafourche, like much of southern Louisiana is based on by the industry in the Gulf of Mexico. Roads were designed to bring these products north. Roadways connect Thibodaux, the largest city within the parish, to two large cities outside of the Parish – Houma and New Orleans. Investment and development patterns have continued with emphasis along Bayou Lafourche. During the Plan’s public engagement efforts, people were asked to express their desires for the future of development within the Parish. Their feedback showed that a high priority should be placed on new road design standards (i.e. complete streets) and providing other modes of transportation in the future. The following two transportation goals have been established and serve as a focal point for key strategies.

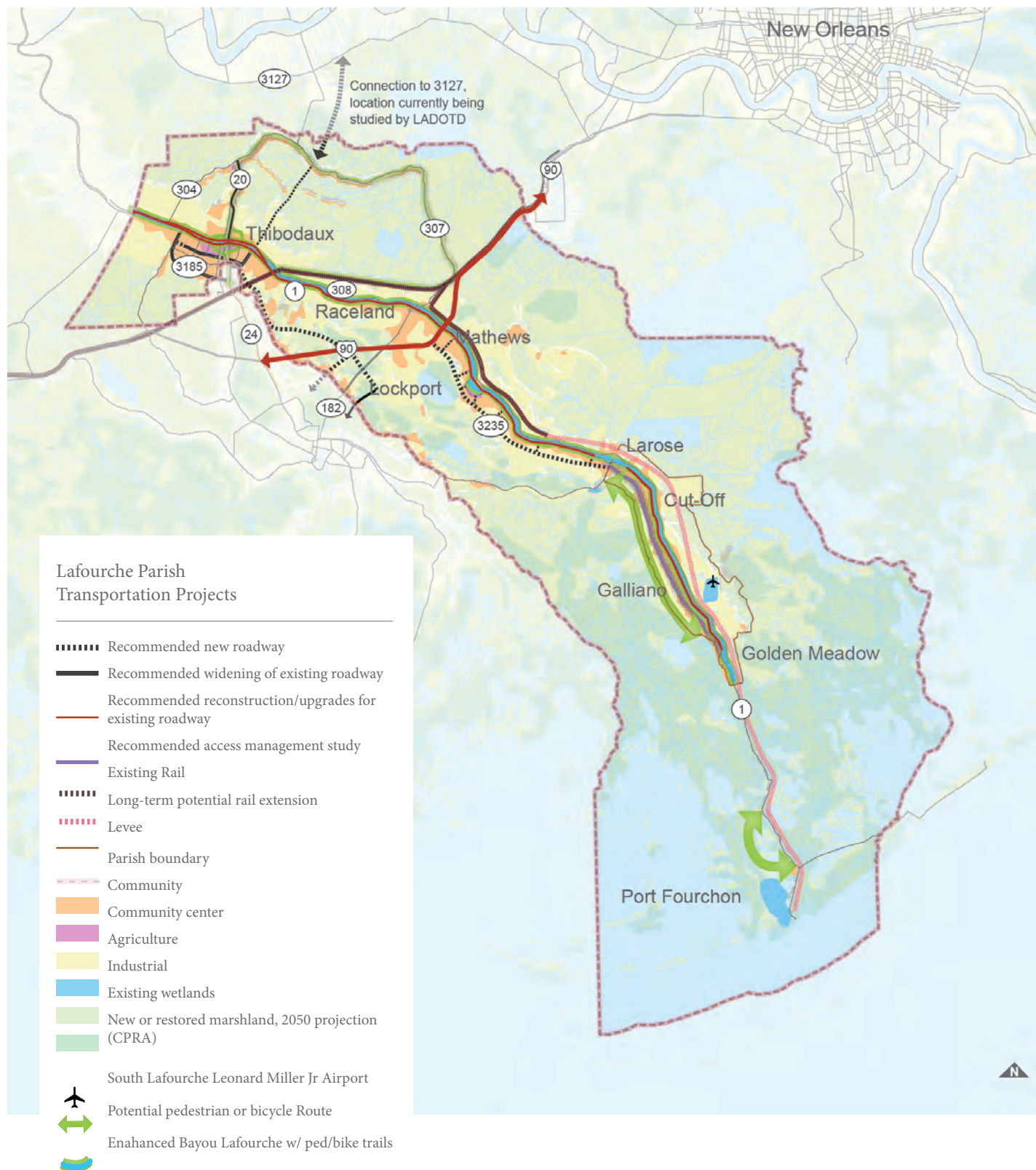
Transportation Connection Goals

- 1. Increase roadway capacity and improving safety.**
- 2. Improve the quality of transportation system and expand transportation mode options, including a long-term rail strategy to serve Port Fourchon.**

CHAPTER 8: Transportation Connections

Figure 29: Transportation Projects Map

This concept-level transportation projects map provides a basis for coordinating transportation planning efforts. It is intended to serve as a conceptual supplement to the MPO plan as not all projects from the MPO plan are reflected in this map.



Background

Roads

There are three major connecting corridors in Lafourche: U.S. 90, LA 1 and LA 308. LA-1 and LA-308 both run north-south from the Gulf of Mexico through Lafourche and into the continental US. Currently, these two major thoroughfares are two-lane, undivided roads. LA 1 is situated on the west side of the bayou and LA 308 is located on the east side. Commercial and residential developments are situated all along this corridor. The resulting long line of communities and homes gives the highway its nickname, the “longest main street in the nation.”

U.S. 90 is an east-west corridor that passes through the Parish, connecting New Orleans to the east and Lafayette to the west. It passes close to both Thibodaux and Houma, providing important statewide connections. U.S. 90 is a four-lane, divided road with a paved shoulder built to interstate standards in preparation for I-49. Drivers from Thibodaux can take LA 20 or LA 24 south to U.S. 90 or take LA 1 or LA 308 parallel southeast to connect to U.S. 90. These corridors move commuters from Lafourche to other major cities in the region.

Water

Water is a major part of life for Parish residents. Much of the Parish’s landscape is wetlands. Bayou Lafourche flows from the north part of the Parish down to Port Fourchon and the Gulf of Mexico. Most of the economy is founded on goods and services that are associated with water, like boat construction, oil and seafood from the Gulf of Mexico. In the northern portions of Lafourche Parish, near Thibodaux, the bayou is used mainly by individuals for recreational uses and by small, private companies for industrial and commercial uses. The bridges between 308 and LA 1 and the weir in Thibodaux limit boat movement up the Bayou.

As the bayou flows south from Larose to Golden Meadow, it is increasingly used for shipbuilding and fishing industries. Further south, Port Fourchon services over 90% of the Gulf of Mexico’s deepwater oil production.

Rail

Rail runs east and west near the US 90 corridor extending between New Orleans and Lafayette, and to coastal communities beyond. All goods from the Gulf first are shipped via truck to this location. A rail line right-of-way extends south of Raceland to Larose. It is currently not in use, but should be preserved for future connections south. There is no direct rail connection north into Assumption Parish or St. James Parish.

Public Transit

Public transit is limited in the Parish. Currently, Good Earth Transit, operated by Terrebonne Parish and paid for by the City of Thibodaux, runs a fixed route transit system providing circulator service around the City of Thibodaux. Good Earth Transit also operates a fixed route service within and around the City of Houma providing five other routes in addition to the one that connects the cities of Houma and Thibodaux.

Lafourche Council on Aging (COA) runs a public transport system with affordable, by-appointment transit within the parish and to nearby surrounding areas. The fee is reduced for the elderly and disabled. The COA has eight service vehicles, five of which are lift-equipped. Service is available 12 hours per day, Monday – Friday.

The Lafourche ARC organization provides transit for the mentally and physically disabled and elderly. It is a demand-responsive service with four lift-equipped vehicles, and is available ten hours a day Monday



South Lafourche Leonard Miller Jr. Airport in Galliano

through Friday. Rides are free to users.

Air Travel

The closest international airport to Lafourche Parish is Louis Armstrong New Orleans International Airport, located 45 minutes from Raceland. The airport is served by most major airlines and offers non-stop services to important national hubs including, Atlanta, GA, Charlotte-Douglas, NC, New York, NY (JFK and La Guardia), and Chicago, IL (Midway and O'Hare). The South Lafourche Leonard Miller Jr. Airport in Galliano is a general aviation airport with two runways and a nearby heliport.

Transportation Strategies

Connectivity and Capacity

LA 1 and LA 308 serve as both local roads and major regional through-ways. Due to the linear nature of the Parish from Thibodaux to the Port, these roads are the main access for both local and regional traffic that provide a wide variety of uses from school buses delivering children, residents driving to local shops and services, and industry use. An crash can shut down a roadway for hours. LA 3235 in the southern part of the Parish was built to facilitate truck traffic; however it is being compromised by uncontrolled access as residential uses are built along the roadway. This is increasingly creating conflicts and unsafe conditions between high-speed travelers and local, slower moving traffic.



Concept for connectivity between Walmart and Mathews Government Complex

Access Management

Overall corridor delays and individual intersection delays are major issues along LA 1 and LA 308, as is improving safety along LA 3235. Given the limitations and safety concerns related to the roadway system in these areas, access management presents solutions for the Parish's transportation system.

Access management strategies can increase roadway safety and efficiency. Strategies include adequately spaced shared driveways (using cross access easements), signaling high volume intersections, creating roundabouts, as well as other low-cost solutions. The American Association of State Highway and Transportation Officials (AASHTO) indicates that 50 to 70 percent of all crashes are access related and could be relieved with proper access management strategies. Access management

strategies have been proven to increase the capacity of a roadway by 23 to 45 percent depending on the number of changes made to the roadway.

Consolidating the number of driveways that exist along a street can have benefits for both the traveling public and property owners. It involves removing or relocating existing driveways to reduce the number of conflict points along the street, thereby increasing safety. Research shows that as driveways or other access connections decrease, the crash rates decrease. If the Parish implemented driveway consolidation along corridors where there is a high ratio of driveways per mile, there should be a significant reduction in the number of crashes.

Dedication of land on common property lines or developing joint access easements is another important tool that works to keep local traffic off of primary corridors. In many commercial areas,

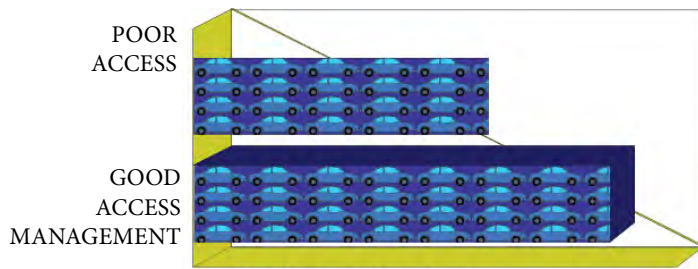
CHAPTER 8: Transportation Connections

Figure 30: Lafourche Parish Mobility Improvements

Express transit routes between Thibodaux, Houma and Lafayette are recommended. Express routes would deliver passengers to destinations with fewer stops. Local transit, which would include more frequent stops are recommended between Thibodaux, Houma, Raceland, Lockport, Larose, Golden Meadow.



Figure 31: Access Management Effects on Capacity
Good access management leads to increased capacity.

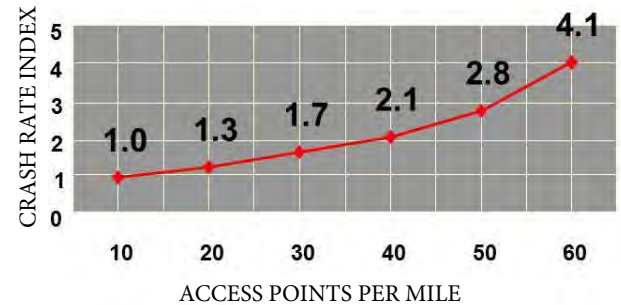


Source: FDOT 2010 Highway Capacity Manual

the length of frontage available to each property owner is limited, and limited frontage exposure makes it difficult to provide properly designed driveways. Eliminating driveways and sharing access can improve overall access and increase the available area for parking and deliveries. Working together with driveway consolidation efforts, cross access easements, and allowing connections between parking lots on adjacent lots ensures that a single driveway can serve both properties. The result is greater internal circulation between neighboring properties, which allows vehicles to circulate between businesses without having to re-enter the major roadway. Providing traffic signals at commercial driveways or streets intersections where there is heavy traffic is another way to provide safe, efficient traffic flow.

A good example of a need for a cross access agreement is at the Mathews Government Center along LA 1. People who visit the government facility and then want to shop at the neighboring Walmart have to make one left turn onto LA 1 and then another quick left turn from LA 1 into Walmart to go next door. This type of condition creates slowdowns and results in numerous crashes. An easement and connecting driveway between the two properties would allow traffic to travel between the two centers as well as increase the capacity and

Figure 32: Access Density and Crash Rate Correlation
As access density increases, crash rates increase.



Source: FDOT 2010 Highway Capacity Manual

safety of LA 1. The purpose of this approach is to limit the number of driveways on major roads as well as reduce vehicle miles traveled on busy roads surrounding commercial centers. With this method, trips between neighboring sites will not have to proceed onto the major road network.

Adding acceleration/deceleration lanes and turning lanes, where possible, would also help with access management. Deceleration lanes allow traffic exiting a major street to slow down to a safer speed to make a left or right hand turn at an intersection without affecting the main flow of traffic. Dedicated acceleration lanes allow cars that are joining the main road to speed up and match the flow of traffic.

CONSOLIDATION

On LA 3235, excessive driveways and single-use access on the roadway causes drivers to back out onto roads where the speed limits can reach high speeds, creating the potential for crashes. Figures 33 and 34 illustrate national research demonstrating the connection between excessive access and crash rates which in turn can have a significant impact on roadway capacity. A professional access management study for the current LA 3235 road will promote safety and enhance development opportunities along this corridor.



Increasing Capacity

The Houma-Thibodaux Metropolitan Planning Organization (HTMPO) has identified critical needs and potential funding sources for top transportation projects in their twenty-five year Metropolitan Transportation Plan. Implementing these major projects (which include the LA-1 improvements) will start the process of improving overall connectivity of the Parish.

Other projects on a more local scale have been identified and their construction will assist in creating a connected regional system. Connecting LA 3235 to U.S. 90, for example, will not only provide local mobility options, but can offer an alternative to the already congested LA 1 and LA 308.

The expansion of LA 3235 north to U.S. 90, and access management and safety improvements for existing LA 3235 are major road improvement priorities for the Parish. A corridor study to provide a better understanding of LA 3235's current uses, issues and opportunities, will assist in developing a plan that can provide a new evacuation route and also support local development opportunities. This corridor has the potential to serve several different roles for the Parish including providing additional trucking and emergency evacuation routes. Safety is a major concern for all drivers traveling along high volume corridors within Lafourche because of development patterns and access issues.

Low-Cost Solutions

Presently, low cost safety improvements are underway, including upgrading signage and installing warning signals and rumble strips.

Complete Streets Policy and Context Sensitive Solutions

Complete streets are intended to incorporate multiple modes of transportation options within a single roadway network based on the surrounding land use context. The State of Louisiana already has a complete streets policy in place. A complete streets roadway network can include bikeways, parking, sidewalks, planting buffers, and transit ways. Complete street design standards are flexible and may be implemented on existing and future transportation corridors. Incorporating complete street principles in future state and local road designs is essential to developing a transportation system that meets the needs of future residents. Local and regional transportation issues are rarely solved by one large sweeping improvement like the construction of a large highway – it takes many solutions working together to improve transportation capacity and safety.

An ideal complete streets policy:

- Addresses subdivisions as well as publicly built roads and bridges.
- Includes a vision for how and why the community wants to build its streets.
- Specifies that ‘all users’ includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles, and that all users are considered when designing and building streets.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires state and local review and approval of exceptions for state and local roads.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is adoptable by all agencies to cover all roads.
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs.
- Establishes that Complete Streets solutions will complement the context of the community.
- Includes specific next steps for implementation of the policy.

Small Area / Corridor Planning

Many transportation improvements can be better served by small area and/or corridor planning efforts. This focused style of planning allows for a multi-faceted approach to combine technical information with planning policies. Traditionally, transportation improvements were determined by identifying high-congestion locations through traffic counts and travel demand models that would

compute the locations experiencing the greatest amount of congestion during peak periods. As a result, capacity improvements would occur by either adding lanes to the existing congested thoroughfares or building new roads to complement the travel patterns and diffuse the traffic within a particular area or corridor. A small area corridor planning process is recommended for LA 3235.

Increasing Multi-Modal Opportunities

Another local transportation priority is to increase public transportation opportunities within Lafourche Parish and connect these with the existing fixed-route regional system. In workshops and focus groups conducted during the Plan’s development people identified the difficulty in getting around the Parish affordably as one of the top issues in the Parish.

In addition to implementing the currently planned projects, providing new local routes can greatly enhance residents’ access to transit facilities, thereby increasing their mobility options. Possible options include inter-city busses and increasing Amtrak access. Interviews conducted as part of the development of this plan revealed that residents in southern Lafourche Parish who do not own a motor vehicle struggle to get to and from Thibodaux and Houma. A transit system that moves people from their local communities into the cities to shop, attend doctors’ appointments or school, participate in entertainment activities and take care of other personal needs will increase the overall health and economy of the Parish.

Responding to this lack of infrastructure, today, a number of transportation tools are available that integrate multiple modes of travel, including bicycle lanes and boulevards, signage to announce presence of pedestrians and bicyclists, signalized crosswalks, and raised and textured at busy intersections.

The following process can assist the Parish in the decision-making for local transportation improvements that address mobility choices for its citizens during small area and/or corridor planning. These steps are intended to be incorporated into the planning of major roadway projects.

1. Identify transportation problem areas in the Parish and define the study area.
2. Determine area context, e.g. downtown, urban, suburban, or rural.
3. Identify potential street type, e.g. main street, multi-modal, commuter, livable, or industrial
4. Identify potential tools, e.g. access management or multi-use path.
5. Choose appropriate street type and cross section the overall health and economy of the Parish.

Hike and Bike Trails

There is a great opportunity to create a multi-use trail system along Bayou Lafourche. The Houma-Thibodaux MPO recently adopted the South Central Regional Bicycle and Pedestrian Plan, which highlights existing and proposed bike and pedestrian facilities in the six-parish region. Workshop participants repeatedly identified biking and walking as a priority issue. In a similar manner that the Mississippi River trail system has used the top of the levee as a multi-use, paved trail with pedestrian-scale lighting and other pedestrian amenities, Lafourche has the opportunity to create a

bayou trail that provides residents and tourists with a place to walk and bike safely to their destinations or use for recreation. The trail initiative would likely involve a program to purchase land where there is no available public land. Working together with property owners, the Parks and Recreation Department, and other Parish agencies to implement a system of trails along the bayou and to identify potential improvements in highly trafficked areas would provide significant quality of life and health amenities to Lafourche residents.

Major Highway Initiatives

LA 1

One of the highest priority major highway initiatives for the parish is the reconstruction and expansion of LA 1, which connects north Lafourche with Port Fourchon and subsequently other ports in the Gulf of Mexico. Building and completing LA 1 will have a great impact on the future trucking system throughout Lafourche Parish as well as help with current capacity and access management issues on LA 1. It is important to continue to work with DOTD and regional, state and national planning agencies to secure the funding to complete this important project. The project is supported by the LA 1 Coalition, a group of industry stakeholders.

LA 3235

Extending 3235 to U.S. 90 will provide an alternative to LA 1 for heavy truck and industrial traffic. Studies should look at key individual sections for final implementation. Also, a railroad right-of-way could be considered along the extension. This extension is key to diversifying industrial and logistic activities at Port Fourchon and the airport. It will be critical to manage access to maintain traffic flow and minimize conflicts with local traffic. The expansion could be constructed in sections to minimize impact.

U.S. 90/I-49

Securing access to U.S.90/I-49 and from LA 1/308 and the proposed extension of LA 3235 to U.S. 90 is also a transportation and freight priority. Both the determination of access connections and land use planning around these new interchanges will enable the Parish to maximize its development potential and provide smooth transitions from the local street system to a regional network.

Supported by the I-49 South Coalition, the Louisiana Department of Transportation 2012 I-49 study recommends using the existing alignment and an at-grade roadway wherever possible. The freeway costs, determined by the Louisiana Department of Transportation and Development are separated by the following three segment:

- LA 308 interchange to I-310 interchange: 17.8 miles, \$328M.
- I-310 interchange to the Huey P. Long Interchange: 13.8 miles, \$567.2M.
- Huey P. Long Interchange to Ames Boulevard: 3.9 miles, \$417.8M.

HOUMA-THIBODAU TO LA 3127 CONNECTION

This project will provide an improved North-South transportation link between the Houma/Thibodaux area and I-10 transportation. This Statewide Transportation Plan Priority-A Mega Project will provide safer, more efficient movement of people and goods as well facilitate emergency Hurricane evacuation. Detailed information concerning the transportation needs for this North-South link is currently being studied by the Louisiana Department of Transportation.

Bayou Plazas

The 2007 Bayou Lafourche Corridor Plan addresses needed improvements along the bayou. The overlook and dock recommendations should be implemented and expanded into a Bayou Lafourche Plaza concept to draw tourist and recreational activity into the Parish. Potential improvements include upgrading existing boat launches with better amenities—including parking, bicycle and pedestrian connections, fish cleaning stations, informational signs, attraction identification and maps.

By increasing investment in the bayou the parish can provide an efficient and attractive way for tourists and locals to travel up and down the water and stop at points of interest. From the bayou plazas, people would be able to visit local businesses and attractions by boat, on foot, on a bike. These plazas would create an incentive to travel farther down the bayou to locations not previously thought of as activity destinations. The plazas could feature public docks, park areas, private boat and bike rentals, local fish and produce markets, restaurants, shops and other recreational facilities. Similar ‘ports’ can be found in other nearby communities such as Lockport. Lafourche’s charm can best be experienced along the water, and these bayou attractions will couple with the local shops and restaurants to cultivate a sense of place and culture in Lafourche.

CHAPTER 8: Transportation Connections

Figure 33: Major Pedestrian/Bicycle and Recreation Opportunities Map

This concept map illustrates the potential for Bayou Lafourche to become a more significant recreation and tourism draw through beautification of the bayou and addition of bayou-side plazas or parks. The concept map identifies major existing, and potential boat launch locations and conceptually illustrates desired pedestrian and bike routes. More detailed information on parish and regional routes is specified in the South Central Bicycle and Pedestrian Plan.



TRANSPORTATION CONNECTIONS VISION

Lafourche Parish has a system of waterways, roads and trails that supports the Parish's economy, responds to the desires and needs of citizens, enables efficient response to emergencies, and makes the Parish more accessible to visitors who wish to experience the culture and beauty of this special place.

Policy Recommendations

Goal 1: Increase roadway capacity and improving safety.

Strategy 1.1:

Construct new roadways and improve existing facilities.

Actions

- 1.1.1 Identify a Parish staff person to correspond with DOTD on a regular basis so both agencies are apprised of big project and individual requests. The Parish representative should also serve on the MPO Technical Advisory Committee.
- 1.1.2 Pursue a parish-wide transportation study.
 - Conduct an access management study to improve safety on LA 3235.
- 1.1.3 Extend LA 3235, north to U.S. 90
 - Synchronize lights and video messaging signs.
 - Begin studying, protecting, and acquiring right of way for the proposed route.
- 1.1.4 Continue to improve and build an elevated LA-1 to Port Fourchon and fund LA1 Coalition efforts.
- 1.1.5 Complete ITS improvements on LA1/LA 20/ Canal Street to synchronize lights and signage.
- 1.1.6 Coordinate with DOTD on new interchanges and updates to existing FHWA interchanges.

Strategy 1.2:

Create a locally adopted access management plan for new and existing roadways.

Actions

- 1.2.1 Review of driveway spacing requirements, turn controls and other tools for new roadways.
- 1.2.2 Ongoing identification of existing roadway locations with high crash levels to study for potential access improvements.
- 1.2.3 Adopt an access management ordinance that requires developer-funded cross-access easements between new commercial development to reduce the number of vehicles entering and exiting major roadways to travel from one business next door to another.
- 1.2.4 Encourage access easements on new development and explore retrofitting existing developments.
- 1.2.5 Amend the subdivision ordinance to require a traffic impact study for developments that will produce a high level of traffic, as per the ITE Trip Generation Manual. An example of development triggers could include:
 - 1. Projects generating 500 or more additional trips per day added to the public road system, or
 - 2. Projects generating 100 or more daily trips along a road segment at peak times, or
 - 3. Projects that affect access to a state highway.
- 1.2.6 Work with the MPO to classify primary Parish roads as local, collector, or arterial.

Strategy 1.3:

As a parish, support major highway initiatives taking place at the state and national level.

Actions

- 1.3.1 Complete council resolutions for major highway initiatives.
- 1.3.2 Complete the construction and elevation of LA 1 to open as a future trucking system throughout the Parish with access to the nation. The Parish should continue their efforts to work with DOTD and regional planning agencies to secure the funding needed to complete this important project.
- 1.3.3 Preserve rights of way for new road when development occurs
- 1.3.4 Connect existing facilities.
- 1.3.5 Extend LA 3235 to connect with U.S. 90 north of Mathews to improve safety for evacuation and serve as a trucking route alternative to LA 1/Highway 308.
- 1.3.6 Protect freight routes from encroaching local traffic and development through local access management and land use development standards.
 - In the long-term (25 years), coordinate with the state on plans for the interchange of 308 at US-90. (This project is currently not funded.)
 - Coordinate with the state on access management along US-90 to Des Allemands.
 - Support the completion of an interchange at I-310 and US-90.
 - Support the completion of I-49 from Lafayette to New Orleans.

Strategy 1.4:

Plan for regional connectivity establishing a program to plan for future regional alignments and right-of-way preservation through a parish thoroughfare plan.

Actions

- 1.4.1 Work with the HTMPO to plan for future road alignments that provide facilities through Lafourche and adjacent parishes. Coordinate with adjacent parishes on regional road improvements and future road extensions to plan for needed future right-of-way.
- 1.4.2 In conjunction with HTMPO and adjacent parishes, prepare corridor preservation plans to identify and preserve right-of-way needed for future alignments.
 - Plan for the future extension of LA Highway 3235 by requiring preservation of the required right-of-way.
 - Work with Terrebonne Parish to acquire the right-of-way needed when Bayou Gardens is extended north across Bayou Blue.

Goal 2: Improve the quality of transportation system and expand transportation mode options, including a long-term rail strategy to serve Port Fourchon.

Strategy 2.1:

Expand multi-modal transportation options.

Actions

- 2.1.1 Plan and fund public transit service to provide basic service to major hubs: Raceland/Thibodaux/Houma.
- 2.1.2 Phase transit to provide – in the long-term – a daily service to Golden Meadow.
- 2.1.3 Explore coordinating with Port Fourchon to provide shuttle transportation for the 2,000 dock workers. Coordinate this effort with residential service to Golden Meadow.
- 2.1.3 Participate in future regional passenger train service through coordination with Amtrak.
- 2.1.4 Acquire and/or upgrade the existing rail lines throughout the Parish to make them available for shipment of goods coming

from the port.

- 2.1.5 Extend the rail line from Valentine to the Port by exploring partnerships with potential shipping interests to fund this project over the long term. This is a very high-cost project and should be evaluated as to the feasibility and timing.

Strategy 2.2:

Adopt a local complete streets and enhanced connectivity approach for roadway design and construction.

Actions

- 2.2.1 Integrate land development requirements and transportation improvements by incorporating a complete streets approach at the development review stage.
- 2.2.2 Design turn-lanes, signal timing, sidewalks, bus shelters and other amenities to make the Parish more multi-modal friendly.
- 2.2.3 Strive for protected - not shared - bike and pedestrian infrastructure where possible.
- 2.2.4 Adopt a local Complete Streets policy for local public roads.
- 2.2.5 Adopt Complete Streets standards for private subdivision roads.
- 2.2.6 Work with SCPDC staff to devise a connectivity plan for the Mathews area that improves connectivity for future transportation corridors, creates a pedestrian friendly environment and serves as a complete streets and connectivity demonstration project.

Strategy 2.3:

Continue to build a robust hike, bike and paddle trail system throughout the parish

Actions

- 2.3.1 Parish Council to Adopt the Bayou Lafourche Corridor Study.
- 2.3.2 Adopt the HTMPO's South Central Regional Bicycle and Pedestrian Plan.
- 2.3.3 Create a plan for the Parish to fund the

acquisition of Bayou-side property as it becomes available in order to create a multi-use trail along the edge of Bayou Lafourche.

- 2.3.4 Consider a multi-use trail in Golden Meadow from Oak Ridge Community Park south, possibly following Old Louisiana Highway 1 south of the levee.
- 2.3.5 Provide funding for the planning and implementation of a bike path from Nicholls State to the downtown area.
- 2.3.6 Connect existing ped/bike facilities in Thibodaux and Lockport.
- 2.3.7 Work with Thibodaux to expand the walking trail from downtown, Jean Laffite National Park, Nicholls State University, and Canal Street, and look at possibilities of connecting this system into the South Central Regional Bicycle and Pedestrian Plan.
- 2.3.8 Establish additional ped/bike facilities within Raceland and further south to include Larose and Golden Meadow
- Connect the schools, hospital, government center, and various businesses within Mathews and Raceland via walking and bike paths.
- 2.3.9 Research similar efforts across the country and prepare a report on best practices that are appropriate for Lafourche.
- 2.3.10 Install ped/bike signage along pathways and promote use.

Strategy 2.4:

Provide better access to Bayou Lafourche.

Actions

- 2.4.1 Identify sites for public/private partnerships; create bayou plazas and water taxi routes so locals and visitors can enjoy the Lafourche culture through public docks, park areas, private rentals, local fish and produce markets, restaurants, shops and recreational facilities all located in proximity to the bayou.

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Chapter 9: *Infrastructure*

Introduction

One of the Parish's top priorities is maintaining infrastructure and making improvements to levees, roads, highways, bridges, pump stations, and drainage. This reflects a tremendous effort to protect residents' assets from natural hazards and to keep up with fresh water demands from new residents and businesses. Just as water provides the economic sustenance and cultural heritage in Lafourche Parish, water infrastructure is foundational to the Parish's safety and resilience. Bayou Lafourche is the primary source of potable water for the communities along the Bayou, making the quality of the Bayou's water essential for the health, safety and quality of life in Lafourche. The fresh water demands of the residents, businesses and gulf ecosystems must be balanced to achieve a sustainable future for the region. This chapter focuses on critical infrastructure in regard to drainage, sanitary sewerage, potable water, fiber/telecommunications, electricity and gas, solid waste, recycling, and stormwater management.

Infrastructure Goals:

- 1. Amend guiding documents and regulations to align with the Lafourche Parish Drainage Master Plan.**
- 2. Plan to enhance and maintain service to existing development and plan for adequate service to growth areas.**



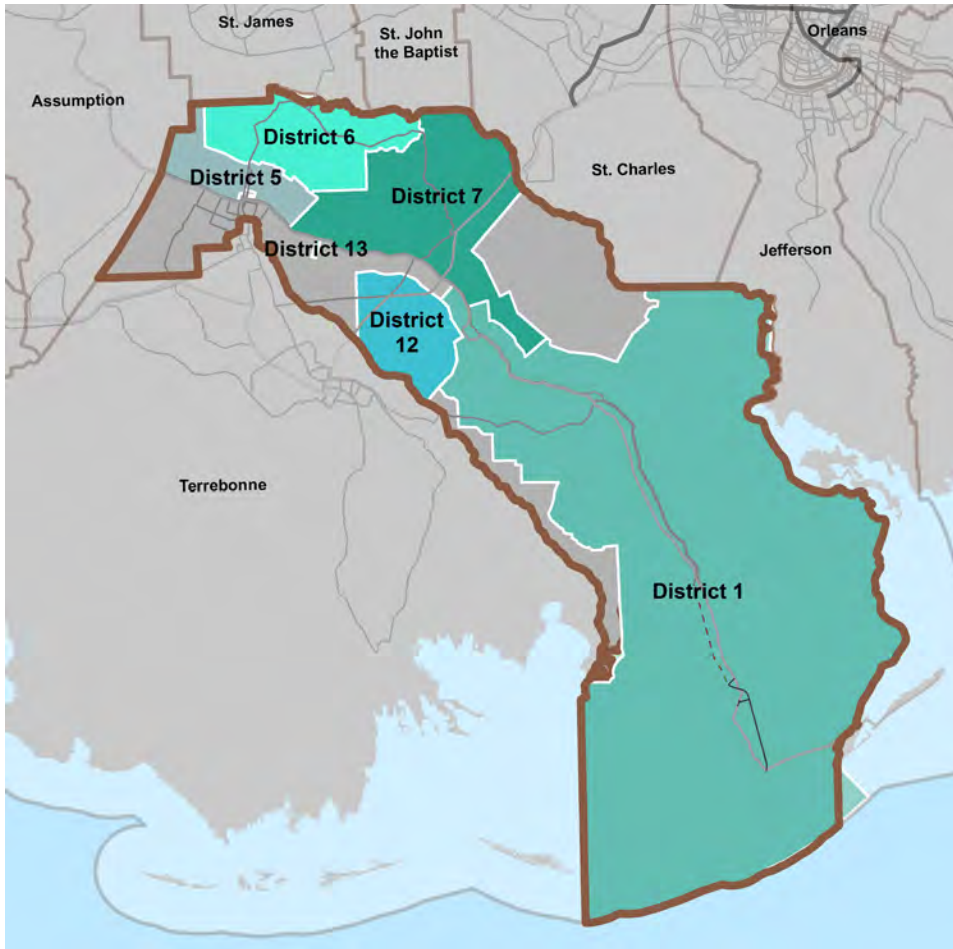


Figure 34: Drainage Districts

Source: SDPCD

Background

Drainage

In the past, the Parish has struggled with the ability of its gravity fed and forced drainage systems to handle issues caused by rain events. Subsidence and sea level rise require the use of forced drainage systems and their use must continue to expand in order to keep developed areas from flooding. Forced drainage systems separate the subsiding land from the rising sea and protect the Parish from surges due to tropical storm events. The Parish includes six drainage districts as depicted in the map above.

- Drainage District 1: includes an unincorporated area north of Lockport to the southern reaches of Lafourche Parish

Drainage District 5: includes area north of LA 1 near Thibodaux

- Drainage District 6: includes communities of Chackbay and Kraemer
- Drainage District 7: includes are south of district 4 and 5 north of LA 1 including the community of Raceland
- Drainage District 12: includes area south of LA 1 and Raceland, north west of Lockport
- Drainage District 13: includes small area south of LA 1 between Schriever and Raceland

2012 LAFOURCHE PARISH DRAINAGE MASTER PLAN

In 2012, the Parish Council adopted the Parish Drainage Master Plan. The Drainage Master Plan provides drainage models for the Parish to use for future drainage improvements and outlines recommendations for changes to existing ordinances. The Drainage Master Plan incorporated extensive research, existing conditions analysis, and public input as part of its development. The Drainage Master Plan does not address stormwater management.

Sewerage and Wastewater Treatment

Lafourche Parish has multiple sewer treatment facilities (plants). Most of these sewer treatment facilities (plants) are privately owned and operated with the parish having no control over these systems with the exception of the time of subdivision approvals. At the most, the parish and sewer district have 12 sewer treatment facilities (plants).

SEWERAGE RATES

There are six sewerage districts in the Parish:

- Sewerage District No. 1 serves approximately 390 customers in the Country Club Gardens Subdivision, Levert Subdivision, Bayou Country Club, Club Gardens Estates, Club Gardens East, and the Club Garden Extension. The sewerage plant for this district is over 45 years old. The equipment is over 10 years old.
- Sewerage District No. 2 includes the right bank of Bayou Lafourche and is contiguous to the western limits of the City of Thibodaux
- Sewerage District No. 4 covers includes a tract of land lying within the Marydale Subdivision.
- Sewerage District 7 covers northeastern portion of Lafourche parish, north of Hwy 1.

- Sewerage District No. 11 encompasses the entire Parish, exclusive of the incorporated areas and any other sewerage district.
- Sewerage District No. 14 includes Ward 2 – the Dugas Subdivision

Potable Water

The Lafourche Parish Water Works No. 1 provides potable water to over 250,000 people in four Parishes. The Bayou Lafourche Freshwater District maintains the pumping system that moves water from the Mississippi River through the bayou, and the District keeps the bayou open through dredging and other public works. Bayou Lafourche provides a source of water for households, industry, farming, transportation, and recreational purposes. The 2012 Bayou Lafourche Freshwater District Master Plan details improvement projects for the Fresh Water District.

The Parish has four water treatment plants for its potable water:

- Lafourche Parish Water District No. 1 (North)
- Golden Meadow Reverse Osmosis
- Lafourche Parish Water District No. 1 (Central)
- The City of Thibodaux Water Plant

Telecommunications

The Parish has several providers of internet, cable, and telephone service including Bell South Telecommunications, Vision Communication, AT&T, and Charter Communications.

Electricity and Gas

The Parish has several providers of electricity and gas services including Entergy, Hilcorp Energy Co., Thibodaux Utility Collections, Thibodaux City Gas & Water, South Coast Gas, South Louisiana Electric, and Trans LA Gas Company.

Solid Waste

The Parish currently has contracts with IESI / SWDI to collect and dispose solid waste and trash from over 30,800 residential and small commercial businesses. Curbside pickup occurs two times a week and larger bulky wastes are collected bi-monthly. Commercial businesses that generate larger volumes of solid waste are provided with appropriately sized garbage needs depending on their capacity needs.

Recycling

Several facilities in Thibodaux, Mathews, and Cut Off provide bins for recycling. However door-to-door recycling pick up is not currently provided. Facilities are listed below:

- Thibodaux: Acadia Truck Plaza (corner of St. Patrick Street & Highway 308)
- Mathews: Mathews Government Complex (4876 Highway 1)
- Galliano: South Lafourche Library (16241 E. Main St.)

All bins are available for use anytime day and night. Acceptable items include all paper products, all types of plastics, tin cans, and aluminum cans and foil. The recycling program does not include the recycling of glass items.

Stormwater Infrastructure

Stormwater excesses caused by large amounts of rainfall in a short period of time occur frequently in the Parish. Minimal elevations combined with a relatively flat topography and an extensive levee system mean that stormwater cannot flow out of many areas of the Parish and must be pumped out. Generally, the most damaging stormwater events have been a function of tropical storms and hurricanes. However, a rain-only stormwater event inundated the community of Alidore in 2009 with up to four feet of water in some areas.

Pump stations are a major consideration to remove stormwater between the levees. The Parish capital improvement program has a number of proposed upgrades to existing pump stations and funding for new pump stations.

Lafourche Parish relies on a series of levees for both backwater and storm surge flooding. Most levees protecting urban areas were constructed by the U. S. Army Corps of Engineers (USACE). These levees are maintained by the parish government and/or levee districts and inspected annually by district and federal officials. As noted, two levee districts in the parish have jurisdiction over different geographical areas in Lafourche Parish as described below:

- North Lafourche Levee District: Builds, operates, and maintains all levees north of the Intracoastal ranging in elevation from 4 to 8 feet
- South Lafourche Levee District: Builds, operates, and maintains all levees from Larose to south of Golden Meadow ranging in elevation from 9 to 13 feet
- Lafourche Parish: Builds, operates, and maintains various drainage levees ranging in elevation from 3 to 8 feet

As a general rule, capital improvements and maintenance of pump stations is a function of the Parish Department of Public Works or the levee districts. Levee construction is a function of the Corps while levee maintenance is the responsibility of the Lafourche Parish government and the levee districts. The three entities are constantly improving their respective levees to provide greater protection to the citizens they serve.

Louisiana's 2012 Master Plan includes various coastal protection and restoration measures such as marsh creation, structural protection, and sediment diversion that when constructed will reinforce the coastline within both Lafourche Parish and the state as a whole, thereby further protecting the area from coastal erosion and the effects of hurricanes.

INFRASTRUCTURE VISION

Lafourche excels in meeting residents' health and safety needs by improving the built environment as a means of enhancing protection, improving economic health, creating community cohesion, and providing recreational opportunities.

Policy Recommendations

Goal 1: Amend guiding documents and regulations to align with the Lafourche Parish Drainage Master Plan.

Strategy 1.1:

Develop an overall storm drainage manual and adopt it for use in the Parish and the municipalities.

Strategy 1.2:

Update the subdivision ordinance and drainage design standards.

Actions

- 1.2.1 Design new developments to accommodate the 4% annual chance event (25 year storm). 24-hour duration should be in accordance with a total depth of 10.8 inches according to National Weather Service Technical Paper No. 40.
- 1.2.2 Limit flow rate and volume of discharge from any proposed development to the 25-year storm pre-development rate.
- 1.2.3 Require proposed developments to show hydraulic calculations to the channels modeled within the Drainage Master Plan.
- 1.2.4 Require all development to be above the peak water stage elevation for the 25-year storm, as determined in the Drainage Master Plan or the FEMA BFE, whichever is higher.

- 1.2.5 Encourage the use of large regional detention areas and reservoir banking.
- 1.2.6 Implement impact fees to mitigate drainage impacts caused by a proposed development.
- 1.2.7 When possible, hire additional technical staff capable of reviewing drainage calculations.

Strategy 1.3:

Implement development standards for flood damage protection, stormwater management, natural resource protection, tree preservation, and burrow pits.

Goal 2: Plan to enhance and maintain service to existing development and plan for adequate service to growth areas.

Strategy 2.1:

Implement current infrastructure plans to plan for adequate service to growth areas.

Strategy 2.2:

Plan water district improvements and expansions as it relates to the uses and intensity levels on the vision map.

Strategy 2.3:

Maintain the water quality in Bayou Lafourche, to ensure that the bayou has the ability to provide drinking water for multiple parishes, as managed by the Lafourche Parish Water District.

Actions

- 2.3.1 Actively enforce existing state and water district setbacks along the bayou.
- 2.3.2 Consider establishing parish-wide setbacks along the bayou to protect the integrity of the bayou water system.

Strategy 2.4:

Continue to support programs that focus on restoring the coast and wetlands.

Strategy 2.5:

Secure infrastructure to improve ability to recover from storm events.

Strategy 2.6:

Use the vision map to guide plans for new community sewer systems by focusing on community centers.

Strategy 2.7:

Develop a plan to address sewerage infrastructure in the Parish.

Actions

- 2.7.1 Develop comprehensive plans for potable water and sewerage and wastewater treatment.

Strategy 2.8:

Incorporate the Implementation Plan of this Comprehensive Resiliency Plan into the Capital Improvement Plan.

Strategy 2.9:

Actively enforce existing state and water district setbacks along the bayou. Consider establishing parish-wide setbacks along the bayou to protect the integrity of the bayou water system.

Strategy 2.10:

Enhance boat launches along the bayou and establish and maintain access points to the water in coastal areas.

Actions

- 2.10.1 Provide access and signage to boat launches to help tourists find the facilities.
- 2.10.2 Provide amenities such as food, snacks, bait and equipment rentals at the boat launches.

Chapter 10: *Economic Development*

Introduction

Lafourche’s economic assets include overall stronger employment than the region as a whole and major competitive advantages in certain sectors such as transportation, oil and gas support, tourism, and fisheries. Challenges for sustainable growth include a shrinking workforce (the phenomenon that over half of most medium-skilled workers connected to the oil and port industries will retire in the next several years has been aptly dubbed “the great crew change”), and the need to attract and retain young and skilled workers, as well as a strong need for economic diversification.

Economic Development Goals

1. **Strengthen economic development coordination within the Parish, regionally and state-wide.**
2. **Build the economy on existing Parish assets.**
3. **Create workforce training programs that develop skills of existing residents to match industry needs.**



Lafourche Strengths and Weakness

The following strengths and weaknesses of Lafourche and the South Central Region's economy were identified in a strengths, weaknesses, opportunities and threats (SWOT) analysis performed by International Economic Development (IEDC) teams that worked in Lafourche and Terrebonne Parishes following the 2010 oil spill.

STRENGTHS

- Natural resources – oil and gas, fisheries, wildlife
- Port Fourchon, LOOP
- Thibodaux Municipal Airport, South Lafourche Leonard J. Miller Airport
- Pipeline systems
- Highway Access – Interstate 10, US 90
- Skilled Workforce – disaster knowledge and experience
- Industrial knowledge infrastructure
- Technical and Community college systems
- Cultural identity and sense of place; eco- and cultural tourism
- Entrepreneurial spirit and inventiveness
- Fisheries cluster

WEAKNESSES

- Lack of Hurricane protection levees
- Severe weather events fact of life; long-term impacts of disasters
- Chronic labor shortages
- Loss of Barrier Islands and Coastal wetlands
- Limited Housing Stock
- Limited educational attainment, high percentage of high school dropouts
- Economy remains largely undiversified
- Over-reliance by state and local government on oil and gas severance and sales taxes
- Limited worker certification programs
- Insurance cost and availability barrier to area business
- Limited access to capital
- Debt limits; lack of venture capital
- Lack of Research University
- Limited industrial/business park space or buildings and sites

SOUTH CENTRAL REGIONAL ECONOMIC DEVELOPMENT STRATEGY

The South Central Comprehensive Economic Development Strategy coordinates regional economic development efforts between the different entities and agencies concerned. There are four main elements:

1. An analysis of the regional economy and the external trends and forces that impact it.
2. A vision encompassed in the statement of the region's goals.
3. The action plan developed to implement the goals.
4. An evaluation to determine the effectiveness of the action.

The South Central Region planning area has the same jurisdiction as the Houma Thibodaux Metropolitan Planning Organization (HTMPO), and includes six parishes: Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, and Terrebonne. In addition, there are six municipal members: Golden Meadow, Gramercy, Lockport, Litcher, Napoleonville, and Thibodaux.

The document, updated in 2012, is organized by seven overarching goals aimed at advancing sustainable economic development in the South Central Region:

1. Improve public infrastructure to support and sustain a viable economy and environment.
2. Support employers in key geographic areas where needed infrastructure already exists.
3. Protect, conserve and promote natural resources and a more equitable use of these resources for business and recreation.
4. Pre-plan to improve emergency operations and recovery.
5. Improve fiscal capacity of local government and the community to make the region financially attractive for economic development and to enhance quality of life.
6. Improve the Parish's capacity to make economic development decisions.

7. Improve the Parish's capacity to make efficient land use decisions.

While the South Central Comprehensive Economic Development Strategy addresses regional issues, a substantial portion of its content is directly relevant to Lafourche Parish, and is integrated throughout this chapter.

Coordinating Parish-wide economic development efforts with regional strategies will amplify the effect of local actions by streamlining resources and directing them toward their highest and best use.

Background

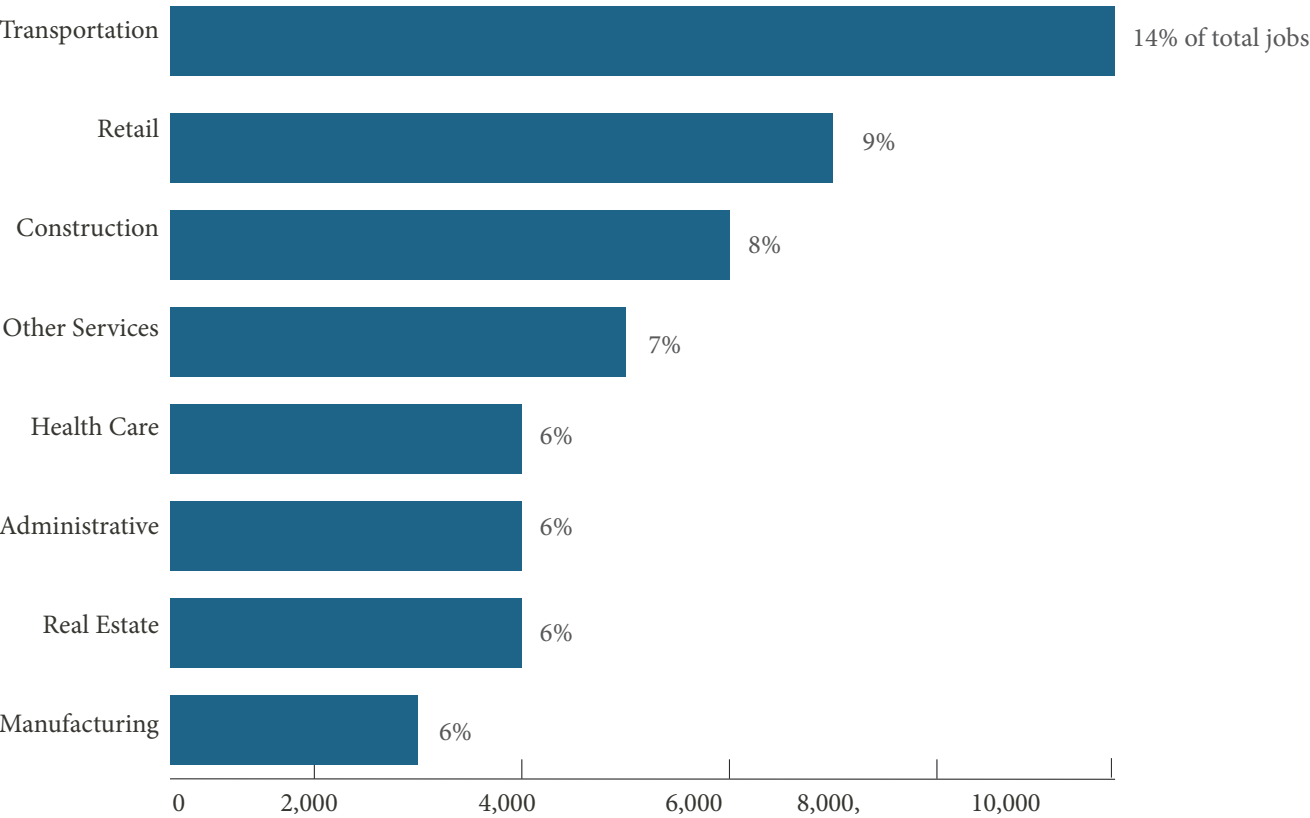
Lafourche Parish’s motto is “Feeding and Fueling America.” The Parish has a total agriculture farm value of over \$98.78 million resulting in an economic impact of \$250 million. Lafourche ranks in the top 10 parishes in the state of Louisiana in sugar, citrus and beef.

As the 9th largest sugar parish with over 28,000 acres of sugarcane, the Parish has a farm value of over \$27 million in 32 farms. Two sugar mills grind over 2 million tons of sugar cane annually. The Parish is the 10th largest beef-producing parish with over 18,000 cows, 280 cattlemen and 50,000 acres of pasture with a farm value of over \$8.7 million. Lafourche is the 2nd in the state in citrus production with 41 producers on over 100 acres of primarily satsumas and

navel oranges, with a farm value of nearly \$1 million. Additionally, the Parish is the 21st largest vegetable producing parish with 12 commercial producers on 86 acres. The biggest crops are tomatoes, cabbage, peppers, okra and potatoes and the farm value is nearly \$600,000. The Parish also has income from timber, hay and other animal commodities, such as horses, sheep, goats, chickens and pigs.

Lafourche Parish also “Feeds America” with seafood as well. Local fishermen haul in catches of shrimp, crawfish and crabs as well as several species of freshwater and saltwater fish and oysters. Seafood is sold locally, shipped fresh to New Orleans markets, and/or shipped elsewhere for processing.

Table 15: Largest Employment Sectors — 2010



Source: US Bureau of Economic Analysis, 2005-2010 (CA25N)

Port Fourchon is another large contributor to the Parish's economy, where 9 of the top 10 taxpayers in Lafourche operate from and/or utilize the port facilities. Over 250 companies occupy the port located at the southern end of the Parish at the Gulf of Mexico. Port Fourchon plays a strategic role in furnishing the country with up to 18% of its entire oil supply. Domestically, Port Fourchon services 90% of all deep water oil production in the Gulf of Mexico, where America gets one-third of its domestic oil supply. The port is also the land base for LOOP (Louisiana Offshore Oil Port) which handles 10-15% of the nation's foreign oil and is connected to 50% of U.S. refining capacity.

Because the fishing and oil industries are so prevalent here in Lafourche, the shipbuilding industry also thrives here. Ships and boats used in both industries are fabricated here in the Parish and sent all over the world. Additionally, a large number of military vessels are built here as well.

Lafourche's economy currently benefits from robust growth in both established and emerging industrial sectors and strong employment levels compared to the rest of the region. Port Fourchon's proximity to deep water shows great potential to expand port operations and freight-handling capacity throughout the Parish. Additionally, ecotourism opportunities thrive in Lafourche's unique natural areas with its wildlife and natural amenities of the coastal marshes. However, challenges for sustainable economic growth in the Parish include a diminishing labor pool, the inability to attract and retain a younger workforce, a high level of vulnerability to global oil markets, and finding strategies to decrease retail leakages.

Employment and Workforce Trends

Employment is strong in Lafourche, with a five-year, 13% job growth (totaling 7,000 new jobs in the period from 2005 to 2010) concentrated in sectors where the Parish has a regional advantage including transportation and warehousing; forestry and fishing; and management. Almost 40% of these jobs (2,681) were in transportation and warehousing alone. Most industries had net job growth and the top five growth industries added a total of 4,510 jobs.

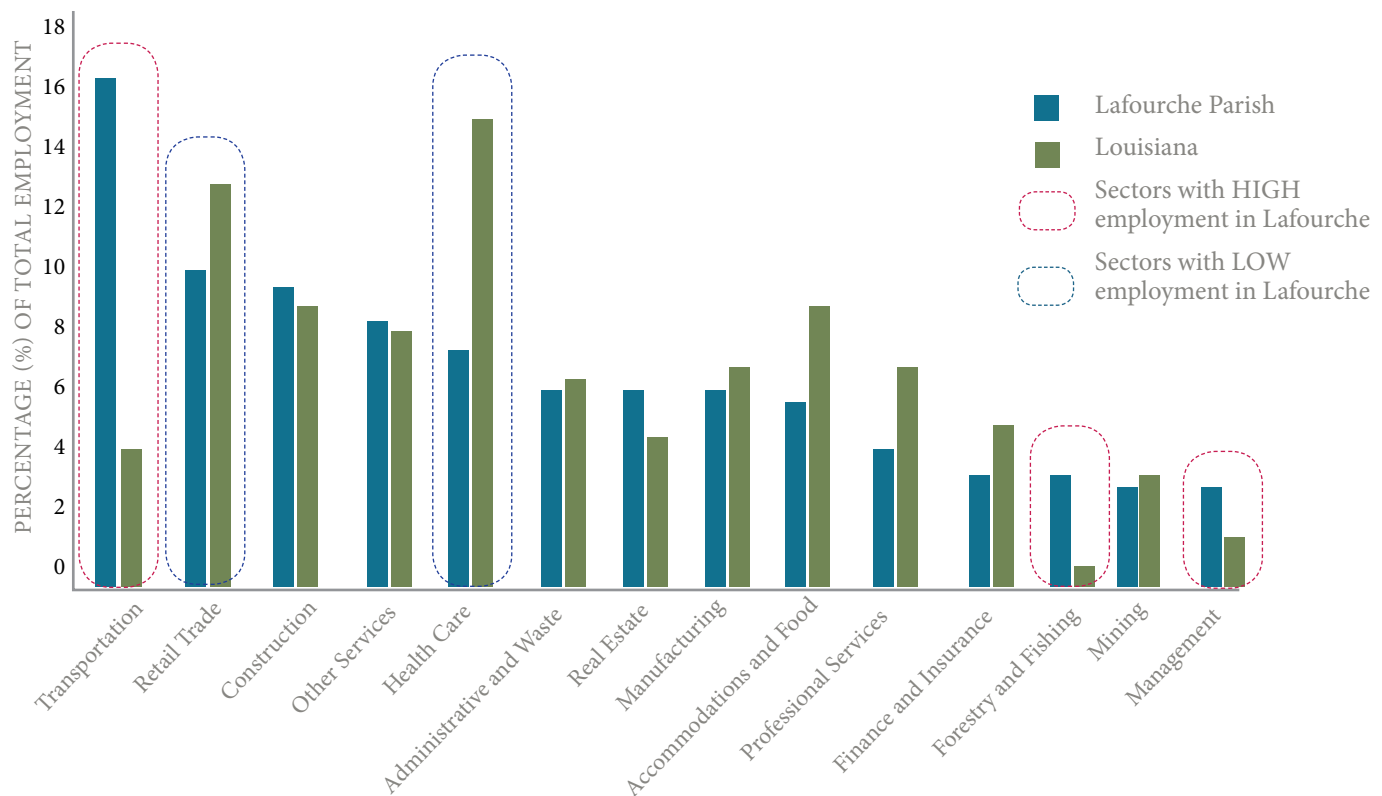
Industries in decline include administrative and waste management, (down by 15%, or 620 jobs lost), and information (down by 8%). The manufacturing industry has remained stagnant with no net change between 2005-2010.

Table 16: Job Growth by Employment Type in Lafourche

Employment by Type	Jobs in 2005	Jobs in 2010	Percent Change (%)
Wage & Salary Employment	35,679	39,714	11%
Non-farm Proprietors	316,947	19,839	17%
Farm Proprietors	324	347	7%
TOTAL PARISH EMPLOYMENT	52,950	59,900	13%

Source: US Bureau of Economic Analysis, 2005-2010 (CA25N)

Table 17: Employment in Lafourche Compared to the State of Louisiana by Sector (2010).



Source: US Bureau of Economic Analysis, 2005-2010 (CA25.N) and Lafourche Parish Comprehensive Plan

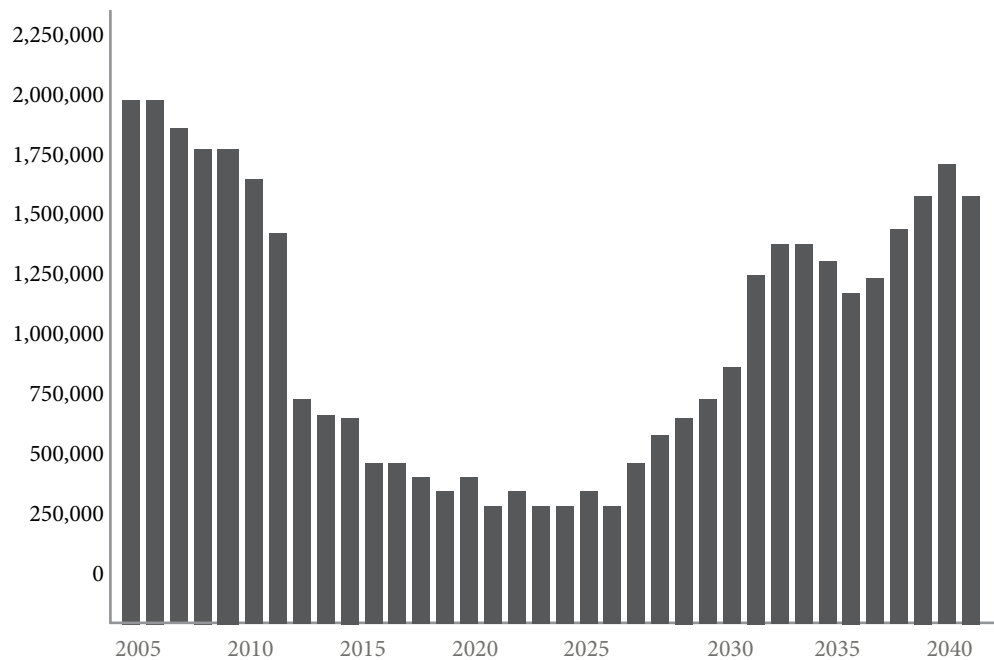
THE GULF COAST ADVANTAGE

With the Gulf Coast having the fastest population growth in the U.S., expanding vessel capacity provides opportunities for companies owning and operating carriers that transport other companies' cargo to add new services (for example, the ability to transport dry, liquid, or oversized cargo) and serve distinct markets in the Gulf of Mexico. Major investments in the port capacity and distribution centers are increasing the international interest in the Gulf Coast to shippers.

ATTRACTING GENERATION Y

While employment is generally strong in Lafourche, employers are facing a shrinking labor pool as aging baby boomers exit the workforce. In order to grow and keep pace regionally and within the state, the Parish needs specific strategies designed to retain and attract people in their 20s and 30s, and encourage recent graduates to stay in the Parish. This generation, known as Generation Y, is the most connected of any generation in history with access to constant flows of information. They value staying connected to friends and families, having a good life-work balance, diverse housing, and social opportunities. To retain this population segment, Lafourche will need to match training and educational opportunities with emerging sectors and provide family-wage jobs so that residents are prepared and new businesses view Lafourche as an attractive employment environment with skilled workers. In addition, it will be important to foster a housing market to meet the growing demand for compact, pedestrian-friendly neighborhoods desired by Generation Y.

Table 18: Percent Net Annual Change in the Working Age Population



Source: US Bureau of Economic Analysis, 2005-2010 (CA25N) and Lafourche Parish Comprehensive Plan

MATCHING WORKER TRAINING

Skills of local workers do not always match those of the jobs available, therefore targeted training is needed. Thirty percent of the labor force in Lafourche is external, coming from other parishes or states to work primarily at Port Fourchon. Generally, these jobs are not held by residents because their skills do not match the requirements. The U.S. Bureau of Labor Statistics estimates that between 40–45% of all job openings in the economy through 2014 will be in middle-skilled occupations, compared to 33% in high-skilled occupations and 22% in low-skilled service occupations. According to the Georgetown University Public Policy Institute, many of these middle-skilled jobs are best suited for domestic locations and pay relatively well. A number of these occupations face critical shortfalls in skilled workers.

Two trends affect the middle-skilled job category significantly. Retiring baby boomers will create large vacancies in the low- to middle-skilled jobs. Immigrants are likely to fill the bottom- and top-skilled

jobs more easily than those in the middle. Together, these trends will leave growing shortages of workers for middle-skilled jobs—those that require postsecondary education and training, but not necessarily a bachelor's degree.

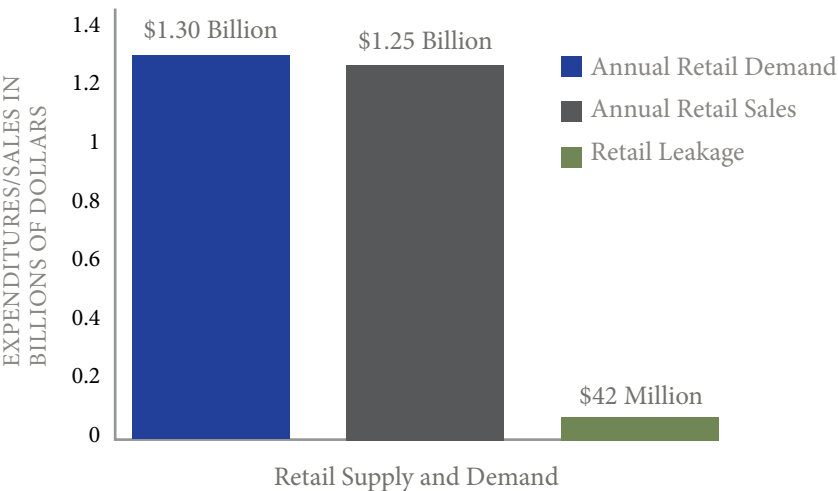
Regionally, Lafourche's population of young adults has the lowest percentage of bachelor's degrees or higher (2.1%). Among the population age 25 and older, Lafourche has second lowest regional percentage of graduate or professional degrees (3.6%). Overall, the state of Louisiana has a lower labor force participation rate than the national average (60.5% vs. 64.5%). This is mostly due to incomplete education and training (U.S. Department of Labor, March 2011) – high school graduation rates in Lafourche are also lower than the national average for each ethnic group except American Indians (matching the average at 54%).

In order to keep up with the changing needs for experienced employees, communities and employers are creating special community college programs to

UNDERSTANDING RETAIL LEAKAGES AND SURPLUS

In retail, leakage occurs when members of a community spend money outside that community or when money spent inside that community is transferred outside the community. For example, crossing a border to buy goods forgoes the same purchase that could have been made inside the community. A retail surplus means that the community’s trade area is capturing the local market plus attracting non-local shoppers.

Table 19: Retail Leakage and Opportunities



Source: Lafourche Parish Comprehensive Plan

fill local labor needs. A national example is Florida’s community college system which in 2012 began a program to train and employ over 2,600 students in manufacturing jobs with 38 employers committing to hire graduates¹. Nicholls State University has targeted programs in a number of areas that service local businesses, including petroleum management, nursing, business management, and food services. Continuing to explore linkages between employers and the University will help capture this great asset. Additionally, accessible transportation options to training sites are critical to participation.

INDUSTRY MIX

Today’s mix of industries in Lafourche is not optimal for maximizing local business investments and easily adapting to global market fluctuations and changing environmental conditions. Oil-based industry makes up 90% of the business going through Port Fourchon – the Parish’s largest employment facility. The lack of local retail outlets is causing “retail leakages” where local customers spend more money in businesses

outside the Parish than inside the Parish. Much of this retail leakage goes to neighboring parishes. Examples include businesses dealing in home furnishings, computers, camera equipment, sporting goods, and clothing and accessories.

Focusing economic development in expanding sectors such as culinary arts, logistics operations, and ship-building will not only reduce over-reliance on one industry, but will also retain more dollars spent within the community and increase the positive impacts of the local multiplier effect.

PORT FOURCHON

Port Fourchon has experienced tremendous growth since the 1960s. Starting with just two businesses, there are now over 250 companies working out of the Port. With 400 acres of elevated land, the Port supplies the energy industry by providing 90% of the deep water oil and gas activity in the Gulf and servicing 18% of the nation’s oil supply. Port Fourchon is the service base for the Louisiana Offshore Oil Port (LOOP) and is the

¹ <http://www.tampabay.com/news/business/spc-will-oversee-15-million-federal-job-training-grant-to-florida/1252465>

only port in Louisiana servicing outer continental shelf activities. On a daily basis the Port services 270 large shipping vessels supplying more than 1200 trucks on the roads to bring goods to the nation. In a month, about 15,000 workers pass through to access offshore jobs. With an annual budget of \$80 million it is a driver in the local, state, and national economy.

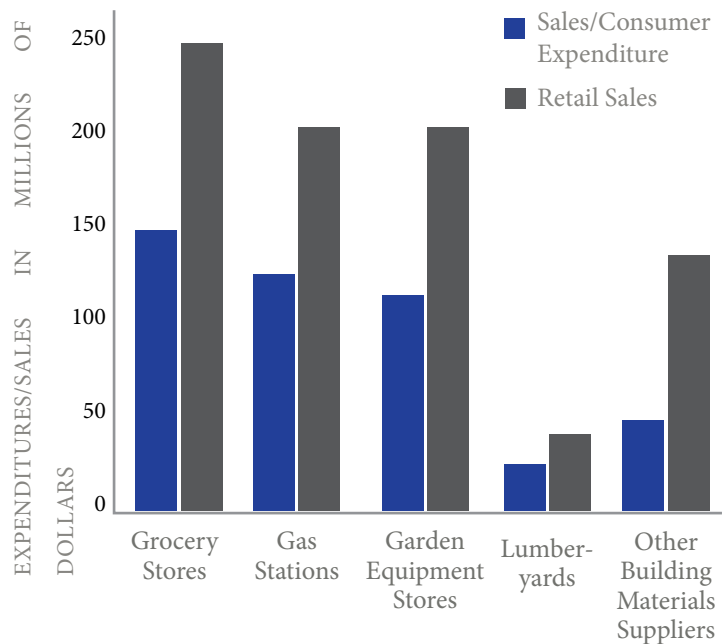
Port Fourchon has protection from a double levee system and is currently expanding its land area to continue to support the growing energy service needs. Channel dredging, expanding road and water infrastructure to the north, relocating LA-1, and rig reconstruction are all underway to expand the Port's service area. In 2006, construction spending at the Port supported nearly 900 Lafourche jobs.

Port Fourchon: Expansion and Economic Diversification

Initially, Port Fourchon was developed to support agriculture, fishing, and recreation economies in the Parish. While it continues to do so, today it is primarily known for its energy support services (90% of port business is oil and gas-related). However, the heavy reliance on the oil and gas industry makes Port Fourchon very vulnerable to market fluctuations. To decrease this vulnerability, some of the port-based businesses are starting to diversify their activities beyond oil and gas including a ship-building industry which has emerged in southern Lafourche Parish.

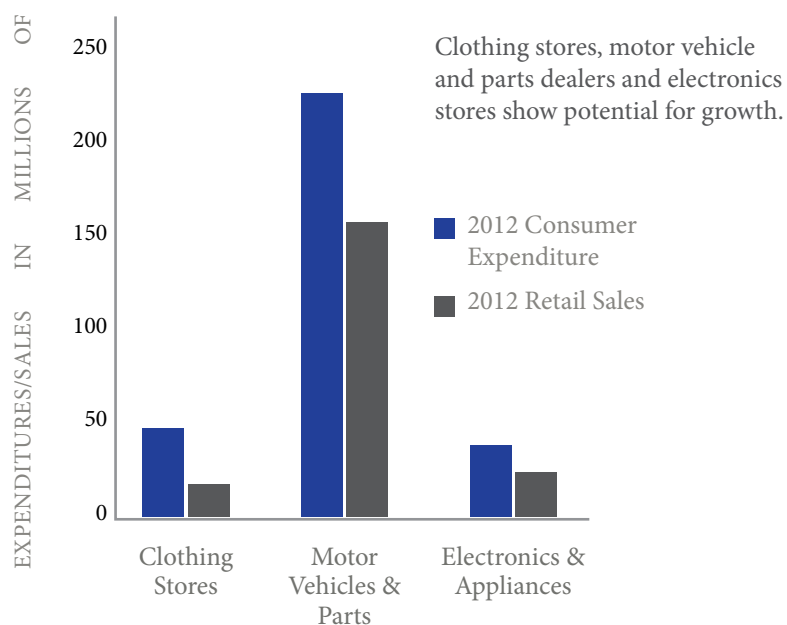
Port expansion not only provides new opportunities for servicing different kinds of cargo carriers (for example, dry (or break bulk) cargos—non-containerized dry goods in bulk quantity such as grains, gravel, coal, or fertilizer) require different facilities from wet cargo (chemicals in liquid form), while oversized or containerized cargo (large

Table 20: Retail Advantage Areas



Source: Lafourche Parish Comprehensive Plan

Table 21: Retail Leakage and Opportunities



Source: Lafourche Parish Comprehensive Plan

Figure 35: Multimodal Distribution Center concept near Highway 90/308



machinery and cars, or cargo packaged in large metal transport containers) require even more specialized port facilities. Expanded facility size and types also generates a new market for on-location as well as off-site support services, broadly referred to as the logistics cycle sector. Construction of new facilities also generates new employment; in 2006 construction spending at the Port Fourchon supported nearly 900 new jobs. Currently, the Port is developing a 1,200 acre industrial park.

Most recently, Slip B (where vessels dock and unload cargo) of a Northern Expansion area project at Port Fourchon has been completed. The Greater Lafourche Port Commission has completed and leased all 5,300 feet of Slip B. Other facility expansions under consideration include channel dredging to deepen and widen channels for larger, deepwater container cargo vessels, which would enable them to travel further inland and gain access to the broad network of inter-coastal waterways as well as increase regional rail connections.

Port Fourchon: Unique Deepwater Access

Port Fourchon is located six miles from the open Gulf of Mexico. The distance from Port Fourchon to the end of the continental shelf where the open Gulf and deep water begins requires regular dredging to accommodate large shipping vessels. By comparison, the Port of Galveston is 9.3 miles from the open Gulf.

Port Fourchon's proximity to deep water provides opportunities to expand and increase its capacity, thereby increasing opportunities for job creation in transportation and port logistics. The logistics cycle industry refers to a set of services needed to support port operations. These services include: temporary on-site cargo storage before it is transported to its final location, information and communications technology support centers to coordinate timing and capacity for cargo transport and storage in different locations and along different travel modes, and management of warehouses and distribution centers where cargo may be repackaged and reloaded onto alternate vehicles in preparation for wholesale or retail distribution.

GULF COAST PORTS COMPARISONS

PORT FOURCHON, LOUISIANA

Acres: 1,700

Access: Deep water access

Use: 90% energy support; service center

Differentiation: Only Louisiana port servicing outer continental shelf activities

Expansion: Northern Area Expansion (Slips B and C) and residential development; Fourchon Island

rig reconstruction

HOUSTON, TEXAS

Acres: 400

Access: Deep water access

Use: Distribution center; home improvement and petroleum byproducts

Differentiation: Handles almost 70% of containerized cargo in the Gulf

Expansion: Port expansion; Doubling capacity

MOBILE, ALABAMA

Acres: 570

Access: Deep water access

Use: Auto industry; auto parts and resins

Differentiation: Specializes in heavy lift and oversized cargo

Expansion: Container terminal expansion

TAMPA, FLORIDA

Acres: 40

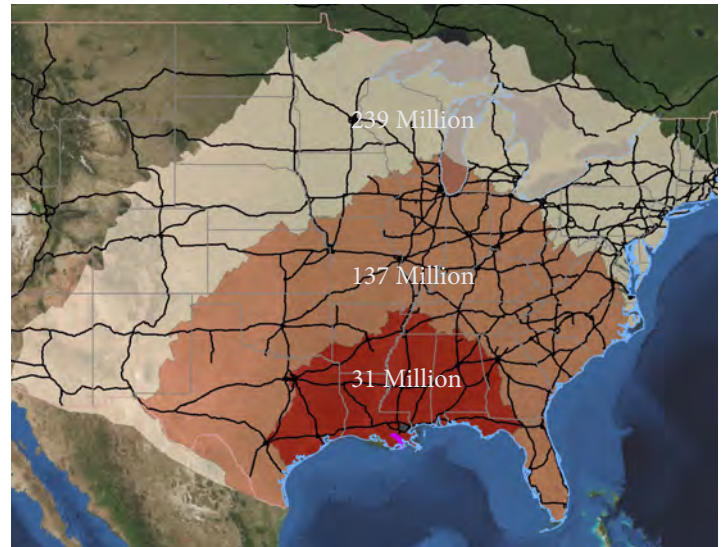
Access: Deep water access

Use: Distribution center; furniture and food products; on-dock train terminal

Differentiation: Gulf port closest to international “trade triangle”

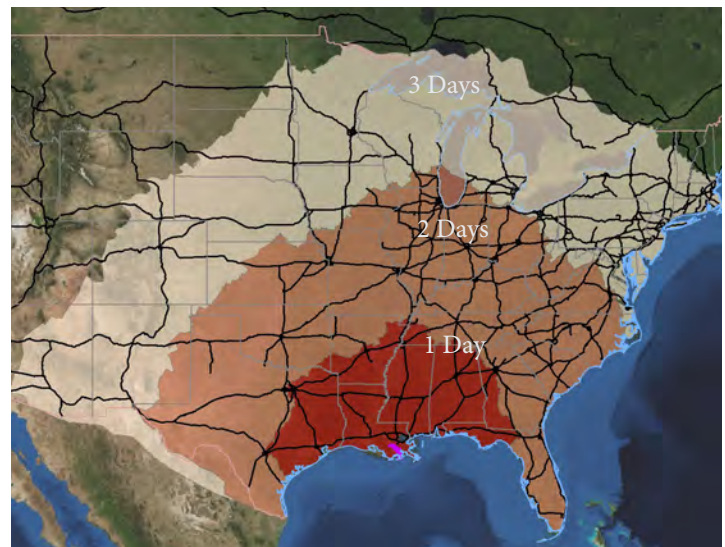
Expansion: Major capacity expansion of container terminal supporting infrastructure investments – especially rail and truck. Expanding container terminal to 160 acres, deepening channel to 43 feet

Figure 36: Population (number of people) within Delivery Range of Port Fourchon



Source: ESRI, i-cubed, USDA, USGS, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Figure 37: Truck Travel Coverage from Port Fourchon



Source: ESRI, i-cubed, USDA, USGS, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

EXAMPLES OF COORDINATED CULTURAL TOURISM

- The Kentucky Bourbon Trail
- Fredericksburg, Texas
- Hood River Fruit Loop

Focus on Tourism

Lafourche Parish has unique and diverse cultural offerings based on the Indian and Cajun cultures, the natural coastal ecosystem including the bayou and delta environments, and the region's ample wildlife. The parish has opportunities to provide for tourists including lodging and dining establishments, as well as guided tours to "experience" the Cajun and Houma Indian lifestyles, and participate in recreational fishing, and observe Lafourche's fauna and flora. Festivals, music, tours, camping, arts programs, and the farmer's market all support Lafourche's tourism economy. The Parish is an attractive destination for French-speaking tourists, and it is in fact marketed throughout France and Canada. This tourism niche should be emphasized and expanded.

Many aspects of tourism depend on healthy ecosystems to provide the fresh catch and bird nesting ground. Maintaining the health and productivity of these ecosystems – the region's natural capital – is crucial to maintaining the Parish's economy. Coordinating tourism efforts – from lodging, restaurants, music, concert facilities, and bicycling to wildlife viewing, fishing and boating – will strengthen the tourism industry and provide a way for unified support of coastal protection and restoration. Specifically, increased emphasis on regional coordination to protect marshes and fisheries is critical to Lafourche's tourism industry.

The Parish's Dig In! effort is one way the Parish is currently working to coordinate its tourism activities. Its goals include supporting continued growth of the Nichols State Culinary Institute, promoting ecotourism as an emerging industry, and establishing Bayou Lafourche as a recreational amenity and regional draw. Continued expansion of this program is needed to serve and expand Lafourche's tourism industry.

Managing Economic Development

Some parishes manage and structure economic development efforts within their parish government, and some manage economic development through a separate organization.

One way for a community to enhance economic vitality is through the creation of an organization dedicated, specifically to local economic development. These kinds of organizations can help a community take a more strategic and coordinated approach to implementing economic development programs. Steps toward creating such an organization are:

1. Establish a working board or committee
2. Know current state of community's economy
3. Identify community's economic assets
4. Study market trends nationally and globally
5. Draft both a short- and long-term economic development plan

After these steps have been taken, the core activities of the organization can be determined and a strategy built around the most effective approach to undertaking those activities. The strategy helps determine both the structure and function of the local economic development organization. Across the country, different communities may have economic development organizations that are public, private, or a combination of both. Each of these structures will be associated with particular sources and mechanism for funding the organization's staff and core activities.

Core activities can include:

- Business recruitment/expansion and retention/marketing
- Small business and entrepreneurship
- Technology-based development
- Building a local labor pool: workforce development
- Local development with social and economic goals
- Research/analysis and grant writing

Ultimately, an economic development organization for the Parish will need to be structured in a way that best utilizes available resources in order to carry out the core activities to achieving local economic goals.

Coordination with Regional Implementation Programming

The South Central Region Comprehensive Economic Development Strategy (2012) (CEDS) provided updates on the implementation of projects supporting its economic development goals. While the categories of projects below refer to themes discussed in the

other chapters of this plan, they are all areas that have been identified by the CEDS as central to driving sustainable economic development in the region over the next twenty to thirty years. Many of the projects are specific to Lafourche Parish:

EMERGING SECTORS/ECONOMIC DIVERSIFICATION

- Expanding culinary institute: the City of Thibodaux has increased pump capacity to provide sufficient water to serve the Nicholls State University campus and support its planned expansion of the Chef John Folse Culinary Institute.
- Nicholls State University continued to coordinate the Clean Power & Energy Research Consortium to develop technologies and the knowledge base to advance production and generation of “next generation” fuels for clean power and energy production.



LOUISIANA ECONOMIC DEVELOPMENT (LED) SITE CERTIFICATION PROGRAM

Louisiana Economic Development maintains a database of certified sites within the state that are ready for development. This program maintains the inventory and markets these development sites to prospective businesses. A Louisiana Economic Development Certified Site is a development-ready industrial site that has completed a rigorous review process by Louisiana Economic Development and URS, an independent, third-party engineering firm. Specific site details, such as zoning restrictions, title work, environmental studies, soil analysis and surveys, are assessed for compliance and authenticity. LED has an application on their website and a database of previously certified sites. Louisiana Economic Development Certified Sites are identified by a special notation and logo. The agency will work with property owners, parishes



and municipalities to grant certification.

TOURISM

- After the BP oil spill, Lafourche and Terrebonne Parishes were each allocated \$2.1 million from the Louisiana Tourism Recovery Program to promote/market tourism in their communities.
- Lafourche received a grant award for a Bayouside Wharf and Overlook; the project is in the design phase.

RECREATION

- Environmental cleanup for Lafourche Parish's new Raceland community center was completed.
- CDBG funding (\$800,000 grant) is being used to construct the building.
- Lafourche Parish received a state Recreational Trails Grant of \$55,066
- Elevated Wetlands Boardwalk project. This will be supplemented with \$83,872 in local funds.

- A new \$30 million Lift-Span Bridge over Bayou Lafourche at Larose is under construction, replacing an aged, weight-limited pontoon swing bridge. The asphalt portion of Adam "Ted" Gisclair/Northern expansion Road and waterline project at Port Fourchon was completed under budget. This will allow paving of the entire road, with all space leased. Construction of the \$153.2 million Phase I-A of the LA 1 Project is complete. This is a 6.3 mile section of elevated, two-lane highway between Leeville and Port Fourchon (2011).
- Consequence Analysis issued by Federal Government on remaining unimproved sections of LA 1 estimates nation could suffer up to \$7.8 billion in loss of GDP with a loss of this highway.

TRANSPORTATION INFRASTRUCTURE

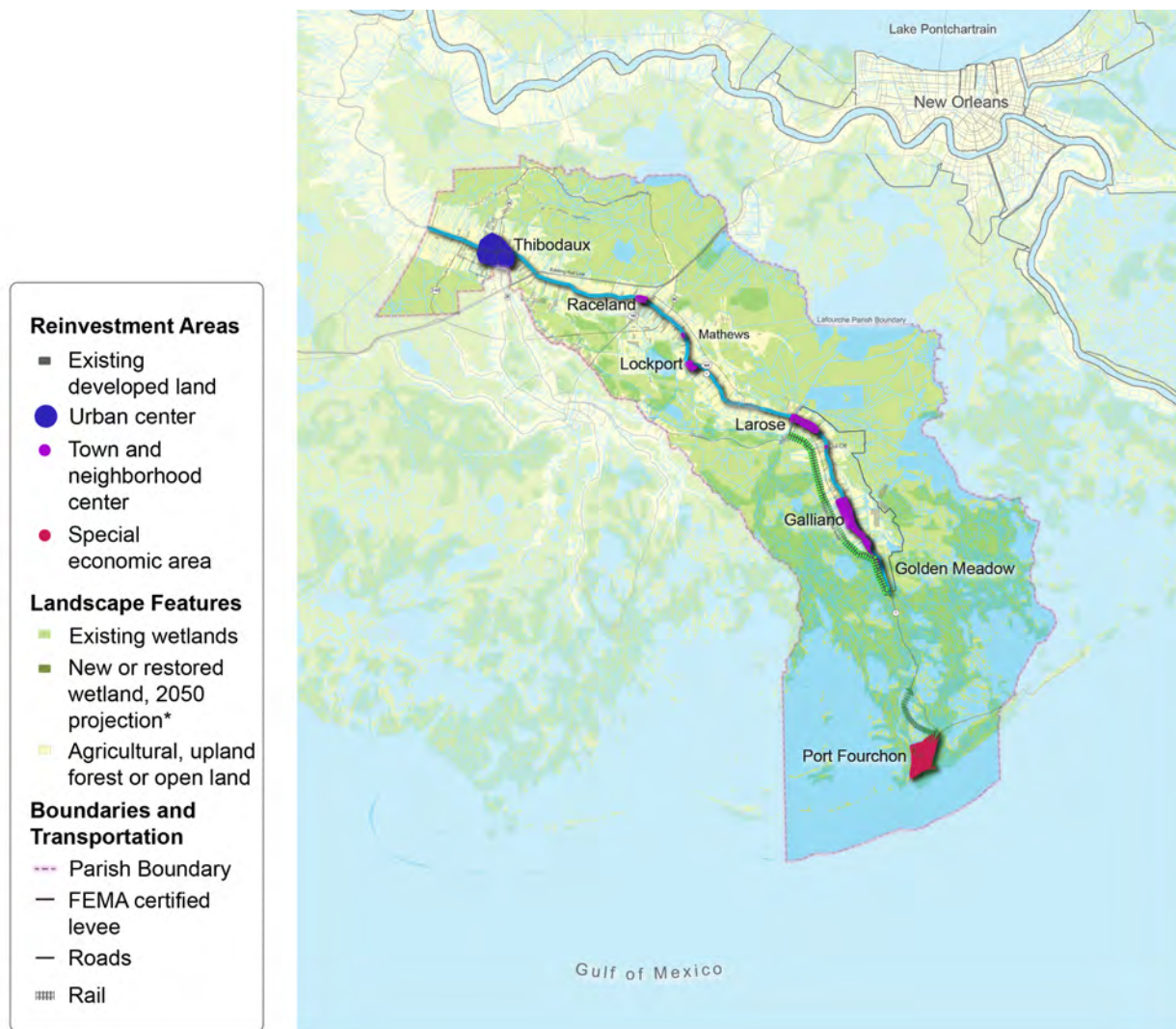


Figure 38: Tourism and Recreation Scenario

Source: CPRA

- HTMPO has assisted the LA 1 Coalition in submitting an application for federal Department of Transportation TIGER Discretionary ARRA stimulus funding for the final phase of the LA1 project.
- Thibodaux circulator transit route is now in operation.
- Houma Thibodaux Master Transportation Plan (MTP) 2035 issued May 13, 2010; 2040 update underway.

WASTEWATER

- Wastewater feasibility analysis for Lafourche Parish - HTMPO is completing final reports.
- Sewer Force Main project in Thibodaux issued a Certificate of Substantial Completion for a total project cost of \$1,256,725.
- Installed emergency generators at the Thibodaux Wastewater Treatment Facility, along with Sewer District #1 Wastewater Treatment Facility and Lift Station and Sewer District #4 Lift Station.

ECONOMIC DEVELOPMENT VISION

Lafourche Parish's economy is expanded through its entrepreneurial spirit and cultural roots. The growing economy helps retain young people in the Parish, with new jobs in emerging sectors filled by well-trained employees who enjoy living and working in Lafourche Parish.

Policy Recommendations

Goal 1: Strengthen economic development coordination within the Parish, regionally and state-wide.

Strategy 1.1:

Use the Parish Economic Development Director to coordinate the various institutions around the Parish

Actions

- 1.1.1 Establish a regular communications schedule with other parishes' economic development staff as well as with the Houma Thibodaux Metropolitan Planning Organization (HTMPO) to exchange project updates and collaborate on resource-leveraging projects.
- 1.1.2 Organize Parish-wide economic development efforts under the regional strategy's goal structure so that local and regional objectives are mutually supportive.

Strategy 1.2:

Establish a comprehensive economic development organization for the Parish under the Parish Economic Development Director.

- 1.2.1 Have a full-time person on staff to interface with potential corporations and other economic development entities.

- 1.2.3 Partner with economic development agencies on a state and regional basis, including the Tourism Commission, Lafourche Chamber of Commerce, and the Thibodaux Chamber of Commerce, and Main Street Thibodaux.
- 1.2.4 Partner with the New Orleans/Baton Rouge Chambers economic partnership to expand the economies of the state and region.
- 1.2.5 Work with Nicholls State University, Fletcher Technical College and Louisiana Technical College to set up training programs geared to the needs of emerging industries.

Strategy 1.3:

Establish a Parish-wide Economic Development Organization

Actions

- 1.3.1 Determine how the economic development effort will be led: i.e. by a department within the parish government and funded through a line item in the budget or led through a public/private partnership
- 1.3.2 Know current state of community's economy.
- 1.3.3 Identify community's economic assets.
- 1.3.4 Study market trends nationally and globally.
- 1.3.5 Draft both a short- and long-term economic development plan.

Strategy 1.4:

Certify properties through the LED Site Certification program.

Actions

- 1.4.1 Prioritize potential sites that could be certified and advertised on the Louisiana Economic Development Site Certification program, such as the Port Fourchon area; Lockport industrial park; Galliano airport area; Highway 90 and 308 area.
- 1.4.2 Create a list of ten potential sites and certify one to two a year.
- 1.4.3 Inform and educate landowners about the advantages of LED Site Certification.
- 1.4.4 Continue to explore sites to be certified and placed on certification list.

Goal 2: Build the economy on existing Parish assets.

Strategy 2.1:

Build the economy on innovation and entrepreneurship.

Actions

- 2.1.1 Revisit the SWOT Analysis in the South Central Region Comprehensive Economic Development Strategy frequently to identify assets that are regionally unique to Lafourche, as well assets that should be developed in coordination with the region to build synergy and leverage resources.
- 2.1.2 Create working environments that appeal to entrepreneurs.
- 2.1.3 Create flexible office space.
- 2.1.4 Create live-work housing.
- 2.1.5 Provide warehouses and warehouse offices.
- 2.1.6 Create business, food preparation and restaurant incubators.
- 2.1.7 Emphasize new housing choices that appeal to younger, creative business owners.

- 2.1.8 Partner with Nicholls State University to offer programs to train for emerging industries.

- 2.1.9 Continue to explore the potential for building on existing institutional assets like the Chef John Folse Culinary Institute at Nicholls State University, the Louisiana Coastal Recovery Authority, and the Barataria-Terrebonne National Estuary Program.

Strategy 2.2:

Expand and diversify the port.

Actions

- 2.2.1 Investigate the market and operational potential for adding freight import/export to the port operations.
- 2.2.2 Explore an initial freight operation that offloads freight at Port Fourchon and barges it via the Houma Shipping Channel.
- 2.2.3 Add the ability to truck freight through the Parish after the completion of LA-1 and LA-3235 to remove the potential for conflicts between freight and local traffic.
- 2.2.4 Provide for the long-term option of extending rail service to the port in conjunction with national and/or international logistics partners.
- 2.2.5 Design LA 3235 as a Parish freight route with controlled and planned access to protect the traffic flow.
- 2.2.6 Plan for a logistics employment center located at U.S. 90 and LA-308.
- 2.2.7 Attract oil and gas related companies to develop in the Parish.
- 2.2.8 Continue development of Slip C of Northern Expansion area at Port Fourchon.

- 2.2.9 Explore deepening the existing east-west channel connecting the Houma Navigation Canal to Port Fourchon to 12-feet to facilitate flow of traffic between the ports of Terrebonne and Fourchon. Study the potential benefits of tying the port to the Terrebonne roadway network, as well as potential impacts to environmental and flood protection systems.

Strategy 2.3:

Focus on ecotourism and “voluntourism.”

Actions

- 2.3.1 Prioritize infrastructure projects that will support an enhanced ecotourism industry. Providing signs throughout the parish in both French and English could be a great way to both highlight Lafourche’s culture link to France and to make it easy for French-speaking tourists to navigate the area.
- 2.3.2 Restoration and conservation of natural areas and native wildlife.
Example: Support the Greater Lafourche Port Commission’s development of the Maritime Forest Ridge, which will provide a world-class 12,000 birding trail to complement opportunities offered by Grand Isle’s Nature Conservancy Facility for birding, both as integral parts of the Grand Isle Loop on the State of Louisiana Birding Trail.
- 2.3.3 Systematic, targeted small business assistance and marketing aid to groups (such as fishing guides who suffered greatly after hurricanes and oil spills); Work with small business owners to capitalize on interest in gaming, bird watching, swamp tours and coastal recreation—as well as local culture and traditional foods, music and celebrations.
- 2.3.4 Using funding from BP to market and rebuild tourism in Lafourche.
- 2.3.5 Identify untapped markets and areas with capacity for establishing more bed and breakfast accommodations.
- 2.3.6 Offer a greater number of longer-trip tour boats.
- 2.3.7 Collaborate with International Ecotourism Society.
- 2.3.8 Support expanded “voluntourism” opportunities.
- 2.3.9 Provide way-finding tour guidance throughout the region including the Wetlands Cultural Trail.
- 2.3.10 Create bayou plazas and ecoparks, which could include projects such as:
- Convert old LA-1 into a national destination for fishing, birding, ecotourism and cultural activities.
 - Continue to actively promote the *Dig In!* program
 - Investigate feasibility of pursuing Congressional designation of the Bayou Lafourche Corridor as a National Heritage Corridor
 - Support initiatives to improve public facilities and access to Port Fourchon beaches
 - Continue implementation of Bayou Lafourche Corridor Plan to develop cultural and ecological assets

Strategy 2.4:

Partner with tourism and economic development agencies.

Actions

- 2.4.1 Expand the scope of current tourism activities to create a consolidated tourism approach based on the Lafourche culture.

- 2.4.2 Include providers of fishing and hunting; ecotourism and bird watching; coastal recreation; bayou, swamp and coastal tours; dinner tours on the bayou; cultural tours, music and food; bed and breakfast owners and local lodging.
- 2.4.3 Prepare an organizational and marketing approach.
- 2.4.4 Market nationally and internationally to targeted audiences
 - Emphasize marketing efforts that include French speaking tourists.
 - Emphasize marketing efforts that include historic tourism.
 - Build full-service, quality RV Parks and campgrounds, with a focus in the southern parish area.
 - Target RV and campers by advertising in magazines and newsletters which circulate to the traveling public.
 - Promote the Parish as a Bed and Breakfast destination.
 - Emphasize urban, historical and coastal tourism opportunities in the Parish's communities, including Thibodaux, Lockport and Leesville.
 - Provide uniform signage in the Parish to assist tourists and visitors.
 - Meet needs for boat launches and docking facilities.

Strategy 2.5:

Attract and retain additional retail and services in the Parish, especially small businesses.

Actions

- 2.5.1 Capture more of the retail spending that is currently taking place outside of the Parish.
- 2.5.2 Identify retail shortages and promote retail to fill gaps.

- 2.5.3 Develop a strategy to attract family entertainment and restaurants.

Strategy 2.6:

Reduce barriers to creating new businesses (core and non-core industries).

Actions

- 2.6.1 Offer small business access to up-to-date, industry oriented market data.
- 2.6.2 Consider developing a micro-lending program for very small businesses/self-employed.
- 2.6.3 Expand Louisiana Small Business Development Center (LSBDC) office at Nicholls State University.
- 2.6.4 Creation of an LSBDC "e-center" that will provide small business consulting and training services in Thibodaux.

Strategy 2.7:

Develop Emerging Industries.

Actions

- 2.7.1 Explore potential to expand on existing institutional structures at Nicholls State University. Focus areas for programs could include:
 - Cluster development/technological innovation centers
 - Commercialization and export of products/expertise/services maritime-shipbuilding, culinary and information technology industries
- 2.7.2 Promote technology transfer from academic and research institutions to aid in commercialization of new technologies.

Examples include:

- Local economic development programming to assist expansion of high-quality shrimp business model using on-boat freezing and direct, contract-based marketing to increase price per pound
- Provide support for implementing a new inspection regimen for offshore drilling rigs with increased use of sensor technologies on offshore rigs to extend the reach of limited inspection staff
- Much inspection activity related to heightened emergency and environmental safety management programs for offshore drilling operations will likely be staged out of Port Fourchon; technical support could be provided by the digital imaging and computer technology programs at Nicholls State University
- Create incubator programs for businesses focused on software, auto regulation, internet and telecommunications, and acoustic and other testing technologies

Strategy 2.8:

Maximize redevelopment opportunities.

Actions

- 2.8.1 Prioritize development and infill where there is existing infrastructure capacity.
- 2.8.2 Promote reuse of vacant and underused properties and infill development in areas already served by infrastructure in order to reduce sprawl and demand for additional infrastructure that strain limited community tax bases
- 2.8.3 Identify sites suitable for various types of industrial development – create Graphic Information Systems (GIS) based inventories of available sites for communities where none exist.

- 2.8.4 Revitalize the Thibodaux Central Business District and Historic District Area.
- 2.8.5 Explore potential to add guidelines to regional building codes for installing energy efficient technologies like solar panels, wind turbines, etc.
- 2.8.6 Continue to assess brownfield sites as a first step in making them ready for cleanup, redevelopment and reuse, turning them from community liabilities to community assets.
- 2.8.7 Investigate feasibility of creating historic districts in Lockport.
- 2.8.8 Investigate feasibility of developing mini-Main Street program for communities along the Bayou Lafourche Corridor.
- 2.8.9 Utilize the use of Harang Auditorium in Thibodaux.

Goal 3: Create workforce training programs that develop skills of existing residents to match industry needs

Strategy 3.1:

Capitalize on the Parish's experience managing emergency and on-going environmental safety operations to expand skills of local workforce.

Actions

- 3.1.1 Fund Haz Mat, environmental safety, and emergency response training programs for out-of-work/displaced groups like fishermen or oil workers.
- 3.1.2 Coordinate with the HTMPO to establish public-private partnership to fund such training programs.
- 3.1.3 Develop training programs to capitalize on the increased need for personnel trained to combat cyber attacks on national security (systems operations, etc.).

Chapter 11: Coordinating Effectively

Introduction

Many important forces that shape the overall quality of life for people in Lafourche originate far beyond the geographic borders of city, parish, state, region, or nation. International and national economic forces and migration will drive the future of the local economy and demographics. National policy will affect everything from the health of local industry to resources available to local governments.

The Parish should continue to strengthen long-term coordination efforts with Thibodaux and towns in the Parish, and with state and federal agencies. Many of these agencies set policies that directly affect the quality of life for Lafourche residents. These policies also impact the ability of residents to access insurance, quality education, safe neighborhoods, and social services.

The Parish includes the city of Thibodaux and the towns of Lockport and Golden Meadow. There are a number of census-designated communities in the parish, including Raceland, Larose, Mathews, Gheens, and Cut Off. In order to maximize public services and facilities, it is necessary to coordinate services such as transportation, utilities, police protection, and the school system, between the Parish and municipalities and communities. In addition, intra-governmental coordination of policies, procedures and information within Parish government departments prevents duplication of services and improves opportunities to address health, safety and quality of life issues for all citizens. Coordinating, monitoring and promoting public services, health and safety requires commitment at all levels of local government. The Parish must be involved in the coordination of health and human services with state and federal agencies to ensure resources are available to meet the needs of all citizens. Preservation or enhancement of services, particularly in historically underserved areas, is a priority.

Coordinating Effectively Goals

- 1. Provide efficient, effective and coordinated services to the public.**
- 2. Enable residents and business owners to have healthy and satisfying lives in a comfortable and safe natural environment.**
- 3. Focus on education and training by coordinating with public schools, technical schools, community colleges and Nicholls State University.**
- 4. Provide leadership training to emphasize accountability, transparency and continuing education for elected and appointed officials, nonprofit and business leaders.**
- 5. Through coordination, increase the sustainability of Lafourche Parish and enhance the long-term viability of region.**

Background

The Lafourche Parish Government wishes to provide the highest level of service possible to all residents. As land use, transportation and coastal development issues have become more complex, it is increasingly important that the Parish collaborates with a range of partners to achieve this desired level of service.

The futures of other local and parish governments are intertwined with Lafourche Parish. Thibodaux, Raceland, Lockport, Larose, Cut Off, and Golden Meadow are home to 42,500 residents and cover an area of about 57.2 square miles along LA 1 and LA 308. In addition, many Lafourche residents currently go to Houma for shopping and services. Lafourche Parish is linked to its neighboring parishes in many aspects. Activities on one side of the parish line have tremendous effects on residents on the other side. Schools, police, fire, and other service lines are blurry between some parts of Terrebonne and Lafourche Parish. Visitors and residents to Grand Isle in Jefferson Parish access homes, lodging, fishing, and recreational activities through Lafourche. Additionally, all efforts to protect Lafourche Parish residents from destructive storm surges, planning and maintaining levees, and implementing risk-reduction programs require regional collaboration. Coordination is essential for the mutual prosperity of each of the parishes and the region.

Each jurisdiction should solicit comments from these municipalities about land-use decisions near their jurisdictions. For the benefit of all local governments concerned, in the future this practice should be formalized and coordination strengthened between parishes and incorporated communities. Many issues central to the future growth and economic

development of the entire region, especially transportation and levee protection issues, depend upon the cooperation and coordination of all local governments in the region. To achieve the most benefits to all citizens, active cooperation must extend beyond local governments to include other important local institutions that have a vested interest in the health and prosperity of areas surrounding them.

The Parish should share information and explore partnerships whenever possible with these and other institutions and organizations:

- Bayou Lafourche Fresh Water District
- Lafourche Water District
- North Lafourche Levee District
- Bayou Board of Realtors
- Bayou Interfaith Shared Community Organization (BISCO)
- Bayou Lafourche Fresh Water District
- Fletcher Technical College
- Greater Lafourche Port Commission
- LA-1 Coalition
- Lafourche Chamber of Commerce
- Lafourche Parish Housing Authority
- Lafourche Parish Public Schools
- Nicholls State University
- Greater Lafourche Port Commission
- Restore or Retreat
- Houma Thibodaux Metropolitan Planning Organization HTMPO
- South Lafourche Levee District
- South Louisiana Economic Council
- Thibodaux Chamber of Commerce
- Thibodaux Housing Authority
- United Houma Nation
- Greater Lafourche Port Commission

Intergovernmental coordination is most essential in the implementation stages of this Plan. It cannot only be the responsibility of one organization to achieve the goals. A lack of support, either politically or financially, will limit the ability of the

Parish to succeed.

Local Coordination

Both the Parish and its municipalities will benefit from increased coordination to ensure consistent development goals. The Parish, Thibodaux, Lockport, and Golden Meadow should consider establishing a “joint planning area” that goes beyond the current boundaries of their jurisdictions. Changes in this joint planning area would be reviewed for consistency in development and cooperative opportunities for service provision. In addition, the cities and the Parish could address the potential of future annexation areas, allowing both entities to plan accordingly through annexation agreements. Other areas that could be considered jointly by Parish and local governments include:

- Facilitating common development standards
- Coordinating sewerage and other facilities
- Economic recruitment opportunities
- Provision of an integrated trail system
- Coordinated transportation planning
- Flood protection and drainage
- Green infrastructure for water management

Coordination with Adjacent Parishes

Water management, coastal protection and restoration efforts, transportation, infrastructure, public services and economic development are some of the areas that cross parish boundaries. Coordination should be required to ensure that water management practices do not negatively affect adjacent parishes. Similarly, as new economic opportunities arise, a coordinated planning effort will ensure high-quality developments that benefit the entire coastal region, while protecting the special characteristics of each parish, the coast, bayou and river region.

Regional Coordination

The Parish should continue to work with the HTMPO which provides for the region: coordinated transportation and land use planning, infrastructure, public service and economic development, and organizational assistance. Furthermore, current coordination includes supporting coastal restoration and protection efforts. Parishes farther inland are acutely aware that what is good for the coast is good for them. This type of coordination and support should continue and expand where possible.

State Coordination

Louisiana Economic Development, the Louisiana Department of Transportation and Development, the Louisiana Coastal Protection and Restoration Authority, the Louisiana Department of Environmental Quality, the Louisiana Department of Natural Resources, the Louisiana Department of Health and Hospitals, and other state agencies, are instrumental in implementing policies at a statewide level that ensure the health and safety of the state's citizens.

Federal Coordination

Continue to work with the Federal Emergency Management Agency, the Army Corps of Engineers, the Federal Environmental Protection Agency and the Department of Defense to protect the parish and Port Fourchon.

Continue to work with the Federal Emergency Management Agency, the Army Corps of Engineers, the Federal Environmental Protection Agency and the Department of Defense to protect the parish and Port Fourchon.



COORDINATING EFFECTIVELY VISION

All parts of Lafourche Parish work together. There is close coordination with the cities in the Parish as well as with other coastal parishes. The coordination of diverse areas of the Parish make the whole Parish stronger and more resilient.

Policy Recommendations

Goal 1: Provide efficient, effective and coordinated services to the public.

Strategy 1.1:

Develop and maintain procedures, policies, standards and ordinances that guide and regulate public services, public buildings, and health and human services.

Actions

- 1.1.1 Promote public service facilities, such as libraries, community centers, health clinics, and job training facilities as an integrated system of service delivery.
- 1.1.2 Develop public service facilities that are consistent with land use, transportation plans, and public infrastructure plans.
- 1.1.3 Ensure that public services are reasonably accessible to all areas of the Parish.
- 1.1.4 Coordinate public services with the public school system when such services are compatible.
- 1.1.5 When planning and developing new subdivisions ensure that adequate parks, open space, trails, and connections to schools and social services are provided.

Strategy 1.2

Establish public service goals and standards and a plan for inter-governmental coordination. Regularly evaluate the provision of public services to ensure standards are met.

Actions

- 1.2.1 Provide services in an efficient and timely manner consistent with Parish policies and standards.
- 1.2.2 Initiate discussions with regional partners to coordinate services. Discuss regional coordination monitoring with the HTMPO.
- 1.2.3 Schedule regular monitoring of Parish services to determine areas of deficiencies in coverage and actual services provided. Schedule improvements.

Strategy 1.3

Continue to recruit and retain the highest caliber of public service professionals.

Actions

- 1.3.1 Maintain transparent standards to provide for compensation based on educational levels and performance excellence.
- 1.3.2 Develop programs and services that facilitate the continued hiring and retention of quality public service professionals.
- 1.3.3 Review and enhance the ongoing training program for public service professionals, ensuring that appropriate training is provided for promotion opportunities and competent individuals are prepared consistently.

Strategy 1.4

Promote research and innovation that is consistent with the Parish's entrepreneurial spirit.

Actions

- 1.4.1 Investigate new proposals for service standards and methods based on current research, and on the tested experience of innovations in other communities.
- 1.4.2 Utilize new technological developments to improve services, and to ensure that existing technological systems continue to be used with maximum effectiveness.
- 1.4.3 Encourage the coordination of colleges and universities, for training in for advanced technologies, specifically in oil and gas; retain workforce and coordinate with gas industries.

Strategy 1.5:

Ensure residents of the Parish are provided the highest quality preparedness training and understanding of risk to be able to respond to storm events and natural disasters.

Actions

- 1.5.1 Require annual “readiness” reporting from the Office of Emergency Preparedness regarding disaster preparation and mitigation.
- 1.5.2 Continually enhance disaster preparedness education programs.
- 1.5.3 Inform the residents about disaster preparedness, including both educational programs and services available from private business (during storm events and in the post-storm recovery period).
- 1.5.4 Promote emergency services coordination during and after disaster situations.
- 1.5.5 Provide a hotline to call to learn when areas of the parish re-open after storm events.

- 1.5.6 Coordinate interim mental-health counseling and other social-services.

Strategy 1.6:

Promote education, awareness and involvement in the provision of public services.

Actions

- 1.6.1 Educate residents, including students, as to proper actions in emergency situations.
- 1.6.2 Educate communities and neighborhoods about the service delivery system and possible efficiencies and conservation of resources.
- 1.6.3 Explore joint uses of school facilities and other public buildings to provide additional services to the broader community.
- 1.6.4 Provide information and education to property owners about building codes, subdivision requirements, and the need for adequate parks, trails, schools and access to social services.

Goal 2: Enable residents and business owners to have healthy and satisfying lives in a comfortable and safe natural environment.

Strategy 2.1:

Enable all persons to have access to needed services.

Actions

- 2.1.1 Provide efficient public transportation services for access to health and human services.
- 2.1.2 Adopt policies that address environmental health issues.

Strategy 2.2:

Promote the coordination of existing health and human services, comprehensive planning for short-term and long-term needs or residents, and innovative research into new programs and methods.

Actions

- 2.2.1 Encourage research of new methods and programs for innovative patient care and services, building on the work that Thibodaux Regional Medical Center is pursuing.
- 2.2.2 Create an interagency system that allows agencies to share basic recipient information, such as where, when and what amount of basic services have been provided.
- 2.2.3 Foster collaboration between agencies to better service holistic needs of residents.
- 2.2.4 Promote the provision of daycare centers for children from birth to 10 years of age with costs shared by parents, employers and other partners including Headstart and the School Board.

Goal 3: Focus on education and training by coordinating with public schools, technical schools, community colleges and Nicholls State University.

Strategy 3.1:

Engage the post-secondary educational institutions within the Parish in programs which would support the retention of college graduates and train them for future Parish jobs.

Actions

- 3.1.1 Create and implement internship programs among disciplines within each college or University.

- 3.1.2 Assist the educational institutions in creating an educational awareness program promoting government service upon graduation as a means of financial loan repayment.
- 3.1.3 Establish guidelines which would foster the post-graduation hiring of interns and apprentices.
- 3.1.4 Partner with Parish businesses to create a program which would provide incentives for new technology, oil and gas, logistics, and other emerging businesses to hire interns or apprentices from local institutions and then provide them permanent jobs upon graduation.

Strategy 3.2:

Create a high school program to train students for locally available jobs.

Actions

- 3.2.1 Train students for local manufacturing businesses which are limited by a shortage of skilled workers.
- 3.2.2 Create a training program to bring together local businesses and the Parish school system to create a curriculum that would prepare students for entry level positions in industry.
- 3.2.3 Groom young people in core workplace competencies as well as effectively integrate them into various work settings.
- 3.2.4 Chamber of Commerce representatives coordinate with local business leaders to establish basic entry level job descriptions and requirements. Requirements would be comprehensive, not just the specific trade skills, but other important qualities to be a successful employee: responsible behavior, safety consciousness, communication ability, problem solving, performance expectations, and teamwork.

- 3.2.5 School board designs and implements a curriculum to meet these requirements as well as establish a program to assess student's interests, aptitudes and abilities. Use local technical and trade school facilities and apprenticeship arrangements with local businesses to conduct the "hands on" education.
- 3.2.6 Provide co-op courses that earn technical school and high school credits.

Strategy 3.3:

Develop training programs for the Parish workforce to ensure that residents are prepared to fill future Parish employment opportunities.

Actions

- 3.3.1 Work with Fletcher Technical College and Nicholls State University to offer effective training that enables Parish residents to become viable candidates for jobs in the region.
- 3.3.2 Support technical college programs to increase training programs to ensure that local workers are available to fill local jobs.
- 3.3.3 Design a cooperative program between the high schools and Fletcher Technical College and Nicholls State University that provides a current path to technical training for high school students.
- 3.3.4 Target training for workers to serve local industries such as oil and gas, ship yards, and technology and logistics industries.
- 3.3.5 Study emerging businesses and develop training programs to meet those industry needs. Such industries could be businesses associated with the oil and gas industry, drilling, environmental testing, inspections, logistics, and service businesses. Provide training in front of this need so that workers are ready to be hired.

Goal 4: Provide leadership training to emphasize accountability, transparency and continuing education for elected and appointed officials, nonprofit and business leaders.

Strategy 4.1:

Identify, schedule and budget for board and commission leadership training through regional professional organizations.

Actions

- 4.1.1 Require that elected and appointed officials have a designated number of hours of training a year. Required courses should include introductory planning, ethics, leadership and certification review courses.
- 4.1.2 Develop a program to require yearly accountability of boards as to accomplishment of goals, revenues, expenses, and attendance in required and voluntary educational opportunities to be made available to public.

Strategy 4.2:

Provide leadership training opportunities.

Actions

- 4.2.1 Establish a leadership tour to make annual visits to successful programs of interest, such as communities that have successfully strengthened and diversified their economic base, and communities that have supported improvements to quality and quantity of diverse housing and other relevant issues.
- 4.2.2 Encourage annual attendance at a professional or leadership conference such as the State Planning Conference, the Annual Smart Growth Conference, the State Landscape Architect conference, or ethics training.
- 4.2.3 Support the efforts of Leadership Lafourche.

Goal 5: Through coordination, increase the sustainability of Lafourche Parish and enhance the long-term viability of region.

Strategy 5.1:

Support shared goals between different parts of the Parish, with the Parish's cities and towns and with adjacent parishes.

Action

- 5.1.1 Consider consolidation of boards and services to reduce costs and provide consistent service throughout the Parish. Areas that could be considered for consolidation include boards overseeing ambulance, sewerage, recreation and drainage.

Strategy 5.2:

Create a joint planning area and annexation and boundary agreements between the Parish and the following cities and towns:

- Thibodaux
- Raceland
- Mathews
- Lockport
- Larose
- Cut Off
- Galliano
- Golden Meadow

Strategy 5.3:

Create programs to share data and services within the Parish, and between the Parish and cities and towns, and adjacent parishes.

Action

- 5.3.1 Consider sharing data requirements that cross political boundaries, such as water management, land management (GIS) and safety data bases (911).

Strategy 5.4:

Coordinate with adjacent parishes to ensure seamless service provisions, increase efficiency in all parishes, and to reduce potential unintended negative impacts.

Actions

- 5.4.1 Work with the HTMPO to plan for future road alignments that provide facilities through Lafourche and adjacent parishes. Coordinate with adjacent parishes on road improvements and future road extensions to plan for needed future right-of-way.
- 5.4.2 In conjunction with HTMPO and adjacent parishes, prepare corridor preservation plans to identify and preserve right-of-way needed for future alignments.
- 5.4.3 Work with Terrebonne Parish to preserve the right-of-way needed when Bayou Gardens is extended north across Bayou Blue.
- 5.4.4 Coordinate with Terrebonne, St. James, and Assumption to create a process to review and resolve boundary discrepancies.
- 5.4.5 Work with Terrebonne Parish to provide effective service provision to the Pointe aux Chenes area of Lafourche Parish. The Parish boundary cuts the community in half, creating many destabilizing issues.
- 5.4.6 Work with Terrebonne Parish to ensure that Terrebonne's water management strategies do not adversely affect Lafourche residents and that Lafourche is not adversely affecting Terrebonne.

Strategy 5.5:

Use the Implementation Plan as a guiding document to identify and prioritize the Parish's many initiatives.

Actions

- 5.5.1 Organize recommendations and priorities of various studies and documents.

- 5.5.2 Identify resources that need to be considered and balanced in future planning efforts.
- 5.5.3 Create links between major initiatives such as Coastal Protection and Restoration Authority (CPRA) programs, Louisiana Department of Transportation and Development (DOTD) programs, the Barataria-Terrebonne National Estuary Program, Freshwater District, Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) projects, and the Parish's Drainage Master Plan.

Strategy 5.6:

Increase the efficiency of services provided within the Parish and its incorporated municipalities, reducing redundancy of service and streamlining the provision of service to all our residents.

Actions

- 5.6.1 Determine the services which are overlapping between the municipalities.
- 5.6.2 Determine which specific services should be provided by a specific governmental entity and provide appropriate services in the satellite offices in the Parish's governmental centers and in conjunction with the municipal governmental centers.

Strategy 5.7:

Ensure access to all areas of the Parish and initiate systems so all residents may effectively and efficiently travel from one portion of the Parish to another.

Actions

- 5.7.1 Integrate transit planning with all entities of impact and coordinate with the HTMPO so that the system may be upgraded or adapted as development patterns dictate.
- 5.7.2 Coordinate transit planning with governmental entities and cities and towns.

- 5.7.3 Coordinate greenway planning with the South Central Planning and Development District, Thibodaux and other municipalities so that all forms of transportation including bicycle and pedestrian may be seamless and coordinated planning exists for these services.

Strategy 5.8:

Foster opportunities to support shared goals for coastal restoration and resiliency.

Actions

- 5.8.1 Partner with EPA, NOAA, USGS, FEMA, Louisiana DNR, LADOTD, Lafourche Parish Coastal Zone Management Committee, and cities to further coastal restoration and protection of the region.
- 5.8.2 Partner with industry leaders, nonprofit organizations and private developers to develop practices and procedures that further the Parish's goals.
- 5.8.3 Create a mechanism for sharing data and implementing the Plan's recommendations that involves all entities from including development, social services, transportation, economic development, and safety and resiliency partners.

Implementation

Steps to Achieve the Parish's Vision

Implementing the Comprehensive Resiliency Plan's vision will require an effective partnership between the public and private sectors, nonprofit organizations, and members of the community. This plan lays out **goals, strategies** and **actions** to achieve the Lafourche Parish resident's vision.

To ensure that the Comprehensive Plan remains active and guides future Parish development, the Planning Commission and Parish Council should:

1. Establish a five-year implementation work plan.
2. Conduct annual updates that concisely summarize achievements for each year.
3. Prepare a more extensive update every five years to establish a work plan for the following five-year period. Regular updates to the implementation plan will be necessary to keep the Parish's vision current, up-to-date and headed in the right direction.
4. Use the plan to advise and implement the Capital Improvement Plan.
5. Use the plan's goals and strategies to help guide development decisions.
6. Continue to include a public process in the implementation, review and updating of the Comprehensive Resiliency Plan.

Goals, Strategies & Actions

GOALS are the big overarching ideas, changes or practices that are essential to realize the community's Vision.

STRATEGIES establish specific, attainable and realistic goals that guide how the Comprehensive Plan is implemented in a way that will achieve the Vision.

ACTIONS outline the steps needed to achieve the objectives. Not all strategies have actions.

The **Priority Action Plan chart** includes priority strategies and actions that should be completed now or within 1-2 years. The **Implementation Task List** details all of the strategies and actions included in the Plan, including those near-term as well as those that should be implemented over the next 5 to 10 years. Action items address the specific recommendations required to bring this plan to life.

PRIORITY ACTION PLAN STRATEGIES AND ACTIONS

The **Priority Action Plan** chart details the top strategic actions listed at the end of Chapter 1: the Vision (page 31). These 13 strategic actions received a high level of public and Parish support, have a clear path to implementation, support other adopted plans or policies, or can be accomplished with a minimal amount of funding.

The timing of specific action items may change based on the availability of funding from outside sources and the ability of the Parish to leverage private, public, and nonprofit funding.

Priority Strategic Action	Timing	Responsibility	Funding
1. Create an umbrella Economic Development Organization that coordinates the many Economic Development organizations, and interacts with state, national and international economic development initiatives.	Now!	Lafourche Parish Economic Development and Administration	No additional funding required
2. Certify one properties through the Louisiana Economic Development certification system.	1-2 years	New Economic Development Organization	Property owners and economic development/ parish
3. Develop and adopt access management and complete streets standards for existing and new roadways.	1-2 years	Lafourche Parish Public Works	Explore grants for transportation programs
4. Adopt resiliency design standards for residential construction. Develop prototype plans for resilient development that can be used off the shelf by developers and residents. Include prototypes for market rate and affordable housing. Prototypes should be flexible enough to be modified with changing FEMA and NFIP standards.	1-2 years	Lafourche Parish Planning and Permitting	Explore grants for resiliency programs
5. Partner with the Port Authority to support diversification of the port and airport and development of the industrial park around the airport	Now!	New Economic Development Organization and Port Authority	No additional funding required
6. Coordinate with Parish municipalities and adjacent parishes. Create annexation and development agreements with municipalities to coordinate long-term development and the provision of services. Coordinate with Terrebonne Parish to develop service agreements along boundaries and to address drainage and resiliency issues in a regional context.	Now!	Lafourche Parish Administration	No additional funding required

Priority Strategic Action	Timing	Responsibility	Funding
7. Inventory recreational facilities in all districts. Create a shared use program to maximize services to Parish residents.	Now!	Lafourche Parish Parks and Recreation	Hire intern to prepare first step of the inventory
8. Adopt the Bayou Lafourche Corridor Study and the South Central Bicycle and Pedestrian Plan as part of the Comprehensive Resiliency Plan. Prepare a Bayou Trail Study and develop a pilot project to be led by the Lafourche Parks and Recreation Department. Integrate the bayou plaza concept and prepare an implementation plan for a trail system and plazas.	Adopt study now. Prepare Bayou Trail Study in 1-2 years.	Parish Council and Lafourche Parks and Recreation	No additional funding required
9. Complete a comprehensive review and update of the subdivision ordinance to ensure that it is aligned with the comprehensive plan.	1-2 years	Planning and Permitting	Initial review in-house; obtain grant resiliency funds for writing and implementation
10. Prepare a small area plan for the Raceland and Mathews area. <ul style="list-style-type: none"> Addressing the conversion of US 90 to I-49 and associated impacts; Attracting and planning for new businesses to locate to the area; Supporting and enhancing current residential, commercial, government, and school facilities; Investigating and enhancing infrastructure to support additional transportation systems, water, and sewage; Improving and enhancing the appearance along Bayou Lafourche, LA 1, and LA 308. 	1-2 years	Planning and Permitting	Explore grants for resiliency programs
11. Prepare a Small Area Plan for Larose to take into consideration: <ul style="list-style-type: none"> Strengthening the presence of the historical town; Investigating current conditions along LA 3235, its possible expansion and the need to incorporate safety measures into the roadway system; Creating recreational opportunities on Bayou Lafourche and expanding the current overall recreational facilities in Larose by connecting them to adjacent areas; Continuing a vital atmosphere for commercial and residential development. 	1-2 years	Planning and Permitting	Explore grants for resiliency programs
12. Explore various funding options for the completion of LA 1 to create better transportation access to Port Fourchon and use the corridor to strengthen the overall resiliency of south Lafourche.	Now!	Lafourche Parish Economic Development	LA1 Coalition
13. Develop a parish-wide Capital Improvement Program and align CIP funding priorities with the goals of the Comprehensive Resiliency Plan.	Now!	Public Works, Administration and Planning and Permitting	No additional funding required

Implementation Task List

The **Implementation Task List** is a comprehensive list of the Plan's goals, strategies and actions, with a suggested responsibility and timeframe and in which the action should be implemented.

Strategy		Action
LAND USE		
Land Use Goal 1: Plan for future land loss and population growth parish-wide.		
1.1	<i>Adopt Plan Lafourche Vision and land use maps to guide future development and investment.</i>	1.1.1 Identify suitable and developable land in the Thibodaux, Raceland and Lockport area to locate a variety of housing types, creating a balance between single and multi-family, affordable and high-end rentals, and compact and large lot detached housing.
		1.1.2 Identify locations for long-term green and open spaces, and determine whether they are candidates for restoration, conservation, recreation, agriculture, or a combination thereof.
		1.1.3 Make a long-term commitment to fund a staff position for an Implementation Planner who is tasked with overseeing the implementation of the Comprehensive Resiliency Plan.
		1.1.5 Review Capital Improvement Plan (CIP) recommendations and align CIP funding priorities with the goals of the Comprehensive Resiliency Plan.
1.2	<i>Implement the strategic plan by creating policies that encourage infill, redevelopment, and new neighborhood development in existing Lafourche communities, thereby helping communities to undertake small area planning that supports the parish-wide vision.</i>	1.2.1 Draft agreements between cities and Parish to coordinate which areas in the region should be the focus for infill, new growth, or agricultural conservation.
		1.2.2 Coordinate plans for new infrastructure and services to distribute amenities evenly among the Parish population.
		1.2.3 Coordinate plans to avoid or minimize negative development impacts across jurisdictions.

Strategy	Action
Land Use Goal 2: Create complete communities that provide access to transportation options, housing, recreation, education, retail, and employment all in proximity to one another.	
2.1 <i>Address community-level needs through small area planning</i>	2.1.1 Prioritize and incentivize infill development by identifying and banking properties in areas that are serviced by roads, water and sewer; through streamlining the permitting process for infill development; and by guiding development to established communities.
	2.1.2 Collaborate with Parish communities to develop comprehensive small area plans in current or future population centers that address special areas of concern such as the need for affordable housing, the need for workforce housing, needs of underserved populations, and appropriate areas for infill development. Prepare community plans for the following areas: Port Fourchon, Galliano, Cut Off, Larose, Gheens, Lafourche Crossing, Chackbay/Kraemer, Fourchon Beach Plan update.
	2.1.3 Create a small area plan that details the potential for creating over the long-term a Main Street environment in the US 90/LA-308 area.
	2.1.4 Adopt current Bayou Lafourche Corridor and Pedestrian Bicycle Plans.
2.2 <i>Adopt and Implement Development Standards at the community level using the Best Practices Manual for Development in Coastal Louisiana (2012), the Louisiana Land Use Toolkit and the Coastal Toolkit as guides.</i>	2.2.1 Adapt strategies from the Best Practices Manual and Land Use Toolkit to fit community needs. Specific standards to consider for initial adoption include: <ul style="list-style-type: none"> • Establishing drainage development standards, and implement other drainage study recommendations to ensure that new development does not create drainage problems for existing uses. • Developing access standards to keep roads and highways safe and connected. • Establishing setback standards so that new buildings are placed consistently and do not create site conflicts with neighboring buildings. • Enforcing existing bayou setback standards and establish additional setback standards to protect the water quality of Bayou Lafourche • Adopting an ordinance requiring minimal landscaping standards along street frontages for commercial uses. • (NEW if desired) Adopting an ordinance requiring minimal parking standards for non-residential uses. • Requiring housing elevation in specific areas

Strategy		Action	
2.2	Continued from previous page.	2.2.2	Integrate adoption of development and design standards into small area planning processes
		2.2.3	Implement small area plans and development/design standard
2.3	Create a program of community-level solutions to make small-scale improvements that address quality-of-life issues.	2.3.1	Prioritize community-level improvements. Package them together and create a small bond program to pay for them.
		2.3.2	Projects could include improvements such as drainage improvements that address internal flooding within existing developments, sidewalk and neighborhood connections, and neighborhood parks and trails.
RESILIENCY AND HAZARD MITIGATION			
Resiliency and Hazard Mitigation Goal 1: Establish areas where site level development should occur that will enhance long-term resiliency and align with the Vision map.			
1.1	Build higher and/or build on high ground.	1.1.1	Create incentives to encourage infill and redevelopment so as not to increase the footprint of developed areas and to create more drainage and flood protection. Incentives can include a selection of methods such as a streamlined approval process for permitting, reduced permitting costs, infrastructure assistance, and other economic development mechanisms.
		1.1.2	In areas of new development establish and enforce standards that require development to be built on higher and more stable soils adjacent to the bayou and its distributaries.
		1.1.3	Follow historic settlement patterns and building types with land uses organized by elevation and hydrology from high ground to low ground.
1.2	Coordinate new development with water management infrastructure.	1.2.1	Develop a community outreach and engagement plan to involve multiple stakeholders and partners in the design, protection and performance of infrastructure.
		1.2.2	Create a public awareness program for residents to help them identify the functions of their infrastructure which will allow for more informed decision-making by the community as a whole. Emphasize the important role of water and sediments in the Parish’s history and in its future.
		1.2.3	Plan investments in existing and future infrastructure so it can be used as the basis for other kinds of investment and economic development, resulting in public dollars leveraging private investment and growth for the Parish.

Strategy	Action
1.3 <i>Create more space for water at low points.</i>	1.3.1 Identify areas that can serve as large basins and allow for wider outfall canals within the levees. This will increase storage capacity and allow for better control of water levels.
	1.3.2 Develop outfall areas as a new kind of recreational zone. <ul style="list-style-type: none"> Plan waterways and water bodies as recreational amenities. Introduce associated wetlands in long-term phasing in order to clean water and to provide additional habitat and amenities on protected side of levees.
	1.3.3 Locate aquatic facilities and other related development on elevated structures in the recreational zone, just inside of the levee.
	1.3.4 Manage water resources through investment in waterways and water bodies to create a system of sustainable drainage infrastructure.
	1.3.5 Create private economic opportunities through infrastructure investments.
1.4 <i>Plan the ground before designing buildings.</i>	1.4.1 Create prototype building plans in which the long-term stability of soils and water flows provides the underlying structure that is then adapted to desired housing types.
	1.4.2 Reduce the distance between storm drains and canals or detention/retention basins allowing for higher water levels, which can limit subsidence.
	1.4.3 Build buildings around lakes and waterways, not only for aesthetic purposes, but to provide long-term risk reduction through improved management of groundwater.
1.5 <i>Promote and permit commercial and industrial development, including public and critical facilities in strict accordance with flood plain management, and other applicable state and federal regulations.</i>	1.5.1 Establish and consolidate maps identifying hazard areas.
	1.5.2 Guide future development away from hazard areas while maintaining other parish goals such as economic development and improving the quality of life.
	1.5.3 Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.
	1.5.4 Provide safe locations for files, records, and computer equipment.
1.6 <i>Promote preservation and/or conservation of flood prone areas for Parish parks, recreation areas, and general flood plain management.</i>	1.6.1 Participate in existing programs at the state and federal levels oriented to environmental enhancement and land conservation.
	1.6.2 Expand and provide programs including land banking and preservation, areas. Locate priority bayou-side, outside levees, farming, nature trails, birding, fishing, areas.

Strategy		Action
Resiliency and Hazard Mitigation Goal 2: Improve resiliency to floods and other natural disasters by utilizing best practices for coastal development.		
2.1	<i>Adopt a multiple line of defense strategy.</i>	2.1.1 Develop and preserve natural lines of defense including: <ul style="list-style-type: none"> • Land building • marsh creation • sediment diversion • barrier island restoration • Shoreline protection
		2.1.2 Harden infrastructure including improving and adding where necessary <ul style="list-style-type: none"> • Levees • Pumps
2.2	<i>Use site-specific solutions to improve resiliency.</i>	2.2.1 Cluster land uses on naturally high areas to reduce the area vulnerable to flooding and storm surge.
		2.2.2 Adopt the practice of elevating buildings beyond minimum required elevations to reduce the likelihood of flooding.
2.3	<i>Restore the region's natural hydrologic function, where possible.</i>	2.3.1 Encourage plans and parking lot designs which integrate stormwater infiltration.
2.4	<i>Preserve and rehab wetlands and sensitive areas along bayous and other waterways.</i>	

Strategy	Action
2.5 <i>Coordinate with the CPRA and other state agencies on implementation of the State's Coastal Master Plan and adopt non-structural measures to support wise development in the Parish's coastal zone.</i>	2.5.1 Continue to emphasize coordination between the Parish and state agencies working on non-structural issues in Louisiana.
	2.5.2 Consider increasing the Parish's capacity and amending regulatory requirements, as appropriate, to ensure that goals are met in local land use planning, building codes, flood damage prevention ordinances, and risk reduction project funding.
	2.5.3 Enact ordinances that require appropriate risk reduction standards.
	2.5.4 Identify state funding and local financing opportunities to address identified needs and support implementation of resiliency programs.
	2.5.5 Provide training programs on the state and parish resiliency programs and inform the public about the non-structural options available to them.
	2.5.6 Inform the public about the risk of living in a flood hazard area.
	2.5.7 Adopt resiliency development practices outlined in the Coastal Best Practices Manual (see Resiliency and Hazard Mitigation chapter for list of best practices).
	2.5.8 Adopt risk-reducing standards as outlined in the Louisiana Coastal Land Use Toolkit to increase resiliency of development, including: <ul style="list-style-type: none"> • Flood damage reduction standards • Stormwater management standards • Parking and site access standards • Borrow pits standards • Natural resource protection standards

Strategy		Action
Resiliency and Hazard Mitigation Goal 3: Identify and pursue preventative measures that will reduce damages from future hazards.		
3.1	<i>Address repetitive flood damage in the Parish by mitigating repetitive losses.</i>	3.1.1 Elevate, acquire, or reconstruct all repetitive loss and severe repetitive loss structures in the Parish.
		3.1.2 Develop a decision matrix that deals with (severe) repetitive loss properties in the Parish.
3.2	<i>Improve existing drainage infrastructure to protect current structures and future construction from localized flood events.</i>	3.2.1 Widen drainage ditches and upgrade culverts to protect current structures and future construction from flood event.
		3.2.2 Develop new green infrastructure that integrates into existing drainage systems for detaining and retaining stormwater.
		3.2.3 Upgrade pump station capacity sizes and diversified so as to allow maintenance of water levels necessary to mitigate subsidence.
		3.2.4 Ensure pump stations have adequate trash racks to ensure operation during a flood event.
3.3	<i>Create new infrastructure or elevate or bury existing infrastructure to protect current structures and future construction from flood damage.</i>	3.3.1 Provide additional pump station protection inside levee systems.
		3.3.2 Install generators at all critical facilities.
		3.3.3 Elevate roads with a flood history where feasible.
		3.3.4 Elevate levee and floodwall heights to further protect current structures and future construction from storm surge.
		3.3.5 Where feasible, bury power lines to improve chances of maintaining power during storm events.
3.4	<i>Protect parish and municipal infrastructure from wind events.</i>	3.4.1 Construct safe rooms.
		3.4.2 Wind harden critical facilities.
		3.4.3 Wind retrofit critical facilities, public buildings, or private buildings using window film, screen, or shutters.

Strategy		Action	
3.5	Team with state and federal agencies to reduce the effects of land subsidence.	3.5.1	Pursue coastal protection projects to reduce land subsidence in coastal areas.
		3.5.2	Ensure accurate survey points are located throughout the parish to monitor continued subsidence.
		3.5.3	Monitor agricultural activities and encourage farming practices that reduce soil compaction and limit acceleration of subsidence and identify farm land that is beneficial for coastal protection, in addition to farming.
		3.5.4	Manage groundwater levels in developed areas to limit soil compaction and oxidation.
Resiliency and Hazard Mitigation Goal 4: Enhance public awareness and understanding of disaster preparedness.			
4.1	Provide public education for all hazards.	4.1.1	Continue to correspond closely with the media concerning hazard mitigation measures and plans.
		4.1.2	Continue to provide educational brochures to libraries, schools and other public facilities including mitigation measures for all hazards including hurricanes, tornados, coastal/tropical storms, levee failure, coastal erosion, land subsidence, and saltwater intrusion.
		4.1.3	Implement an all-hazard warning system to ensure proper citizen notification of hurricanes, tornados, coastal/ tropical storms, levee failure, coastal erosion, land subsidence, and saltwater intrusion.
Resiliency and Hazard Mitigation Goal 5: Continue work to lower insurance premiums.			
5.1	Work with other state and Parish leaders to mitigate recent insurance legislation so that property owners can afford to insure homes and businesses.	5.1.1	Continue to monitor and adapt to FEMA’s Levee Analysis and Mapping Procedures (LAMP) to ensure all levees, regardless of certification, are considered when evaluating the Parish’s risk.

Strategy		Action
5.2	<i>Work to lower insurance premiums through participation in the FEMA Community Rating System (CRS).</i>	5.2.1 Adopt and enforce development standards aimed to ensure successful enrollment in CRS.
		5.2.1 Add new regulations reducing development density in flood plains.
		5.2.3 Ensure that each political subdivision joins the CRS.
		5.2.4 Encourage all jurisdictions continue to participate in the NFIP – the Parish, Thibodaux, Lockport, and Golden Meadow.
		5.2.5 Establish a public outreach campaign to ensure all homeowners in floodplains are aware of the various types of coverage options under the NFIP.
		5.2.6 Establish homeowner education program on flood mitigation measures.

Strategy		Action
CULTURE AND RECREATION		
Culture and Recreation Goal 1: Coordinate recreation districts and agencies to enhance access for all Lafourche residents to the highest quality leisure, cultural and natural resources.		
1.1	Inventory and document parks and recreation facilities in the Parish.	1.1.1 Create a mapped inventory of all recreational facilities located within the Parish’s eight recreation districts.
		1.1.2 Develop a program based on the recreation inventory to market and share services, using a coordinated approach.
		1.1.3 Upgrade existing park facilities to expand amenities – parking, fish cleaning, informational signs, attraction identification signage, maps.
		1.1.4 Assess water sources and flood/subsidence risk reduction opportunities inherent to parklands and system
1.2	Coordinate Lafourche Parish’s recreation, cultural and historic resources with Jean Lafitte National Historic Park and Preserve, establishing the Park as a gateway to Lafourche’s cultural and historical experience.	1.2.1 Support Jean Lafitte National Park’s vision which focuses on restoring its ecosystem; improving hydrologic function; and providing a beautiful natural setting with many recreational and educational opportunities.
		1.2.2 Establish Jean Lafitte as the gateway to Lafourche’s historical and natural areas.
		1.2.3 Continue to provide information about other historical sites throughout the Parish at Jean Lafitte National Park’s visitor center.
		1.2.4 Investigate expanding the Wetland Cultural Byway and implementing wayfinding techniques to link the national park, existing historical sites, and other attractions.
Culture and Recreation Goal 2: Plan cultural assets and recreational facilities for future growth.		
2.1	Develop a parish-wide Parks and Recreation Plan to ensure adequate facilities are developed for future growth	2.1.1 Identify and document needs based on the inventory and population projections.
		2.1.2 Create a plan to fill gaps in needed parks and recreation sites, including new services and ammenities. Support and integrate the Beachfront District Plan into new plan.
		2.1.3 Coordinate parks, develop as integral components of water management systems.
		2.1.4 Establish requirements for parks to be provided at the following recommended levels of service as development occurs in the parish.

Strategy		Action
2.2	<i>Support and promote tourist and activity destinations through out the Parish.</i>	2.2.1 Consider recreation and parks inside the subdivision ordinance, especially as it pertains to the vision and recreational map.
		2.2.1 Enhance access to the natural resources and various wildlife habitat.
		2.2.2 Support and promote activities such as golfing, birding, fishing, hunting, canoeing and camping.
		2.2.3 Elevate Leesville as a destination for recreational and seasonal tourism.
2.3	<i>Continue to implement the 2007 Bayou Lafourche Corridor Plan.</i>	2.3.1 Prioritize recommendations that can be feasibly funded and completed in the near future.
		2.3.2 Identify funding and implementation actions for the following: <ul style="list-style-type: none"> • a promenade along Company Canal in Lockport • a boardwalk trail system through publicly owned swampland forest in Lockport • a new seafood market and safe harbor marina in Golden Meadow • a nature park and marina in Larose

Strategy		Action
2.4	<i>Build new and renovated existing bayou plazas along Bayou Lafourche.</i>	2.4.1 Design public access facilities along the bayou with new and upgraded boat launches, water taxis and picnic areas to offer local families high-quality recreation opportunities, as well as attract visitors to enjoy the bayou and unique experiences of the Gulf's beautiful and diverse wildlife.
		2.4.2 Consider developing ecoparks into the Bayou Plazas. Ecoparks are parks that build off the local culture and amenities, highlight the natural environment, attract animals, and support a variety of ecosystems. Ecoparks could include educational and recreational components and will focus on sustainability principles.

HOUSING CHOICES

Housing Choices Goal 1: Create housing options that meet the need of future residents.

1.1	<i>Increase housing options</i>	1.1.1 Conduct a housing needs assessment to determine the amount, location, condition and cost of rental and ownership housing in Lafourche Parish.
		1.1.2 Partner with the housing authority and other entities to build affordable housing that creates a balanced housing mix, including assisted living and mixed income housing.
		1.1.3 Encourage restoration and repair of existing housing, particularly housing located in areas with relatively lower flood risk, within existing towns, and in transportation-efficient locations throughout the Parish.
		1.1.4 Use existing federal and state programs, public-private partnerships, and incentive programs to identify and meet the housing needs of low and moderate-income residents.
		1.1.5 Work with property owners in the LA 1/US 90 area to plan for development using land use, economic development and infrastructure tools.

Strategy		Action	
1.2	Address the need for workforce housing for specific growing industries such as oil, gas, shipbuilding, and tech.	1.2.1	Use the results of the housing needs assessment to quantify the gap in short-term housing need and supply.
		1.2.2	Partner with large employers to create workforce housing. (See the Housing chapter of this plan for specifics).
Housing Choices Goal 2: Ensure that resiliency is considered in new building types.			
2.1	Address the need for safe, resilient housing	2.2.1	Develop prototype plans that use resilient design and construction techniques and make available to residents.
		2.2.2	Encourage the design of resilient structures that blend with the existing character.
		2.2.3	Strengthen regulations that ensure new mobile homes are strong enough to withstand severe weather conditions.
		2.2.4	Use prototype example plans for preferred housing types so that people who want to build infill housing can do so at reduced costs and with fast-tracked permitting.

Strategy	Action
TRANSPORTATION CONNECTIONS	
Transportation Connections Goal 1: Increase roadway capacity and improving safety.	
1.1 <i>Construct new roadways and improve existing facilities.</i>	1.1.1 Identify a Parish staff person to correspond with DOTD on a regular basis so both agencies are apprised of big project and individual requests. The Parish representative should also serve on the MPO Technical Advisory Committee.
	1.1.2 Pursue a parish-wide transportation study. <ul style="list-style-type: none"> • Conduct an access management study to improve safety on LA 3235.
	1.1.3 Extend LA 3235, north to U.S. 90 <ul style="list-style-type: none"> • synchronize lights and video messaging signs. • begin studying, protecting, and acquiring right of way for the proposed route
	1.1.4 Continue to improve and build an elevated LA-1 to Port Fourchon; fund LA1 Coalition efforts.
	1.1.5 Complete ITS improvements on LA1/LA 20/Canal Street to synchronize lights and signage.
	1.1.6 Coordinate with DOTD on new interchanges and updates to existing FHWA interchanges.

Strategy		Action
1.2	<i>Create a locally adopted access management plan for new and existing roadways.</i>	1.2.1 Review of driveway spacing requirements, turn controls and other tools for new roadways.
		1.2.2 Ongoing identification of existing roadway locations with high crash levels to study for potential access improvements.
		1.2.3 Adopt an access management ordinance that requires developer-funded cross-access easements between new commercial development to reduce the number of vehicles entering and exiting major roadways to travel from one business next door to another.
		1.2.4 Encourage access easements on new development and explore retrofitting existing developments.
		1.2.5 Amend the subdivision ordinance to require a traffic impact study for developments that will produce a high level of traffic, as per the ITE Trip Generation Manual. (Sample development triggers provided in Transportation chapter of this plan.)
		1.2.6 Work with the MPO to classify primary Parish roads as local, collector, or arterial.

Strategy	Action
1.3 <i>As a parish, support major highway initiatives taking place at the state and national level.</i>	1.3.1 Complete council resolutions for major highway initiatives.
	1.3.2 Complete the construction and elevation of LA 1 to open as a future trucking system throughout the Parish with access to the nation. The Parish should continue their efforts to work with DOTD and regional planning agencies to secure the funding needed to complete this important project
	1.3.3 Preserve rights of way for new road when development occurs
	1.3.4 Connect existing facilities.
	1.3.5 Extend LA 3235 to connect with U.S. 90 north of Mathews to improve safety for evacuation and serve as a trucking route alternative to LA 1/Highway 308.
	1.3.6 Protect freight routes from encroaching local traffic and development through local access management and land use development standards. <ul style="list-style-type: none"> • In the long-term (25 years), coordinate with the state on plans for the interchange of 308 at US-90. (This project is currently not funded.) • Coordinate with the state on access management along US-90 to Des Allemands. • Support the completion of an interchange at I-310 and US-90. • Support the completion of I-49 from Lafayette to New Orleans.
1.4 <i>Plan for regional connectivity establishing a program to plan for future regional alignments and right-of-way preservation through a parish thoroughfare plan.</i>	1.4.1 Work with the HTMPO to plan for future road alignments that provide facilities through Lafourche and adjacent parishes. Coordinate with adjacent parishes on regional road improvements and future road extensions to plan for needed future right-of-way.
	1.4.2 In conjunction with HTMPO and adjacent parishes, prepare corridor preservation plans to identify and preserve right-of-way needed for future alignments. <ul style="list-style-type: none"> • Plan for the future extension of LA Highway 3235 by requiring preservation of the required right-of-way. • Work with Terrebonne Parish to acquire the right-of-way needed when Bayou Gardens is extended north across Bayou Blue.
Transportation Connections Goal 2: Improve the quality of transportation system and expand transportation mode options, including a long-term rail strategy to serve Port Fourchon.	

Strategy		Action
2.1	<i>Expand multi-modal transportation options.</i>	2.1.1 Plan and fund public transit service to provide basic service to major hubs: Raceland/Thibodaux/Houma.
		2.1.2 Phase transit to provide – in the long-term – a daily service to Golden Meadow.
		2.1.3 Explore coordinating with Port Fourchon to provide shuttle transportation for the 2,000 dock workers. Coordinate this effort with residential service to Golden Meadow.
		2.1.3 Participate in future regional passenger train service through coordination with Amtrak.
		2.1.4 Acquire and/or upgrade the existing rail lines throughout the Parish to make them available for shipment of goods coming from the port.
		2.1.5 Extend the rail line from Valentine to the Port by exploring partnerships with potential shipping interests to fund this project over the long term. This is a very high-cost project and should be evaluated as to the feasibility and timing.
2.2	<i>Adopt a local complete streets and enhanced connectivity approach for roadway design and construction.</i>	2.2.1 Integrate land development requirements and transportation improvements by incorporating a complete streets approach at the development review stage.
		2.2.2 Design turn-lanes, signal timing, sidewalks, bus shelters and other amenities to make the Parish more multi-modal friendly.
		2.2.3 Strive for protected - not shared - bike and pedestrian infrastructure where possible.
		2.2.4 Adopt a local Complete Streets policy for local public roads.
		2.2.5 Adopt Complete Streets standards for private subdivision roads.
		2.2.6 Work with SCPDC staff to devise a connectivity plan for the Mathews area that improves connectivity for future transportation corridors, creates a pedestrian friendly environment and serves as a complete streets and connectivity demonstration project.

Strategy	Action
2.3 <i>Continue to build a robust hike, bike and paddle trail system throughout the parish</i>	2.3.1 Parish Council to Adopt the Bayou Lafourche Corridor Study.
	2.3.2 Adopt the HTMPO's South Central Regional Bicycle and Pedestrian Plan.
	2.3.3 Create a plan for the Parish to fund the aquisition of Bayou-side property as it becomes available in order to create a multi-use trail along the edge of Bayou Lafourche.
	2.3.4 Consider a multi-use trail in Golden Meadow from Oak Ridge Community Park south, possibly following Old Louisiana Highway 1 south of the levee.
	2.3.5 Provide funding for the planning and implementation of a bike path from Nicholls State to the downtown area.
	2.3.6 Connect existing ped/bike facilities in Thibodaux and Lockport.
	2.3.7 Work with Thibodaux to expand the walking trail from downtown, Jean Laffite National Park, Nicholls State University, and Canal Street, and look at possibilities of connecting this system into the South Central Regional Bicycle and Pedestrian Plan.
	2.3.8 Establish additional ped/bike facilities within Raceland and further south to include Larose and Golden Meadow <ul style="list-style-type: none"> • Connect the schools, hospital, government center, and various businesses within Mathews and Raceland via walking and bike paths.
	2.3.9 Research similar efforts across the country and prepare a report on best practices that are appropriate for Lafourche.
	2.3.10 Install ped/bike signage along pathways and promote use.
2.4 <i>Provide better access to Bayou Lafourche.</i>	2.4.1 Identify sites for public/private partnerships; create bayou plazas and water taxi routes so locals and visitors can enjoy the Lafourche culture through public docks, park areas, private rentals, local fish and produce markets, restaurants, shops and recreational facilities all located in proximity to the bayou.

Strategy		Action
INFRASTRUCTURE		
Infrastructure Goal 1: Amend guiding documents and regulations to align with the Lafourche Parish Drainage Master Plan.		
1.1	<i>Develop an overall storm drainage manual and adopt it for use in the Parish and the municipalities.</i>	
1.2	<i>Update the subdivision ordinance and drainage design standards.</i>	1.2.1 Design new developments to accommodate the 4% annual chance event (25 year storm). 24-hour duration should be in accordance with a total depth of 10.8 inches according to National Weather Service Technical Paper No. 40.
		1.2.2 Limit flow rate and volume of discharge from any proposed development to the 25-year storm pre-development rate.
		1.2.3 Require proposed developments to show hydraulic calculations to the channels modeled within the Drainage Master Plan.
		1.2.4 Require all development to be above the peak water stage elevation for the 25-year storm, as determined in the Drainage Master Plan or the FEMA BFE, whichever is higher.
		1.2.5 Encourage the use of large regional detention areas and reservoir banking.
		1.2.6 Implement impact fees to mitigate drainage impacts caused by a proposed development.
		1.2.7 When possible, hire additional technical staff capable of reviewing drainage calculations.
1.3	<i>Implement development standards for flood damage protection, stormwater management, natural resource protection, tree preservation, and burrow pits.</i>	

Strategy	Action
Infrastructure Goal 2: Plan to enhance and maintain service to existing development and plan for adequate service to growth areas.	
2.1 <i>Prepare an analysis to determine the adequacy of the current community infrastructure, public facilities and services, in anticipation of the projected population growth. Determine if current infrastructure plans will provide adequate service to growth areas.</i>	
2.2 <i>Plan water district improvements and expansions as it relates to the uses and intensity levels on the vision map.</i>	
2.3 <i>Maintain the water quality in Bayou Lafourche, to ensure that the bayou has the ability to provide drinking water for multiple parishes, as managed by the Lafourche Parish Water District.</i>	2.3.1 Actively enforce existing state and water district setbacks along the bayou.
	2.3.2 Consider establishing parish-wide setbacks along the bayou to protect the integrity of the bayou water system.
2.4 <i>Continue to support programs that focus on restoring the coast and wetlands.</i>	
2.5 <i>Secure infrastructure to improve ability to recover from storm events.</i>	
2.6 <i>Use the vision map to guide plans for new community sewer systems by focusing on community centers.</i>	
2.7 <i>Develop a plan to address sewerage infrastructure in the Parish.</i>	2.7.1 Develop comprehensive plans for potable water and sewerage and wastewater treatment.
2.8 <i>Incorporate the Implementation Plan of this Comprehensive Resiliency Plan into the Capital Improvement Plan</i>	

Strategy		Action
2.9	Actively enforce existing state and water district setbacks along the bayou. Consider establishing parish-wide setbacks along the bayou to protect the integrity of the bayou water system.	
2.10	Enhance boat launches along the bayou and establish and maintain access points to the water in coastal areas.	2.10.1 Provide access and signage to boat launches to help tourists find the facilities.
		2.10.2 Provide amenities such as food, snacks, bait and equipment rentals at the boat launches.
ECONOMIC DEVELOPMENT		
Economic Development Goal 1: Strengthen economic development coordination within the Parish, regionally and state-wide.		
1.1	Use the Parish Economic Development Director to coordinate the various institutions around the Parish.	1.1.1 Establish a regular communications schedule with other parishes' economic development staff as well as with the Houma Thibodaux Metropolitan Planning Organization (HTMPO) to exchange project updates and collaborate on resource-leveraging projects.
		1.1.2 Organize Parish-wide economic development efforts under the regional strategy's goal structure so that local and regional objectives are mutually supportive.

Strategy	Action
1.2 <i>Establish a comprehensive economic development organization for the Parish under the Parish Economic Development Director.</i>	1.2.1 Have a full-time person on staff to interface with potential corporations and other economic development entities.
	1.2.3 Partner with economic development agencies on a state and regional basis, including the Tourism Commission, Lafourche Chamber of Commerce, and the Thibodaux Chamber of Commerce, and Main Street Thibodaux.
	1.2.4 Partner with the New Orleans/Baton Rouge Chambers economic partnership to expand the economies of the state and region.
	1.2.5 Work with Nicholls State University, Fletcher Technical College and Louisiana Technical College to set up training programs geared to the needs of emerging industries.
1.3 <i>Establish a Parish-wide Economic Development Organization</i>	1.3.1 Determine how the economic development effort will be led: i.e. by a department within the parish government and funded through a line item in the budget or led through a public/private partnership.
	1.3.2 Know current state of community's economy.
	1.3.3 Identify community's economic assets.
	1.3.4 Study market trends nationally and globally.
	1.3.5 Draft both a short- and long-term economic development plan.
1.4 <i>Certify properties through the LED Site Certification program.</i>	1.4.1 Prioritize potential sites that could be certified and advertised on the Louisiana Economic Development Site Certification program, such as the Port Fourchon area; Lockport industrial park; Galliano airport area; Highway 90 and 308 area.
	1.4.2 Create a list of ten potential sites and certify one to two a year.
	1.4.3 Inform and educate landowners about the advantages of LED Site Certification.
	1.4.4 Continue to explore sites to be certified and placed on certification list.

Strategy		Action
Economic Development Goal 2: Build the economy on existing Parish assets.		
2.1	<i>Build the economy on innovation and entrepreneurship.</i>	2.1.1 Revisit the SWOT Analysis in the South Central Region Comprehensive Economic Development Strategy frequently to identify assets that are regionally unique to Lafourche, as well as assets that should be developed in coordination with the region to build synergy and leverage resources.
		2.1.2 Create working environments that appeal to entrepreneurs.
		2.1.3 Create flexible office space.
		2.1.4 Create live-work housing.
		2.1.5 Provide warehouses and warehouse offices.
		2.1.6 Create business, food preparation and restaurant incubators.
		2.1.7 Emphasize new housing choices that appeal to younger, creative business owners.
		2.1.8 Partner with Nicholls State University to offer programs to train for emerging industries.
		2.1.9 Continue to explore the potential for building on existing institutional assets like the Chef John Folse Culinary Institute at Nicholls State University, the Louisiana Coastal Recovery Authority, and the Barataria-Terrebonne National Estuary Program

Strategy	Action
2.2 <i>Expand and diversify the port.</i>	2.2.1 Investigate the market and operational potential for adding freight import/export to the port operations.
	2.2.2 Explore an initial freight operation that offloads freight at Port Fourchon and barges it via the Houma Shipping Channel.
	2.2.3 Add the ability to truck freight through the Parish after the completion of LA-1 and LA-3235 to remove the potential for conflicts between freight and local traffic.
	2.2.4 Provide for the long-term option of extending rail service to the port in conjunction with national and/or international logistics partners.
	2.2.5 Design LA 3235 as a Parish freight route with controlled and planned access to protect the traffic flow.
	2.2.6 Plan for a logistics employment center located at US-90 and LA-308.
	2.2.7 Attract oil and gas related companies to develop in the Parish.
	2.2.8 Continue development of Slip C of Northern Expansion area at Port Fourchon.
	2.2.9 Explore deepening the existing east-west channel connecting the Houma Navigation Canal to Port Fourchon to 12-feet to facilitate flow of traffic between the ports of Terrebonne and Fourchon. Study the potential benefits of tying the port to the Terrebonne roadway network, as well as potential impacts to environmental and flood protection systems.

Strategy	Action
2.3 <i>Focus on ecotourism and “voluntourism.”</i>	2.3.1 Prioritize infrastructure projects that will support an enhanced ecotourism industry. Providing signs throughout the parish in both French and English could be a great way to both highlight Lafourche’s culture link to France and to make it easy for French-speaking tourists to navigate the area.
	2.3.2 Restoration and conservation of natural areas and native wildlife. Example: Support the Greater Lafourche Port Commission’s development of the Maritime Forest Ridge, which will provide a world-class 12,000 birding trail to complement opportunities offered by Grand Isle’s Nature Conservancy Facility for birding, both as integral parts of the Grand Isle Loop on the State of Louisiana Birding Trail.
	2.3.3 Systematic, targeted small business assistance and marketing aid to groups (such as fishing guides who suffered greatly after hurricanes and oil spills); Work with small business owners to capitalize on interest in gaming, bird watching, swamp tours and coastal recreation—as well as local culture and traditional foods, music and celebrations.
	2.3.4 Using funding from BP to market and rebuild tourism in Lafourche.
	2.3.5 Identify untapped markets and areas with capacity for establishing more bed and breakfast accommodations.
	2.3.6 Offer a greater number of longer-trip tour boats.
	2.3.7 Collaborate with International Ecotourism Society.
	2.3.8 Support expanded “voluntourism” opportunities.
	2.3.9 Provide way-finding tour guidance throughout the region including the Wetlands Cultural Trail.
	2.3.10 Create bayou plazas and ecoparks. (See the Economic Development Chapter of this plan for a list of possible projects.)

Strategy	Action
2.4 <i>Partner with tourism and economic development agencies.</i>	2.4.1 Expand the scope of current tourism activities to create a consolidated tourism approach based on the Lafourche culture.
	2.4.2 Include providers of fishing and hunting; ecotourism and bird watching; coastal recreation; bayou, swamp and coastal tours; dinner tours on the bayou; cultural tours, music and food; bed and breakfast owners and local lodging.
	2.4.3 Prepare an organizational and marketing approach.
	2.4.4 Market nationally and internationally to targeted audiences. (See the Economic Development chapter of this plan for specific marketing opportunities.)
2.5 <i>Attract and retain additional retail and services in the Parish, especially small businesses.</i>	2.5.1 Capture more of the retail spending that is currently taking place outside of the Parish.
	2.5.2 Identify retail shortages and promote retail to fill gaps.
	2.5.3 Develop a strategy to attract family entertainment and restaurants.
2.6 <i>Reduce barriers to creating new businesses (core and non-core industries).</i>	2.6.1 Offer small business access to up-to-date, industry oriented market data.
	2.6.2 Consider developing a micro-lending program for very small businesses/self-employed
	2.6.3 Expand Louisiana Small Business Development Center (LSBDC) office at Nicholls State University.
	2.6.4 Creation of an LSBDC “e-center” that will provide small business consulting and training services in Thibodaux.

Strategy		Action
2.7	<i>Develop Emerging Industries.</i>	<p>2.7.1 Explore potential to expand on existing institutional structures at Nicholls State University. Focus areas for programs could include:</p> <ul style="list-style-type: none"> • Cluster development/technological innovation centers • Commercialization and export of products/expertise/services maritime-shipbuilding, culinary and information technology industries.
		<p>2.7.2 Promote technology transfer from academic and research institutions to aid in commercialization of new technologies. (See economic development chapter for examples of programs that would support this action.)</p>
2.8	<i>Maximize redevelopment opportunities.</i>	<p>2.8.1 Prioritize development and infill where there is existing infrastructure capacity.</p>
		<p>2.8.2 Promote reuse of vacant and underused properties and infill development in areas already served by infrastructure in order to reduce sprawl and demand for additional infrastructure that strain limited community tax bases.</p>
		<p>2.8.3 Identify sites suitable for various types of industrial development – create Graphic Information Systems (GIS) based inventories of available sites for communities where none exist</p>
		<p>2.8.4 Revitalize the Thibodaux Central Business District and Historic District Area</p>
		<p>2.8.5 Explore potential to add guidelines to regional building codes for installing energy efficient technologies like solar panels, wind turbines.</p>
		<p>2.8.6 Continue to assess brownfield sites as a first step in making them ready for cleanup, redevelopment and reuse, turning them from community liabilities to community assets.</p>
		<p>2.8.7 Investigate feasibility of creating historic districts in Lockport.</p>
		<p>2.8.8 Investigate feasibility of developing mini-Main Street program for communities along the Bayou Lafourche Corridor.</p>
		<p>2.8.9 Utilize the use of Harang Auditorium in Thibodaux.</p>

Strategy		Action	
Economic Development Goal 3: Create workforce training programs that develop skills of existing residents to match industry needs			
3.1	Capitalize on the Parish’s experience managing emergency and on –going environmental safety operations to expand skills of local workforce.	3.1.1	Fund Haz Mat, environmental safety, and emergency response training programs for out-of-work/displaced groups like fishermen or oil workers
		3.1.2	Coordinate with the HTMPO to establish public-private partnership to fund such training programs
		3.1.3	Develop training programs to capitalize on the increased need for personnel trained to combat cyber attacks on national security (e.g. systems operations)
COORDINATING EFFECTIVELY			
Coordinating Effectively Goal 1: Provide efficient, effective and coordinated services to the public.			
1.1	Develop and maintain procedures, policies, standards and ordinances that guide and regulate public services, public buildings, and health and human services.	1.1.1	Promote public service facilities, such as libraries, community centers, health clinics, and job training facilities as an integrated system of service delivery.
		1.1.2	Develop public service facilities that are consistent with land use, transportation plans, and public infrastructure plans.
		1.1.3	Ensure that public services are reasonably accessible to all areas of the Parish.
		1.1.4	Coordinate public services with the public school system when such services are compatible.
		1.1.5	When planning and developing new subdivisions ensure that adequate parks, open space, trails, and connections to schools and social services are provided.
1.2	Establish public service goals and standards and a plan for inter-governmental coordination. Regularly evaluate the provision of public services to ensure standards are met.	1.2.1	Provide services in an efficient and timely manner consistent with Parish policies and standards.
		1.2.2	Initiate discussions with regional partners to coordinate services. Discuss regional coordination monitoring with the HTMPO.
		1.2.3	Schedule regular monitoring of Parish services to determine areas of deficiencies in coverage and actual services provided. Schedule improvements.

Strategy		Action
1.3	<i>Continue to recruit and retain the highest caliber of public service professionals.</i>	1.3.1 Maintain transparent standards to provide for compensation based on educational levels and performance excellence.
		1.3.2 Develop programs and services that facilitate the continued hiring and retention of quality public service professionals.
		1.3.3 Review and enhance the ongoing training program for public service professionals, ensuring that appropriate training is provided for promotion opportunities and competent individuals are prepared consistently.
1.4	<i>Promote research and innovation that is consistent with the Parish's entrepreneurial spirit.</i>	1.4.1 Investigate new proposals for service standards and methods based on current research, and on the tested experience of innovations in other communities.
		1.4.2 Utilize new technological developments to improve services, and to ensure that existing technological systems continue to be used with maximum effectiveness.
		1.4.3 Encourage the coordination of colleges and universities, for training in for advanced technologies, specifically in oil and gas; retain workforce and coordinate with gas industries.
1.5	<i>Ensure residents of the Parish are provided the highest quality preparedness training and understanding of risk to be able to respond to storm events and natural disasters.</i>	1.5.2 Require annual “readiness” reporting from the Office of Emergency Preparedness regarding disaster preparation and mitigation.
		1.5.3 Continually enhance disaster preparedness education programs.
		1.5.4 Inform the residents about disaster preparedness, including both educational programs and services available from private business (during storm events and in the post-storm recovery period).
		1.5.5 Promote emergency services coordination during and after disaster situations.
		1.5.6 Provide a hotline to call to learn when areas of the Parish re-open after storm events.
		1.5.7 Coordinate interim mental-health counseling and other social-services.

Strategy	Action
1.6 <i>Promote education, awareness and involvement in the provision of public services.</i>	1.6.1 Educate residents, including students, as to proper actions in emergency situations.
	1.6.2 Educate communities and neighborhoods about the service delivery system and possible efficiencies and conservation of resources.
	1.6.3 Explore joint uses of school facilities and other public buildings to provide additional services to the broader community.
	1.6.4 Provide information and education to property owners about building codes, subdivision requirements, and the need for adequate parks, trails, schools and access to social services.
Coordinating Effectively Goal 2: Enable residents and business owners to have healthy and satisfying lives in a comfortable and safe natural environment	
2.1 <i>Enable all persons to have access to needed services.</i>	2.1.1 Provide efficient public transportation services for access to health and human services.
	2.1.2 Adopt policies that address environmental health issues.
2.2 <i>Promote the coordination of existing health and human services, comprehensive planning for short-term and long-term needs of residents, and innovative research into new programs and methods.</i>	2.2.1 Encourage research of new methods and programs for innovative patient care and services, building on the work that Thibodaux Regional Medical Center is pursuing.
	2.2.2 Create an interagency system that allows agencies to share basic recipient information, such as where, when and what amount of basic services have been provided.
	2.2.3 Foster collaboration between agencies to better service holistic needs of residents.
	2.2.4 Promote the provision of daycare centers for children from birth to 10 years of age with costs shared by parents, employers and other partners including Headstart and the School Board.

Strategy		Action
Coordinating Effectively Goal 3: Focus on education and training by coordinating with public schools, technical schools, community colleges and Nicholls State University.		
3.1	<i>Engage the post-secondary educational institutions within the Parish in programs which would support the retention of college graduates and train them for future Parish jobs.</i>	3.1.1 Create and implement internship programs among disciplines within each college or University.
		3.1.2 Assist the educational institutions in creating an educational awareness program promoting government service upon graduation as a means of financial loan repayment.
		3.1.3 Establish guidelines which would foster the post-graduation hiring of interns and apprentices.
		3.1.4 Partner with Parish businesses to create a program which would provide incentives for new technology, oil and gas, logistics, and other emerging businesses to hire interns or apprentices from local institutions and then provide them permanent jobs upon graduation.
3.2	<i>Create a high school program to train students for locally available jobs.</i>	3.2.1 Train students for local manufacturing businesses which are limited by a shortage of skilled workers.
		3.2.2 Create a training program to bring together local businesses and the Parish school system to create a curriculum that would prepare students for entry level positions in industry.
		3.2.3 Groom young people in core workplace competencies as well as effectively integrate them into various work settings.
		3.2.4 Chamber of Commerce representatives coordinate with local business leaders to establish basic entry level job descriptions and requirements. Requirements would be comprehensive, not just the specific trade skills, but other important qualities to be a successful employee: responsible behavior, safety consciousness, communication ability, problem solving, performance expectations, and teamwork.
		3.2.5 School board designs and implements a curriculum to meet these requirements as well as establish a program to assess student's interests, aptitudes and abilities. Use local technical and trade school facilities and apprenticeship arrangements with local businesses to conduct the "hands on" education.
		3.2.6 Provide co-op courses that earn technical school and high school credits.

Strategy		Action
3.3	Develop training programs for the Parish workforce to ensure that residents are prepared to fill future Parish employment opportunities.	3.3.1 Work with Fletcher Technical College and Nicholls State University to offer effective training that enables Parish residents to become viable candidates for jobs in the region.
		3.3.2 Support technical college programs to increase training programs to ensure that local workers are available to fill local jobs.
		3.3.3 Design a cooperative program between the high schools and Fletcher Technical College and Nicholls State University that provides a current path to technical training for high school students.
		3.3.4 Target training for workers to serve local industries such as oil and gas, ship yards, and technology and logistics industries.
		3.3.5 Study emerging businesses and develop training programs to meet those industry needs. Such industries could be businesses associated with the oil and gas industry, drilling, environmental testing, inspections, logistics, and service businesses. Provide training in front of this need so that workers are ready to be hired.
Coordinating Effectively Goal 4: Provide leadership training to emphasize accountability, transparency and continuing education for elected and appointed officials, nonprofit and business leaders		
4.1	Identify, schedule and budget for board and commission leadership training through regional professional organizations.	4.1.1 Require that elected and appointed officials have a designated number of hours of training a year. Required courses should include introductory planning, ethics, leadership and certification review courses.
		4.1.2 Develop a program to require yearly accountability of boards as to accomplishment of goals, revenues, expenses, and attendance in required and voluntary educational opportunities to be made available to public.
4.2	Provide leadership training opportunities.	4.2.1 Establish a leadership tour to make annual visits to successful programs of interest, such as communities that have successfully strengthened and diversified their economic base, and communities that have supported improvements to quality and quantity of diverse housing and other relevant issues.
		4.2.2 Encourage annual attendance at a professional or leadership conference such as the State Planning Conference, the Annual Smart Growth Conference, the State Landscape Architect conference, or ethics training.
		4.2.3 Support the efforts of Leadership Lafourche

Strategy		Action
Coordinating Effectively Goal 5: Through coordination, increase the sustainability of Lafourche Parish and enhance the long-term viability of region.		
5.1	<i>Support shared goals between different parts of the Parish, with the Parish's cities and towns and with adjacent parishes.</i>	5.1.1 Consider consolidation of boards and services to reduce costs and provide consistent service throughout the Parish. Areas that could be considered for consolidation include boards overseeing ambulance, sewerage, recreation and drainage.
5.2	<i>Create a joint planning area and annexation and boundary agreements between the Parish and the following cities and towns: Thibodaux, Raceland, Mathews, Lockport, Larose, Cut Off, Galliano, and Golden Meadow.</i>	
5.3	<i>Create programs to share data and services within the Parish, and between the Parish and cities and towns, and adjacent parishes.</i>	5.3.1 Consider sharing data requirements that cross political boundaries, such as water management, land management (GIS) and safety data bases (911).

Strategy	Action
5.4 <i>Coordinate with adjacent parishes to ensure seamless service provisions, increase efficiency in all parishes, and to reduce potential unintended negative impacts.</i>	5.4.1 Work with the HTMPO to plan for future road alignments that provide facilities through Lafourche and adjacent parishes. Coordinate with adjacent parishes on road improvements and future road extensions to plan for needed future right-of-way.
	5.4.2 In conjunction with HTMPO and adjacent parishes, prepare corridor preservation plans to identify and preserve right-of-way needed for future alignments.
	5.4.3 Work with Terrebonne Parish to preserve the right-of-way needed when Bayou Gardens is extended north across Bayou Blue.
	5.4.4 Coordinate with Terrebonne, St. James, and Assumption to create a process to review and resolve boundary discrepancies.
	5.4.5 Work with Terrebonne Parish to provide effective service provision to the Pointe aux Chenes area of Lafourche Parish. The Parish boundary cuts the community in half, creating many destabilizing issues.
	5.4.6 Work with Terrebonne Parish to ensure that Terrebonne's water management strategies do not adversely affect Lafourche residents and that Lafrouche is not adversely affecting Terrebonne.

Strategy		Action
5.5	<i>Use the Implementation Plan as a guiding document to identify and prioritize the Parish's many initiatives.</i>	5.5.1 Organize recommendations and priorities of various studies and documents.
		5.5.2 Identify resources that need to be considered and balanced in future planning efforts.
		5.5.3 Create links between major initiatives such as Coastal Protection and Restoration Authority (CPRA) programs, Louisiana Department of Transportation and Development (DOTD) programs, the Barataria-Terrebonne National Estuary Program, Freshwater District, Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) projects, and the Parish's Drainage Master Plan.
5.6	<i>Increase the efficiency of services provided within the Parish and its incorporated municipalities, reducing redundancy of service and streamlining the provision of service to all our residents.</i>	5.6.1 Determine the services which are overlapping between the municipalities.
		5.6.2 Determine which specific services should be provided by a specific governmental entity and provide appropriate services in the satellite offices in the Parish's governmental centers and in conjunction with the municipal governmental centers.
5.7	<i>Ensure access to all areas of the Parish and initiate systems so all residents may effectively and efficiently travel from one portion of the Parish to another.</i>	5.7.1 Integrate transit planning with all entities of impact and coordinate with the HTMPO so that the system may be upgraded or adapted as development patterns dictate.
		5.7.2 Coordinate transit planning with governmental entities and cities and towns.
		5.7.3 Coordinate greenway planning with the South Central Planning and Development District, Thibodaux and other municipalities so that all forms of transportation including bicycle and pedestrian may be seamless and coordinated planning exists for these services.

Strategy	Action
5.8 <i>Foster opportunities to support shared goals for coastal restoration and resiliency.</i>	5.8.1 Partner with EPA, NOAA, USGS, FEMA, Louisiana DNR, LADOTD, Lafourche Parish Coastal Zone Management Committee, and cities to further coastal restoration and protection of the region.
	5.8.2 Partner with industry leaders, nonprofit organizations and private developers to develop practices and procedures that further the Parish's goals.
	5.8.3 Create a mechanism for sharing data and implementing the Plan's recommendations that involves all entities from including development, social services, transportation, economic development, and safety and resiliency partners.