



DRAFT COMMUNITY PLAN *for* DELISLE  
*Harrison County, Mississippi*

*Cover photograph by Michael Curtis*

# Community Plan *for* DeLisle

*Harrison County, Mississippi*

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**APRIL 14, 2006**

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**City and Regional Planning**  
AUSTIN E. KNOWLTON SCHOOL OF ARCHITECTURE





# Contents

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<b>EXECUTIVE SUMMARY</b>	<b>6</b>	<b>CHAPTER 3. BACKGROUND</b>	<b>56</b>
<b>INTRODUCTION</b>	<b>8</b>	Demographics	56
Purpose	8	Housing	60
Principles of New Urbanism	10	Land Use Pattern and Zoning	68
Process	10	Economics	76
People	11	Natural Resources	79
Acknowledgements	12	Community Facilities	87
Organization of the document	13	Infrastructure	92
<b>CHAPTER 1. CONTEXT</b>	<b>14</b>	<b>APPENDIX A. CITIZEN INVOLVEMENT</b>	<b>98</b>
Description of Community	14	<b>APPENDIX B. POTENTIAL FUNDING SOURCES</b>	<b>122</b>
History of DeLisle	14	<b>APPENDIX C. DEMOGRAPHIC DATA TABLES</b>	<b>126</b>
Regional Connections	17		
General Trends	18		
Summary of Community Input	20		
Community Issues and Conclusions	22		
<b>CHAPTER 2. THE PLAN</b>	<b>24</b>		
SmartCode and Sector Map	24		
Outline of Community Goals and Objectives	27		
Topic Areas	40		
<i>Preservation of the Natural Environment</i>	40		
<i>Rebuilding in DeLisle</i>	43		
<i>Development in the Center of DeLisle</i>	47		
<i>Economic Development</i>	51		
<i>Preserving Rural Character</i>	52		
<i>Recreation and Community Facilities</i>	53		

## *List of Maps*

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Map 1. Aerial photo of DeLisle	15
Map 2. Regional connections	19
Map 3. DeLisle Sectors	25
Map 4. Comprehensive Policy	41
Map 5. Census tract block group	56
Map 6. Hurricane Katrina damage	67
Map 7. Existing land use	69
Map 8. Existing zoning	72
Map 9. DeLisle’s wetlands and natural features	80
Map 10. 1988 floodplain	84
Map 11. Hurricane Katrina storm surge inundation	85
Map 12. Pass Christian School District	87
Map 13. DeLisle functional road classifications with estimated traffic counts	93
Map 14. Utilities, sanitary sewer system	95
Map 15. The DeLisle Planning Area neighborhoods	126



# Executive Summary

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The *Community Plan for DeLisle* has been designed to guide redevelopment and growth in the DeLisle Planning Area over a period of twenty years. This plan incorporates the principles of New Urbanism and the Mississippi SmartCode Model in an effort to create a plan that reflects the community's desire for a sustainable rural community. This plan recommends the adoption of a Sector Model of development. Under this SmartCode Model, the planning area is divided into different sectors—some reserved for open space and others identified for various types of growth. The preliminary Sector Map for the DeLisle Planning Area will be incorporated into a county-wide Sector Map to guide development throughout Harrison County.

Community input was collected from surveys, written and verbal correspondence, an online discussion forum, and Town Hall Meetings. Issues identified as priorities by the community are the foundation of this plan. These priorities are organized as seven community goals:

### ***Ensure DeLisle prepares for growth***

Development pressures are imminent in DeLisle due to its proximity to major thoroughfares and expanses of open land. Residents of Pass Christian are likely to relocate in DeLisle to areas less affected by Hurricane Katrina. Appropriate policies, infrastructure and services must be created to accommodate growth while respecting the community's rural character.

### ***Rebuild the community***

DeLisle was severely impacted by Hurricane Katrina.

Nearly 20 percent of the residential structures were destroyed. Rebuilding the community is a major priority for the residents and County officials. As the community works together to rebuild from the devastation caused by Hurricane Katrina, there will be a demand for different styles and price-ranges of housing. Proper planning will ensure that housing is affordable and compliments the local character of DeLisle.

### ***Maintain the rural character of the community***

DeLisle is a rural community with vast amounts of open space and small community charm. Residents enjoy large properties, scenic views and slow-paced development. Policies and programs must be implemented to ensure that these rural qualities are preserved.

### ***Protect and preserve the rural environment***

DeLisle is bordered by three bodies of water, the Wolf River, Bayou DeLisle and St. Louis Bay. These environmentally sensitive areas are highly sought after for outside development to build condominiums and casinos. Policies and programs must be implemented to ensure that the natural environment is protected.

### ***Maintain and enhance DeLisle's close-knit community***

DeLisle is known for its family oriented atmosphere, rich history and welcoming charm. The community members enjoy interacting with one another but currently do not have a favorable location to do so. Public parks, bike trails, and a community meeting facility would provide the resi-

*Community input was collected from surveys, written and verbal correspondence, an online discussion forum, and at Town Hall Meetings.*



dents an opportunity to interact and therefore maintain the community's close-knit character.

***Protect the health and safety residents***

The quality of ground water supply, crime prevention, hurricane protection and roadway and pedestrian safety are important to the DeLisle community. The quality of life in DeLisle can be enhanced by strengthening services and providing related opportunities in the area.

***Encourage and support development of a water service area***

DeLisle citizens currently utilize private wells to obtain water. The development of a water service area would reduce the residents fear of water contamination, increase fire safety and provide opportunities for further planned growth and development.

For each goal, a series of objectives and strategies are described. Detailed actions are outlined to be implemented by the County and various county agencies. To guide implementation, this plan provides a timeline that prioritizes the action statements.

Topic area descriptions detail a number of policies and development strategies. These topics are reflections of the citizens' vision of the future of the community.

Citizen participation guided the selection of appropriate policies and development strategies. During the second Town Hall Meeting, the community was able to vote, using electronic voting devices, to identify the scenarios and policy strategies they found most important. The most favored scenario for the hamlet in the center of DeLisle pro-

vides a mix of limited office/retail facilities and residential development with a minimum one acre lot size. However, a significant portion of other participants preferred conservation subdivision design.

The top priorities are to create a community center that converts to a hurricane shelter, establish a water service area, and encourage small businesses to locate in the center of DeLisle. The community has a strong desire to rebuild DeLisle in a manner that maintains its pre-Katrina character; therefore, they would not support development such as industrial that would be contrary to this character.

The Harrison County Board of Supervisors is the responsible party for carrying out most of the action steps, especially since it is the entity with the authority to adopt any recommended regulatory measures. However, in order to assist in the implementation of the plan, DeLisle residents are encouraged to form a non-profit organization to solicit and receive grant monies, coordinate local citizen efforts, and undertake other action steps, especially those that are nonregulatory.

# Introduction

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## Purpose

Those along the Gulf Coast will never forget August 29, 2005. The destruction wrought by Hurricane Katrina took both lives and homes in DeLisle. It did not, however, take the resolve of its residents to rebuild their community. Area citizens have come together to make decisions about their collective future. The *Community Plan for DeLisle* articulates this future.

Shortly after the hurricane, Mississippi Governor Haley Barbour established the Governor's Commission for Recovery, Rebuilding, and Renewal. The Commission provided local leaders with ideas and information that will help them decide what their communities will look like in the future. As part of this effort, they hosted the Mississippi Renewal Forum, in partnership with the Congress for the New Urbanism. The Renewal Forum focused on planning and visioning for the incorporated areas of the coast. This plan extends the work of the Renewal Forum into the unincorporated areas of Harrison County. The *Community Plan for DeLisle* incorporates many of the ideas provided by the Governor's Commission and integrates them with what the citizens of DeLisle have stated that they want for their community.

The *Community Plan for DeLisle* complements the county's sustainability planning process. The Harrison County Board of Supervisors, prior to Hurricane Katrina, initiated a sustainable planning process to guide the future development of the county. This plan along with other planning efforts in the county are based on the principles of Smart

Growth and New Urbanism.

The Board of Supervisors for Harrison County recognized the need for a plan for rebuilding DeLisle. The Board invited Assistant Professor Jennifer Cowley, from the City and Regional Planning Program at The Ohio State University (OSU) to bring a technical assistance team to DeLisle to facilitate this planning process. This plan has been funded through grants and in-kind contributions and is provided at no cost to the taxpayers of Harrison County.

To assist the DeLisle planning team, Harrison County Supervisor Marlin Ladner appointed a five-person steering committee of local residents. The steering committee acted as a liaison between the citizens and the planning team. They provided input throughout the planning process. They ensured that the DeLisle planning team addressed citizen concerns and incorporated community goals into the *Community Plan for DeLisle*.

The *Community Plan for DeLisle* has a long-range perspective. Its primary purpose is to aid in the rebuilding of the community by:

- 1) Formulating goals to fulfill the community's vision
- 2) Developing a series of strategies to achieve those goals

The plan serves as a policy guide for the community. It does not create any laws or regulations; it only identifies methods that are appropriate for carrying out the policies. Any recommendations for zoning changes or new laws will require a separate and distinct public process. It is in the

*Hurricane Katrina took both lives and homes in DeLisle. It did not, however, take the resolve of its residents to rebuild their community.*



**Figure 1 (Left).** Ohio State University Professor Jennifer Cowley (right) leads a small group discussion during the Town Hall Meeting.  
*Source: Robert Lemon.*

**Figure 2 (Right).** Fire Marshall George Mixon (center), steering committee members Linda Ladner and Robert Jones meet the planning team in DeLisle.  
*Source: Andy Taylor.*

**Figure 3 (Bottom).** Hurricane Katrina disrupted the lives of DeLisle citizens through its destructive power. The storm's surge pushed this house near Bayou DeLisle off of its foundation.  
*Source: Michael Curtis.*





hands of the citizens of DeLisle and the Harrison County Board of Supervisors to carry the plan through to implementation.

## Principles of New Urbanism

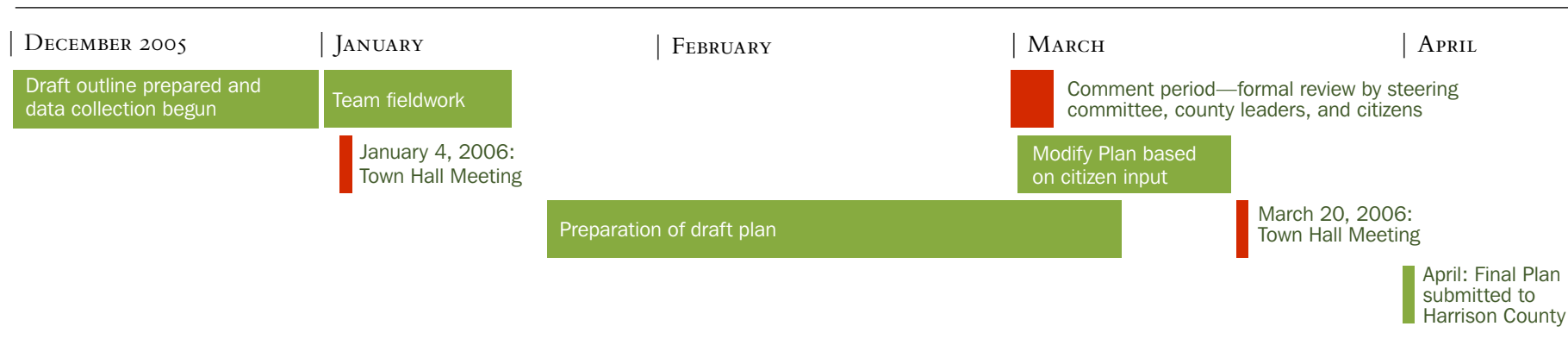
The Charter of the New Urbanism forms the basis for the recommendations from the Mississippi Renewal Forum. This plan integrates many of the principles identified in the portion of the Charter pertaining to regional scale.<sup>1</sup> The following principles, from the Charter, should guide public policy, development, and design in DeLisle.

1. Metropolitan regions are finite places with geographic boundaries derived from topography, watersheds, coastlines, farmlands, regional parks, and river basins. The metropolis is made of multiple centers that are cities, towns, and villages, each with its own identifiable center and edges.
2. The metropolitan region is a fundamental economic unit of the contemporary world. Governmental cooperation, public policy, physical planning, and economic strategies must reflect this new reality.
3. The metropolis has a necessary and fragile relationship to its agrarian hinterland and natural landscapes. The relationship is environmental, economic, and cultural. Farmland and nature are as important to the metropolis as the garden is to the house.
4. Development patterns should not blur or eradicate the edges of the metropolis. Infill development within existing urban areas conserves environmental resources, economic investment, and social fabric, while reclaiming marginal and abandoned areas. Metropolitan regions should develop strategies to encourage such infill development over peripheral expansion.
5. Where appropriate, new development contiguous to urban boundaries should be organized as neighborhoods and districts, and be integrated with the existing urban pattern. Noncontiguous development should be organized as towns and villages with their own urban edges, and planned for a jobs/housing balance, not as bedroom suburbs.
6. The development and redevelopment of towns and cities should respect historical patterns, precedents, and boundaries.
7. Cities and towns should bring into proximity a broad spectrum of public and private uses to support a regional economy that benefits people of all incomes. Affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.
8. The physical organization of the region should be supported by a framework of transportation alternatives. Transit, pedestrian, and bicycle systems should maximize access and mobility throughout the region while reducing dependence upon the automobile.
9. Revenues and resources can be shared more cooperatively among the municipalities and centers within regions to avoid destructive competition for tax base and to promote rational coordination of transportation, recreation, public services, housing, and community institutions.

## Process

Once the planning team was assembled, it formulated this plan in a five-month time frame as noted in Figure 4. Following the development of the planning process in collaboration with the County, the team began gathering area data and background information in December 2005. The





**Figure 4.** The community plan formed over five months.



**Figure 5.** Citizens of DeLisle voiced their opinions on development issues through a survey provided at the Town Hall Meeting.

Source: Robert Lemon.

team traveled to Harrison County the first week in January 2006 to gather more data and survey the community's needs.

As part of that fieldwork, the team held a Town Hall Meeting on January 4 in the West Harrison Civic Center. More than 100 residents attended. During the meeting, citizens completed a written survey seeking their opinions on development issues in DeLisle and Harrison County. The attendees participated in a Visual Preference Survey designed to reveal their opinions regarding development options for housing, setbacks, town center alternatives, and streetscapes. Attendees then participated in small group discussion of issues that they wanted addressed in the community plan.

The planning team drafted community goals based on the vision DeLisle citizens communicated during the Town Hall Meeting, through the survey results, and additional comments gathered from a web-based discussion forum and 1-800 number. They researched policies and strategies to enable DeLisle citizens to implement these goals.

The planning team submitted the draft plan to the community, steering committee, and other stakeholders for public comment. They presented the plan to the Harrison County Board of Supervisors and to the community at a second Town Hall Meeting on March 20, 2006.

With these comments, they prepared the final version. Citizens had the opportunity to provide additional input on alternative scenarios for future development. These comments were incorporated into the final plan that was presented to the citizens of DeLisle and Harrison County in April 2006.

## People

### The Planning Team

Professor Jennifer Cowley, PhD, AICP, served as the Project Manager and worked in conjunction with the Harrison County Board of Supervisors and Patrick Bonck, Harrison County Zoning Administrator. Cowley, who teaches planning at The Ohio State University, assembled the following team to work on the *Community Plan for DeLisle*.

Kristin Hopkins, AICP, Principal Planner for the Cuyahoga County Planning Commission in Ohio, volunteered her time to serve as the DeLisle planning team leader. Prior to working for the county, she spent 18 years as a planning consultant.

Team members included OSU City and Regional Planning graduate students Michael Curtis, from Slidell, Louisiana, who holds his undergraduate degree in Fine Arts

from Mississippi State University; Carla Marable, who is also pursuing a degree in Public Policy and Management and holds her undergraduate degree in Economics; Ellen Marrison who holds her undergraduate degree in Journalism, and worked in public relations and marketing prior to returning to school; and Keisha Walker, who holds her undergraduate degree in Business Administration, and worked in marketing in Louisville, Kentucky before returning to school.

### **The Steering Committee**

A Steering Committee comprised of area representatives was appointed by Harrison County Supervisor Marlin Ladner to assist the planning team in coordinating communication within DeLisle and responding to questions and issues during the planning process.

Bill John has lived in DeLisle since 1977. He and his wife have two children. He works for Lockheed Martin at Stennis Space Center.

Robert Jones is retired from the US Air Force. He and his wife have three children and two grandchildren. He serves as the secretary for the West Harrison County Sewer District Board. After Hurricane Katrina, his wife Eleanor took on the role of coordinator at DeLisle's second distribution center, located on the site of the destroyed fire station. Robert's house sustained considerable damage from Hurricane Katrina, and he occupied a FEMA trailer in his driveway for months to follow.

Linda Ladner and her husband have two children and two grandchildren. Her husband, Kenny, is a retired school teacher and has lived in DeLisle his whole life. She is currently employed at Keesler Air Force Base. Linda's home on Wittmann Road was severely damaged by Hurricane Katrina. During the rebuilding process, she and her family lived in a FEMA trailer parked in the driveway of a family friend more than five miles away.

E.J. Parker grew up in DeLisle. His mother's home on Wittmann was destroyed during Hurricane Camille, but she rebuilt. In 1999, E.J. and his wife built a home next to his mother's. Both homes were lost in Hurricane Katrina,

but both E.J. and his mother plan to rebuild.

Reverend RoseMary Williams lives in Gulfport and has been the pastor of Mt. Zion Baptist Church since 1996. She was a teacher in DeLisle from 1971 until her retirement in 1997.

### **Acknowledgements**

A warm thank you goes out to all the citizens of DeLisle who welcomed the planning team into their community and took the time to share their community vision so willingly during a very difficult time. It was truly this vision that guided the team and made this plan possible.

Special thanks goes out to two of the steering committee members, Robert Jones and Linda Ladner, and George Mixon, Harrison County Fire Marshal, who provided the planning team with a tour through DeLisle, noting its history—the people and places that formed the community. All steering committee members were a valuable asset for the planning team by providing crucial information gathering and community feedback. Bill John deserves thanks for organizing steering committee meetings and hosting them in his home, despite the challenge with half of its members displaced from their homes because of the hurricane. Patrick Bonck, the Harrison County Zoning Administrator, answered numerous questions and worked patiently with our many requests. Harrison County Supervisor Marlin Ladner coordinated with the planning team and steering committee; he acted as an invaluable source of information about the community. The entire Harrison County Board of Supervisors deserves thanks for the support of planning efforts in DeLisle.

Community representatives from the Pass Christian School District, the Wolf River Conservation Society, the Department of Marine Resources, community churches, DuPont, and George Mixon, Harrison County Fire Marshal, were also instrumental in compiling the plan. We would also like to thank FEMA personnel Steve Pratt and Josh Barbee

for their input. Representatives Jeff Taylor and Paul Barnes from the Southern Mississippi Planning and Development District were also instrumental in compiling the plan.

The team must acknowledge the funding sources that made this work possible. The Service-Learning Initiative at OSU provided a \$5,000 grant; the OSU Office of Outreach and Engagement provided a \$2,000 grant; the OSU College of Engineering provided a \$5,000 grant; the Knowlton School of Architecture provided a \$3,000 grant; and the Ohio Planning Conference provided a \$500 grant. The Cleveland Section of the Ohio Planning Conference underwrote Team Leader Kristin Hopkins travel expenses and the Cuyahoga County Planning Commission authorized Ms. Hopkins to devote a portion of her time to the project. The Mississippi and Hawaii Chapters of the American Planning Association provided funds to assist in the printing of this plan.

The team would also like to thank the other members of The Ohio State University planning team, whose assistance was critical. Justin Goodwin provided the maps shown throughout this plan; Amelia Costanzo prepared and analyzed the citizen survey; Robert Lemon prepared and analyzed the visual preference survey; Corrin Hoegen for her renderings of the town center; the zoning team and others who assisted with facilitation during the Town Hall Meetings including Nick Seivers, Matt Hinkle, Jeff Jacobs, and Andrew Taylor. Two additional professional planners Chris Snyder from Miami Township, Ohio, and Bob

Cowell, from Monroe County, Indiana, volunteered their time to assist with the planning process.

## Organization of the document

### CHAPTER 1. CONTEXT

Context summarizes DeLisle's important characteristics, key trends, and pressing planning issues.

### CHAPTER 2. THE PLAN

The Plan outlines overall goals and objectives to address the issues identified in Chapter 1 and provides specific strategies and actions to achieve these goals and objectives.

### CHAPTER 3. BACKGROUND

Background provides relevant information on community history and trends and provides detailed analyses of the characteristics of population, housing, land use, natural resources, community facilities and infrastructure that have been reviewed and examined as part of this planning process.

### APPENDICES

The appendices include information on citizen involvement in this planning process, funding sources that may be used to implement this plan and detailed data tables of information summarized in Chapter 3.

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## NOTES

1. Congress of the New Urbanism. (2006). Charter of the New Urbanism. Accessed February 17, 2006 from: <http://www.cnu.org/aboutcnu/index.cfm?formAction=charter>.

# Chapter 1. *Context*

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## Description of Community

DeLisle is an unincorporated area of Harrison County located four miles north of Pass Christian, along the marshes north of the Wolf River and Saint Louis Bay. Based on survey responses from residents attending a Town Hall Meeting in January 2006, the consensus is that DeLisle's center is near the DeLisle Elementary School. It is bounded by Interstate Highway 10 to the north, Menge Avenue to the east, the Wolf River and the Bayou DeLisle to the south and the Harrison County line to the west (see Appendix A for all citizen responses). This is an 11.3 square mile area (7,250 acres) illustrated on Map 1.

Prior to Hurricane Katrina, some of the area's largest oaks, and an abundance of pecan and magnolia trees were located along the Wolf River and bayous. This scenic setting has made DeLisle an attractive location for housing. DeLisle has been and continues to be primarily a residential area. However, there are small amounts of commercial businesses and a DuPont chemical plant located on the outskirts of the planning area.

## History of DeLisle

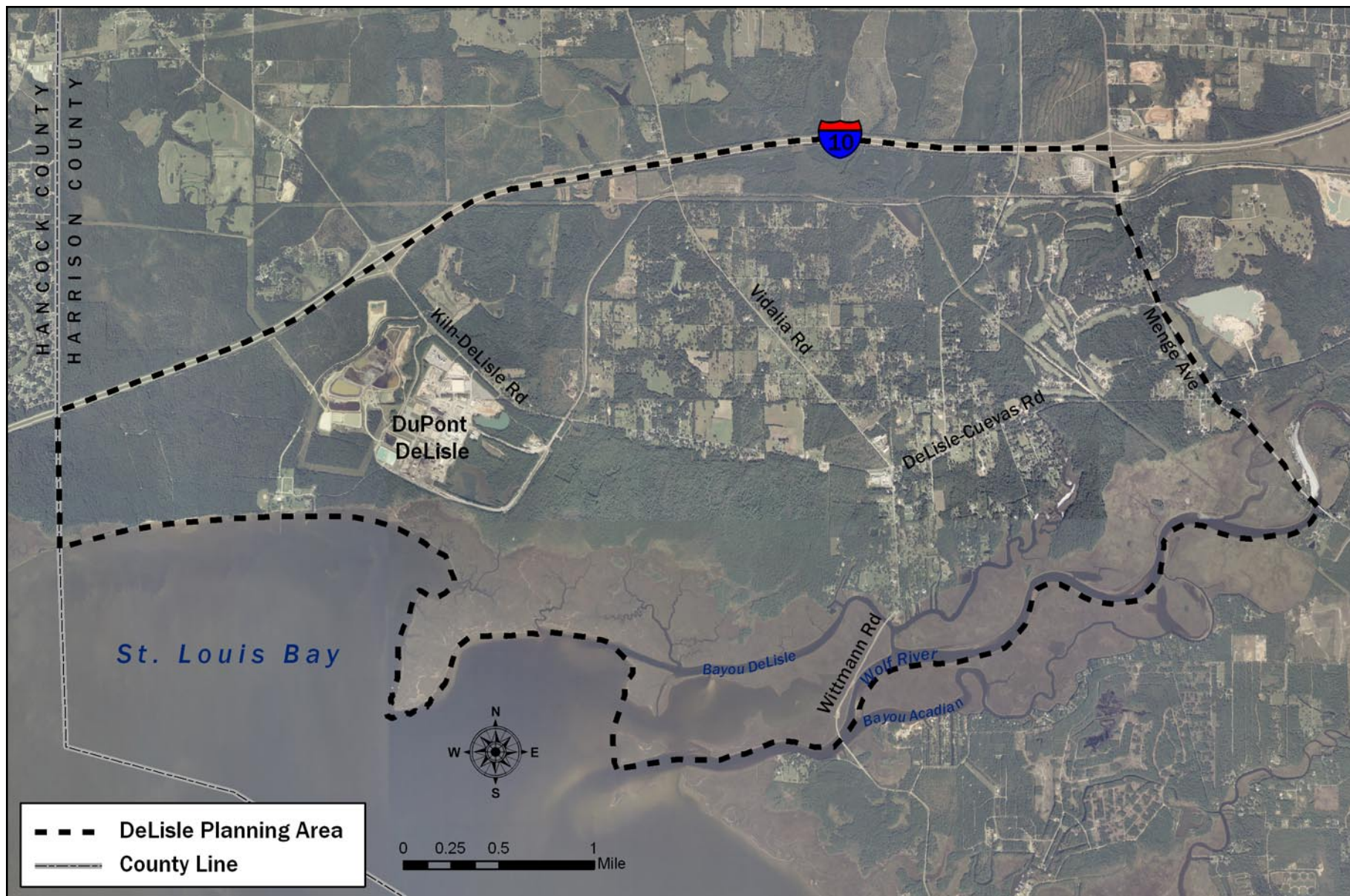
DeLisle had its start with an ancient Indian tribe. The tribe harvested oysters and fish from the Bay, leaving behind mounds of shells. Jean Baptiste Saucier explored the area in the early 1700s, which was later settled by his descendants. To this day, there are still residents of DeLisle who bear the



**Figure 6:** Live oaks are a common and treasured species along Bayou DeLisle.

Source: Michael Curtis.





**Map 1.** Aerial photo of DeLisle.

Data Source: Southern Mississippi Planning and Development District (SMPDD).



surnames of some of these early French settlers, including Jean Baptiste Nicaise and Charles Ladner. In the late 1700s, the community was named La Riviere des Loups (Wolf River), which later became known as Wolf Town and continued to bear that name for nearly one hundred years. In 1884, a post office was constructed and the community took the name DeLisle in honor of Lieutenant Comte De L'Isle, who discovered and named the Bay of Saint Louis in 1700. De L'Isle gave his name to the first bayou that he entered.<sup>1</sup>

By the mid 1800s, more than ten lumber mills lined the Wolf River and adjacent bayous, near the Saint Louis Bay. Shipyards located along the river and bayous, employing men to build boats for the seafood and lumber industries. Documented names of those who built and bought the ships are still recognized in the community. For instance, a schooner built of cypress and named Felecity was built by Antonio Pavolini at Wolf River for the estate of Francois Cuevas in 1872.<sup>2</sup> Families from Alabama, Georgia, and the Carolinas moved westward and settled in this area because of the numerous employment opportunities in these industries.

During this time of prosperity, the establishment of numerous mansions and resort hotels along the Gulf Coast attracted thousands of tourists. The first yacht club on the Gulf Coast organized at Pass Christian in 1849. Most travelers arrived to the coast via railroads.<sup>3</sup> While Pass Christian became popular as a vacation spot, others settled in DeLisle because they saw it as a safe haven, away from the coastal beaches and vacationers.

The Catholic Church established DeLisle's first church, Our Lady of Good Hope, in 1872. This building stood as a landmark for residents until Hurricane Camille destroyed it in 1969.

Kiln-DeLisle Road became the primary route from New Orleans to the Harrison County Gulf Coast. In 1914, the construction of Wittmann Road (also known as Henderson Avenue) and its bridges that cross Bayou DeLisle, Wolf River, and Bayou Portage accommodated the



**Figure 7.** DeLisle State Historical Marker, located on the west side of Wittmann Road, just north of Bayou DeLisle. Residents propped up the marker after Hurricane Katrina, indicating their resolve to rebuild.

Source: Michael Curtis.

increasing vehicular traffic from New Orleans. Until 1928, this route along Kiln-DeLisle Road and Wittmann Road served as the only means for automobiles to reach Pass Christian from the west.

The Shelley Plantation started operation in 1850. In 1926, a luxury hotel and golf course named Pine Hills Hotel replaced 1,900 acres of the plantation land along the Saint Louis Bay. The lavish 185-room hotel sat just 300 feet from the bay and played host to important and wealthy guests. In addition to the hotel and golf course, the owners had plans for a 500-lot residential development at the end of what is now Pine Hills Drive off Kiln-DeLisle Road.<sup>4</sup>

The hotel fell on hard times during the Depression and



**Figure 8.** Schooners were popular vessels along the Bay in the late 1800s, built by Antonio Pavolini and other shipbuilders.

Source: Courtesy of Dan Ellis.



**Figure 9.** Father RJ Sorin served as pastor of Our Lady of Good Hope Parish for 56 years.

Source: Courtesy of Dan Ellis.



**Figure 10.** The Pine Hills Hotel, located west of DuPont off Kiln-DeLisle Road, once played host to dignitaries and vacationers.

Source: Courtesy of Dan Ellis.

had to close. The complex housed two army battalions and served as a Prisoner of War camp during World War II.<sup>5</sup> The site remained dormant until it became the home of a Catholic seminary and retreat monastery in 1953. Hurricane Camille damaged the buildings in 1969. In 1976, DuPont acquired the land adjacent to this site to construct its chemical plant. The company later purchased the 80-acre hotel site, razed the building, and used the land as a buffer zone in what residents call the DeLisle Forest.

While there was some industry in the area, DeLisle developed as a bedroom community from its early ties with the shipping and lumber industries, with many of the original families that settled in the area maintaining a presence in the community today. About 60 percent of the houses in DeLisle have been constructed since 1970. Many former residents of Pass Christian chose to move inland after Hurricane Camille and settled just north in DeLisle, which led to a housing boom in the 1970s when 127 homes were built.<sup>6</sup>

DuPont opened its titanium dioxide plant in 1979. The DeLisle plant is the second largest producer of the whitening material in the world. Today it has a workforce of 523

full-time employees and 450 contractors, drawn from the three-county areas surrounding the plant. DuPont has a total of 2,600 acres of which 200 are developed.<sup>7</sup>

For years, residents used Hurricane Camille as the benchmark for measuring storms. Now, Hurricane Katrina, which hit the Gulf Coast on August 29, 2005, is the most destructive natural disaster to strike the area. Three residents in DeLisle lost their lives during the hurricane, and more than 90 percent of the homes sustained some amount of wind and/or water damage. The storm surge, with its high velocity water, destroyed approximately 20 percent of the homes in the community and displaced residents, changing the look of the community. Despite the damage, residents of DeLisle expressed their commitment to their community, promising to rebuild.

DeLisle has an interesting history of employment in logging, boating, tourism and industry. Today, the community serves primarily as residential community, with DuPont as its major employer.

## Regional Connections

DeLisle is a small tight knit residential community that has always had strong regional connections. It is an unincorporated community without its own local government, zip code, school district, or amenities such as shopping and entertainment facilities. The result: DeLisle has long since relied on its neighboring communities.

DeLisle and Pass Christian share a school district and zip code. Before Hurricane Katrina, many DeLisle residents traveled to “The Pass” for their shopping needs. The two communities have a long history of closeness, strengthened after Hurricane Camille. After that hurricane’s devastation, many Pass Christian residents migrated to DeLisle. After the recent events of Hurricane Katrina, some anticipate DeLisle will see another in-migration of Pass Christian residents.

DeLisle also has a strong connection with Gulfport: many residents work in Gulfport and frequent its shopping areas along US Highway 49.

*Many of the original families that settled in DeLisle maintain a presence in the community today.*





**Figure 11.** Before Hurricane Katrina, many DeLisle residents travelled to Pass Christian for their shopping needs. The storm destroyed most of the commercial development in Pass Christian including the Walmart on US Highway 90.

Source: Michael Curtis.

Since the hurricane, DeLisle residents have had to travel to Diamondhead, Gulfport, and Biloxi to obtain goods and services that they cannot obtain in their own community. With Interstate Highway 10, for which there are two DeLisle exits, many of these areas are easily accessible.

Residents of other surrounding communities have connections to DeLisle. For example, DuPont employs close to 1,000 people that travel from the three counties surrounding the plant.<sup>8</sup>

According to the 2000 Census, two-thirds of the residents commute between 10 and 30 minutes to work, while approximately 25 percent commute between 30 to 60 minutes. With Interstate Highway 10 so near, people employed in various locations throughout the coast have made DeLisle their home.

Residents have strong connections to the water: primarily the Wolf River, Saint Louis Bay, Bayou DeLisle, and other nearby bayous. These water bodies support numerous species of fish, shellfish, and other wildlife, providing residents with opportunities for recreational fishing and boating. The coastal beaches are only a short five to ten minute drive through Pass Christian.

## General Trends

DeLisle is a predominately residential community made up of single-family wood-framed homes on large lots. According to the 2000 Census, it had a population of 1,374. Over the last decade, the population increased by 6 percent. In that same time, DeLisle experienced an 11.6 percent increase in the number of households. For both population and households, DeLisle grew at slower pace than both the state and Harrison County. At the same time, Pass Christian experienced three times DeLisle's rate of population growth and more than two times its rate of increase in households.

While both the total population and number of households in DeLisle increased between 1990 and 2000, the number of persons per household showed a gradual de-

*Since the hurricane, DeLisle residents have had to travel to Diamondhead, Gulfport, and Biloxi to obtain goods and services that they cannot obtain in their own community.*



**Map 2.** Regional connections.

*Data Source: SMPDD.*

crease, from an average 3.5 to 2.9 persons per household. This is consistent with the 30-year national trend in declining household size due to higher divorce rates, fewer children per family and more single person households.

Between 1990 and 2000, the number of housing units increased in DeLisle by 8.9 percent. This was somewhat slower than the 15.0 percent rate of increase in the state and 17.4 percent increase in both Harrison County, and Pass Christian. In comparing construction rates over time, DeLisle averaged 15 new houses annually during the 1980s, but in the 1990s, this pace declined to an average of only 9.1 units per year. Based on these figures, growth in DeLisle had begun to slow.

However, in the early part of 2000, new residential development at “The Oaks,” located in the northeast area of DeLisle, began and has since added a new housing element to the community, characterized by smaller lots, dedicated open space and a planned architectural design on a neighborhood-wide level.

Survey responses and discussions with community members indicate that most residents were pleased with housing conditions prior to Hurricane Katrina. Most residences were in good condition but a few showed signs of deterioration. Most residences are traditional site-built construction but there are also manufactured homes in the DeLisle community. As of 2006, there were over 2,400 va-

cant, residentially zoned acres in the planning area.

Throughout its history, DeLisle has supported some industrial development. Early on, it was the shipbuilding and lumber industry, followed much later by the establishment of the DuPont chemical plant in 1979. However, the DuPont plant is located on the edges of the planning area, away and somewhat isolated from most DeLisle residents. The entrances to the plant are within a half-mile of the Interstate Highway 10 and Kiln-DeLisle Road interchange, enabling most of its employees to travel to work without driving through the community. In addition, there are other large parcels with commercial or industrial zoning located at both Interstate Highway 10 exits into DeLisle: adjacent to DuPont and at the Menge Avenue interchange. More significantly, there are nearly 60 acres in the center of DeLisle zoned for industrial use. However, no substantial industrial development is present at this time.

Residents of DeLisle work in a variety of occupations such as managerial, construction, service, and sales. The top employment industry is educational, health, and social services, followed by arts, entertainment, and recreation. Between 1990 and 2004, the manufacturing industry lost workers while employment in the leisure and services industries increased. Hurricane Katrina dealt a blow to the services industry that may take years for recovery.

Since Hurricane Katrina, traffic has increased considerably along collector roads through DeLisle. The hurricane demolished the US Highway 90 Bridge over Saint Louis Bay, which has forced traffic between Pass Christian and Hancock County through DeLisle. In addition, because of Katrina, the Pass Christian School District relocated their operations to DeLisle Elementary School, which is located in the center of DeLisle. During peak travel times, there is heavy congestion on collector roads and excessive delays. During off-peak travel times, speeding is a major issue along collector roads, particularly in residential areas. Additionally, heavy vehicle traffic from debris hauling has eroded the road surfaces throughout DeLisle.

## Summary of Community Input

*The Community Plan for DeLisle* is a reflection of the desires of the residents for the future of their community. An in-depth analysis of current land use and the pressures facing the area informs the plan as well.

The planning process seeks to obtain residents' opinions in a variety of ways. The planning team began the community input process by conducting a Town Hall Meeting on January 4, 2006. During the meeting, attendees completed a written survey, participated in a Visual Preference Survey, and explored issues further in small group discussions. A second Town Hall Meeting was conducted on March 20, 2006 which allowed the residents to vote on various policies and scenarios regarding future development in DeLisle. The community was able to vote to identify which scenarios and policies they thought were most important for their community to accomplish. The Town Hall Meeting also provided an opportunity for the community to make known any concerns not addressed in this plan.

### Visual Preference Survey

To understand DeLisle citizens' vision for their community, the planning team conducted a Visual Preference Survey (VPS) at the Town Hall meeting. Eighty-five people participated.

A VPS consists of a series of different types of images of development. Participants vote on whether the types of development depicted are acceptable for their community with an electronic keypad. Participants rate images on a scale of one to five (one being very unacceptable, three being neutral, and five being very acceptable).

The DeLisle VPS measured preferences for housing setback from the road, housing density, housing style, and town center types. Participants voted on the degree to which these images are acceptable for their community. A score of 3.6 or higher indicated that an image is acceptable for the community. A score between 2.5 and 3.5 indicated a neutral rating of the image and a score of below 2.5 indicated that an image is





**Figure 12.** This rural housing image was considered most acceptable from a choice of four types of housing densities.

*Source: Michael Curtis.*



**Figure 13.** The Ranch Style house was an acceptable housing style for DeLisle with an average rating of 4.3.

*Source: Robert Lemon.*



**Figure 14.** The high-density neighborhood received the lowest rating among densities with an average of 1.3.

*Source: Affordable Housing Design Advisor.*



**Figure 15.** This image of a house on stilts received an average rating of 3.2.

*Source: Robert Lemon.*

unacceptable to the community. Some images drew a mixed response with some rating the images as acceptable and some as unacceptable, which resulted in an average neutral rating. The summary below provides an overview of what the participants found to be most acceptable for DeLisle. The full results can be found in Appendix A.

Participants in DeLisle found images of a rural community most acceptable (see Figure 12). They favored very low-density residential housing and deep setbacks. A suburban type of housing was acceptable for their community as well. The most acceptable housing of those tested was a Ranch Style on a poured concrete foundation (see Figure 13). Participants found contemporary housing styles unacceptable.

As images of housing density increased, favorable ratings decreased. The lowest density image had an average rating of 4.3. The highest density image had an average rating of 1.3 (see Figure 14).

Houses on pier foundations rated from neutral to unacceptable (see Figure 15).

For a town center, they preferred well-landscaped single



**Figure 16.** The one-story well-landscaped commercial center was the most acceptable of four images for a town center.

Source: Fairhope Alabama; <http://lightsphere.com/photos/florida/fairhope/>.

*The majority of residents indicated that they prefer DeLisle's rural atmosphere and do not wish to see their community change. At the same time, many acknowledge that change is imminent with the effects of Hurricane Katrina forever altering the community.*

story buildings with on-street parking (see Figure 16).

Landscaping was another important element. DeLisle participants voted for the incorporation of the natural regional landscape into the streetscape. A parking lot designed around trees received an acceptable rating of 3.75 (see Figure 17). Paved parking lots or on-street parking with little to no landscaping received much lower ratings.

#### **Small Group Discussions**

The small group discussions revealed the deep connection citizens feel to their community. When asked what they liked best about their community, most residents responded that it was the small-town, rural atmosphere. Most also answered that they wanted their community to rebuild to the way it was. Attendees also said they were interested in seeing some small retail establishments locate in the community. They were interested in having some convenience stores that would support the local population. Because of past condominium proposals along the bayou, many resi-



**Figure 17.** This parking lot that was designed around the natural trees was found acceptable with a rating of 3.75.

Source: *Affordable Housing Design Advisor*.

dents voiced their opposition to such development.

DeLisle citizens value their community's open views, the view of the stars at night and its natural amenities. Whatever development they do see, they want it to be in keeping with the character of the community, as it now exists.

## **Community Issues and Conclusions**

DeLisle's position along Interstate Highway 10 makes it an attractive location for both residents and businesses. However, the majority of residents surveyed as part of the planning process indicated they prefer the rural atmosphere and do not wish to see their community change. At the same time, residents expressed an interest in having some small businesses in the center of DeLisle that would support the local community. Many acknowledge that change is imminent with the effects of Hurricane Katrina forever altering the community.

Residents are concerned that additional housing will be constructed in DeLisle as people displaced from Pass Christian move further inland, as was the case after Hurricane Camille. On the other hand, many homes in DeLisle were lost. While residents have expressed their desire to rebuild, it is not yet known how many will be able to return to the community.

Residents expressed concern that additional housing will be constructed in DeLisle as people displaced from Pass Christian move further inland. After Hurricane Camille, a number of the Pass Christian citizens moved north into DeLisle. On the other hand, many homes in DeLisle were lost. While residents have expressed their desire to rebuild, it is not yet known how many will be able to return to the community.

Currently, there is a vast amount of vacant, developable land in the community. Residents express a desire to protect the rural character of the area. In order to achieve this goal, the community may need to support the County in adopting additional development regulations to direct growth to the appropriate areas and protect the rural char-

acter valued by the community.

Conversations with DeLisle residents reveal how strongly they value the close ties they have with one another. Many residents are related, adult children tend to build homes near their parents, residents know their neighbors, they attend church together, and residents really care about and help each other. They have been able to maintain this friendly, caring way of life even though there are few gathering places in DeLisle besides the local churches. When considering the potential for new residential development in the aftermath of Katrina, some residents are concerned that new housing will make it difficult to maintain this close-knit community characteristic. Residents recognize the need to find ways to foster community interaction among all residents—including future newcomers.

DeLisle has many natural amenities. The people of DeLisle want to maintain the area's natural resources and protect them from development. While state ownership currently protects some of the land along the bayou from

development, other areas, classified as coastal preserves, remain in private ownership. The destruction of homes along the bayou and the resulting barriers to rebuilding may have opened large tracts of land to different development influences. This may indicate the need for more protection of these vital, yet sensitive natural areas.

While the natural areas are an asset, DeLisle residents expressed concern that operations at the DuPont plant may be contaminating these areas. A 2004 water quality study by the Agency for Toxic Substance and Disease found that there is no public health hazard to underground drinking water from the DuPont DeLisle plant.<sup>9</sup> Despite these findings, many still wonder about groundwater contamination, from both the industrial plant and the landfill on the north side of Interstate Highway 10, as well as runoff from development, and septic tank leakage. Environmental degradation of their water resources in the bayous and Wolf River is also a concern.

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#### NOTES

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## Chapter 2. *The Plan*

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The focus of this plan is to establish long-term goals and objectives to meet the long term vision of the citizens. The plan recommends strategies and specific action steps to accomplish the goals and objectives.

Prior to defining the goals, the planning team assessed the existing conditions and trends, detailed in Chapter 3. Issue statements used in this plan come from the results of the community survey conducted during the Town Hall Meetings, discussions with the DeLisle Steering Committee, and feedback from community residents gathered from the 1-800 number and an online community forum designed for this plan.

This *Community Plan for DeLisle*, in its broadest form, is a statement of what the community strives to achieve and what the residents hope DeLisle will become. The goals and objectives outlined in this chapter are long-term, to be achieved over the next 20 years. Some will be challenging to accomplish. The aftermath of Hurricane Katrina presents the opportunity to rebuild in the manner most desirable to the community.

This plan documents those desires, helps to determine public investment priorities, and serves as a general framework for the development of specific regulations and standards to guide public and private developments.

### **SmartCode and Sector Map**

The SmartCode is a model development code that uses progressive planning techniques. As an outgrowth of the Mississippi Renewal Forum, planners modified the

SmartCode to meet the needs of the Mississippi Gulf Coast. This plan builds on the work of the Renewal Forum, including the SmartCode.

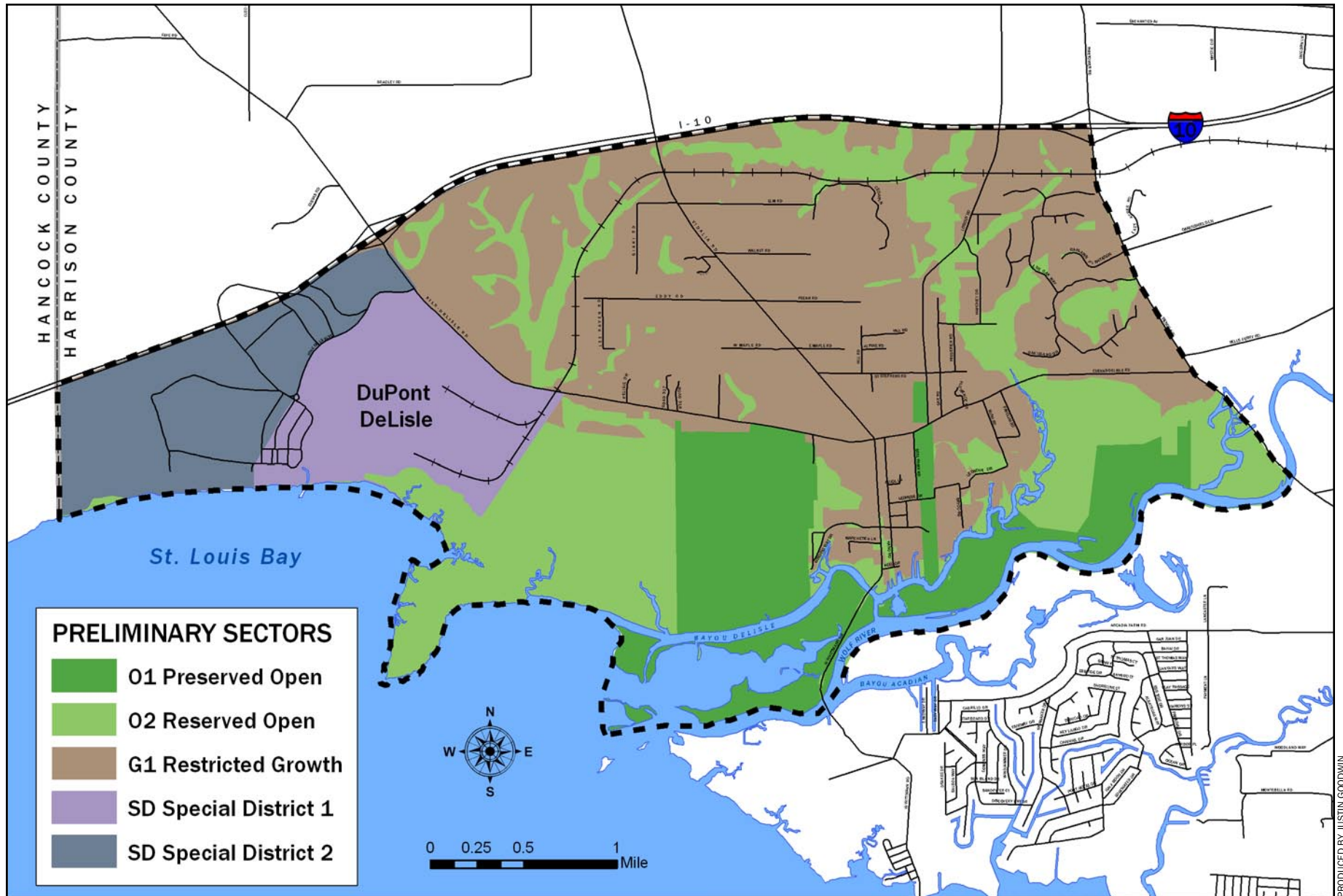
The SmartCode allows for planning at multiple scales, from the regional context of the countryside, down to the smaller scale of local neighborhoods. At the broad county-wide scale, the code recommends dividing the landscape into different sectors. These sectors provide for a range of development patterns, from the preservation of open space and rural areas deemed unsuitable for development, to the encouragement of growth in more appropriate areas.

A Harrison County Sector Map is under development. When complete, it will create a common language and vision for the future development of all communities in the county. The County will ultimately determine how best to implement the development regulations contained within the SmartCode.

The sector map for DeLisle (see Map 3) identifies a desirable outcome for the future of the community in terms of SmartCode principles and definitions. Application of the SmartCode along these sectors can guide development in DeLisle, while respecting the community's rural character.

The SmartCode identifies six sectors, ranging from preserved open space to urban development (see Figure 18). For DeLisle, only three of the six sectors apply because of the rural nature of the community. Each of the three applicable sector designations is explained below. In addition to these designations, large areas land already zoned for commercial and industrial development are designated using special districts.

*This Community Plan for DeLisle, in its broadest form, is a statement of what the community strives to achieve and what the residents hope DeLisle will become.*



**Map 3.** DeLisle Sectors.

Data Source: Street Centerlines: Harrison County Zoning Department; County Boundaries, Water Bodies: SMPDD.

\*O-1 Sectors are State-Owned Preserve Lands — MS Division of Marine Resources (DMR).

\*\*O-2 Sectors are a combination of wetlands and current FEMA floodzones (obtained from SMPDD).

**The (O-1) Preserved Open Sector** consists of open space already protected from development in perpetuity. The Preserved Open Sector includes undeveloped areas under environmental protection by law or standard, as well as land acquired for conservation through purchase, or land protected from development by easement. Areas designated Preserved Open Sector (O-1) are mapped using the criteria listed below:

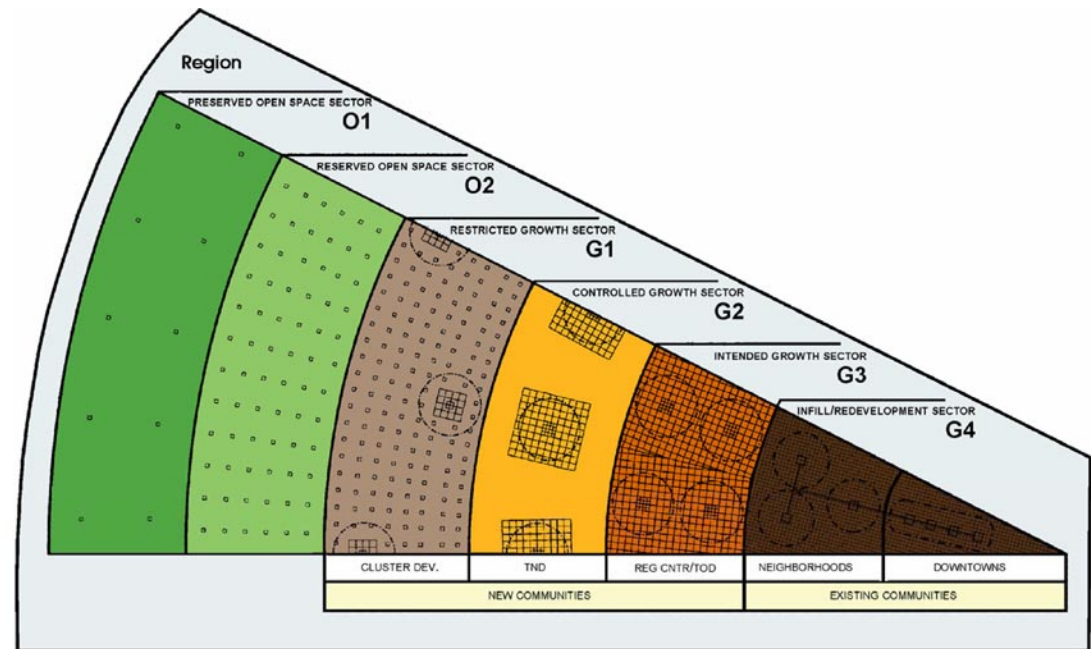
- a. Surface Water Bodies
- b. Protected Wetlands
- c. Protected Habitat
- d. Riparian Corridors
- e. Purchased Open Space
- f. Conservation Easements
- g. Residual to Cluster Open Space

**The (O-2) Reserved Open Sector** is composed of undeveloped parcels larger than 20 acres outside of incorporated cities and wastewater service areas that are either vacant or in agricultural/forestry use. It includes open space that should be, but is not yet, protected from development. The areas designated Reserved Open Sector (O-2) are mapped using the following criteria:

- a. Flood Plain
- b. Steep Slopes
- c. Open Space to be Acquired
- d. Corridors to be Acquired
- e. Buffers to be Acquired
- f. Legacy Woodland
- g. Legacy Farmland
- h. Legacy Viewsheds

**The (G-1) Restricted Growth Sector** consists of areas of low-density, rural development, such as that in DeLisle. This sector includes hamlets and clustered residences with parcel sizes ranging from one-half acre lots within the hamlet to up to 20 acres surrounding the hamlet. Hamlets may also have a small amount of retail and some community facilities located at the main intersection. Areas within the G-1 may have value as open space, but are subject to development based on the existing zoning that enables such development.

**The (SD) Special District** designation covers non-residentially developed areas that are isolated from residential neighborhoods.



**Figure 18.** Sector diagram from the Mississippi Renewal Forum.

Source: Mississippi Renewal Forum.



## Outline of Community Goals and Objectives

The objective of this Plan is to evaluate and suggest improvements to aid the citizens in achieving their goals of rebuilding and redeveloping the community. The face of DeLisle changed as the result of Hurricane Katrina. In rebuilding the community, many options may be considered. Community input, survey responses, and the Town Hall Meetings were all instrumental in drafting the goals, strategies, and action items in this plan, see Appendix A for more detail. An integral part of the planning process is the formulation of goals that represent the community's vision for the future.

Residents of DeLisle want to ensure that any investment in the community enhances its unique qualities: the natural setting, a deep sense of community among the residents, and the low-density rural and semi-rural settlement pattern. Citizens also identified opportunities for development including public access to the waterfront, some small commercial development to serve the needs of the populace and additional community amenities such as a public park.

Being concerned about the future, residents also recognize the need to rebuild and grow in a sustainable manner that meets the needs of the present without compromising the ability of future generations to meet their own needs. The following goals work to accomplish this through environmental stewardship.

The previous chapter summarizes the wide range of issues and concerns identified by DeLisle community members. These issues fall within seven broad goal statements, outlined below. Specific objectives work to meet each goal, followed by a series of strategies to assist the community in focusing resources in fulfilling the objectives. Detailed action steps form a checklist to guide the community as it seeks to achieve the goals and objectives.

Because DeLisle is an unincorporated community, the Harrison County Board of Supervisors is the entity responsible for carrying out most of the action steps. For example, the Board is the entity that has the authority to adopt any

recommended regulatory measures. However, in order to assist in the implementation of the plan, DeLisle residents are encouraged to form a non-profit organization to solicit and receive grant monies, coordinate local citizen efforts, and undertake other action steps, especially those that are nonregulatory.

Timeframes for implementation that guide the prioritization of goals and associated objectives are broken down into four categories:

1. Immediate
2. Short-term
3. Medium-term
4. Long-term

The immediate term follows the publication of the plan to the end of the first year. In other words, Year One is from April through December 2006. The short-term is the entirety of each of Years Two through Five. The medium-term follows this five-year period from Year Six to Ten. The long-term is the remainder of the period this plan covers through year 20.

The short-term implementation strategies have been broken into one-year periods. The medium- and long-term implementation strategies have more general timeframes since opportunities for action are less clear at this point. Such timeframes are a guide for the community to prepare for development and the next steps. The pursuit of medium- and long-term aspects of the plan will often be dependent on the progress of short-term action items.

Some actions extend over a period of years. Other actions continue through the duration of the plan. Implementation timelines follow the hierarchy of each goal below (see Tables 1 through 7).

Many of the actions in this plan will require significant financial investment. Appendix B describes a variety of funding sources that are available to aid in the implementation of this plan.

**GOAL 1. ENSURE DELISLE PREPARES FOR GROWTH.**

**Objective 1.1.**

Carry out the goals and policies of this plan.

**STRATEGY A.** Use the community plan as a guide for future growth and development.

*Action 1.* Adopt this community plan document as an amendment to the Harrison County Comprehensive Plan.

**STRATEGY B.** Circulate and promote the *Community Plan for DeLisle* to make residents and other property owners aware of the policies and recommendations.

*Action 1.* The County Board of Supervisors and Zoning Department will circulate, in partnership with the DeLisle Steering Committee, a newsletter to inform and update all stakeholders on the plan contents.

**STRATEGY C.** Identify financial and other resources for plan implementation.

*Action 1.* Coordinate with FEMA, DuPont, volunteer organizations, universities, businesses and other agencies to identify funding opportunities to support the implementation of this plan.

*Action 2.* Support the establishment of a DeLisle non-profit to apply for foundation, state, and federal grants.

**GOAL 2. REBUILD THE COMMUNITY.**

**Objective 2.1.**

Identify options for homeowners rebuilding their homes.

**STRATEGY A.** Research funding programs for rebuilding.

*Action 1.* Coordinate with the Harrison County Community Development Block Grant Coordinator to educate DeLisle homeowners on grant and loan programs to assist in rebuilding homes.

*Action 2.* Coordinate with the Harrison County Community Development Block Grant Coordinator to distribute information to residents so that they can apply for rebuilding funds.

*Action 3.* Coordinate with the Harrison County Community Development Block Grant Coordinator to ensure that eligible DeLisle homeowners take advantage of the Hurricane Katrina Homeowners Assistance Grants.

**STRATEGY B.** Ensure that affected property owners are aware of requirements for elevating buildings in the floodplain.

**Table 1.** Implementation Timeline for Goal 1.

ENSURE DELISLE PREPARES FOR GROWTH	IMMEDIATE	SHORT TERM				MEDIUM TERM	LONG TERM
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6-10	YEAR 11-20
<i>1.1.A. Action 1.</i> Adopt this community plan.							
<i>1.1.B. Action 1.</i> Circulate a newsletter to stakeholders about the plan’s contents.							
<i>1.1.C. Action 2.</i> Coordinate with FEMA, DuPont, volunteer organizations, and others.							
<i>1.1.C. Action 2.</i> Support the establishment of a DeLisle non-profit organization.							

**Action 1.** Coordinate with Federal Emergency Management Agency (FEMA) and the Harrison County Building Official to educate homeowners about flood elevation requirements, and keep residents informed on the status of any changes to the existing flood plain elevations.

**Action 2.** Coordinate with FEMA to educate homeowners about the Increased Cost of Compliance Program that offers assistance to homeowners to bring their home into compliance with the flood elevation requirements.

**Objective 2.2.**

Provide for a variety of housing options.

**STRATEGY A.** Educate consumers about housing options.

**STRATEGY B.** Expand opportunities to construct modular housing in residential areas.

**Action 1.** Harrison County Zoning Department adopt a revised modular housing ordinance expanding the number of districts in which modular housing can be located.

**STRATEGY C.** Promote the placement of community appropriate affordable housing units.

**Action 1.** Partner with a Community Development Financial Institution to utilize the Low-Income Housing Tax Credits for housing that is affordable for the residents of DeLisle.

**STRATEGY D.** Encourage and maintain storm resistant building standards.

**Action 1.** Coordinate with Harrison County Code Administration and Zoning Departments to enforce building and zoning codes.

**Table 2.** Implementation Timeline for Goal 2.

REBUILD THE COMMUNITY.	IMMEDIATE	SHORT TERM				MEDIUM TERM	LONG TERM
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6-10	YEAR 11-20
<i>2.1.A. Action 1 &amp; 2.</i> Educate and distribute information to residents so they can apply for rebuilding funds.							
<i>2.1.A. Action 3.</i> Eligible homeowners apply for Hurricane Katrina Homeowners Assistance Grants.							
<i>2.1.B. Action 1.</i> Educate homeowners about flood elevation requirements.							
<i>2.1.B. Action 2.</i> Educate homeowners about the Increased Cost of Compliance Program.							
<i>2.2.B. Action 1.</i> Adopt a revised modular housing ordinance.							
<i>2.2.C. Action 1.</i> Utilize the Low Income Tax Credit for affordable housing.							
<i>2.2.D Action 1.</i> Coordinate with Harrison County Code Administration and Zoning Departments to enforce building and zoning codes.							

**GOAL 3. MAINTAIN THE RURAL CHARACTER OF THE COMMUNITY.**

**Objective 3.1.**

Maintain the existing rural residential character.

**STRATEGY A.** Maintain a residential density of approximately 0.3 dwelling units per acre in the outskirts of DeLisle.

*Action 1.* Retain the existing E-1 Very Low Density Residential District for parcels located outside the area where sewer lines currently exist.

*Action 2.* Determine additional areas appropriate for rezoning to the E-1 Very Low Density Residential District.

**STRATEGY B.** Maintain a residential density of approximately one dwelling unit per acre within the areas of DeLisle where a pattern of one-acre lots currently exists.

*Action 1.* Retain the existing R-1 Low Density Residential District for parcels that can connect to the recently constructed sewer lines.

**STRATEGY C.** Encourage new residential development to preserve open space within each subdivision.

*Action 1.* Support the use of the current PUD zoning regulations, or adoption of conservation subdivision regulations as outlined in the SmartCode.

**Objective 3.2.**

Ensure that any new economic development occurring on land currently zoned for nonresidential uses remains compatible with the area's rural character.

**STRATEGY A.** Allow the establishment of small businesses (such as small convenience retail and services intended to meet the needs of the community) at the intersection of Kiln-DeLisle/Cuevas-DeLisle and Vidalia/Wittmann.

*Action 1.* Encourage the rezoning of approximately one to two acres of the land area at the northwest and northeast corners of the intersection of Kiln-DeLisle/Cuevas-DeLisle and Vidalia/Wittmann to commercial to allow for small businesses.

*Action 2.* Identify grant opportunities, such as those offered through the Foundation for the Mid South and the USDA Rural Community Development Initiative, to support local economic development.

*Action 3.* Partner with a Community Housing Development Organization to utilize the New Market Tax Credits for commercial development.

**STRATEGY B.** Require all new development on land zoned for nonresidential use to maintain and enhance the existing natural environment.

*Action 1.* Amend the zoning ordinance to require nonresidential districts to maintain a minimum of 25 percent of the development site as open space.

**Objective 3.3.**

Preserve the dark skies at night.

**STRATEGY A.** Limit light pollution from residential and commercial sources.

*Action 1.* Amend the Outdoor Lighting section of the Zoning Ordinance.

**GOAL 4. PROTECT AND PRESERVE THE ENVIRONMENT.****Objective 4.1.**

Maintain the bayou, wetlands and coastal preserves as protected environments.

**STRATEGY A.** Encourage the protection of the riparian areas and coastal wetlands along the bayou, as well as other quality wetlands found throughout DeLisle.

*Action 1.* Coordinate with the Wolf River Conservation Society to identify conservation opportunities in the Wolf River watershed.

*Action 2.* Coordinate with the Land Trust for the Mississippi Coastal Plain to preserve and protect wetlands and riparian buffers in other watersheds located in DeLisle.



**Table 3.** Implementation Timeline for Goal 3.

MAINTAIN THE RURAL CHARACTER OF THE COMMUNITY	IMMEDIATE	SHORT TERM				MEDIUM TERM	LONG TERM
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6-10	YEAR 11-20
<i>3.1.A. Action 1.</i> Retain the existing E-1 zoning where there are no sewer lines.							
<i>3.1.A. Action 2.</i> Determine additional areas to rezone to E-1.							
<i>3.1.B. Action 1.</i> Retain the existing R-1 zoning for parcels that can connect to the existing sewer lines.							
<i>3.1.C. Action 1.</i> Support the use of current PUD zoning regulation or conservation subdivisions as outlined in the SmartCode.							
<i>3.2.A. Action 1.</i> Encourage the rezoning of 1 to 2 acres of land at the northwest and northeast corners of the intersection of Kiln-DeLisle and Vidalia for small neighborhood commercial uses.							
<i>3.2.A. Action 2.</i> Identify grant opportunities, to support local economic development.							
<i>3.2.A. Action 3.</i> Encourage New Market Tax Credits for commercial development.							
<i>3.2.B. Action 1.</i> Amend the Zoning Ordinance to require nonresidential districts to maintain a minimum of 25 percent open space on the development site.							
<i>3.3.A. Action 1.</i> Amend the Outdoor Lighting section of the Zoning Ordinance.							

**Action 3.** Partner with the Conservation Fund to identify potential funding for the preservation of sensitive natural areas in DeLisle.

**STRATEGY B.** Provide property owners financially viable alternatives to rebuilding when their damaged homes are located in environmentally sensitive areas.

**Action 1.** Encourage the state legislature to establish enabling legislation authorizing communities and counties to adopt Transfer of Development Rights programs and identify “sending” areas and “receiving” areas.

**Action 2.** Develop a Transfer of Development Rights program so that property owners who own land with environmentally sensitive features can sell the development rights associated with their properties to developers in receiving zones located in identified growth areas.

**Action 3.** Partner with the Wolf River Conservation Society and the Land Trust for the Mississippi Coastal Plain to develop a Purchase of Development Rights program.

**STRATEGY C.** Encourage property owners to establish conservation easements on the portions of their properties that are located in environmentally sensitive areas.

**Action 1.** Work with the Wolf River Conservation Society to educate property owners on the tax benefits of conservation easements.

**Objective 4.2.**

Promote the benefits of preserving the environment.

**STRATEGY A.** Partner with the Nature Conservancy, other educational providers, and the Pass Christian School District to utilize the Conservancy's land for outdoor environmental education programs.

**Action 1.** Coordinate with the Mississippi Department of Marine Resources to identify opportunities to complete the construction of a nature trail through the conservation land.

**Objective 4.3.**

Restore and enhance tree cover in DeLisle.

**STRATEGY A.** Preserve existing trees.

**Action 1.** Establish a County Tree Commission, charged with evaluating strategies for tree preservation.

**Action 2.** Form a partnership with a Mississippi university to conduct a tree survey in DeLisle.

**Action 3.** Adopt a Historic Tree Protection Ordinance, applied at the request of a community to protect landmark trees (i.e. trees having a diameter greater than 24 inches).

**Action 4.** Apply for grants through organizations such as the Mississippi Forestry Commission and National Tree Trust to add trees in the town center.

**STRATEGY B.** Encourage homeowners to replant with species that are native to the area and can withstand storms.

**Action 1.** Establish programs and partnerships with organizations such as American Forests and National Arbor Day Foundation to educate the public about the benefits of trees and to promote the planting and maintenance of new trees in less urbanized areas.

**Action 2.** Encourage residents to participate in seedling and tree give away programs sponsored by National Arbor Day Foundation and the Audubon Society.

**GOAL 5. MAINTAIN AND ENHANCE DELISLE'S CLOSE-KNIT COMMUNITY.**

**Objective 5.1.**

Provide opportunities for community interaction.

**STRATEGY A.** Promote the development of the pedestrian and bike trail connections through DeLisle, identified in the Mississippi Renewal Forum (location shown on the Comprehensive Policy Map).

**Action 1.** Obtain transportation enhancement funding available for alternative modes of transportation.

**Table 4.** Implementation Timeline for Goal 4.

PROTECT AND PRESERVE THE ENVIRONMENT	IMMEDIATE	SHORT TERM				MEDIUM TERM	LONG TERM
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6-10	YEAR 11-20
<i>4.1.A. Action 1.</i> Identify conservation opportunities in the Wolf River watershed.							
<i>4.1.A. Action 2.</i> Preserve and protect wetlands and riparian buffers in other watersheds located in DeLisle.							
<i>4.1.A. Action 3.</i> Identify potential funding for the preservation of sensitive natural areas in DeLisle.							
<i>4.1.B. Action 1.</i> Encourage enabling legislation authorizing Transfer of Development Rights programs.							
<i>4.1.B. Action 2.</i> Develop a Transfer of Development Rights program.							
<i>4.1.B. Action 3.</i> Develop a Purchase of Development Rights program.							
<i>4.1.C. Action 1.</i> Educate property owners on the tax benefits of conservation easements.							
<i>4.2.A. Action 1.</i> Complete the nature trail through the conservation land.							
<i>4.3.A. Action 1.</i> Establish a County Tree Commission.							
<i>4.3.A. Action 2.</i> Conduct a tree survey in DeLisle.							
<i>4.3.A. Action 3.</i> Adopt a Historic Tree Protection Ordinance.							
<i>4.3.A. Action 4.</i> Apply for grants to add trees in the town center.							
<i>4.3.B. Action 1.</i> Educate homeowners about the benefits of planting and maintaining trees.							
<i>4.3.B. Action 2.</i> Encourage residents to participate in seedling and tree give away programs.							

**Action 2.** Post signage along the portion of the trail in DeLisle to identify significant community assets and historic or cultural amenities.

**STRATEGY B.** Continue to promote and conduct local events at community facilities, churches, and DeLisle elementary school that bring people together.

**Action 1.** Residents of DeLisle will develop and maintain a strong relationship with the Pass Christian School District to collaborate on activities that are mutually beneficial.

**Objective 5.2.**

Expand community facilities and services.

**STRATEGY A.** Provide a public park with picnic facilities.

**Action 1.** Explore the possibility of a public park near Old DeLisle Cemetery with access to the bayou.

**Action 2.** Encourage the formation of community athletic teams to increase usage of parks by identifying community coaches and children that want to participate.

**Action 3.** Identify funding opportunities for playground and other recreational equipment.

**STRATEGY B.** Create public access to bayou.

**Action 1.** Identify land areas where public access could be established.

**Action 2.** Work with DuPont to provide corporate sponsorship of a public fishing pier and boat launch.

**Action 3.** The DeLisle nonprofit should coordinate with Harrison County to apply for the Mississippi Department of Marine Resources Boat Access program to fund a public boat access program.

**Action 4.** Coordinate with the Mississippi Department of Marine Resources to reestablish the fishing pier and improve the parking area and boat launch off Wittmann Road along Bayou DeLisle.

**STRATEGY C.** Create a community recreation center.

**Action 1.** Support DeLisle residents in working with the Pass Christian School District to establish a time for children to use the gym after school hours.

**Action 2.** Research funding opportunities for a community recreation center.

**Action 3.** Support the construction of a community recreation center through private development.

**Objective 5.3.**

Preserve and promote DeLisle's heritage.

**STRATEGY A.** Document the significant historical, architectural, and archaeological sites in DeLisle to preserve important aspects of the community's past.

- Action 1.* Form a partnership with a Mississippi university to conduct an inventory of historic structures in DeLisle.
- Action 2.* Apply for the Community Heritage Preservation grant program administered by the Mississippi Department of Archives and History to provide assistance in preserving the Old DeLisle Cemetery.
- Action 3.* Encourage owners of old noteworthy buildings to apply for historic landmark status of their buildings.

**Strategy B.** Ensure community residents and visitors are aware of DeLisle's heritage.

- Action 1.* Create an "Oak Tree Registry" and certification program for landmark live oak trees, where property owners can receive a plaque to affix to trees.
- Action 2.* Erect markers throughout the community to identify and explain important information about structures, sites, and other features of historical or special significance.

**Objective 5.4.**

Maintain and enhance DeLisle's community identity.

**STRATEGY A.** Enhance entrances to the community.

- Action 1.* Support the DeLisle non-profit in holding a competition to develop designs for a community entrance sign.
- Action 2.* Support the DeLisle non-profit in erecting an entrance sign to DeLisle as travelers cross the bridge into the community.

**GOAL 6. PROTECT THE HEALTH AND SAFETY OF RESIDENTS.**

**Objective 6.1.**

Ensure the safety of the groundwater supply for residents.

**STRATEGY A.** Private well owners perform routine tests on their water supply.

- Action 1.* Encourage property owners to communicate with the County Health Department about appropriate methods of testing the water quality of private wells.



**Table 5.** Implementation Timeline for Goal 5.

MAINTAIN AND ENHANCE DELISLE'S CLOSE-KNIT COMMUNITY.	IMMEDIATE	SHORT TERM					MEDIUM TERM	LONG TERM
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6-10	YEAR 11-20	
<i>5.1.A. Action 1.</i> Obtain transportation enhancement funding for alternative modes of transportation.								
<i>5.1.A. Action 2.</i> Post signage along the portion of the pedestrian/bike trail in DeLisle.								
<i>5.1.B. Action 1.</i> Develop and maintain a strong relationship with the Pass Christian School District.								
<i>5.2.A. Action 1.</i> Explore the possibility of a public park near Old DeLisle Cemetery with access to the bayou.								
<i>5.2.A. Action 2.</i> Encourage the formation of community athletic teams to increase usage of parks.								
<i>5.2.A. Action 3.</i> Identify funding for additional recreational equipment.								
<i>5.2.B. Action 1.</i> Identify land areas where public access could be established.								
<i>5.2.B. Action 2.</i> Work with DuPont to provide corporate sponsorship of a public fishing pier/boat launch.								
<i>5.2.B. Action 3.</i> Apply for the Mississippi Department of Marine Resources Boat Access program.								
<i>5.2.B. Action 4.</i> Reestablish the fish pier and boat launch off Wittmann Road along Bayou DeLisle.								
<i>5.2.C. Action 1.</i> Support DeLisle residents in working with Pass Christian School District to establish a time for children to use the gym after school hours.								
<i>5.2.C. Action 2.</i> Research funding opportunities for a community recreation center.								
<i>5.2.C. Action 3.</i> Support the construction of a community recreation center through private development.								
<i>5.3.A. Action 1.</i> Conduct inventory of historic structures in DeLisle.								
<i>5.3.A. Action 2.</i> Apply for funding to assist in preserving Old DeLisle Cemetery.								
<i>5.3.A. Action 3.</i> Encourage owners of older noteworthy buildings to apply for historic landmark status.								
<i>5.3.B. Action 1.</i> Create an “Oak Tree Registry” and certification program.								
<i>5.3.B. Action 2.</i> Erect markers to identify structures of historical or special significance.								
<i>5.4.A. Action 1.</i> Support a competition to develop designs for a community entrance sign.								
<i>5.4.A. Action 2.</i> Support an entrance sign to DeLisle as travelers cross the bridge into the community.								

**Action 2.** Promote awareness of the EPA Safe Drinking Water Hotline as a means to find state certified testing labs.

**Objective 6.2.**

Ensure there is an updated emergency management plan in place for DeLisle, one that meets the needs of the current population and adjusts over time as the community develops.

**STRATEGY A.** Build a community center that converts to a hurricane shelter during emergencies.

**Action 1.** Complete a feasibility study for constructing a hurricane shelter.

**STRATEGY B.** Work with FEMA, and other agencies to update an emergency management plan and a hazard mitigation plan including updated evacuation procedures.

**Action 1.** Include DeLisle residents in the revisions and updates to the emergency management and hazard mitigation plan.

**Action 2.** Organize public meetings bi-annually to review the emergency plans and make changes as needed.

**Action 3.** Determine how to provide evacuation transportation for elderly and disabled citizens.

**STRATEGY C.** Direct the debris removal process to focus aggressively on opportunities to divert debris from the solid waste stream, and create a system to deal with source separation in future events.

**Action 1.** Create a debris removal plan/process.

**Objective 6.3.**

Reduce criminal activity or perceived criminal threats.

**STRATEGY A.** Encourage cooperation between residents and local law enforcement to identify criminal activity.

**Action 1.** Work with residents in DeLisle to establish a neighborhood block-watch program.

**Objective 6.4.**

Improve and maintain roadway safety.

**STRATEGY A.** Establish appropriate traffic controls.

**Action 1.** Work with the Gulf Regional Planning Commission to conduct traffic counts at Kiln-DeLisle/Cuevas-DeLisle and Vidalia/Wittmann Roads.

**Action 2.** Complete a traffic assessment to determine anticipated traffic control needs at the Kiln-DeLisle/Cuevas-DeLisle intersection with Wittmann/Vidalia Roads in the center of the community.

**Table 6.** Implementation Timeline for Goal 6.

PROTECT THE HEALTH AND SAFETY OF RESIDENTS.	IMMEDIATE	SHORT TERM				MEDIUM TERM	LONG TERM
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6-10	YEAR 11-20
<b>6.1.A. Action 1.</b> Encourage partnership with County to assist DeLisle citizens with testing their water supply.							
<b>6.1.A. Action 2.</b> Promote the EPA Safe Drinking Water Hotline to find state certified testing labs.							
<b>6.2.A. Action 1.</b> Complete a feasibility study for constructing a hurricane shelter.							
<b>6.2.B. Action 1.</b> Include DeLisle residents in te revisions and updates to the emergency management and hazard mitigation plan.							
<b>6.2.B. Action 2.</b> Organize public meetings bi-annually to review the emergency plans.							
<b>6.2.B. Action 3.</b> Determine how to provide evacuation transportation for elderly and disabled citizens.							
<b>6.2.C. Action 1.</b> Create a debris removal plan/process.							
<b>6.3.A. Action 1.</b> Work with residents to establish a neighborhood block-watch program.							
<b>6.4.A. Action 1.</b> Conduct traffic counts at Kiln-DeLisle/Cuevas-DeLisle and Vidalia/Wittmann Roads.							
<b>6.4.A. Action 2.</b> Complete a traffic assessment to determine what traffic controls are needed at this intersection.							
<b>6.4.A. Action 3.</b> Post speed limit signs.							
<b>6.4.A. Action 4.</b> Establish cross walks adjacent to the DeLisle Elementary School.							
<b>6.4.B. Action 1.</b> Ensure that traffic mitigation measures are implemented concurrent to development.							

**Action 3.** Post speed limit signs.

**Action 4.** Coordinate with the Pass Christian School District to establish cross walks adjacent to the DeLisle Elementary School.

**STRATEGY B.** Ensure that any development of the land area currently zoned C-3 Resort Commercial west of Wittmann Road and south of the Wolf River properly mitigates anticipated traffic impacts.

**Action 1.** Ensure that traffic mitigation measures identified through the site plan approval process are implemented concurrent to development.

**GOAL 7. ENCOURAGE AND SUPPORT THE DEVELOPMENT OF A WATER SERVICE AREA.**

**Objective 7.1.**

Investigate the criteria for establishing a water service area.

**STRATEGY A.** Work with the Regional Water and Sewer Authority to determine the necessary steps to establish a water service area.

**Action 1.** Coordinate with the Regional Water and Sewer Authority to determine the feasibility of establishing a water service area in DeLisle.

**Table 7.** Implementation Timeline for Goal 7.

ENCOURAGE AND SUPPORT THE DEVELOPMENT OF A WATER DISTRICT	IMMEDIATE YEAR 1	SHORT TERM YEAR 2 YEAR 3 YEAR 4 YEAR 5				MEDIUM TERM YEAR 6-10	LONG TERM YEAR 11-20
7.1.A. Action 1. Determine the feasibility of establishing a water service area in DeLisle.							

**SUMMARY**

Many of these objectives, strategies, and actions apply to specific areas within DeLisle. The Comprehensive Policy Map (see Map 4.) illustrates these ideas in a general and conceptual manner.

**Topic Areas**

Through the citizen participation process, the community has clearly articulated many of their ideas of what they would like to see for the future. The planning team translated these desires into goals and policy statements, identifying various methods for achieving the desired goals.

However, in some cases there are two or more possible alternatives for achieving a specific goal. When this occurred, the planning team prepared different scenarios to illustrate the options, and the most appropriate scenario was chosen based on citizen input.

For other goals, a number of different tools are available to achieve the desired outcomes. Some of the methods are not now possible in Mississippi. Changes to the state legislation would allow the creation of these tools locally. Others

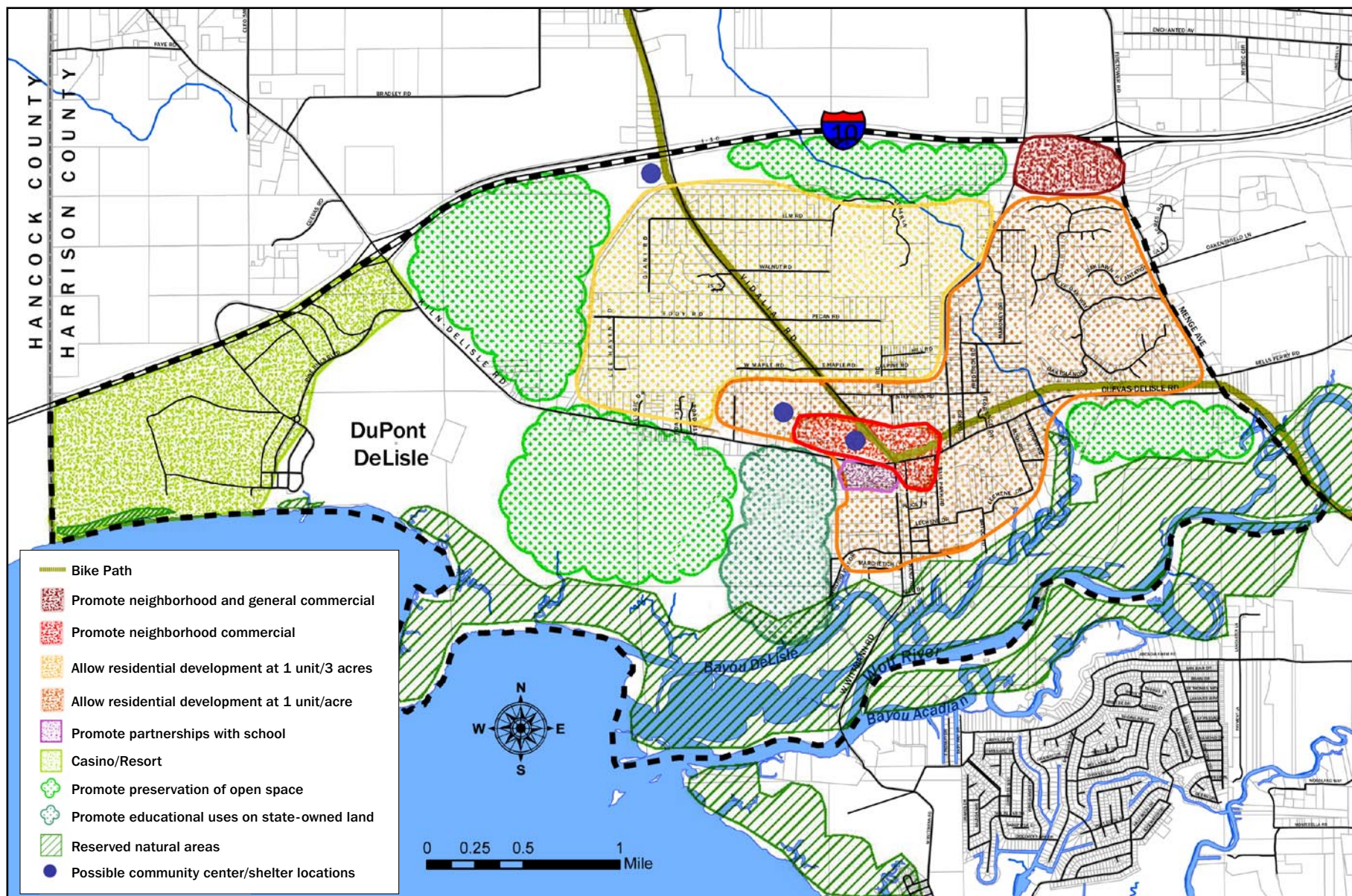
are ordinances and/or programs that would need to be established by Harrison County. Most of the time, these are complementary and do not require choosing one over another. The planning team has provided descriptions and benefits of the various options that are available, including an explanation of how the tools could be established. This way, residents can determine which are appropriate for use in DeLisle.

**PRESERVATION OF THE NATURAL ENVIRONMENT**

In the community survey and through the small group discussion, the citizens of DeLisle repeatedly stated, “We want everything back like it was.” One of the main concerns was protecting bayous, wetlands, and coastal preserves from casinos, condominiums, and other unwanted commercial developments.

The following policies were presented to the community at a Town Hall Meeting held on March 20, 2006. The community voted on which policies they would support in their community. The policies listed below are those which the community indicated that they would support, in order of preference.





**Map 4. Comprehensive Policy.**

*Source: Base map data: SMPDD.*



*One of the main concerns of DeLisle citizens was protecting bayous, wetlands, and coastal preserves from casinos, condominiums, and other unwanted commercial developments.*

### **Policy 1. Historic Tree Protection Overlay**

Large oak and magnolia trees, as well as large wooded areas found in DeLisle are key natural features that are important to preserve. Pre-Katrina, large historical trees, many of which were landmarks, as well as numerous other smaller trees grew in DeLisle. Conversations with residents underscore the importance of trees to the community. Old live oak trees are collectively a significant landmark in DeLisle. A Historic Tree Protection Overlay would preserve and protect the trees that remain. Such an overlay would apply to areas in a community only at the request of its residents. The overlay would protect landmark trees, such as large, old trees having a diameter greater than 24 inches.

### **Policy 2. Conservation Easement**

Conservation easements are deed restrictions landowners choose to place on their property to protect resources such as productive agricultural land, ground and surface water, wildlife habitat, historic sites, or scenic views. The easement is either voluntarily sold, as described in more detail in Policy 4 Purchase of Development Rights program, or donated by the landowner. A conservation easement constitutes a legally binding agreement that prohibits certain types of development (residential or commercial) from taking place on the land.

The easement is a legally binding covenant, publicly recorded and attached to the property deed—in perpetuity or for a specified time. It gives the holder the responsibility to monitor and enforce the property restrictions imposed by the easement for the duration of the covenant. An easement does not grant ownership nor does it absolve the property owner from traditional owner responsibilities such as payment of property tax, though it may transfer maintenance responsibilities to the easement holder.

Typically, local government agencies, land trusts, or other nonprofit organizations hold these easements. Designating both a government agency and a nonprofit or land trust as co-holders of the easement is a common alternative. Certain public programs require arrangements

wherein a government preservation program or organization purchases the easements.

If done according to IRS requirements, one can treat donated easements as charitable gifts, deducted from one's federal income tax. The amount of the gift is the difference between the appraised value of the land before the easement and the appraised value of the land after the easement is in place. The State of Mississippi passed its own Conservation Easement Act of 1986 which is a statute providing for the grant of easements (see Miss. Code §89-19-1). This statute gives a clear method for granting gifts of land or easements that qualify the donor for tax relief under Federal law.<sup>1</sup>

### **Policy 3. Conservation Subdivisions**

Conservation subdivisions are another way residents can preserve and protect the land. Conservation subdivisions preserve open space through clustered, compact lots. A conservation subdivision protects farmland and natural resources while allowing for the same number of residences possible under current zoning and subdivision regulations.

Generally, parcels 40 acres or larger qualify. According to the SmartCode, a conservation subdivision must preserve at least 50 percent of the overall area of the parcel from development. This tool is also appropriate for land along the bayou, where large parcels exist or could be assembled from smaller parcels.

### **Policy 4. Purchase of Development Rights**

A Purchase of Development Rights program allows the voluntary sale of the rights to develop a piece of property between a property owner and a land trust, such as the Land Trust for the Mississippi Coastal Plain. In the same manner as a Transfer of Development Rights program (described below), the development rights are separated from the property ownership. The seller gives up the right to develop the land, but otherwise retains the right of ownership. At the time of the sale of the development rights, a conservation easement is put in place on the entire property to retain the property as open space in perpetuity. The re-

sult is that the seller receives financial compensation for the easement and maintains reduced property taxes.

### **Policy 5. Transfer of Development Rights**

The Mississippi Renewal Forum advocates the use of Transfer of Development Rights (TDR). TDR programs are based on the concept that property owners have a bundle of different rights, including the right to use land; lease, sell, and bequeath it; borrow money using it as collateral; construct buildings on it; and mine it—all subject to reasonable local land use regulations. Laws allow landowners to transfer or sell some or all of these rights to another person. For example, when a landowner sells property, all the rights transfer to the buyer.

A Transfer of Development Rights program allows landowners to separate and sell the right to develop land from the other property rights and the owner retains ownership of the land. One can transfer the separated development rights to another parcel. The development rights represent the unused development potential of the property. The owner of these rights can use them on other properties they already own, or sell them for use elsewhere.

TDR programs can accomplish multiple goals including open space protection, conservation of environmentally sensitive areas and preservation of historic landmarks. In the context of open space protection, TDR can shift new construction from sensitive natural areas to designated growth zones closer to developed areas.

The parcel of land where the rights originate is the “sending” parcel. When the rights transfer from a sending parcel, the land is restricted with a permanent conservation easement.

The parcel of land to which the rights transfer is the “receiving” parcel. Buying these rights allows a property owner to build at a higher density than ordinarily permitted by the base zoning. Sensitive natural areas in DeLisle could be preserved this way if DeLisle were designated as a sending area.

There are three main benefits to a TDR program:

1. It permanently protects open space while keeping it in private ownership.
2. It promotes orderly growth by concentrating development in areas with adequate services.
3. The private sector pays to protect open space, which saves public funds for other programs.

Because a TDR program is market-driven, more land enters protection when development pressure is high.

Before County implementation, the State of Mississippi must amend the state statutes. This plan advocates that the state legislature establish enabling legislation authorizing communities and counties to adopt Transfer of Development Rights programs and identify “sending” areas and “receiving” areas. The residents of DeLisle should also encourage the Board of Supervisors to adopt a transfer of development rights program, and to designate DeLisle as a “sending zone” so that property owners have a financially feasible option for preserving land along the Bayou.

### **REBUILDING IN DELISLE**

Rebuilding following Hurricane Katrina is the primary concern of most DeLisle residents. Most of the homes destroyed were located near Bayou DeLisle, in the 100-year flood plain. Based on evidence from a windshield damage assessment conducted by the planning team and data provided by FEMA, Hurricane Katrina destroyed approximately 100 homes (20 percent of the total housing units).<sup>2</sup> Considering an average household size of 2.75 persons in 2000, a generous estimate is that the hurricane displaced roughly 300 citizens of DeLisle. However, residents estimate that approximately 90 percent of their displaced neighbors will return to DeLisle.

There are several rebuilding possibilities. Individual homeowners will have to contend with different issues. As a

*“We want everything back like it was.”*

whole, the community may see degrees of each possibility.

### ***Rebuild at original site***

The first possibility is that some residents will rebuild at their previous location. The Harrison County Zoning Ordinance permits reconstruction of pre-existing structures if destroyed by a natural disaster, regardless of whether they previously conformed to the code, however they must comply with adopted flood elevations.

### ***Relocate within DeLisle***

However, some residents may not be able to rebuild for reasons of cost and practicality, due to flood regulations and the cost of constructing a new home. A second possibility is that people who face this situation yet desire to stay in DeLisle will seek less flood-prone land for development.

There are a number of large parcels in DeLisle that could result in subdivision and further development of residential housing. Growth of housing in DeLisle has averaged 15 units annually over the past 30 years, with a gradually declining growth rate over the past decade. The exception is The Oaks golf course community, which has averaged over 30 homes a year since 2002. The number of housing units constructed in DeLisle is expected to increase as homebuyers are looking for land to build their homes following Hurricane Katrina.

### ***Conservation Development***

A third possibility would require coordination among land-owners with a mutual desire to rebuild their neighborhood while protecting DeLisle from unwanted development. This scenario involves the creation of conservation subdivisions.

A conservation subdivision (described earlier) sites houses on small parcels in a group and reserves additional land in protected open space, shared by the surrounding homeowners. Clustering houses can help maintain DeLisle's rural character by preserving open space and maintaining the overall low-density of housing development. It can also reduce development costs because the proximity of



**Figures 19-20.** These images illustrate the differences between conventional and conservation subdivision design.

Source: *Rural By Design: Maintaining Small Town Character.*

each home reduces the infrastructure investment required. Figures 19 and 20 provide two examples of how conservation subdivision design preserves open space, in contrast to conventional subdivision design.

Cooperating landowners could redevelop several adjacent, vacant lots as one planned site. By combining land and re-subdividing it, homeowners may be able to locate their homes on higher ground, reducing the cost of elevation above the floodplain. The land closer to the bayou would remain open space, preserved by a conservation easement on the land.

If carefully planned, each home in a conservation subdivision would have an unobstructed view of the shared open space, which offsets the fact that homes are closer together. This scenario may be particularly appropriate in areas that were previously occupied by extended families.

### **Hazard Mitigation**

Hazard mitigation includes those actions done before, during, and after a disaster to minimize its impacts. Hazard mitigation requirements benefit the community and individual property owners through increased protection of person and property.

People wanting to rebuild their homes and businesses after a natural disaster often face restrictions on where and how rebuilding can occur. FEMA publishes Flood Insurance Rate Maps (FIRM) and requires homeowners to elevate their homes in Special Flood Hazard Areas (SFHAs) to qualify for the National Flood Insurance Program (NFIP). Such restrictions are an important form of hazard mitigation.

FEMA divides SFHAs into several insurance zones based on the level of flood risk. The two main zones are “V” and “A.” “V” zones identify Coastal High Hazard Areas. “A” zones are lower hazard areas. All flood insurance zones are shown on Flood Insurance Rate Maps (FIRMs) issued by FEMA.

Hurricane Katrina caused such extensive damage that FEMA is reevaluating the base flood elevations, which are used to determine the various insurance zones, and will re-

visit its FIRMs. At the time this plan was prepared, FEMA had not finalized post-Katrina FIRMs. Homeowners who may be affected should understand the implications of these flood designations. NFIP regulations define the following standards for building in hazard zones:

- a. In “V” zones, buildings must be elevated on an open foundation (e.g., pilings, posts, piers) and the bottom of the floor support beam must be at or above the Base Flood Elevation (BFE) as outlined on the FIRM map.
- b. In “A” zones, where flood hazards are less severe, buildings may be elevated either on an open foundation or on continuous foundation walls below the BFE. “A” zone buildings must be elevated so that the lowest floor is at or above the BFE. If continuous walls are used below the BFE, they must be equipped with openings that allow floodwaters to flow into and out of the area enclosed by the walls.

### ***Options for elevating homes to meet FEMA requirements<sup>3</sup>***

FEMA and the Mississippi Renewal Forum each outline methods to raise the finished floor of homes above the Base Flood Elevation. The following are some basic strategies that one can use, alone or in combination, to bring a home into compliance with NFIP regulations. Figures 21-23 illustrate some ways homes can come into compliance with NFIP regulations.

#### ***Option 1:***

Raising the floor elevation on piles or foundation walls. This method could safely raise houses up to four feet to bring the first finished floor to the BFE.

#### ***Option 2:***

Raising the site with fill. Some home sites in A zones can be raised with up to four feet of compacted fill material. This technique could raise the house’s first floor to the BFE





**Figure 21 (Top).** A house raised on masonry piles.

**Figure 22 (Middle).** A house raised using fill.

**Figure 23 (Bottom).** A home elevated over a substory.

Source: Robert Lemon

alone or in combination with piles or foundation walls. Using fill has the advantage of providing a more solid connection with the ground, as opposed to simply raising the home on piles.

**Option 3:**

Create an eight-foot sub-story. Another option is to raise the house a full eight feet above grade, creating an unfinished sub-story. These areas are generally open, providing space for vehicles. A grand staircase along with landscaping can screen the open sub-story. Many homes that were close to the bayou in DeLisle used this technique.

Another response to a widespread natural disaster such as Hurricane Katrina is the examination of existing building standards to determine ways to construct buildings so they are better able to withstand high winds. Yet, in the aftermath of such an event, there is often pressure to relax reconstruction standards to enable quicker rebuilding. This could leave the rebuilt structures more hazard-prone than before.

Enforcement of existing codes is an important method of improving buildings' resistance to extreme weather. While a lower political priority in the aftermath of such a natural disaster, code enforcement can benefit the DeLisle community and Harrison County over the long-term. For example, more than 25 percent of the damage from Hurricane Andrew could have been prevented if the existing building codes had been enforced.<sup>4</sup>

**Housing Type**

New residential development should fit with the existing character of DeLisle. Citizens recognize that the urgent need for housing may encourage lower building and design standards. They fear such pressure will degrade the character of DeLisle's existing neighborhoods.

Specific types of residential development are acceptable to the citizens. They generally want DeLisle to remain a rural community composed primarily of single-family residences on large lots. They are wary of housing labeled "affordable," believing it a euphemism for poorly constructed

homes that deteriorate quickly. They do not oppose manufactured housing but would prefer that it not proliferate. Citizens strongly oppose the development of condominium or apartment complexes in their community.

The area most likely to face pressure or interest from condominium developers is along the bayou, where current property owners may be unable to rebuild due to the expense of building above the flood elevation. This plan's recommendation to encourage conservation easements along the bayou in the southern part of DeLisle (explained in preserving the natural environment topic) supports the objective of reducing the threat of unwanted development.

**Modular Housing**

Modular housing has received considerable attention recently on the Gulf Coast. The Mississippi Renewal Forum identified modular housing as one method to provide quality-built, storm resistant housing at a reasonable cost and in a timely manner.

The modular home has the potential to look exactly like a site-built home, increase in value like a site-built home, and uses the same mortgage financing as the purchase of a site-built home.

Modular home construction uses 20 to 30 percent more material than a standard site-built home to ensure strength during transport, which, in turn, leads to greater strength when completed. Modular homes do well in extreme weather and storms. In a FEMA study following Hurricane Andrew in 1992, wood-frame modular homes in hard-hit Dade County, Florida, stood up to the devastating winds better than stick-built homes.

The report states: "Overall, relatively minimal structural damage was noted in modular housing..." The report also points out that the construction method of modular homes "provided an inherently rigid system that performed much better than conventional residential framing."

Modular houses benefit from construction in a controlled environment, free from the elements, which avoids some problems weather exposure can cause. Modular homes can





**Figures 24 & 25.** Modular housing can be constructed to match almost any style a homeowner might choose. *Source: Modular Building Systems Association.*

be built to the same design as any other on-site construction and can be constructed in much less time than a traditional site-built home: often in as little as four months.

Modular housing is generally less costly than similar site-built homes. According to financial planners, monthly housing costs should not exceed 30 percent of a household's monthly income. Given the median income in DeLisle of \$43,360, this would be approximately \$1,080 per month, or a home priced under \$161,400. Typical modular housing units of sizes comparable to those existing in DeLisle fall within this price, are more durable and energy efficient, and are faster to construct, making them an attractive option for DeLisle residents.

This plan recommends amending the County zoning ordinance to allow modular housing in additional residential districts as long as the exterior finish of the modular home is compatible with the exterior finish of other housing in the vicinity.

#### **DEVELOPMENT IN THE CENTER OF DELISLE**

Survey respondents identify the area at the corners of Kiln-DeLisle Road and Wittmann Road as the center of DeLisle. This is the location of DeLisle Elementary School, as well as the main intersection in the community. People traveling to Pass Christian from Interstate Highway 10 must go through this intersection.

Many residents indicated their desire for some neighborhood commercial services at this intersection site, such as a restaurant, a convenience store, a postal supply store, and a car repair shop. There are approximately 60 acres of vacant land at both the northwest and northeast corners. These two sites could be developed with the desired retail establishments in a manner consistent with the character of the community. Both corners are currently zoned I-1 Light Industrial. While this zoning classification does permit the desired retail uses, it also permits many uses that would be disruptive to the rural character of the community. Examples include:

- “Wholesaling or distribution, including the handling of stock and incidental retail with all operations conducted wholly within a permanently enclosed building,”
- “Warehousing and storage facilities,” and
- “Food locker plant including rental of lockers for the storage of food; cutting and packaging of meats and game, but not the slaughtering of animals or fowl.”

On the southeast corner, zoned C-2, there is an older commercial building located very close to the street. This building has been vacant for some time.

The northwest and northeast corners, because of the availability of land, could develop under a variety of scenarios.

DeLisle residents were invited to select between four scenarios to determine which would be the most acceptable in their community. Residents were split on which scenario would be the most appropriate however they believe that encouraging a mix of retail and residential development is desirable. Scenario 2, which would allow one-acre lots to be developed at the center of DeLisle, received the most votes at 32 percent. Conservation Subdivision development received 28 percent of the votes. Detailed descriptions of all the scenarios are listed below in order of most desired to least desired (see Figures 26 through 29).





**Figure 26.** Scenario 1: Development potential with one-acre lots and neighborhood commercial.

Source: Kristin Hopkins, AICP; Corrin Hoegen.

### Scenario 1

This option allows approximately 33 single-family homes built on one-acre lots, with space for a community center and the two office/retail buildings presently on the property. This scenario would require a rezoning to allow residential development.

Figure 26 depicts a limited amount of commercial development at the corner, and residential development on the remaining portion of the site. The subdivision occurs according to the R-1 minimum one-acre lot size. The minimum lot width is 100 feet, which results in a depth of 435 feet. Wider lots can have less depth. In DeLisle, the existing houses tend to be located closer to the street than to the rear lot line. For example, on St. Stephens Street, just to the north of the development site, the houses typically sit within 50 feet and 90 feet of the right-of-way. The typical orientation of the houses (acceptable in the Visual Preference Survey) is for the longest wall of the house to be parallel to the street, in the ranch house style.



## Scenario 2

This option is the same as Scenario 1, but uses the conservation subdivision design. This allows for a greater amount of shared open space, reduces the length of road, and allows a greater number of existing trees to remain. Each lot is approximately one-half acre in size, however, the development would be screened from the road, and passers-by would not realize its existence. This scenario allocates space for a community center and commercial space at the southern corner. The establishment of a homeowners association would be required and would be responsible for maintenance of the open space. This scenario would require the property to be rezoned.

Average side yards for this type of development range from eight feet to ten feet each on each side of the house, so a 60-foot long ranch house can be situated on these lots. Houses would typically be located about 25 feet to 30 feet from the street.



**Figure 27.** Scenario 2: Same number of houses as in Scenario 1, clustered on a smaller portion of the site. The lot sizes are one-half acre on average.

*Source: Kristin Hopkins, AICP; Corrin Hoegen.*





**Figure 28.** Scenario 3: Traditional Neighborhood Development.  
*Kristin Hopkins, AICP; Corrin Hoegen.*

**Scenario 3**

About 80 single-family lots, ranging in size from one-quarter acre to one acre are available, along with three rows of attached single family or town houses. Open space is located in the center of the development and the commercial uses and community facility would remain in the southeast corner. Streets form a traditional grid pattern. This type of development requires rezoning to allow residential development.

Figure 28 depicts development according to the Traditional Neighborhood Development regulations promoted by the SmartCode. A more pedestrian friendly atmosphere through narrower lot frontages shortens the walking distance between business establishments and community facilities. The lots, as depicted in the illustration, range in size from 50 feet wide by 150 feet deep, to lots 100 feet wide by 250 to 400 feet deep. The smaller lots are located close to the commercial land uses, while larger lots are located along the perimeters of the development adjacent to the existing residential neighborhood.



**Figure 29.** Scenario 4: Development Potential according to the Existing I-1 Industrial Zoning.  
*Kristin Hopkins, AICP; Corrin Hoegen.*

**Scenario 4**

The property develops as light industrial, with uses such as a light manufacturing plant or office warehouse (see Figure 29). The building currently under construction on the southernmost part of the parcel becomes incubator space for start up businesses. This scenario requires no change in zoning for the property.

Based on feedback from the citizens of DeLisle, the center of DeLisle should be developed with a mix of low-density housing and light retail activities. This would allow residents to access retail oriented for the local community and provide additional housing for those in the community seeking housing.

## ECONOMIC DEVELOPMENT

Citizens of DeLisle desire to maintain their rural atmosphere while obtaining some neighborhood commercial services. In addition, note that two areas within the planning boundaries are zoned for a more intensive land use.

The area west of the DuPont property is zoned C-3, Resort Commercial. The area at Menge Avenue and Interstate Highway 10 is zoned C-2 General Commercial. Both zoning categories allow uses that generate more traffic than allowed in the more-restrictive C-1 zoning category. Because of the unique location of these parcels, different and more intense land uses are appropriate here, but are not appropriate in the center of DeLisle.

Being adjacent to Interstate Highway 10, both parcels are isolated from the residential development in DeLisle. Therefore, any development in these locations will draw from a wider market area, most of whom will access the development via Interstate Highway 10. Traffic at these destinations would not affect traffic in DeLisle, yet citizens could benefit from increased employment opportunities from businesses locating there.

### Resort Commercial

As noted above, an area zoned C-3, Resort Commercial is adjacent to the DuPont Plant. Another area zoned C-3 is located south of the planning area: south of the Wolf River from the Saint Louis Bay to the east of Wittmann Road. It would be possible for a developer to site one or more casinos or other resort uses at either of these locations. Both sites have property owners that are actively interested in pursuing development for casino use. The possible impacts on DeLisle differ between these two sites.

If a casino were to locate on the C-3 parcel south of the Wolf River, the traffic impacts on the community of DeLisle would be significant. Based on existing trends, casino visitors would use both interchange exits from the Interstate Highway 10, traveling through the center of DeLisle from east and west. Resort development at

this location would drastically alter the scenic character of Wittmann Road between Pass Christian and DeLisle, which DeLisle residents value. The area is also environmentally sensitive: the Mississippi Department of Marine Resources designated a significant portion of this site as coastal preserve land. The Mississippi Renewal Forum recommended preservation of this area.

In contrast, the C-3 land south of Interstate Highway 10 to the west of DuPont's facility has a history as a resort area. In the late 1920s, the Pine Hills Hotel and golf course were constructed there, just 300 feet from the bay. Developers platted a residential community, but it never developed. The creation of the DuPont plant in the late 1970s effectively split the land from the rest of the community.

The 675 acres of vacant land could be developed with a mix of casinos and resort uses. The development of a casino or resort area would have a significant impact on DeLisle, however these impacts can be mitigated. The site could be developed to ensure that traffic flow goes to the casino site rather than through DeLisle. Lighting can be directed downward to ensure DeLisle residents can see the stars in the night sky. The wetland areas of the site will be required to be maintained as open space.

Any casino seeking to locate in the DeLisle community would be required to undergo site plan review. This plan advocates that the community work in partnership with the property owner and developer to ensure that the casino minimizes the impact on the community, such as traffic mitigation and protection of wetland areas.

### General Commercial

As noted above, a commercially zoned parcel sits on the west side of Menge Avenue, immediately adjacent to Interstate Highway 10. This area has hosted a flea market in the past. There are currently approximately 33 acres of vacant land zoned C-2, General Commercial. This commercial area could serve both the local population as well as the wider community utilizing the highway access. This area also has frontage on Lobouy Road. Because



this area is situated away from the center of DeLisle, it is suitable for the general commercial uses permitted in the C-2 District; uses that are otherwise inappropriate for the neighborhood commercial area located at the center of DeLisle. Residents have identified the need for a car-repair shop, since Hurricane Katrina destroyed the one repair shop in DeLisle, which had been located along Wittmann Road. Similar types of commercial uses such as banks, drug stores, dry cleaning establishments, and grocery stores are permitted in the C-2 District, and such uses in this location would serve both the local and regional populace.

### **PRESERVING RURAL CHARACTER**

DeLisle residents enjoy the rural character of their community. This rural character comes from the large amount of open land and wooded areas. In addition to the recommendations outlined above in Preservation of the Natural Environment, maintaining a natural appearance ensures that DeLisle remains a rural community, even when additional development occurs.

One recommendation is to establish in the Harrison County Zoning Code a requirement for a minimum amount of open space/impervious surface on commercial and industrial development sites. The current zoning regulations place a restriction on the amount of building floor area that can cover the lot. However, no restrictions limit the amount of lot area devoted to parking. Instead, the zoning code could require a minimum of 25 percent of a development site to be devoted to open space including the area located in the required side, rear, and front yards.

Sites with larger areas of parking lot could be required to use pervious paving materials to reduce water runoff. Shared parking arrangements reduce the gross amount of parking spaces required in DeLisle. Landscaping designs use native plants to create habitats for wildlife.

The benefits of requiring a minimum amount of open area on a lot and requiring a minimum number of trees and

shrubs to be retained or planted on the site include:

- **Increased comfort:** Landscaping and tree cover moderate changes in temperature and make an area more comfortable. The shade provided by trees in the summer or windbreaks shrubs can provide in winter can help to avoid extreme conditions that large areas of asphalt or large buildings can create. The use of vegetation moderates glare and noise.
- **Energy savings:** Cooler temperatures in the summer require less use of air conditioners and windbreaks in the winter result in less heat loss.
- **Improved aesthetics:** Vegetation softens the hard edges of developed areas and screens views of undesirable sites, such as loading areas or garbage containers. Trees and shrubs break space up into pedestrian scale units by creating canopies or defining edges of space. The repetitive use of species in a landscape design helps define the character of an area and create a sense of place.
- **Improved property values:** Concerning houses, first impressions happen at the road. Properties that are more attractive are worth more to potential buyers.
- **Healthier environment:** Trees clean the air and provide oxygen. Reducing runoff creates less impact on our water resources, limiting flooding and erosion by allowing natural processes to work as intended. If one provides the necessary habitat (food, water and cover), wildlife will find it and use it.

Homeowners should be encouraged to maintain the natural landscaping and trees on their lot. Additionally, residents should be aware of the benefits of planting shade trees and creating backyard habitats using native plants that provide water, food, and shelter that support wildlife. Finally, the community could support the distribution of educational

materials that underscore the negative environmental effects from runoff of fertilized lawns and encouraging homeowners to use fertilizers in a judicious manner.

## RECREATION AND COMMUNITY FACILITIES

DeLisle is a close-knit community where the residents enjoy getting together for community functions and recreation. The citizens of DeLisle consistently comment that DeLisle needs more public recreation facilities. Parks and other recreational facilities are important amenities that enhance a community's quality of life and are essential in fostering increased community interaction.

Residents identified several specific recreational facilities that they would like to see in DeLisle including a community center, public parks that include benches and grills, a public fishing pier, and bike or walking trails throughout the community that would also keep children safe on their way to school. Future growth must also come into consideration when planning for community facilities. After reviewing the identified options for recreational and community facilities, DeLisle citizens voted to create a multipurpose center that converts to a hurricane shelter. DeLisle also indicated support for the community learning center being planned by the Mount Zion United Methodist Church. A detailed description of all the options are listed below.

### Fishing and Boating

DeLisle's history is tied to boating and fishing. There was once a public fishing pier along Bayou DeLisle just east of Wittmann Road. There is a desire to reestablish a pier and boat launch so residents can have public access to the bayou. While there is a public boat launch on the south side of the Wolf River, residents indicated that they would like access along Bayou DeLisle. In light of the citizens' desire to preserve the rural character of the community and FEMA's proposed building requirements along the bayou, which may prevent many residents from rebuilding, DeLisle faces

a rare opportunity to incorporate open space in their rebuilding process.

Conservation subdivisions, as described above, could be a redevelopment option for property owners along the bayou. The concept enables the grouping of houses closer together, nearer the road and farther from the waterways. This option could enable the construction of a boat launch and water access, shared by all homeowners in the subdivision. This would be a more private option limiting access to homeowners and their guests. Fees paid to the homeowners association could fund construction of a boat dock and small park area.

If the County, upon release of the Flood Insurance Rate Maps (FIRM) determines that land could be acquired for public use through a buyout program, then they could use buyout areas to create public open space. There are funds available from FEMA for buy-outs. This money provides an opportunity to permanently remove people and property from harm's way, regain critical environmental and community amenities, and create a buffer against future storms. FEMA funds can only provide pre-Katrina market value buy-outs, however this could provide significant funding to acquire necessary land. After acquiring the land, it would then be necessary to apply for additional funding to develop recreational facilities such as boat launches, parks etc.

### DeLisle Elementary School

DeLisle Elementary School is centrally located at the southwest corner of Kiln-DeLisle and Wittmann Roads. The Elementary School is a source of pride and an important resource for the community. Though the Pass Christian School District encompasses a 70.4 square mile area, DeLisle students can walk or ride their bikes to school. The recently constructed gym and the school's marquee sign located at the intersection are community assets. The plan recommends establishing a formal relationship with the Pass Christian School District to establish more community activities and provide more opportunities for community interaction at the elementary school building. Options include:

1. Working with school district to establish programs and activities for local adults, families and children, and allowing them to use the gym or cafeteria after school hours.
2. Exploring opportunities with the school district to find uses for their facilities, including the marquee sign, as a way of broadcasting community events.

### **New Public Park**

A common request made by many DeLisle citizens is the need for a public park. Two possible sites for a public park include:

1. The state-owned land near the bayou.
2. Land adjacent to the Old DeLisle Cemetery.

Currently the land near the Old DeLisle Cemetery is owned by the “Concerned Citizens of DeLisle.” This group of citizens may be open to allowing a public use of this currently uninhabited land. Additionally, there is a large section of land currently owned by the State of Mississippi, located behind the elementary school, which could also be used as a public park.

### **Bike Trails**

DeLisle has few sidewalks and no bike paths. Before Hurricane Katrina, pedestrian access was not a major concern because of the low level of traffic through the community. Post-Katrina, DeLisle experiences significant increases in traffic, particularly near the intersection of Kiln-DeLisle and Wittmann, which is also near DeLisle Elementary School. The increased traffic is a significant safety concern

for students who walk or bike to school, and forces the community to rely on automotive transportation.

The only walking track within the community is currently being used as a point of distribution, leaving the community without any alternative locations. Safe pedestrian access encourages community interaction, which is a key component of DeLisle’s character.

### **Community Center**

Through community surveys and resident interviews, the citizens show a great desire to have a community center. Traditional community centers are generally owned and operated by the city or county. Because DeLisle’s population is small, and because of the current rebuilding priorities of Harrison County, it is not financially feasible to have a traditional community center. An alternative is a privately owned facility that could be rented out to local residents to be used for family reunions, organization meetings, or public expos. A private facility would eliminate the need for grant funding and would utilize traditional commercial financing options. One possible site for this facility would be across from DeLisle Elementary School at the intersection of Kiln-DeLisle and Wittmann.

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## NOTES

1. Mississippi Department of Wildlife and Fisheries. (2006). Tax Relief Features. Accessed March 13, 2006 from <http://www.mdwfp.com/level2/scenicStreams/plan.asp>.

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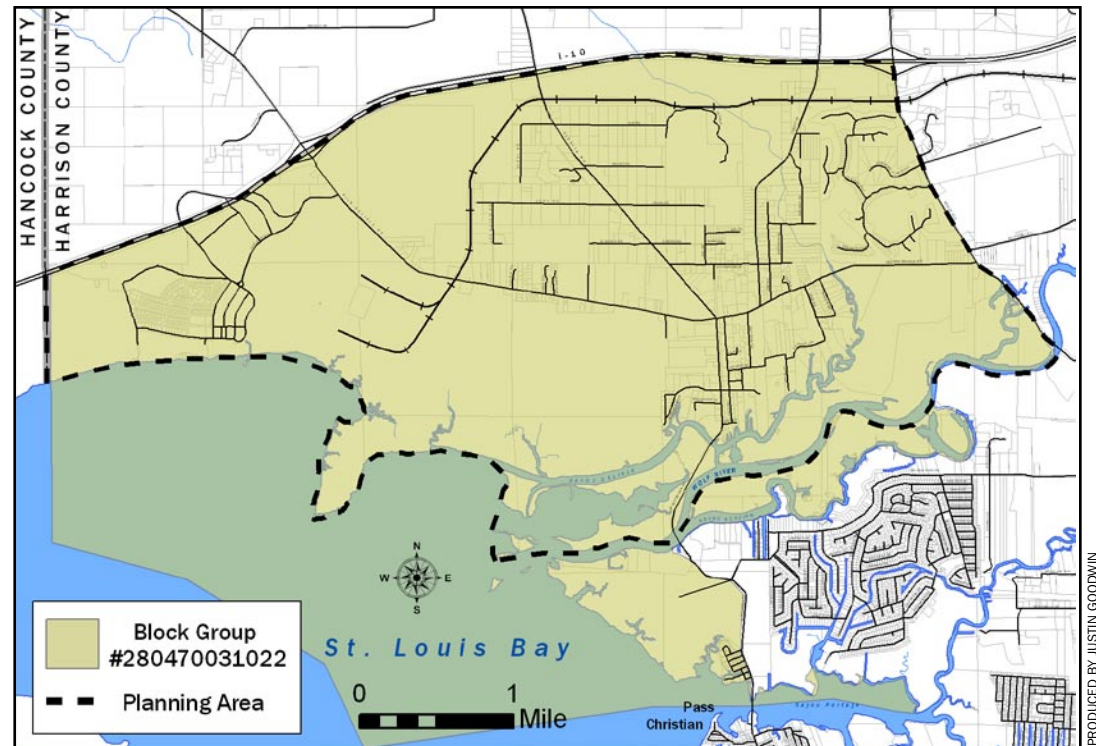
## Chapter 3. Background

A number of factors affect the future of a community, including population trends, housing trends, the existing pattern of development, proximity to highways, the natural environment, and the community's location within the overall region. In addition, in order to understand development options for the future, it is necessary to have a good understanding of the past and present. This chapter provides an overall assessment of the existing conditions and trends, including comparisons of DeLisle with nearby Pass Christian, Harrison County and the state of Mississippi, to create the foundation upon which the goals and objectives for the future of DeLisle are established. The narrative below highlights the more noteworthy statistics, while the complete set of data in tabular form is included in Appendix C.

### Demographics

A demographic analysis of DeLisle is important and necessary for several reasons. This analysis provides insight into existing community needs in terms of facilities and programming; it proves most useful when forecasting future community needs. As such, an in-depth look at key demographic trends can assist in the formation of goals and recommendations.

The majority of the data presented comes from the decennial Census of Population and Housing of the US Census Bureau. Analysis primarily uses year 2000 Census data, but also includes previous Census years in order to assess trends in the community. Data for DeLisle comes from Census Tract Block Group 31.02.02 (see Map 5). The



**Map 5.** Census tract block group.

Source: US Census Bureau.

boundaries for this Block Group remain unchanged between the 1990 and 2000 Census.

Since DeLisle is an unincorporated community, historical census data was unavailable for this analysis. In order to assess past trends and estimate future development, this section reviews historical census data for Pass Christian,



**Table 8.** Population and households, 1960-2000.

	1960	1970	1980	1990	2000
<b>POPULATION</b>					
<b>DeLisle<sup>1</sup></b>	n/a	n/a	n/a	1,295	1,374
<b>Pass Christian</b>	3,881	2,979	5,014	5,557	6,579
<b>Harrison County</b>	119,489	134,582	157,665	165,365	189,601
<b>Mississippi</b>	2,178,141	2,216,912	2,520,638	2,573,216	2,844,658
<b>HOUSEHOLDS</b>					
<b>DeLisle</b>	n/a	n/a	n/a	424	473
<b>Pass Christian</b>	1,095	876	1,790	2,089	2,687
<b>Harrison County</b>	30,981	37,531	52,202	59,557	71,538
<b>Mississippi</b>	568,070	636,724	827,169	911,374	1,046,434

Source: *Census of Population & Housing, US Census Bureau, 1960, 1970, 1980, 1990, 2000.*

**Table 9.** Population and household change, 1960-2000.

	1960-1970 CHANGE	1970-1980 CHANGE	1980-1990 CHANGE	1990-2000 CHANGE
<b>POPULATION</b>				
<b>DeLisle<sup>2</sup></b>	n/a	n/a	n/a	6.1%
<b>Pass Christian</b>	-23.2%	68.3%	10.8%	18.4%
<b>Harrison County</b>	12.6%	17.2%	4.9%	14.7%
<b>Mississippi</b>	1.8%	13.7%	2.1%	10.5%
<b>HOUSEHOLDS</b>				
<b>DeLisle</b>	n/a	n/a	n/a	11.6%
<b>Pass Christian*</b>	-20.0%	104.3%	16.7%	28.6%
<b>Harrison County</b>	21.1%	39.1%	14.1%	20.1%
<b>Mississippi</b>	12.1%	29.9%	10.2%	14.8%

Source: *Census of Population & Housing, US Census Bureau, 1960, 1970, 1980, 1990, 2000.*

\*One can attribute the significant increases in the population and housing units in Pass Christian between 1970 and 1980, as shown in the above tables, to the city increasing its total land area through annexation.

Harrison County and the state of Mississippi, and when possible, compares the local, county and state trends with trends occurring in DeLisle.

Immediately following Hurricane Camille in 1969, many citizens of Pass Christian relocated to the less affected community of DeLisle after realizing that they would be unable to rebuild in The Pass. A similar trend may occur after Hurricane Katrina. However, the storm-devastated many areas in DeLisle and the devastation may lead to an out-migration of their own residents.

### Population

The population of DeLisle in 2000 was 1,374 according to the US Census Bureau. This marked a 6 percent increase over the recorded population (1,295) of the 1990 US Census Bureau. DeLisle also realized an increase in the number of households between 1990 and 2000. In 2000, the Census recorded 473 households, up from 424 in 1990, an increase of 11.6 percent. Similar population growth trends occurred throughout the state and region. Tables 8 and 9 more clearly illustrate the relationship between DeLisle's total population and total number of households as compared to local, regional, and statewide trends.

### Race

According to 2000 Census data, DeLisle is primarily comprised of residents who identify themselves as Non-Hispanic White and African American. Those racial groups are nearly equally distributed. Non-Hispanic White consists of 749 residents (55.5 percent), while African Americans consist of 582 (42.4 percent). There are 22 (1.6 percent) who identify themselves as mixed race, while the remaining residents, who comprise 2.5 percent combined, report their race as American Indian, Hawaiian Pacific Islander, Asian, and other. Sixteen (1.2 percent) reported their ethnicity as Hispanic. During interviews, residents noted that many members of the same family choose to build near one another. To the extent that there are concentrations of one race or another it is generally due to these family ties.

**Age**

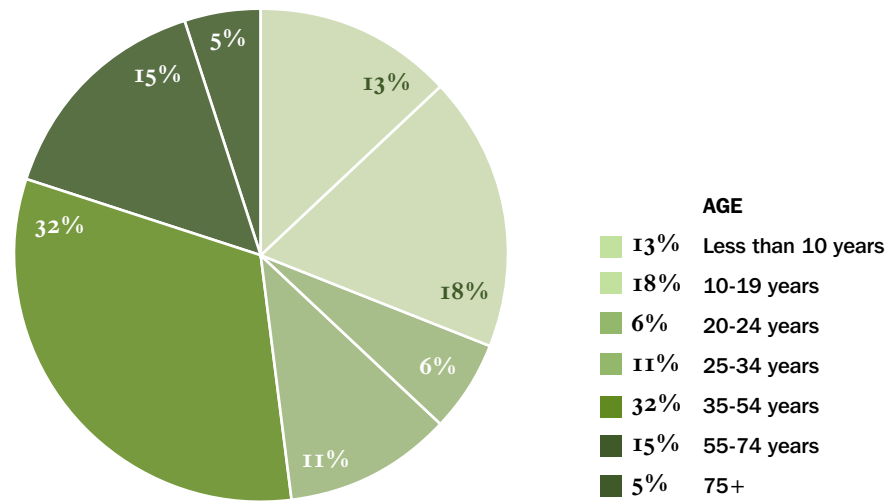
When broken out by typical marketing segments, DeLisle’s age composition is similar to Harrison County in general. DeLisle’s largest age group is that of middle-age adults: persons 35 to 54 years old represent 32 percent of DeLisle’s population according to the 2000 US Census (see Figure 30).

The next highest percentage group in DeLisle is children 10 to 19 years old, representing 18 percent of DeLisle residents, as compared to Pass Christian, Harrison County, and the state overall, which have lower percentages ranging from 12.8 to 15.9. Children less than 10 account for 13 percent of the total community population. Children 19 and under account for 31 percent of the total population. The percentage of children is slightly higher than that of Pass Christian, Harrison County and statewide trends. However, one might attribute this to the large population of adults (age 35-54) that may have children living at home.

The young adult population ages 20-24 accounts for 6 percent of the total population. This group is comprised of persons within only a five-year age range, as compared to the other age categories that include a range of ten or more years. This age group includes young adults who are attending college, or beginning their job search. This category of the population experienced a small decline since the 1990 Census.

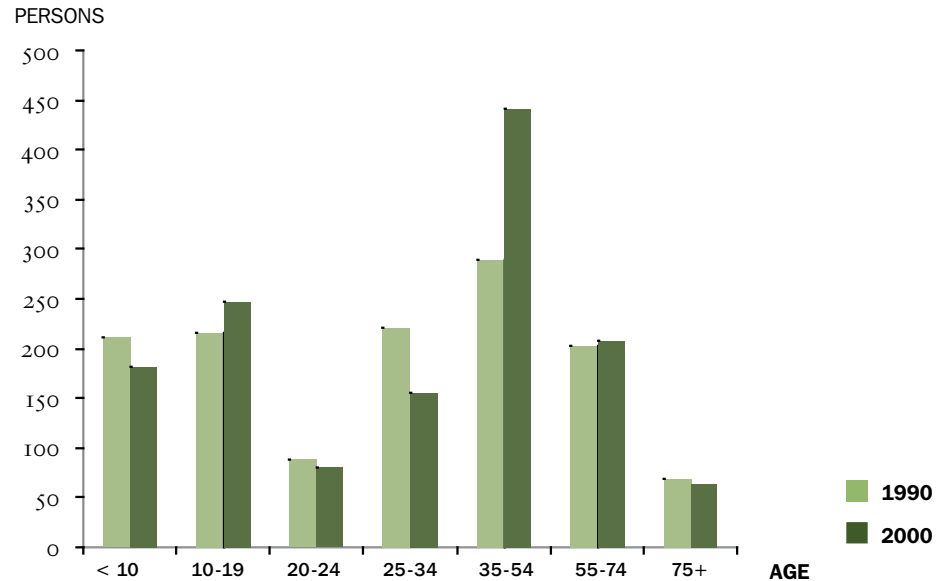
Adults between the ages 55 and 74 comprise 15 percent of DeLisle’s total population. Over the past decade this age group has seen only a 2 percent increase in population, however as the large segment of baby boomers continue to age, this segment of the population may experience more growth in the near future. Elderly adults 75 years and older are the smallest sector of the population, comprising only 5 percent of the population, as illustrated in Figure 30.

In examining the change in age composition between the 1990 Census and the 2000 Census, the category of adults between the ages 55 and 74 showed the largest increase, contributing to the 6 percent population increase overall. The only other category with a significant increase was the age group of 10 to 19 year olds. The age range of



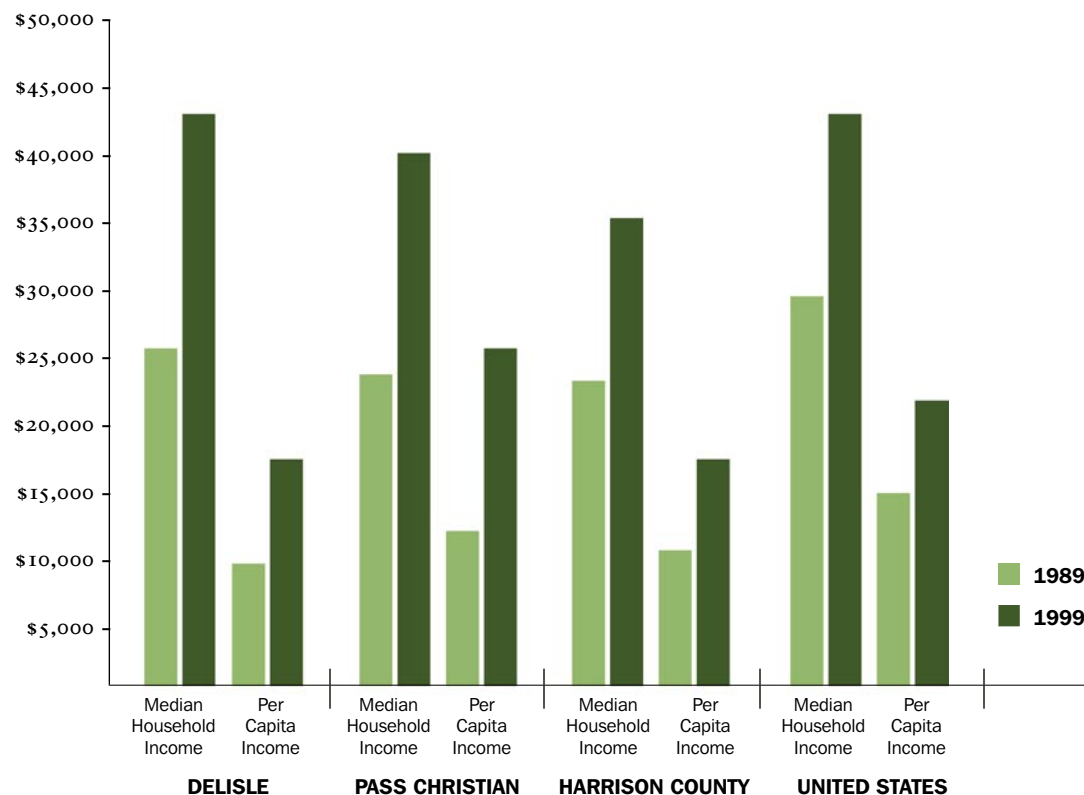
**Figure 30.** Age composition, DeLisle, 2000.

Source: Census of Population & Housing, US Census Bureau, 2000.



**Figure 31.** Change in age composition, DeLisle, 1990, 2000.

Source: Census of Population & Housing, US Census Bureau, 1990, 2000.



**Figure 32.** Median household income and per capita income, 1989, 1999.

Source: *Census of Population & Housing, US Census Bureau, 2000.*

**Table 10.** Educational attainment, 2000.

	TOTAL PERSONS 25 YRS AND OLDER	HIGH SCHOOL DIPLOMA AND ABOVE	COLLEGE DEGREE AND ABOVE
<b>DeLisle</b>	936	68%	19%
<b>Pass Christian</b>	4,574	85%	28%
<b>Harrison County</b>	211,809	80%	26%
<b>Mississippi</b>	2,937,687	75%	24%

Source: *Census of Population & Housing, US Census Bureau, 2000.*

older adults between 55 and 74 increased only slightly. All other age categories experienced declines. The most significant decline occurred in the 25 to 34 year old group, as shown in Figure 31.

**Income**

According to the 2000 Census, DeLisle’s median household income recorded for 1999 is higher than other areas, as shown in Figure 32. This is significant because in the 1990 Census the median household income for DeLisle was considerably lower than the median for the United States. In 10 years, the increase in income for DeLisle households outpaced the median increase in the nation.

Per capita income is the result of area’s aggregate income divided by population. According to the 2000 US Census, DeLisle’s per capita income is \$18,521 (in 1999 dollars), slightly above the Harrison County per capita income at \$18,024. DeLisle’s per capita income is significantly lower than Pass Christian’s \$26,008. In contrast, in the 1990 Census, DeLisle’s per capita income was the lowest of the other three areas.

**Education**

Table 10 shows educational attainment for DeLisle and each of the comparison communities according to the 2000 US Census. Of persons age 25 years and older, roughly 68 percent of DeLisle’s residents have at least a high school diploma or equivalent, lower than the county and state levels. Pass Christian has the highest comparable educational attainment level at 85 percent.

In terms of post-high school education, 19 percent of DeLisle residents who are 25 years and older have a college degree or higher, compared to 24 percent in all Harrison County. Of the comparison communities, DeLisle has the lowest proportion of citizens 25 and older with a college degree or above at 19 percent. In general, the higher the educational attainment is, the higher the household income. However, this is not the case in DeLisle.

## Housing

An analysis of the variety and types of housing in DeLisle is important and necessary for several reasons: it provides insight into ongoing trends, reveals current community needs, and is useful when forecasting future needs. An in-depth look at key housing trends also assists in the formation of goals and recommendations. The following are highlights of the detailed analysis.

### BEFORE KATRINA

The following is an analysis of housing in DeLisle before Hurricane Katrina. The first part compares DeLisle to Harrison County, the state of Mississippi, and the nearby City of Pass Christian, all prior to Hurricane Katrina. The US Census serves as the primary information source on

housing growth rates, tenure characteristics, building ages, types, sizes, and values.<sup>3</sup>

### Growth

As Table 11 shows, between 1990 and 2000, the number of housing units in DeLisle increased from 463 to 504. This amount of growth is proportionally smaller than that of

**Table 11.** Number of housing units, 1990, 2000.

	1990	2000	CHANGE 1990 - 2000	
<b>DeLisle</b>	463	504	41	8.9%
<b>Pass Christian</b>	2,823	3,313	490	17.4%
<b>Harrison County</b>	67,813	79,636	11,823	17.4%
<b>Mississippi</b>	1,010,423	1,161,953	151,530	15.0%

Source: Census of Population & Housing, US Census Bureau, 1990 and 2000.

**Table 12.** Summary of housing construction.

	MISSISSIPPI	PERCENT OF TOTAL	HARRISON COUNTY	PERCENT OF TOTAL	DELISLE	PERCENT OF TOTAL	PASS CHRISTIAN	PERCENT OF TOTAL	
<b>Total - 2000 Census</b>	1,161,953		79,636		504		3,313		
<b>Built in last 10 years</b>	256,315	22.1%	17,437	21.9%	91	18.1%	688	20.8%	
<b>Built more than 10 to 40 yrs ago</b>	656,863	56.5%	45,136	56.7%	311	61.7%	1,799	54.3%	
<b>Built more than 40 yrs ago</b>	248,775	21.4%	17,063	21.4%	102	20.2%	826	24.9%	
AVERAGE ANNUAL NUMBER OF UNITS CONSTRUCTED IN DELISLE 1990-2000						9.1			
<b>Median year structure built</b>	1976		1975		1975		1972		
<b>Total - 1990 Census</b>	1,010,423		67,813		469		2,823		
<b>Built in last 10 years</b>	243,422	24.1%	15,329	22.6%	150	32.0%	475	16.8%	
<b>Built more than 10 to 40 yrs ago</b>	599,316	59.3%	42,348	62.4%	227	48.4%	1,723	61.0%	
<b>Built more than 40 yrs ago</b>	167,685	16.6%	10,136	14.9%	92	19.6%	625	22.1%	

AVERAGE ANNUAL NUMBER OF UNITS CONSTRUCTED IN DELISLE 1980-1990

15.0

Source: Census of Population & Housing, US Census Bureau, 1990 and 2000.



**Table 13.** Year housing built.

	1939 AND EARLIER	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-MARCH 2000
<b>DeLisle</b>	30 (6.0%)	34 (6.7%)	38 (7.5%)	92 (18.3%)	127 (25.2%)	92 (18.3%)	91 (18.1%)
<b>Pass Christian</b>	331 (10.0%)	162 (4.8%)	333 (10.1%)	698 (21.1%)	682 (20.6%)	419 (12.6%)	688 (20.8%)
<b>Harrison County</b>	4,098 (5.1%)	4,345 (5.5%)	8,620 (10.8%)	14,144 (17.8%)	17,939 (22.5%)	13,053 (16.4%)	17,437 (21.9%)
<b>Mississippi</b>	72,381 (0.6%)	62,969 (5.4%)	113,425 (9.8%)	179,489 (15.4%)	262,509 (22.6%)	214,865 (18.5%)	256,315 (22.1%)

Source: Census of Population & Housing, US Census Bureau, 2000.

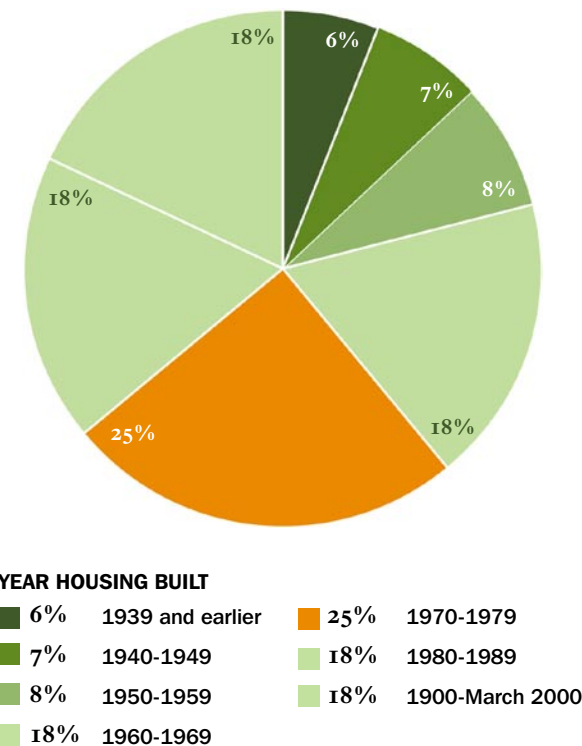
Pass Christian, Harrison County, or the state of Mississippi. Between 1990 and 2000, the number of housing units increased by 15.0 percent over the entire state of Mississippi. In both Harrison County and Pass Christian, the increase in the number of housing units was higher at 17.4 percent. By contrast, DeLisle’s increase in housing units was 8.9 percent. This increase, though substantial, is less than half of the growth within all of Harrison County, which is one of the fastest growing counties in the state.

**Housing Ages**

A closer examination of the Census data provided in Table 12 reveals that there were 91 housing units constructed between 1990 and 2000, for an average of 9.1 units per year. However, this is a slow down from the previous decade, when the area averaged 15 units constructed per year between 1980 and 1990.

Outside the Census data, since 2000, the approval of The Oaks development in the northeastern portion of the planning area brings approximately 100 platted lots to DeLisle.

Figure 33 compares the year built for all housing units in DeLisle. As the chart shows, the decade with the largest increase in housing construction was the 1970s. One might attribute the higher rate of building during that decade to reconstruction following Hurricane Camille, which destroyed many homes along the Mississippi Gulf coast in



**Figure 33.** Year housing built, DeLisle.

Source: Census of Population & Housing, US Census Bureau, 2000.

August of 1969. Almost two-thirds of the housing units in DeLisle (61 percent) were built after since 1970.

However, Hurricane Camille was not the exclusive driver of homebuilding during the 1970s. As Table 13 shows, the years between 1970 and 1979 saw the highest rate of housing growth over the entire state, of which only a small portion was affected by the Hurricane. The median year built for housing units in all of the comparison areas was during the 1970s. DeLisle’s median year built of 1975 is on par with both Harrison County and the State. The median year built in Pass Christian is slightly earlier at 1972 (hurricane devastation may explain this).

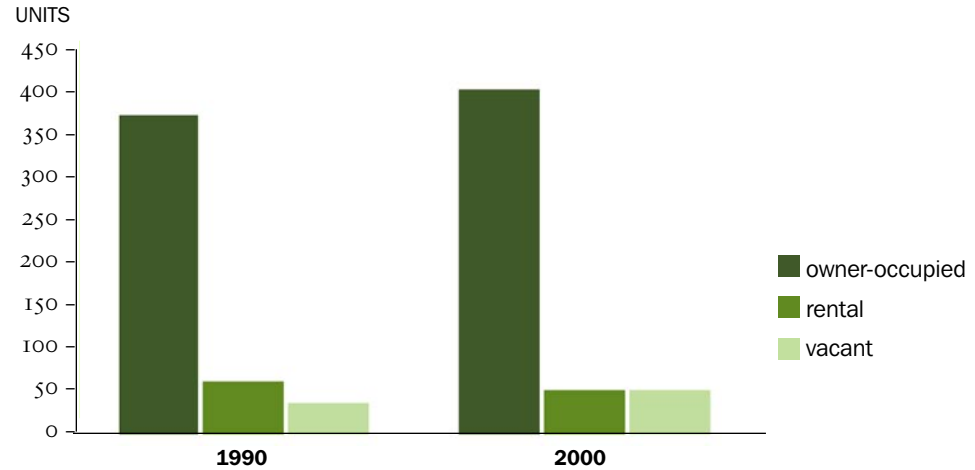
**Tenure**

In terms of housing tenure, the total number of occupied housing units in DeLisle increased from 432 to 452 between 1990 and 2000, yet the occupancy rate during that period decreased by 3.6 percentage points, from 93.3 to 89.7 percent occupied, as illustrated in Figure 34.

In 2000, owner occupied units comprised the majority of occupied housing units, at 88.5 percent. Between 1990 and 2000, the number of owner occupied units increased from 370 to 400. During this same period, the number of rental units declined from 62 to 52, to comprise 11.5 percent of the all occupied units in 2000. The vacancy rate increased between 1990 and 2000 from 7.9 percent to 10.3 percent. In 2000, there were 52 vacant housing units, according to the Census. In comparison, owner occupied units account for 66.2 percent of all occupied units in Harrison County and Mississippi as a whole.

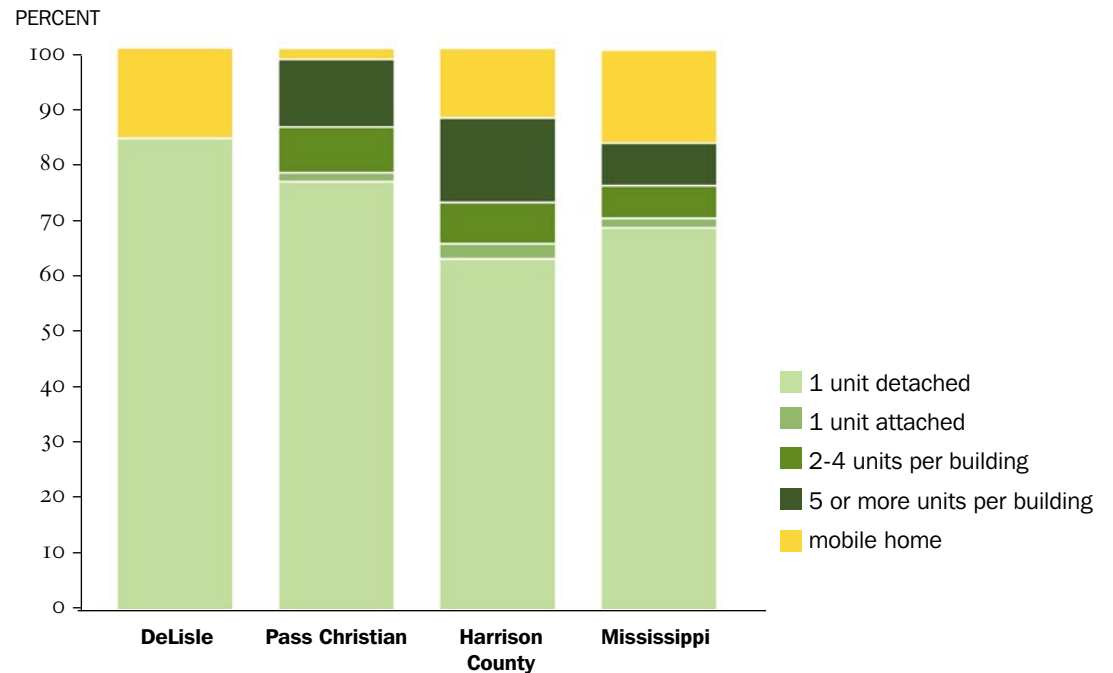
**Housing Types**

Figure 35 illustrates the housing types seen in DeLisle and comparison areas. Housing in DeLisle is less diverse than other areas, which is not surprising given the community’s rural character, small number of housing units, and single-family homes. DeLisle consists, primarily, of two types of housing units: single-family detached structures and manufactured homes. Eighty-four percent of DeLisle’s housing



**Figure 34.** Housing tenure, DeLisle, 1990, 2000.

Source: Census of Population & Housing, US Census Bureau, 1990 and 2000.



**Figure 35.** Proportion of housing types, 2000.

Source: Census of Population & Housing, US Census Bureau, 2000.

units are single family, detached structures. As of 2000, there were 81 manufactured homes in the DeLisle planning area, approximately 16.0 percent of all housing units. This proportion of manufactured homes relative to other types is similar to the proportion in Mississippi. Harrison County has a slightly lower proportion of both single-family detached and manufactured homes. Compared to the state, Harrison County has a higher proportion of multiple unit buildings, with a significant number of apartment buildings that contain five or more dwelling units. Pass Christian, like the County, also has a higher proportion of multiple unit buildings than the state; however, Pass Christian has a much lower proportion of manufactured homes relative to other types.

### Style

The majority of housing in DeLisle consists of single-family detached structures on large lots. The community contains a wide range of home sizes, architectural styles, materials, and manners of construction. The majority of homes in DeLisle are one-story wood-frame ranches or cottages. Typically, ranch homes sit on a concrete foundation, have low-pitched roofs, and possess exterior finishing of brick or wood siding. Frequently, cottages are elevated on square masonry piers, and have exteriors of wood siding. Other types of housing in DeLisle include manufactured homes. Some of these structures are secured to concrete foundations; others are supported by masonry piers.

A number of large estates line Bayou DeLisle. These residences serve as second homes or vacation retreats, in addition to primary residences. Most of these homes along the Bayou are elevated on stilts or pilings. In some cases, living spaces are elevated to 18–20 feet above sea level.

### The Oaks

East of Bayou DeLisle and west of Menge Avenue is a golf-course community called “The Oaks.” The Oaks is a new development with homes still under construction.

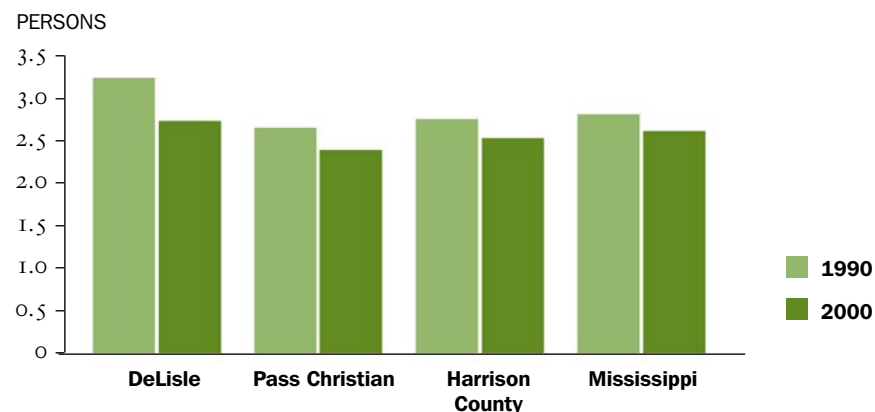
At present, the development contains 105 platted lots. At build out, developers expect 200–250 single-family homes. Homes in The Oaks do not reflect the characteristics of existing housing in DeLisle. These are high-end custom homes, varying in size from one-quarter acre to three or more acres, with values in the general range of \$300,000 to \$800,000. The Oaks development is located at the edge of the planning area, isolated from the rest of DeLisle by Bayou DeLisle, and has access solely onto Menge Avenue (see Figure 36).

### Size

Certain demographic characteristics strongly influence housing. Among these is household size, shown in Figure 37 for 1990 and 2000 in DeLisle and comparison areas. Four notable trends emerge.

First, the average household size of all of the statistical areas declined over the decade. That observation is reflective of a nationwide trend toward smaller households and families.

Second, DeLisle has a higher average household size in both 1990 and 2000 than any of the comparison areas.



**Figure 37.** Average household size, 1990, 2000.

Source: *Census of Population & Housing, US Census Bureau, 1990, 2000.*



**Figure 36.** The Oaks subdivision is separated from the rest of DeLisle by a forested buffer and single entry point.

Source: *Michael Curtis.*

Third, the decline in DeLisle’s average household size between 1990 and 2000 was much greater than in any of the comparison areas, falling from 3.26 persons to 2.75 persons (15.6 percent). By comparison, average household size fell by 9.7 percent in Pass Christian, by 7.9 percent in Harrison County, and by 7.1 percent in the state of Mississippi.

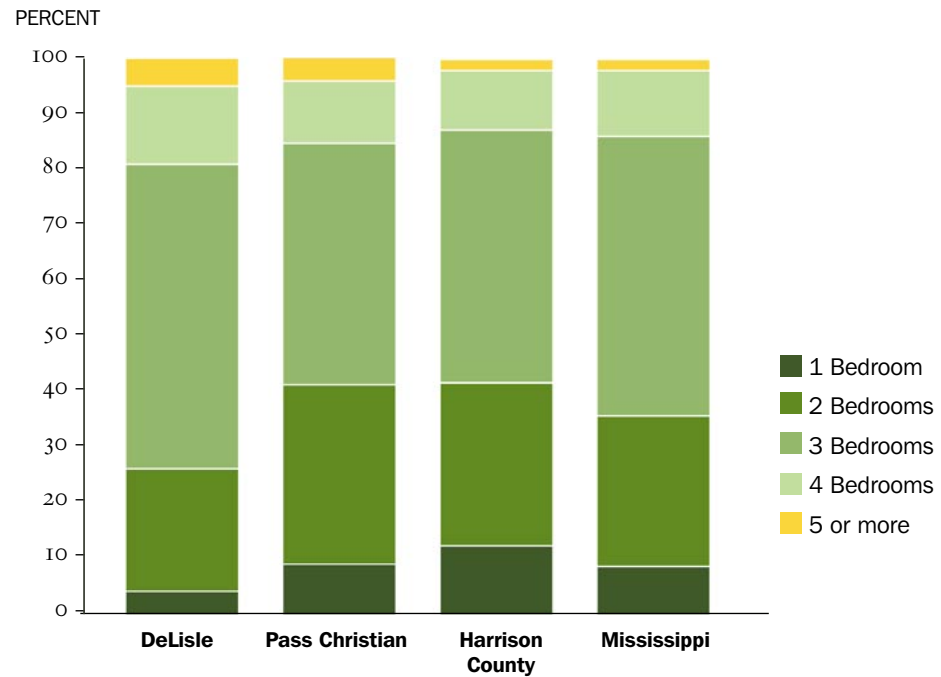
Finally, the average household size in DeLisle from 2000 is above the state average of 2.63 persons, however, the average household size for all of Harrison County and particularly nearby Pass Christian is below the state average.

Since DeLisle’s average household size is slightly higher than comparison areas, one can reasonably predict that the average housing unit size in DeLisle would be slightly larger than comparison areas. Figure 38 compares the average number of bedrooms (one measure of housing size) among housing units in DeLisle and comparison areas in 2000. Approximately 20 percent of housing units in DeLisle have four or more bedrooms; only about 15 percent of housing units in the comparison areas have as many bedrooms. Approximately 74 percent of housing units in DeLisle have at least three bedrooms; within Harrison County and Pass Christian, only about 58 percent of housing units have three or more bedrooms. There is also a slightly higher proportion of housing units in DeLisle with five or more bedrooms; this category comprises about 5 percent of all housing units.

**Values**

Figure 39 and Table 14 compare the median housing value in 1990 and 2000 for DeLisle and comparison areas. In 1990, the state median housing value was \$45,100. At that time, the median housing value in DeLisle was slightly below the state median, at \$44,300. The median value of housing in Harrison County at that time was significantly higher at \$54,900. The median value in Pass Christian was higher yet at \$60,300.

By 2000, the median housing value for the state rose to



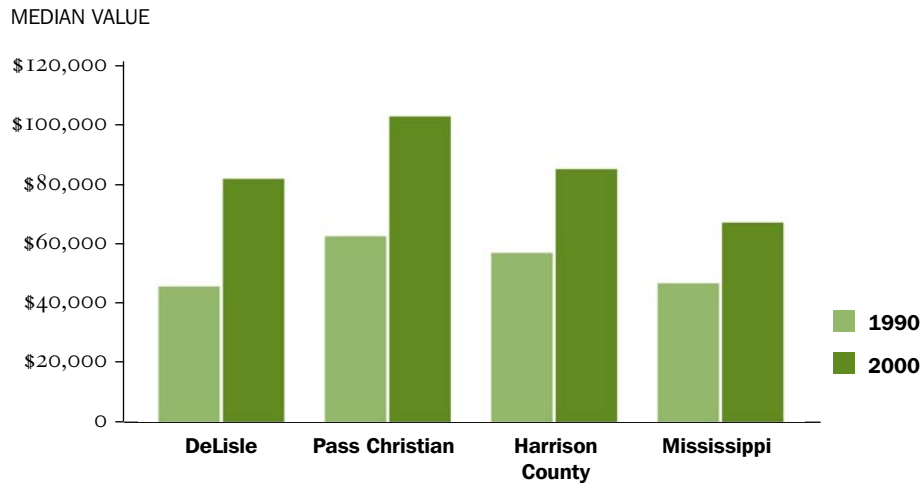
**Figure 38.** Percentage of bedrooms among housing units, 2000.

Source: Census of Population & Housing, US Census Bureau, 2000.

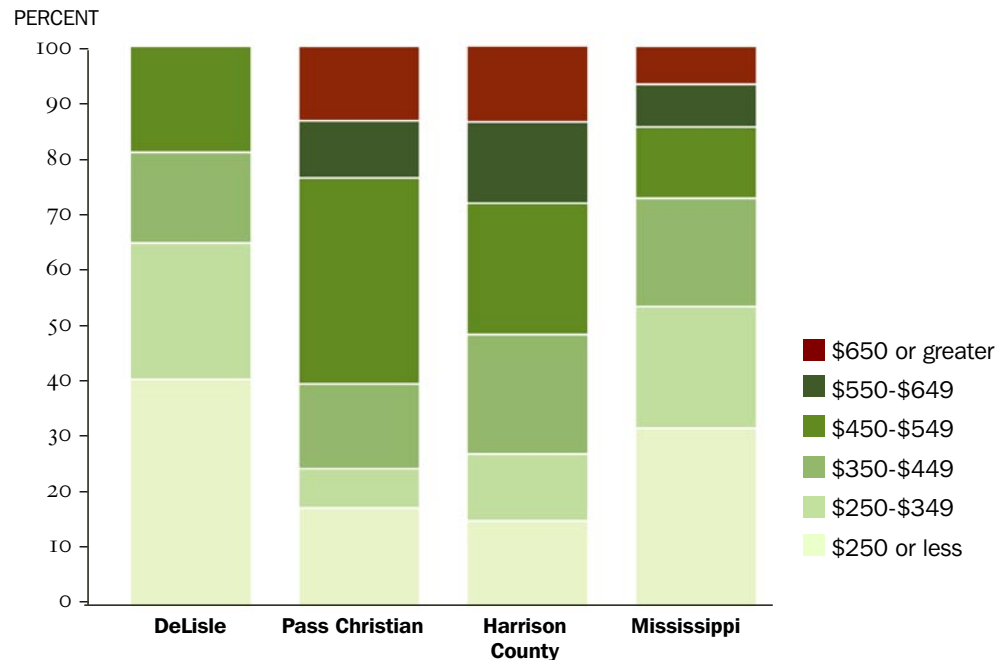
**Table 14.** Median value for all owner-occupied housing units, 1990, 2000.

	MEDIAN VALUE 1990	MEDIAN VALUE 2000	PERCENT CHANGE 1990-2000
<b>DeLisle</b>	\$44,300	\$78,800	77.9%
<b>Pass Christian</b>	\$60,300	\$99,000	64.2%
<b>Harrison County</b>	\$54,900	\$82,000	49.4%
<b>Mississippi</b>	\$45,100	\$64,700	43.5%

Source: Census of Population & Housing, US Census Bureau, 1990, 2000.



**Figure 39.** Median housing value, 1990, 2000.  
 Source: Census of Population & Housing, US Census Bureau, 1990, 2000.



**Figure 40.** Monthly rent, 2000.  
 Source: Census of Population & Housing, US Census Bureau, 2000.

\$64,700, an increase of 43.5 percent. In Harrison County, the median value rose to \$82,000, an increase of 49.4 percent. Pass Christian’s median housing value increased considerably more, by 64.2 percent, to \$99,000. The median housing value in DeLisle increased more than the four comparison areas—by 77.9 percent (or nearly twice as much as the state’s increase of only 43.5 percent) to \$78,800, exceeding the state median. In 1990, the median value for housing units in DeLisle was 20 percent lower than the county median. By 2000, the difference had lessened to only 4 percent below the county median.

Though the majority of occupied housing units in DeLisle are owner-occupied, one must consider how DeLisle’s rental units compare in value to those in other areas. Figure 40 depicts monthly rent for DeLisle and comparison communities in 2000. Rent in DeLisle is lower than the state average. Approximately 65 percent of rental units in DeLisle rent for under \$350 per month. Only about 25 percent of rental units in Harrison County are below \$350 per month. Approximately 80 percent of rental units in DeLisle rent for less than \$450 per month. By comparison, only about 40 percent of rental units in nearby Pass Christian rent for less than \$450 per month. DeLisle does not have any rental units for \$650 or more per month, though 15 percent of rental units in Harrison County are over \$650 per month.

Table 15 compares the average number of bedrooms for rental units, and median contract rent in 2000. The average number of bedrooms for rental units in DeLisle is 2.9, higher than the comparison areas. The next highest is Pass Christian with an average of 2.3 bedrooms per unit. Rental units in DeLisle have more bedrooms on average, but the median rent for all rental units in DeLisle is below the state median, at \$319. Harrison County, with an average of 2.1 bedrooms per rental unit, has a median rent of \$456. Pass Christian’s rent is higher yet at \$472. Table 16 provides an explanation for these trends. The three comparison areas have similar building age regardless of whether the structure is owner- or renter-occupied. In DeLisle, however,



the rental units are significantly older than owner-occupied units—with a median year built of 1958 compared to 1976 for owner-occupied units.

### Summary

Analyzing changes that occurred in DeLisle between 1990 and 2000 relative to three comparison jurisdictions—the state, Harrison County, and Pass Christian—leads one to several important conclusions.

- Growth in the number of housing units in DeLisle is slower than that in the three comparison jurisdictions.
- Household size has declined faster in DeLisle than the state average. Household size is still larger than the state average, but the difference is less than it was in 1990.

**Table 15.** Average bedrooms for rental units and median contract rent, 2000.

	AVERAGE BEDROOMS (APPROXIMATE)	MEDIAN CONTRACT RENT
<b>DeLisle</b>	2.9	\$319
<b>Pass Christian</b>	2.3	\$472
<b>Harrison County</b>	2.1	\$456
<b>Mississippi</b>	2.2	\$334

Source: *Census of Population & Housing, US Census Bureau, 2000.*

**Table 16.** Median year structure built by tenure, 2000.

	RENTAL	OWNER-OCCUPIED
<b>DeLisle</b>	1958	1976
<b>Pass Christian</b>	1971	1971
<b>Harrison County</b>	1974	1976
<b>Mississippi</b>	1977	1975

Source: *Census of Population & Housing, US Census Bureau, 2000.*

- DeLisle is unique within Harrison County coastal communities because it does not contain multiple-family buildings, such as apartments or condominiums. Survey results show that residents feel that this quality is important, in order to maintain the sense of community in DeLisle.
- In terms of housing demographics, DeLisle is more representative of the whole state of Mississippi than it is of Harrison County, particularly with respect to median housing value and housing types (proportion of manufactured homes).

### AFTER HURRICANE KATRINA

Hurricane Katrina caused a housing crisis in DeLisle. Citizens estimate that the storm damaged 90 percent of area homes, with over half experiencing significant flooding. Of those damaged, about 100 homes (20 percent of all the houses in the community) suffered complete destruction. Homes located along Bayou DeLisle were most susceptible to storm surge and wave action. Map 6 indicates the location and extent of damage in DeLisle.

Citizens indicate that most DeLisle residents whose homes suffered significant or complete damage are planning to rebuild in DeLisle. Approximately 300 DeLisle citizens remain displaced from their homes. Some of these displaced citizens are now living outside of the area but a significant number are living within DeLisle or nearby. Some were fortunate to receive a FEMA trailer, which residents can place on their lots provided they have access to water and electricity. Other citizens are living with family or friends nearby. Some of these arrangements have resulted in numerous families sharing one home. The less fortunate have resorted to camping in tents either on their property or near designated shelters.

People with the financial means have begun renovating and repairing their homes. However many are waiting to rebuild, either by choice or necessity. Some await insurance money or federal assistance, as many did not have flood



insurance. Others await decisions by FEMA and Harrison County regarding flood elevations and required building heights. Still others explain that most construction contractors are preoccupied, and labor is scarce, which makes rebuilding a challenge.

## Land Use Pattern and Zoning

The existing land use patterns in DeLisle evolved over many years in response to early settlement patterns and environmental challenges, as well as other influences. The ways in which people use land define the economic, social, and physical aspects of the community. Land use patterns and interrelationships between land uses must fit within an overall vision of the community; otherwise, goals for the future may conflict with land use. Understanding land development patterns and their relationship to established regulations, such as zoning, is critical in determining how to formulate future development policies.

The DeLisle planning area is approximately 11.3 square miles. It is primarily a residential area, with one large industrial use, and a few community facilities including an elementary school, three churches, two cemeteries, and two parks.

The area enjoys some natural boundaries because of the water along its southern border; the DeLisle Forest, a wooded area that acts as buffer land along the DuPont land holdings; forested land along its northern edge, immediately south of Interstate Highway 10, which is currently owned by Weyerhaeuser; and Menge Avenue to the east, a heavily traveled road.

### Development History

Over the years, DeLisle has developed predominately as a residential area, having previously accommodated a thriving shipbuilding industry in the mid 1800s, and a luxury resort and golf course in the late 1920s that ended with the Depression. Following Hurricane Camille in 1969, the area

saw an influx of residents from coastal communities where buildings sustained substantial damage. Additional suburban growth this decade has occurred on its eastern edge with the development of The Oaks housing subdivision.<sup>4</sup>

Hurricane Katrina inflicted heavy damage to more than 20 percent of the residences in DeLisle. While many residents have expressed a desire to return and rebuild their homes, new flood elevations, and building requirements have left people uncertain whether they will be able to rebuild their homes.

However, based on results of a written survey completed by 78 people as well as comments during the Town Hall Meeting conducted January 4, 2006 by the planning team, citizens were consistent in their desire to maintain the rural character of their community and to preserve its natural areas. To ensure that this is accomplished, it is important to document the current pattern of land use in DeLisle, and to assess the development potential of vacant land remaining in the community.

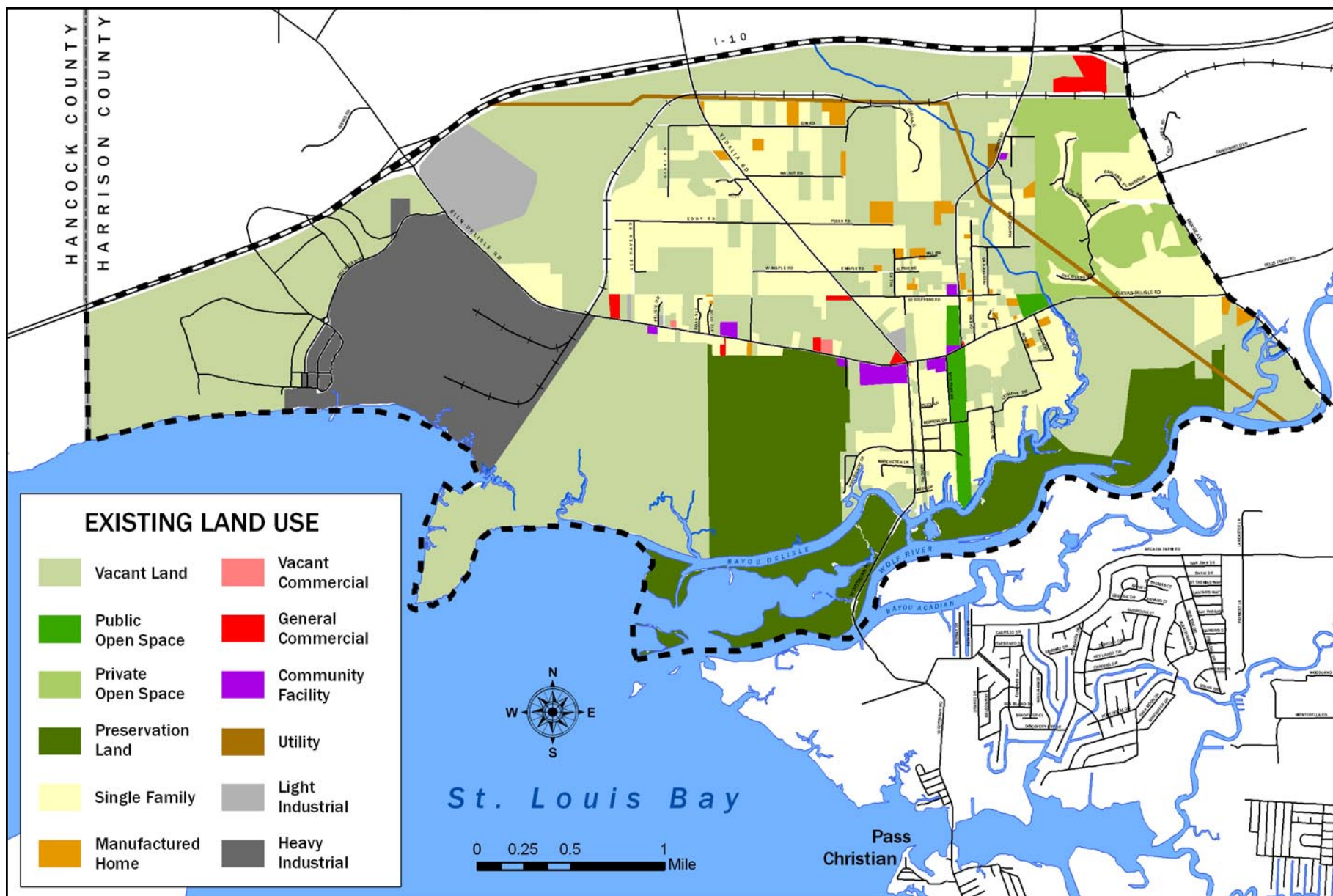
### Existing Land Use

In order to determine future options for DeLisle, the planning team created a generalized inventory of present land use. During the first week of January 2006, the planning team conducted a windshield survey of DeLisle. Supplementing this survey, the team examined aerial photos and parcel data records, and verified issue areas with the Steering Committee. Map 7 illustrates the existing land use patterns in DeLisle. Table 17 lists the corresponding acreages for each land use category.

The Existing Land Use map is a record of the actual use of a parcel, or portion of a parcel at the time of the inventory. In some cases, the use on a parcel does not occupy the entire parcel. In other cases, the use on a parcel does not correspond to the current zoning designations. The purpose for the Existing Land Use map is to identify patterns in the evolution of development while identifying areas for potential future development.

Presently, there are 3,511.6 acres of vacant land—48.4





**Map 7.** Existing land use.

Data Sources: SMPDD, Harrison County Department of Zoning, DeLisle Planning Team. Note: Land use derived from interpretation of zoning, aerial photography, and windshield surveys. 'Single Family' refers to site-built homes. Some Single Family areas include Manufactured Homes.

percent of the land area in DeLisle—indicating that there is the potential for significant growth. For this category, when a property had only a small, developed portion, the undeveloped portion is noted as vacant. This is not to say that it would necessarily be developed in the future; simply that development of some sort *could* occur. Areas on the map shown as vacant could currently be used for agricultural purposes, forested land or land area that the property owner intends to remain as open space. In addition, a large proportion of that vacant land (about 40 percent) is classified as wetlands, and may not be developable.

Land that is set aside as open space by either public or private means accounts for 17.9 percent of the DeLisle land

area. The remaining one third of the community is considered developed with either residential, commercial, industrial or community facilities. The majority of the developed areas (59.7 percent) are devoted to residential uses, while 38.8 percent is utilized for commercial or industrial uses.

The residential development pattern is entirely composed of individually subdivided, primarily single-family dwellings, and with some lots occupied by a mobile home, either as the sole dwelling unit on the lot, or in conjunction with a site-built home. The lot sizes and street patterns are depicted on the Existing Land Use Map (see Map 7). One finds the older areas of residential development in the central eastern portion of DeLisle between Wittmann and

**Table 17.** Land use by acreage.

	SUB TOTAL		TOTAL BY CATEGORY		
	ACRES	PERCENT OF TOTAL	ACRES	PERCENT OF COMMUNITY	PERCENT OF DEVELOPED LAND
Single Family	1,389.0	19.2%			
Manufactured Home	62.3	0.9%			
<b>TOTAL RESIDENTIAL</b>			1,451.3	20.0%	59.7%
General Commercial	35.0	0.5%			
Vacant Commercial	3.7	0.1%			
Light Industrial	157.4	2.2%			
Heavy Industrial	746.3	10.3%			
<b>TOTAL COMMERCIAL/INDUSTRIAL</b>			942.3	13.0%	38.8%
Utility	3.9	0.1%	3.9	0.1%	0.2%
Community Facility	32.2	0.4%	32.2	0.4%	1.3%
<b>TOTAL DEVELOPED LAND</b>			2,429.6	33.5%	100.0%
Private Open Space	306.6	4.2%			
Public Open Space	64.3	0.9%			
Preservation Land	930.0	12.8%			
<b>TOTAL DEDICATED OPEN SPACE</b>			1,301.0	17.9%	
Vacant Land	3,521.6	48.6%	3,521.6	48.6%	
<b>TOTAL</b>	<b>7,252.3</b>	<b>100.0%</b>	<b>7,252.3</b>	<b>100.0%</b>	

Source: DeLisle Planning Team, Note: Land use derived from interpretation of zoning, aerial photography, and windshield surveys.



Pavolini Roads, and continuing up along Lobouy Avenue. Smaller lots with narrow lot widths and lot sizes of approximately a half-acre or less characterize this area. However, many of the landowners own more than one lot, effectively increasing the size of their yard.

Larger lots of more uniform size located in a relatively regular grid pattern characterize the northwestern section of the developed area of DeLisle. These lots average three to five acres in size.

Over 900 acres in DeLisle serve industrial purposes, with the primary occupant being DuPont. Commercial uses occupy a very small proportion of the land area, all of which is located along Kiln-DeLisle Road or Cuevas-DeLisle Road, the main east-west route through DeLisle.

### **Zoning Summary**

The Harrison County Zoning Ordinance governs land development in DeLisle. Zoning is a relatively new tool in Harrison County. Zoning is the way government controls the physical development of land and the kinds of uses each individual property may serve. The zoning ordinance specifies the areas in which residential, industrial, commercial and retail activities may take place. It is based on the police power of government to protect the public's health, safety, and welfare by placing controls on the development of land. Map 8 shows the boundaries of each zoning district.

The greatest amount of land in the planning area of DeLisle is zoned A-1 or General Agricultural District (2,818.7 acres or 38.9 percent of land in DeLisle, see Table 18). It is intended to provide an area for farming, agricultural, silvicultural, dairying, livestock and poultry raising, and other uses; to protect such uses from sprawl until change is warranted. Multiple uses of a single parcel of land are allowed, if consistent with permitted uses in A-1 district. Regulations permit single-family dwellings on as little as one acre. Currently, most of the developed land designated as A-1 is in use for single-family housing. The majority of the vacant land in DeLisle is zoned A-1.

The next largest zoning area is designated E-1 or Very

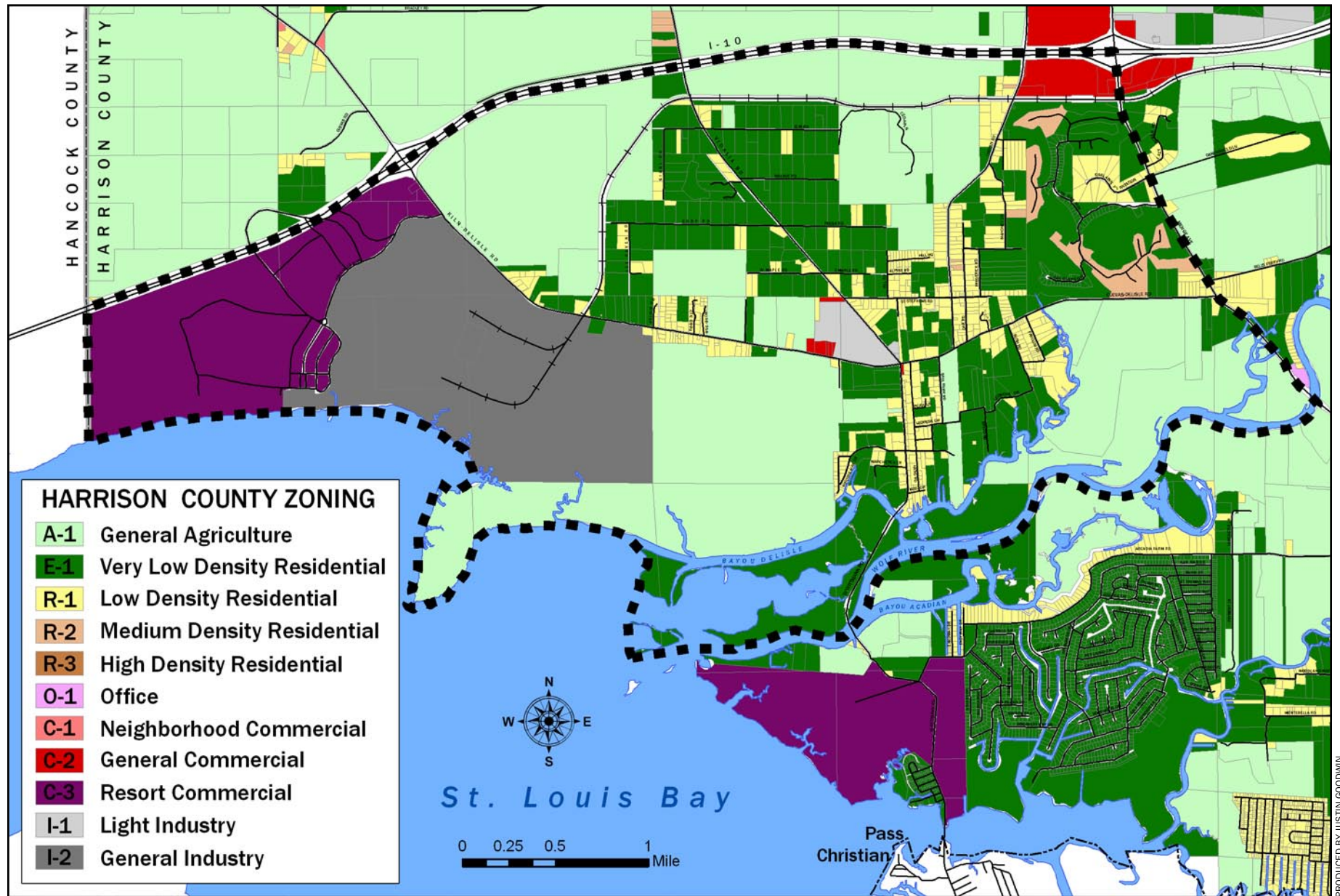
Low Density Residential District. It encompasses about 25.0 percent of the land in DeLisle, or 1,815.7 acres. This zone provides for very low density, estate type residential development (with a minimum lot size of three acres) while allowing limited scale or hobby agricultural and farm uses adjacent to areas where the character of development is established or is planned to be predominantly residential. This district also permits recreational, religious, and educational facilities serving residential areas. Areas with this designation are defined and protected from the encroachment of uses outside of the residential character.

Another 9 percent of the land is zoned R-1 or Low Density Residential District. It provides for generally low-density residential uses, and is restricted to single-family dwellings and related uses to provide basic elements of a balanced and attractive residential area. However, there is a provision in the R-1 district that enables much denser development—minimum 6,000 square foot lots, which when accounting for streets is approximately five units per acre.

A very small portion, only 1 percent, is designated R-2 or Medium Density Residential District. It provides for medium density residential uses on smaller lots with reduced setbacks. Principal use of land is for single-household and two-household (duplex) dwellings and related recreational, religious, and educational facilities that are the basic elements of a balanced and attractive residential area.

Another 1 percent is zoned C-2, General Commercial District. The intention of this district is to serve high volume retail and service type trade beyond the community or neighborhood—the market area tends to be regional. Such uses typically generate high volumes of traffic, so this district is best suited to arterial highways to avoid undue congestion. There are approximately 33 acres zoned C-2 at the Interstate Highway 10, Menge Avenue interchange. Additionally, a few smaller parcels located along Kiln-DeLisle are zoned commercial. There is a limited amount of land in DeLisle zoned for commercial uses.

Depending on changes under consideration for the zoning ordinance, a new zoning designation would be ap-



**Map 8.** Existing zoning as of July 18, 2005.

Data Sources: Harrison County Department of Zoning; SMPDD.

**Table 18.** Summary of acres by zoning district.

	A-1	E-1	R-1	R-2	C-2	C-3	I-1	I-2	TOTAL ACRES
	GENERAL AGRICULTURAL	VERY LOW DENSITY RESIDENTIAL	LOW DENSITY RESIDENTIAL	MEDIUM DENSITY RESIDENTIAL DISTRICT	GENERAL COMMERCIAL DISTRICT	RESORT COMMERCIAL	LIGHT INDUSTRIAL	GENERAL INDUSTRIAL	
<b>Developed Land</b>	305.7	822.3	462.6	54.2	34.8	32.4	3.8	713.9	2429.6
<b>Percent in District</b>	10.8%	45.3%	74.1%	52.7%	50.2%	4.6%	6.6%	67.6%	
<b>Dedicated Open Space</b>	709.3	540.6	5.0	45.9	0.0	0.0	0.0	0.0	1301.0
<b>Percent in District</b>	25.2%	29.8%	0.8%	44.7%	0.0%	0.0%	0.0%	0.0%	
<b>Vacant Land</b>	1803.7	452.7	156.4	2.7	34.5	675.0	53.8	342.8	3521.6
<b>Percent in District</b>	64.0%	24.9%	25.1%	2.6%	49.8%	95.4%	93.4%	32.4%	
<b>Percent of total in DeLisle</b>	51.2%	12.9%	4.4%	0.1%	1.0%	19.2%	1.5%	9.7%	100%
<b>Total Acres in Zoning District</b>	2,818.7	1,815.7	623.4	102.9	69.3	707.4	57.6	1,056.7	7252.2
<b>Percent of total in DeLisle</b>	38.9%	25.0%	8.6%	1.4%	1.0%	9.8%	0.8%	14.6%	100%

Source: Harrison County and The Ohio State University.

propriate near Interstate Highway 10 where road capacity can accommodate a higher volume of traffic. With the establishment of this new Highway Commercial district, significant changes would occur to the list of uses permitted in the C-2 district. These changes would generally ensure that large retail uses could not locate in a C-2 zone.

At the present time, there are no areas zoned for C-1, Neighborhood Commercial, though this district is specifically intended for areas that are nestled in residential areas.

Land to the west of DuPont is zoned C-3, Resort Commercial. This district allows casinos and resort uses: activities and related facilities that are permitted by the Mississippi Gaming Commission. Prior to constructing in a C-3 district, the applicant is required to submit a Master Plan for development, outlining the developers' proposal. This area of DeLisle, where the C-3 zoning exists, comprises about 700 acres, which is nearly 10 percent of the

land area in DeLisle. At this time, most of the area remains vacant. There is another sizeable amount of land zoned for Resort Commercial immediately south of the planning area, along Saint Louis Bay.

Light Industrial or I-1 District encompasses less than 1 percent of the land area. The district provides suitable areas for firms engaged in light manufacturing and for the storage and distribution of goods. There are performance regulations in this district to ensure that permitted light industrial uses are those manufacturing, repair, assembly or processing establishments, or operations that do not use water in the manufacturing operation for processing, cooling, or heating, and do not emit smoke, noise, odor, dust, vibrations, or fumes beyond the building. The goal of this district is to encourage the formation and continuance of a compatible environment for similar types of industry, and to discourage residential uses from encroaching on suitable

light industrial sites.

The remaining 14.6 percent of the land area is zoned I-2, General Industrial. It provides suitable areas for firms engaged in general manufacturing and for the storage and distribution of raw materials and finished goods. According to the I-2 development regulations, uses should not emit detectable levels of smoke, noise, odor, dust, or fumes beyond the bounding property lines of the lot, and should not generate noise above ambient level of noise in areas beyond the zone district boundaries. The goal of this district is to establish compatible environments for similar types of industry, and to discourage encroachment by residential developments.

The Harrison County Zoning Ordinance also includes the opportunity to zone land utilizing a variety of Special Use Districts and Planned Unit Development regulations. A Planned Unit Development allows for unified development on at least 25 acres under single ownership, and allows for a mix of residential and non-residential uses. This set of regulations could be applicable in DeLisle depending on the intention of the developer and Planning Commission.

### **Development Capacity**

Vacant areas in DeLisle have the capacity for additional development based on the rights granted through zoning. However, development is unlikely on all areas shown on the map as vacant. As stated earlier, approximately 49 percent of the land within the DeLisle planning area remains vacant. For the purposes of this analysis, portions of existing large lots not currently being utilized and with the potential to be subdivided have been included as vacant land. The development potential of this area is limited by development restrictions on land classified as wetlands. According to The Mississippi Department of Marine Resources, there are approximately 994 acres denoted with one of 44 wetlands designations. Since it is the recommendation of this Plan that all land designated as wetlands be preserved, these acres were deducted from the total acres of vacant land. Of the remaining vacant acres, there are 1,421.5 acres that are considered developable and are zoned

to permit some form of residential development. Using these vacant acres, further analysis was conducted to determine the potential number of dwelling units possible according to the current zoning (see Table 19).

To estimate the residential development capacity of the planning area, the number of homes that could be constructed on that vacant land was calculated. The amount of land was converted to dwelling units by multiplying the vacant acres by the effective density that results from the minimum lot size requirements in each zoning district. The effective density takes into consideration the additional land area of a development site that is devoted to roads and also accounts for lots that are larger than the minimum area permitted by zoning. For example, a 100 acre subdivision designed with minimum one-acre lots will typically generate 80 or so lots. The rest of the land area is road rights-of-way and excess land found in oversized lots. Table 19 depicts the additional number of homes that could be built in DeLisle if every acre of vacant residential property were to be developed according to its existing zoning classification. This analysis provides a useful examination of the build-out capacity of the community.

Vacant land in DeLisle is found in each of the zoning districts. As noted above, there are a number of acres of wetlands found in the A-1, E-1 and R-1 districts. The greatest amount of vacant developable land zoned for residential use is in the Agricultural Use District. Land in the A-1 district may be developed as single-family housing with a minimum one-acre lot size. Another 351 acres of land could be developed in what is currently zoned E-1, or very low density residential, allowing a minimum three-acre lot. Another 133 acres of vacant developable land exists in the R-1 district, which shares the one-acre minimum density of A-1, while R-2 allows a greater density of housing on 10,000 square feet lots.

There are less than three acres of vacant developable land in the R-2 Medium Residential District, which allows a greater density of housing with a minimum lot size of 10,000 square feet.



**Table 19.** Residential development capacity at build-out.

	A-1	E-1	R-1	R-2	TOTAL
<b>Vacant Land (acres)</b>	1,803.7	452.7	156.4	2.7	2,415.5
<b>Vacant Land classified as Wetlands (acres)</b>	869.1	101.7	23.3	0.0	994.1
<b>Vacant Developable Land (vacant land not classified as wetlands)</b>	934.6	351.1	133.1	2.7	1,421.5
<b>Effective Residential Density on Developable Land (units per acre)</b>	0.8	0.3	0.8	3.1	
<b>Estimated Number of Dwelling Units Possible on Developable Land</b>	766	108	109	8	991

Source: The Ohio State University.

From the above analysis, illustrated in Table 19, the vacant land could theoretically accommodate nearly 1,000 new homes. This evaluation assumes that every vacant acre of residentially zoned land outside the wetlands is developed according to the existing zoning. This is not likely to occur, but it is useful to illustrate the amount of development that could happen if all the vacant land developed under current zoning regulations.

There are two areas where a significant amount of vacant land is zoned for nonresidential development: land owned by DuPont along Kiln-DeLisle Road, which is zoned I-2 General Industrial, and the area immediately west of DuPont, adjacent to Interstate Highway 10, which is zoned C-3 Resort Commercial. According to a DuPont spokesperson, DuPont plans to limit all their operations to the area currently developed, and to retain all the surrounding vacant land as a buffer for their operations. If any plant expansion is to occur, it will be constructed within the footprint of their current operations.<sup>5</sup>

The area zoned C-3 includes approximately 675 acres, much of which could be developed with casinos and or resort uses.

### **Development pressures**

To understand the impact relocation might have on future

housing development, there are a number of factors to consider. First, it is unknown how many households have been displaced that will eventually return to DeLisle. In conversations with the DeLisle steering committee members, they estimate that 90 percent of neighbors who lost their houses plan to return and rebuild in DeLisle. Using this benchmark, DeLisle could experience a short-term net loss of ten households.

A second consideration is that there will likely be pressure to develop previously vacant land in DeLisle. Residents whose homes sat in a floodplain may be prohibited from rebuilding or may be financially unable to rebuild on their previous lot. These citizens may look for other sites within the DeLisle community to rebuild. In addition, there may be development pressure on DeLisle from citizens of other communities affected by Hurricane Katrina who are looking for less flood-prone land in the region on which to build.

A third consideration is past housing growth trends in DeLisle. Census data indicates that during the last few decades DeLisle has averaged 15 new homes each year. One of the fastest periods of housing growth followed Hurricane Camille. Interestingly, DeLisle did not see rapid development at the level one might expect in the years following that disaster. Approximately 30 new homes were construct-

ed per year during the early 1970s.

Between 1990 and 2000, housing growth was slower, at roughly nine units per year. However, since 2002, The Oaks residential development has brought 110 new homes to the DeLisle planning area. This development alone has added more than 30 single family detached homes per year to the DeLisle area.

Finally, studies conducted after Florida hurricanes, indicate that such disasters have little effect on long-term population growth rates.<sup>6</sup> Given the post-Katrina pressures for housing facing DeLisle, citizens can assume that short-term housing growth will be higher than the historical average. A reasonable estimate might be 30 new housing units per year, not counting development in The Oaks. This rate has implications for potential development sites in the community. For example, if the County rezones a parcel to allow for a single family subdivision this could increase the number of homes constructed per year.

## Economics

DeLisle is largely a bedroom community with little diversity of industry, retail, or commercial development. Residents work in a variety of occupations and commute to other cities via Interstate Highway 10.

For potential employers, the area has a rail line serving its industrial area (providing a direct connection to the port in Gulfport). This area is also only a short distance (14 miles) from the Gulfport Airport, which is also just off Interstate Highway 10. This section documents the specific characteristics of the local workforce and the types of occupations held by residents.

The DuPont titanium dioxide processing plant is the dominating industrial use in DeLisle, which occupies about 200 acres of the company's 2,600-acre holdings along the southwest corner of the area. The plant employs approximately 1,000 contract and non-contract employees, drawn primarily from a three-county area. While the exact num-



**Figure 41.** The DuPont DeLisle manufacturing plant has been a fixture in the community along Kiln DeLisle Road since 1979.

*Source: Michael Curtis.*

ber of employees living in DeLisle is unknown, approximately 20 percent live in the DeLisle/Pass Christian area. The DuPont plant pays \$1.7 million in sales and use tax and \$3.8 million in property tax.<sup>7</sup>

Another large employer in the area is the Pass Christian School District. The schools employ 104 certified and 73 non-certified personnel. At the time of this plan, all the schools were operating from a single location in temporary structures at the site of DeLisle Elementary School—the only school in the district operable following Hurricane Katrina.

Other small commercial or non-profit establishments in the planning area include a day care, a Head Start and a storage unit facility located along Kiln-DeLisle Road,

Swanier’s Quickstop on Cuevas-DeLisle Road, Billy’s Auto on Vidalia Road and two gas stations off the Menge Road exit from Interstate Highway 10.

According to figures from the Bureau of Labor Statistics, prior to Katrina, Harrison County had experienced four years of employment growth, following a period of decline after it reached its employment peak of 90,286

in 1999. The leisure and hospitality industry employed the largest number of people in Harrison County, and had maintained a high growth rate in the preceding 15 years. Hurricane Katrina dealt a devastating blow to that industry. While plans are underway to rebuild the industry and make it better able to withstand future hurricanes by moving casinos on land, it may be years before the industry fully recovers.

Manufacturing, on the other hand, was the industry experiencing greatest decline. It is worth noting that the manufacturing industry employs a significant proportion of the DeLisle workforce (15 percent).

**Table 20.** Employment status by sex, 2000.

	MALE		FEMALE		TOTAL	
<b>Total residents 16 years and older:</b>	485		513		998	
<b>In Civilian Labor Force:*</b>	345	71.1%	312	60.8%	657	65.8%
<b>Employed</b>	338	69.7%	302	58.9%	640	64.1%
<b>Unemployed</b>	7	1.4%	10	1.9%	17	1.7%
<b>Not in labor force</b>	140	28.9%	201	39.2%	341	34.2%

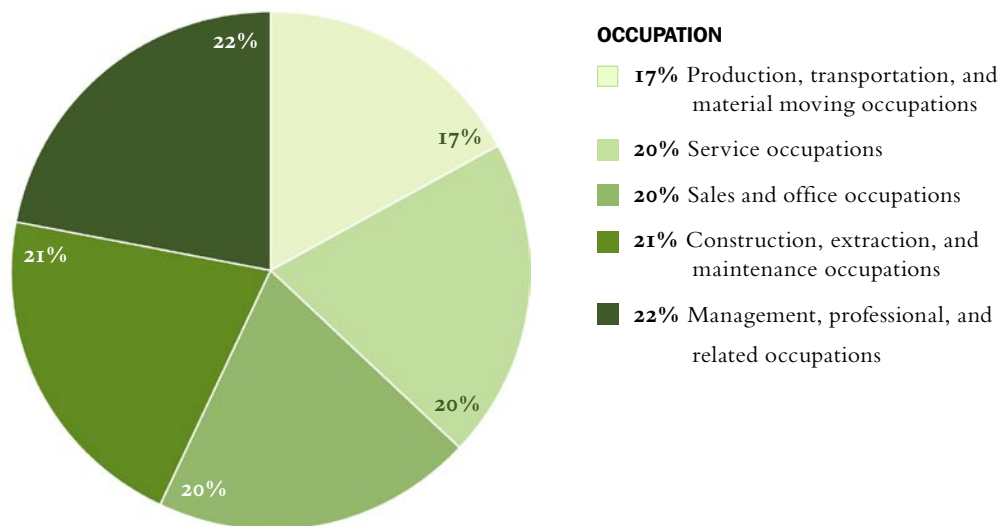
\*According to the 2000 Census, there are no residents in the military.  
Source: *Census of Population & Housing, US Census Bureau, 2000.*

**Employment Characteristics of Residents**

According to the 2000 Census, 65.8 percent of residents 16 years and older are employed. Not surprising, male residents are employed at a higher rate than females, for which 34.2 percent are not in the labor force. Prior to Hurricane Katrina, the unemployment rate in the community was very low at 1.7 percent (see Table 20).

Residents of DeLisle work in a variety of occupations. According to the 2000 Census, 640 residents in DeLisle worked in the following occupations: management; service; sales and office; construction and related; and production/transportation. Figure 42 highlights the distribution of occupations among the civilian labor force.

Residents of DeLisle work in a number of different sectors. As indicated in Figure 43, the largest percentage of residents report employment in the educational, health and social service industry (21 percent). Another 30 percent are equally distributed between the arts, entertainment, recreation, accommodation and food services industry (15 percent); and the manufacturing industry (15 percent). The next two largest industry categories in which residents are employed include the construction industry (11 percent), retail trade industry (10 percent), and public administration (9 percent). Another 6 percent of the employed residents work in the transportation and utilities industry. The remaining residents work in agriculture, wholesale trade, information,



**Figure 42.** Employment by occupation, DeLisle, 2000.  
Source: *Census of Population & Housing, US Census Bureau, 2000.*

or professional management and other services. No residents report employment in the finance, insurance, real estate and rental and leasing industry.

Residents of DeLisle fill a variety of occupations, though very few work in DeLisle. Two-thirds of the residents travel more than 20 minutes to their place of employment. Survey results indicate that many residents work in Gulfport and Biloxi, which are approximately 15 and 30 miles from DeLisle, respectively. Residents enjoy good highway access and a rural environment. The tradeoff is a longer commute time. Table 21 summarizes the commuting times of employed residents.

Of those employed, 74.2 percent worked in Harrison County, with the remainder reporting that they work outside of the county, or outside the state (see Table 22).

**Summary**

The DeLisle planning area is at a crossroads. The aftermath from Hurricane Katrina presents both challenges and opportunities for the community. Residents prefer the rural character and large lot home sites. However, the community also enjoys easy access to the freeway, available land for development, and a desire to see some commercial and retail growth. Its workforce is distributed across several industries, but a large segment of the population is employed in manufacturing—an industry that is in decline both locally and nationally. The hurricane affected the economy of the area.

**Table 22.** Place of employment.

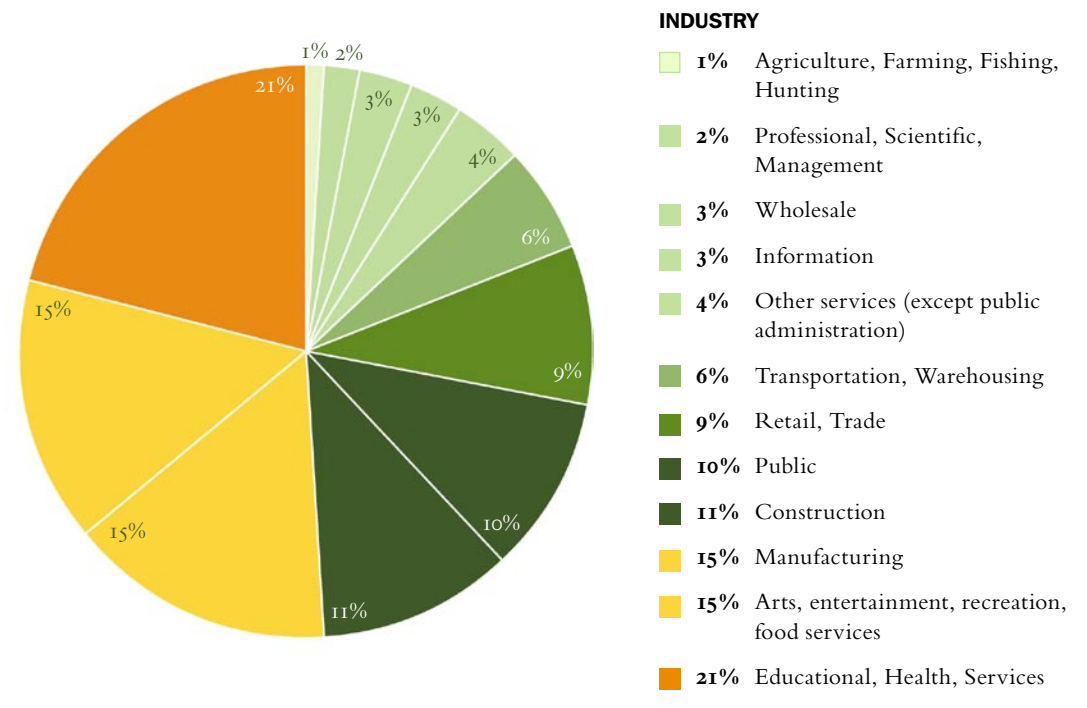
TOTAL EMPLOYED RESIDENTS	640	
<b>Worked in state of residence:</b>	594	92.8%
<b>Worked in county of residence</b>	475	74.2%
<b>Worked outside county of residence</b>	119	18.6%
<b>Worked outside state of residence</b>	46	7.2%

Source: Census of Population & Housing, US Census Bureau, 2000.

**Table 21.** Commuting times of employed residents, DeLisle, 2000.

TOTAL EMPLOYED RESIDENTS	640	
<b>Did not work at home:</b>	631	PERCENT OF RESIDENTS NOT WORKING AT HOME
<b>Less than 5 minutes</b>	0	0.0
<b>5 to 9 minutes</b>	24	3.8
<b>10 to 19 minutes</b>	167	26.5
<b>20 to 29 minutes</b>	252	39.9
<b>30 to 39 minutes</b>	83	13.2
<b>40 to 59 minutes</b>	71	11.3
<b>60 to 89 minutes</b>	28	4.4
<b>90 or more minutes</b>	6	1.0
<b>Worked at home</b>	9	

Source: Census of Population & Housing, US Census Bureau, 2000.



**Figure 43.** Employment by industry, DeLisle, 2000.

Source: Census of Population & Housing, US Census Bureau, 2000.



## Natural Resources

### Geography

DeLisle is located approximately four miles inland from the Gulf of Mexico. While not located directly on the coast, it is located in a coastal zone and has a sizable land area considered as “waterfront property.” Much of the natural environment is characteristic of coastal land. Coastal land can be described as any area of seawater including “any low-tide elevation, land, beach, islet, reefs, and/or rocks lying between the baseline and the high-water mark.”<sup>8</sup>

The topography of the area is described as gently rolling terrain along the Kiln-DeLisle Road, sloping to generally flat upland areas near the Bay of Saint Louis with both depressional and coastal marsh wetlands near the shoreline of the bay.

Along Bayou DeLisle, the elevation of the land is approximately five feet above sea level. The elevation rises slightly to 10 feet above sea level generally 250 feet north of the bayou. Kiln-DeLisle Road generally parallels the 20-foot elevation. Elevations rise heading northward, with the highest elevations of 80 to 90 feet being found along Vidalia Road, just south of the DuPont railroad tracks.

### Hydrology

There are two primary bodies of water in DeLisle. The Wolf River is south of the DeLisle planning area and flows generally east to west into Bay Saint Louis. Bayou DeLisle (see Figure 44), a minor tributary, located just to the north of the Wolf River, flows through the eastern portion of DeLisle toward the Wolf River, then generally parallel to the river into Bay Saint Louis, as seen in Map 8. There are also a number of small ponds, perennial and intermittent streams.

The Wolf River originates in Pearl River County, Mississippi, located northeast of Harrison County, and meanders through western Harrison County and then down into the DeLisle area. The river provides feeding, nesting, and wintering habitat for different types of migratory bird



**Figure 44.** Bayou DeLisle and its natural surroundings.

*Source: Michael Curtis.*

species, such as the Brown Pelican, White Pelican, Osprey, and Cormorants. The river is primarily used by private landowners, boaters, and anglers that visit the area occasionally and seasonally for fishing and waterfowl hunting. The Bay and adjoining water bodies are known for the plentiful supply of bass, striped bass, barfish, crappie, perch, catfish, redfish, speckled trout, flounder, croaker, sheepshead, black drum, among others.

The Wolf River and the forested areas that align its banks are recognized by many as a regional resource. In 1999, Mississippi passed the First Scenic Streams Stewardship Act and the Wolf River became the first river in Mississippi to receive the Scenic Stream designation.

### Wetlands

Wetlands serve an important function in environmental management. They help to prevent flooding by hold-





ing water like a sponge. Acting as a sponge helps to keep river levels normal and filter and purify the surface water. Wetlands retain water during a storm and when water levels are high. As water levels decrease, wetlands slowly release water. Lastly, many animals use wetlands for migration or reproduction processes.<sup>9</sup>

The land area surrounding the Wolf River and the Bayou DeLisle is primarily swampy and is classified as tidal wetlands (see Map 9). According to the State of Mississippi, tidal wetlands are publicly owned as part of the Public Trust Tidelands. The public trust tidelands include “all lands naturally subject to tidal influence, up to the line of mean high tide, regardless of the navigability of the waters over them.”<sup>10</sup>

According to a study conducted by DuPont, “The coastal wetland habitats of Mississippi are among the most ecologically diverse systems in the country. These systems provide for ecological functions including pollution filtering, sediment trapping, flood control as well as serving as important nursery areas which increase the productivity of an abundant fishery resource. These ecological functions also provide economic benefits in the form of commercial and recreational fisheries, hunting, trapping, and many other forms of recreation and commerce.”<sup>11</sup>

In recent years, wetlands have become highly regulated environmental areas. Due to the significant community benefits of protecting wetlands, the Mississippi Department of Environmental Quality has put in place regulatory and incentive programs to help protect remaining wetlands.<sup>12</sup>

There are over 2,800 acres of wetlands found in the planning area. Approximately 957 acres are protected by purchase by a public agency dedicated to preservation of the wetlands or other mechanism that prohibits destruction of the wetland. Another 450 acres are located on developed sites, for example in the backyards of large residential lots or on the DuPont site. The remaining 1,424 acres are located on vacant land. It is important to note that classified wetlands are not of equal quality. The National Wetlands Inventory data includes 44 categories of the various types of



**Figure 45.** The Wolf River and surrounding wetlands.

Source: Michael Curtis.

**Table 23.** Acres of Wetlands In DeLisle Planning Area.

	ZONED AGRICULTURE/ RESIDENTIAL	ZONED COMMERCIAL/ INDUSTRIAL	TOTAL
<b>Wetlands located on Developed Parcels</b>	127.3	322.5	449.7
<b>Wetlands located on Committed Open Space</b>	957.3	0.0	957.8
<b>Wetlands located on Vacant / Open Land</b>	994.1	430.6	1,424.7
<b>Total</b>	2,078.6	753.1	2,831.7

Source: Location of Wetlands from National Wetlands Inventory (NWI) data, compared to the Land Use Inventory prepared by the Planning Team.

wetlands that exist, generally classified as either Palustrine wetlands (typically inland, forested wetlands) or estuarine (coastal) wetlands. In Mississippi, the state has focussed its regulations primarily on estuarine (coastal) wetlands. The existence of wetlands must be field verified on proposed development sites to accurately delineate the presence of regulated wetlands.<sup>13</sup>

In Mississippi, the goal of the state’s regulations on coastal wetlands is to ensure that there is “No Net Loss.”<sup>14</sup>



A property owner may be permitted to construct on wetlands only with a mitigation plan to enhance wetlands in another location. For example, DuPont constructed a 32 acre Waste Disposal Unit within their existing Solid Waste Management Unit (SWMU) located on the west side of DuPont.

The project impacted approximately 24 acres of wetlands. DuPont's mitigation plan provided specific procedures and actions proposed by DuPont to restore, enhance, and manage 85.8 acres of pine flatwoods and forested bayheads at the eastern portion of DuPont's property, adjacent to a 400 acre Coastal Preserves site. The mitigation plan sought to enhance the ecological value of the mitigation tract thereby providing "mitigation credits" to be used to replace the lost functions and values associated with the unavoidable impacts to wetlands located within the limits of Waste Disposal Unit. As part of the mitigation plan, DuPont established a restrictive covenant on this land and made assurances to manage the mitigation tract as needed to enhance and restore the ecological value of this area.<sup>15</sup>

### Soils

There are two main soils that can be found in DeLisle. Handsboro-bohicket soils are located in areas nearest to the Wolf River and Atmore Harlestib-Plummer soils are situated further north towards Interstate Highway 10. The most environmentally sensitive areas are closer to the coast. Table 23 lists the definition of the soils given by the United States Soil Conservation service.

### Groundwater

Freshwater aquifers along the Harrison County coast can occur as deep as 2,500 feet, however, residential wells are typically 250 to 600 feet deep. These aquifers are the source of water for the residents of DeLisle.

The citizens of DeLisle are very concerned about their well water. A lot of the families have stopped using their well water due to perceived contamination by the DuPont Plant. Instead, they have opted to order bottles of water

**Table 23.** Soils found in DeLisle.

SOIL TYPES	DEFINITIONS
<b>Handsboro-bohicket</b>	<ul style="list-style-type: none"> <li>• Very poorly drained organic soils</li> <li>• Located on broad, low, wet grassy flats near bodies of salt or brackish water</li> <li>• Each year the acreage used for grazing shrinks in size as a result of industrial development</li> <li>• Not suited for septic tanks</li> <li>• Suitable habitat for waterfowl, fish and marsh animals</li> </ul>
<b>Atmore Harlestib-Plummer</b>	<ul style="list-style-type: none"> <li>• Poorly drained loamy sediments</li> <li>• Moderately slow permeability</li> <li>• Located on coastal plains, slight depressions and gently sloping interstream divides</li> <li>• Suitable for wetland wildlife</li> </ul>

*Source: United States Soil Conservation Service.*

from various companies. DuPont attests that they have not contaminated the water and the residents of DeLisle should not have any concerns about the water. Based on DuPont's documentation, "the aquifers are confined and protected from contaminants by confining clays."<sup>16</sup> Additionally, the Agency for Toxic Substances and Disease Registry has categorized the site as having no public health hazard to underground drinking water.<sup>17</sup>

### Soil contamination

In December 2005, the Sierra Club detected soil contamination in DeLisle. They identified three prime contaminated areas; soils near DeLisle Elementary School, Winding Way Drive, and Pine Hills Drive. The soils from the school tested to contain dioxin and unhealthy microorganisms along with high arsenic levels two times the federal limit. Winding Way Drive is part of a residential



*Post-Katrina, Federal Emergency Management Agency (FEMA) redefined the flood zone for DeLisle and is working to establish revised flood elevation maps for consideration by the local communities.*

community and tested to have chromium levels 1.7 times higher than EPA standards.<sup>18</sup> Pine Hills Drive is north of the DuPont Plant and tested to have dioxin levels 1.4 times higher than EPA and Mississippi environmental standards. It has yet to be determined if these soils were contaminated by Hurricane Katrina debris or the DuPont Plant. ChemRisk independently analyzed the data from the Sierra Club study and determined that the levels of toxins found in the soil are below what is typically found in Mississippi and nationally.<sup>19</sup> Oystering in St. Louis Bay has been closed due to bacterial contamination from sources of untreated fecal material. The Mississippi Department of Environmental Quality and Mississippi Department of Marine Resources regularly sample oysters for metal contamination. In addition, local and federal governmental agencies have tested the water and found no contamination.

The concerns of community residents regarding actual and perceived contamination of water and land have led to some DeLisle residents requesting the creation of a water service area.

#### **Forests, Agricultural Lands, and Wildlife**

DeLisle is located in a coastal zone surrounded by two main tree types; Slash Pine and Longleaf Pine-Bay. One of the forested areas can be found along the borders of the DuPont Plant located on Kiln-DeLisle Road. DeLisle also lies within the longleaf-slash pine belt of the southern mixed forests. The dominant tree species that provide much of the marketable timber for this region include: slash pine, live oak, water oak, southern magnolia, swamp tupelo, red maple, and sweetbay magnolia.

Since much of DeLisle is still undeveloped and in its natural state, there is an abundance of wildlife and birds that make their home in DeLisle. Common small mammals known to inhabit the area include the opossum, armadillo, muskrat, gray squirrel, eastern cottontail, and raccoon. Medium to large mammals include the gray fox and the white-tailed deer. The wetlands and wooded areas in DeLisle provide habitat for many avian species, rang-

ing from ground-dwelling game birds to raptors, song birds, and migratory waterfowl. Game birds are represented by the northern bobwhite quail and the mourning dove. Common raptors include the red-tailed hawk and red-shouldered hawk. Migratory waterfowl include the mallard, green-winged teal, and wood duck. Numerous reptiles and amphibians can be found in the Bay, the Bayou and the Wolf River. Common reptiles include the eastern mud turtle, eastern box turtle, and the green anole. Snakes are represented by the southern black racer, rat snake, milk snake, and various species of water snakes. Poisonous snakes throughout the DeLisle area include the cottonmouth, copperhead, eastern coral, and eastern diamondback rattlesnake. Amphibians include the lesser siren, green treefrog, southern toad, and bullfrog.

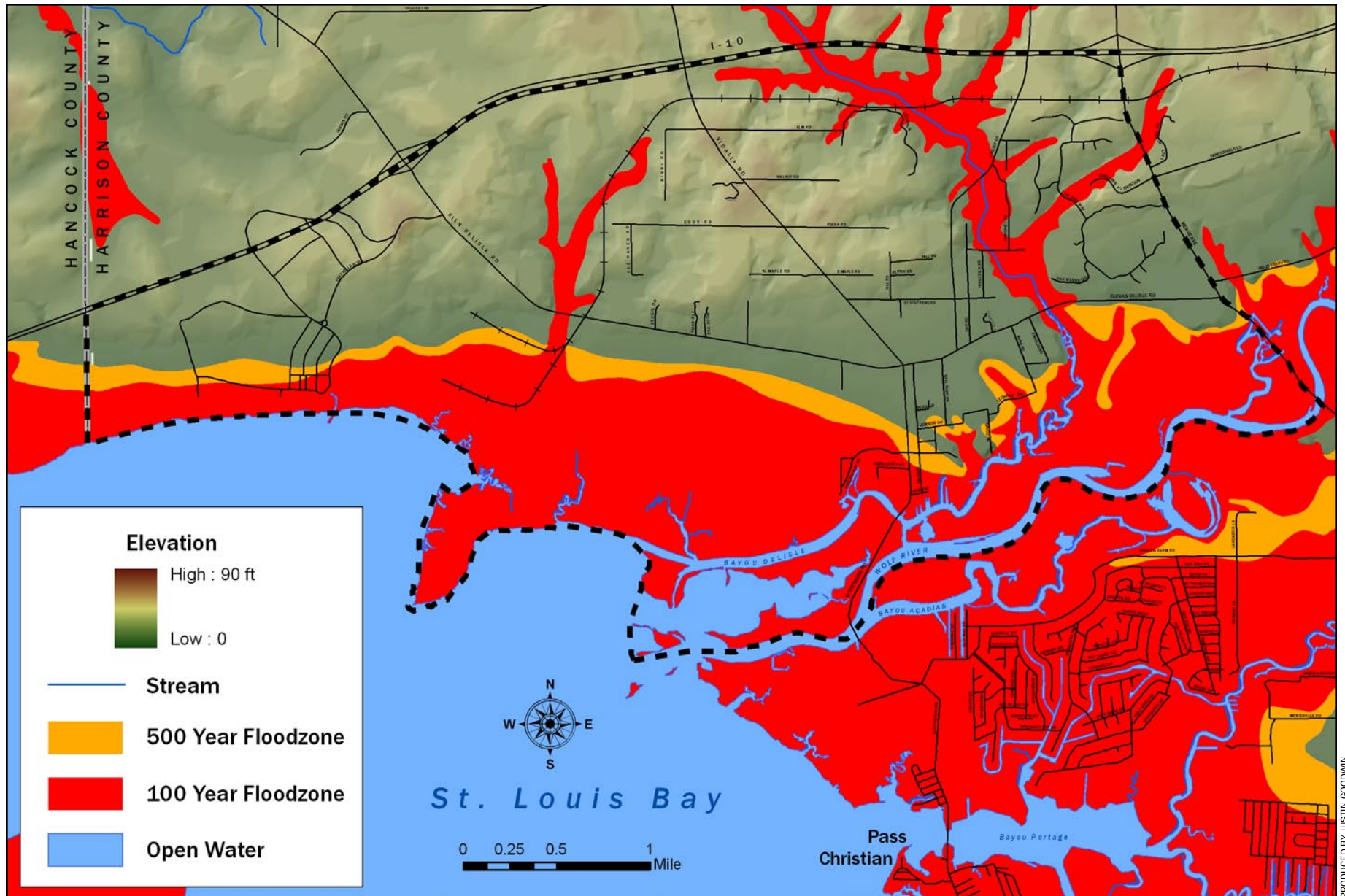
#### **Floodplain**

Pre-Katrina, the flood zone for DeLisle stopped at Kiln-DeLisle Road and Cuevas-DeLisle Road. These flood zones were defined after Hurricane Camille (1969) and Hurricane Betsy (1965). The Flood Hazard Map refers to the 100 year and slightly broader 500 year flood risk on coast areas up to those two roads.

Katrina caused serious flooding in the 100 year and 500 year flood risk zones (see Map 10). Post-Katrina, Federal Emergency Management Agency (FEMA) redefined the flood zone for DeLisle and is working to establish revised flood elevation maps for consideration by the local communities. The final regulated height dimensions for rebuilding in the floodplain will soon be available by FEMA.<sup>20</sup> As of March 2006, the Harrison County Building Official is issuing building permits when the applicant agrees to build four feet above the existing FIRM base elevation.

#### **Effects of Hurricane Katrina and the Storm Surge**

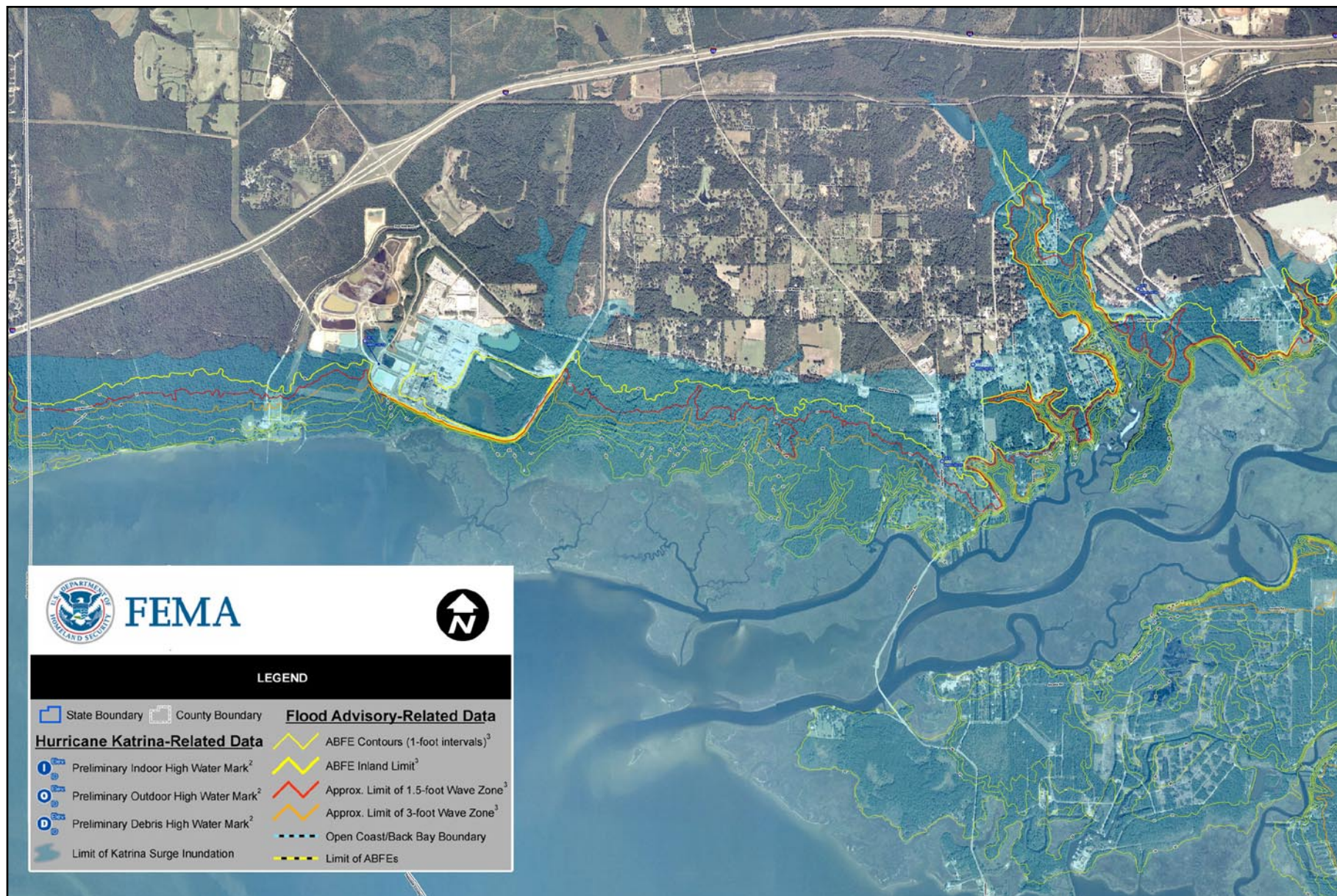
About 90 percent of the homes in DeLisle were damaged by Hurricane Katrina. Most of the damage was due to flooding from the storm surge (see Map 11). Storm surge is water that is pushed toward the shore by the force of the winds swirl-



**Map 10.** 1988 Floodplain.

Data Source: SMPDD. Floodzones designated by Federal Emergency Management Agency (FEMA) in 1988. This data does not reflect post-Katrina advisory elevations.





**Map 11.** Hurricane Katrina storm surge inundation.

Source: FEMA.

ing around the storm. This advancing surge combines with the normal tides to create the hurricane storm tide, which can increase the mean water level 15 feet or more. In addition, wind driven waves are superimposed on the storm tide. This rise in water level can cause severe flooding in coastal areas, particularly when the storm tide coincides with the normal high tides. Because much of Mississippi's Gulf coastline lies less than 10 feet above mean sea level, the danger from storm tides is tremendous. Many of the citizens of DeLisle have been displaced from their homes and are living in FEMA trailers. The FEMA trailers have been leased for 18 months and due to building permits not being released expeditiously, many will still live in the trailers after the expiration date.

Hurricane Katrina completely destroyed some areas of DeLisle. During the hurricane, many tide gauges failed or malfunctioned, limiting the number of locations where stillwater elevations (SWELs) could be calculated. Harrison County's SWELs on the open coast were 18 feet and in the back bay 16 feet. FEMA will use these numbers to recalculate new flood elevation building standards. FEMA is presently establishing Advisory Base Flood Elevations (ABFEs) until more detailed coastal flood risk data are developed to provide communities with advised building elevations for use in the reconstruction process. ABFEs are based on a new flood frequency analysis that takes into account Hurricane Katrina as well as additional tide and storm data from other events that have occurred during the 25 years since the existing FIRMs were developed.<sup>21</sup>

### **Current Programs to Preserve the Natural Environment**

In 1989, the State of Mississippi adopted regulations creating the Mississippi Public Trust Tidelands. The law was passed in order to protect the coastal wetlands. It created two things: it established public ownership of all lands lying under water or naturally subjected to tidal influence, making the Secretary of State the trustee of the Public Trust Tidelands, and created a trust fund from money collected from the leasing of state-owned tideland areas.

An owner of property adjacent to the public trust tidelands can purchase a lease from the Mississippi Department of Marine Resources for purposes such as commerce; industry; fishing; bathing, swimming and other recreational activities; development of mineral resources; environmental protection and preservation; and the enhancement of aquatic and marine life. Exempted uses such as public entities that promote the conservation, reclamation, preservation of the lands or provide public facilities for fishing, recreation or navigation can obtain a lease without being charged use or rental fees.<sup>22</sup>

The Wolf River Conservation Society was established in 1998 and its mission is to protect the environmental integrity of the Wolf River watershed. Over the years it has worked with property owners to establish conservation easements. According to Bob Fairbanks, president of the Wolf River Conservation Society, the society has acquired easements on 2,300 acres. One of the largest established was in March 1999, when the International Paper Company donated a 950-acre perpetual conservation easement to the Wolf River Conservation Society and The Conservation Fund. The easement established a 15-mile long, 300 foot wide protected buffer area on each side of the Wolf River on the company's privately owned land.

In 1992, the State of Mississippi established the Coastal Preserves Program, a program administered jointly by the Department of Marine Resources and the Secretary of State's Office. Its purpose was to provide for the acquisition, protection, and management of coastal wetland habitats.<sup>23</sup> Three of the programs goals are of interest to DeLisle:

1. To acquire, restore and protect unique habitats and associated plant and animal communities.
2. To promote increased opportunities for public appreciation and enjoyment of Mississippi's coastal estuarine wetlands, and
3. To increase public awareness and interest in the values and functions of coastal wetlands, their habitats,



and the ecosystems they are dependent upon.

Since 1996, the Department of Marine Resources in partnership with The Nature Conservancy of Mississippi has acquired more than 14,000 acres of natural coastal habitats for the Coastal Preserves Program.

In 2003, DuPont DeLisle sold approximately 460 acres to The Nature Conservancy at a discounted price. The land, located on the Bay of Saint Louis adjacent to the Wolf River Marshes Coastal Reserve, will be permanently preserved. The Nature Conservancy then transferred ownership of the land to the State. The purchase was funded by boundary settlement agreements negotiated by the Secretary of State's Office and a \$500,000 grant from United States Fish and Wildlife Service, held by the Department of Marine Resources. The property will be managed by the Department of Marine Resources, which already has day-to-day responsibility for the Coastal Preserves. The Nature Conservancy has acquired other property on the lower portion of the Wolf River in recent years. These actions and the efforts of the Wolf River Conservation Society have resulted in the Wolf River being one of the most protected in the state and the region.<sup>24</sup>

## Community Facilities

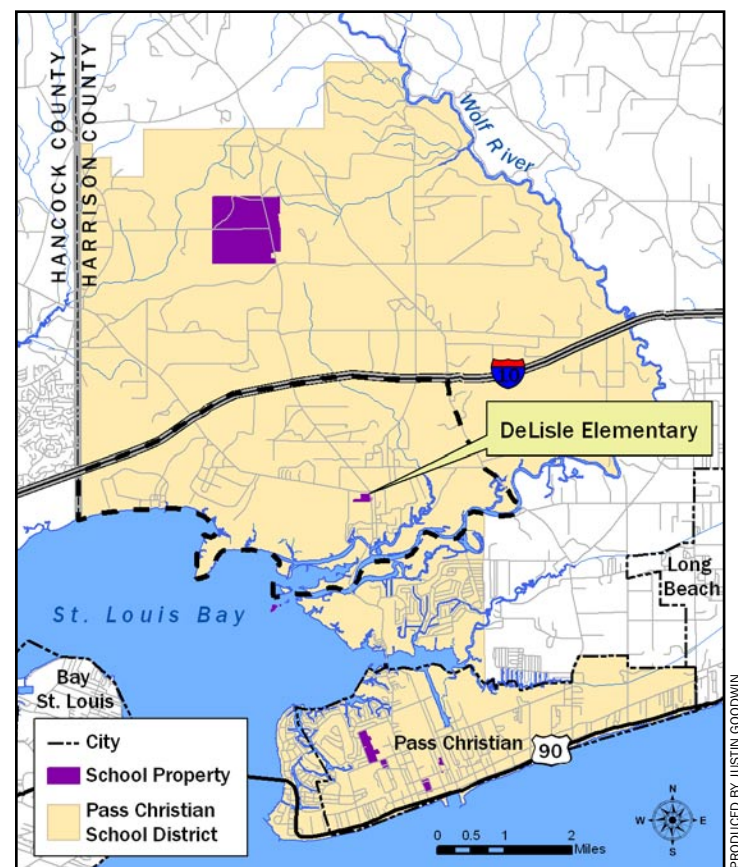
DeLisle offers community facilities and services to meet basic citizen needs. Currently, there are three churches, one public school, two parks, and three cemeteries. With any community, the provision of local opportunities for community gatherings, recreation, and entertainment is important. Citizens of DeLisle would like to see more community-oriented facilities. They also express interest in creating an area at the center of DeLisle with retail and public services.<sup>25</sup>

Churches, schools, parks, and other such facilities are vital to a community because they help sustain neighborhoods and provide opportunities for citizens to gather and interact. Community facilities serve as landmarks that residents use to direct newcomers. In this way, public amenities

play a critical role in establishing community identity.

## Schools

DeLisle is part of the Pass Christian Public School District. The school district, shown on Map 12, encompasses 70.4 square miles stretching from the Gulf Coast northward approximately 30 miles. The establishment of the Pass Christian Public School District dates back to 1887. In 1933,



**Map 12.** Pass Christian School District.

*Data Sources: Roads, Water Features, School District, Political Boundaries: SMPDD; School Property: Harrison County Land Roll.*

students from DeLisle and Pineville entered the school district. Prior to Hurricane Katrina, DeLisle Elementary was the only one of the four district schools located in DeLisle (see Map 11). The other three schools (Pass Christian Elementary, Pass Christian Middle, and Pass Christian High) were all within the corporate limits of Pass Christian.

The DeLisle Elementary School is located in what residents consider the center of DeLisle—the southwest corner of the intersection of Wittmann Road and Kiln-DeLisle Road. The school was most recently renovated in 1961. In 1999, a large gymnasium and four classrooms were added. The DeLisle Elementary School functions as a community building including election voting.

Hurricane Katrina completely destroyed the Pass Christian Elementary and Pass Christian Middle Schools, and washed out the first floor of the Pass Christian High School. Presently, DeLisle Elementary School acts as the site for all the students in the district. Trailers temporarily function as classrooms on the land located immediately west of DeLisle Elementary. The Superintendent's Office and the District Board of Education are also operating out of trailers. With so many children relocated to this area of DeLisle, the lack of sidewalks and the safety of the students has become a concern.

The high school, constructed in 1998, was an 82,000-square foot, multi-story building with a capacity to accommodate 750 students. At this time, the School District intends to repair the high school. However, no decisions have been made on rebuilding the elementary and middle school buildings that were destroyed. The School District owns approximately 70.4 acres on Vidalia Road, situated 29 miles north of DeLisle Elementary School.

Prior to Hurricane Katrina, the district had an enrollment of 1,965 students.<sup>26</sup> The school district is one of the top school districts in Mississippi, ranking a 5 on a scale of 1 to 5 for two years in a row.<sup>27</sup> Table 24 illustrates the demographic makeup of the students in the district for the school year 2004 to 2005. Most of the students are black or white, but there are growing Hispanic and Asian popula-

tions. As of January 2006, according to the administrative assistant of the District Superintendent, 70 percent of the students have returned.

According to the 2000 Census, there were 226 elementary, middle, and high school age children enrolled in school and living in DeLisle: 179 in the Pass Christian Public Schools. Note that all kindergarten to fourth grade children from DeLisle attend the public school, yet by high school more than half of the students transfer to a private high school. Table 25 illustrates the public and private school enrollment for various grades.



**Figure 46.** DeLisle Elementary School post-Katrina. The trailers on the property function as classrooms and school district administrative offices.

*Source: Michael Curtis.*

### Educational Achievement

Several standardized tests measure educational achievement in the state of Mississippi. The tests relevant to Harrison County School District are the Mississippi Curriculum Test (MCT), Writing Assessment (WRIT), and Norm-Referenced Assessment TerraNova Survey (NRT). Students take the MCT test every year in grades two through eight. Schools administer the WRIT and NRT less frequently.<sup>28</sup>

For simplicity, results from sixth graders on the MCT will serve as an indicator of school quality. The MCT breaks students into four achievement groups: minimal, basic, proficient, and advanced. Score reporting lists the percentage of students who perform at basic level or better.

In 2003-2004 DeLisle Elementary sixth graders scoring basic or better were: 99 percent in reading, 97 percent in language, and 97 percent in math. Statewide, scores were: 93 percent in reading, 94 percent in language, and 89 percent in math.

In 2004-2005 DeLisle Elementary fifth graders scoring basic or better were: 99 percent in reading, 100 percent in language, and 94 percent in math. Statewide, scores were: 93 percent in reading, 93 percent in language, and 89 percent in math.

Comparing the data from the two different school years, the schools scored around the same for both academic years. The reading score was 99 percent for both years while language and math scores varied slightly. Statewide, again schools scored around the same for both years. However, in both school years, DeLisle Elementary achieved notably higher scores than the statewide average.

### Churches

Three churches serve DeLisle: Mt. Zion United Methodist, First Baptist of DeLisle, and St. Stephen's Catholic Church. Four families founded Mt. Zion in 1892 as a Methodist Episcopal church (see Figure 47). The church was remodeled in 1960. Mt. Zion plans to open a new facility on Kiln-DeLisle Road in Spring 2006. The pastor of the

**Table 24.** Demographics of the Pass Christian Public School District.

SCHOOL	PASS CHRISTIAN ELEMENTARY SCHOOL	DELISLE ELEMENTARY SCHOOL	PASS CHRISTIAN MIDDLE SCHOOL	PASS CHRISTIAN HIGH SCHOOL
<b>Number of Students in the 2004-05 school year</b>	453	413	520	579
<b>Teacher Student Ratio</b>	1:16	1:14	1:15	1:16
<b>Male</b>	48%	51%	55%	47%
<b>Female</b>	52%	49%	45%	53%
<b>Ethnicity:</b>				
<b>Asian</b>	5%	0	3%	3%
<b>Hispanic</b>	1%	1%	2%	1%
<b>Black</b>	58%	21%	32%	33%
<b>White</b>	36%	78%	63%	63%

Source: Pass Christian Public Schools.

**Table 25.** DeLisle residents' school age children enrolled in school in 2000.

	TOTAL	PUBLIC	PRIVATE	PERCENT IN PRIVATE SCHOOL
<b>Enrolled in kindergarten:</b>	26	26	0	0
<b>Enrolled in grade 1 to grade 4:</b>	61	61	0	0
<b>Enrolled in grade 5 to grade 8:</b>	112	80	32	28.6
<b>Enrolled in grade 9 to grade 12:</b>	27	12	15	55.6
<b>TOTAL K THROUGH 12 GRADE</b>	226	179	47	26.3
<b>Enrolled in college, undergraduate years:</b>	21	21	0	0
<b>Enrolled in graduate or professional school:</b>	9	9	0	0

Source: Census of Population & Housing, US Census Bureau, 2000.



church, Reverend RoseMary Williams, is preparing a plan to construct housing units on the parcel behind the new church. With the technical assistance of Forest City Enterprises, a firm headquartered in Cleveland, Ohio, she plans to build 40 homes and a community center on 20 acres.

Reverend Bebe Bass is the pastor of First Baptist of DeLisle (see Figure 48). The church is located three miles south of Interstate Highway 10 on Cuevas-DeLisle Road. The church first opened its doors in the 1960s. First Baptist is a part of the Southern Baptist Church. It began as a mission church of the First Baptist of Long Beach.

Father Stephen Sweeney built St. Stephen's Catholic Church in 1922 as a mission for Black Catholic parishioners (see Figure 49). Sweeney remained the pastor of St. Philomena's Black Catholic Church in Pass Christian during this time.

The main Catholic Church in DeLisle, Our Lady of Good Hope was founded in 1872 and was located near the Wolf River. Hurricane Camille destroyed Our Lady of Good Hope in 1969. With the loss of their church building, the parishioners of Our Lady of Good Hope began worshipping at St. Stephen's. In 1973, the Diocese of Biloxi decided not to rebuild a new Catholic church and instead upgraded St. Stephen's from a mission church to a primary church. Post-Katrina, the church still stands, but with some cosmetic damage.<sup>29</sup>

### Recreational Facilities

A 9.5-acre privately-owned baseball park and concession stand sits on Cuevas-DeLisle Road. The park and club house host athletic tournaments primarily for adult baseball teams. Easter weekend is a big event for the park and it is not unusual for the park to be very noisy and filled with people into late evening.

St. Stephen's Park, a 2.8-acre park, is located on Lobouy Avenue just south of St. Stephen's Catholic Church (see Figure 50). This park is used for baseball leagues connected with the school district. The church also uses it for Easter



**Figure 47.** Mt. Zion United Methodist Church located on Lobouy Road was last updated in the 1960s. A new church is being built on Kiln-DeLisle Road and will accompany housing units and a community center.  
*Source: Michael Curtis.*



**Figure 48.** First Baptist Church of DeLisle, built in the 1960s.  
*Source: Michael Curtis.*



**Figure 49.** St. Stephen's Catholic Church received some cosmetic damage from Hurricane Katrina.  
*Source: Michael Curtis.*





**Figure 50.** St. Stephen's Ballpark is located on Lobouy Avenue south of St. Stephen's Church.

*Source: Andrew Taylor.*



**Figure 51:** Many of the early inhabitants of DeLisle rest at the Old Cemetery located near Bayou DeLisle. The cemetery was heavily damaged in Hurricane Katrina.

*Source: Michael Curtis.*



**Figure 52:** One of the oldest houses in the DeLisle is still standing after Hurricane Katrina.

*Source: Michael Curtis.*

egg hunts, reunions, and other recreational events.

### **Cemeteries**

There are three cemeteries located in DeLisle. The oldest is the Old Cemetery located at the end of Notre Dame Avenue and overlooks Bayou DeLisle. The oldest graves date back to the 1700's. St. Stephen's Catholic Church also has a cemetery located on Lobouy Avenue. The newest cemetery, DeLisle Cemetery, is located at the corner of Ball Park Road and Lechene Drive. The land on which DeLisle Cemetery and the Old Cemetery are located is owned by the Concerned Citizens of DeLisle.

### **Historical Structures**

According to the National Register of Historic Places and the Pass Christian Historical Society, DeLisle does not have any buildings listed on the National Register. The Mississippi Department of Archives and History reports a historical marker located on the west side of Wittmann Road just north of Bayou DeLisle. The marker reads, "DeLisle—Settled in 1712 by the French. Formerly known as 'Wolf Town,' the community was renamed in 1884 in honor of Comte De L'Isle, a lieutenant of Bienville. John B. Saucier was the first European to settle here."

There is also one residential structure that serves as a landmark (see Figure 52). The house is 113 years old and was first owned by Julius Sellier. It was later sold to Toxie Ferguson and now it is owned by Derek and Debbie Robinson. Ancestors of Julius Sellier still reside in DeLisle. A few of the families live in the area behind the First Baptist of DeLisle. This house was one of the first homes built in the area and is still standing after Hurricane Katrina.

### **Fire Station**

The Harrison County Fire Department had a satellite fire station located in DeLisle on Cuevas-DeLisle Road. Hurricane Katrina demolished the building. A portion of the site is also currently used for an open air distribution center and includes some storage in tents. Efforts to rebuild

the fire station are underway (see Figure 53).

### Conclusions

DeLisle residents are served by basic community facilities, such as parks, churches, and cemeteries. Many of these facilities have been in the community for over two centuries. Survey responses indicated that residents would like to have more recreation facilities in their area. They also would like some neighborhood scale businesses in the center of DeLisle that will provide opportunities to shop, post mail, and grab a bite to eat.

## Infrastructure

### ROADS

The DeLisle Planning Area contains four general types of roadways. The Mississippi Department of Transportation (MDOT) defines the two primary types: interstate highways and rural, major collectors.<sup>30</sup> The planning team defines two other types as local streets—paved and unpaved. There are also a number of dedicated rights of way where no road has yet been constructed. Maintenance of public roads in the planning area is the responsibility of Harrison County, since none of the routes through the DeLisle planning area are designated state routes (see Map 13).

### Highways

Interstate Highway 10 is a four-lane divided limited access highway that runs east and west along the northern edge of the DeLisle planning area. There are two access points to Interstate Highway 10 within this area: at Kiln-DeLisle Road near the western edge of the planning area and Menge Avenue at the easternmost edge. Interstate Highway 10 covers roughly 5.9 miles between Menge Avenue and the Hancock County line.

Traffic volume information for Interstate Highway 10 shows average daily traffic of 37,000 vehicles west of Kiln-DeLisle Road.<sup>31</sup> East of Menge Avenue, average daily traf-



**Figure 53:** Hurricane Katrina destroyed the DeLisle fire station, which is currently operating from a manufactured home on the same site. Efforts to rebuild the fire station are underway.

Source: Michael Curtis.

fic is 48,000 vehicles. Between Menge and Kiln-DeLisle, the stretch of Interstate Highway 10 that skirts the planning area, average volume is lower, at 34,000 vehicles. These patterns indicate that more traffic exits Interstate Highway 10 westbound at Menge Avenue than enters Interstate Highway 10 westbound at that interchange. Citizens from DeLisle, Pass Christian, and Long Beach who enter Interstate Highway 10 at Menge are more likely to head eastbound to reach shopping, entertainment, or employment in Gulfport and Biloxi. Also, proportionally more traffic exits Interstate Highway 10 eastbound at Kiln-DeLisle Road than that which enters Interstate Highway 10 eastbound at that interchange. The Mississippi Department of Transportation has no short-term plans for improvement at either of these interchanges.

### Rural Major Collectors

Rural, Major Collectors are the functional classification for the main roads that run through DeLisle and connect





**Map 13.** DeLisle functional road classifications with estimated traffic counts.

Sources: Political Boundaries, Roadways: SMPDD; 2004 AADT Estimates: Mississippi Department of Transportation Planning Division

to nearby communities. They are two lane non-divided roadways, designed to carry between 2,000 and 10,000 vehicles daily. Five roads of this class serve DeLisle: Kiln-DeLisle Road, Cuevas-DeLisle Road, Vidalia Road, Menge Avenue, and Wittmann Avenue. These rural collectors comprise roughly 10.7 miles of roadway within the DeLisle planning area. All rural major collectors have a right-of-way ranging between 50 and 80 feet and have two-lanes of pavement with asphalt surfacing. There are no curbs or sidewalks.

**Kiln-DeLisle Road** runs east and west through the center of DeLisle and connects with Interstate Highway 10. It is the

primary surface road linking DeLisle with Hancock County and one of three roads connecting Pass Christian to Interstate Highway 10. The three entrances to DuPont's facility also front this road. The right-of-way width for Kiln-DeLisle is 60 feet and the estimated 2004 average daily traffic is 3,400 vehicles.<sup>32</sup> Kiln-DeLisle becomes Cuevas-DeLisle Road at the Vidalia Road/Wittmann Road intersection in the center of DeLisle.

**Cuevas-DeLisle Road** continues east and west from Kiln-DeLisle Road ending at the intersection with Menge Avenue. Cuevas-DeLisle Road contains mostly residential frontage. It has a smaller right-of-way width than the other collectors, at 50 feet, and an estimated 2004 traffic count of 2,800 vehicles daily.

**Menge Avenue** runs north and south, forming the eastern edge of the planning area. It is a primary artery connecting the cities of Long Beach and Pass Christian with Interstate Highway 10. Menge Avenue provides the only access to The Oaks golf community, which is in the planning area to the west of Menge Avenue. Menge Avenue has a right-of-way width of 80 feet—larger than the other planning area collectors. The 2004 traffic count for Menge Avenue between Interstate Highway 10 and Cuevas-DeLisle Road is 5,500 vehicles. The estimated daily traffic on Menge Avenue north of Interstate Highway 10 is 3,400 vehicles.

**Vidalia Road** runs north and south through the center of DeLisle, and intersects Kiln-DeLisle/Cuevas-DeLisle Road at DeLisle Elementary School. It has a right-of-way width of 70 feet; however, it receives much less traffic than the other rural collectors in the DeLisle Planning area. The 2004 estimated daily traffic volume is 700 vehicles. Vidalia Road provides access to rural Harrison County and the northern portion of Pass Christian's School District. South of the intersection with Kiln-DeLisle Road/Cuevas-DeLisle Road, Vidalia becomes Wittmann Road.

**Wittmann Road** runs north and south between the intersection of Kiln-DeLisle Road/Cuevas-DeLisle Road and Vidalia Road, across the Wolf River to Pass Christian. South of the intersection of Kiln-DeLisle road, Wittmann contains residential frontage until it reaches the wetlands at Bayou DeLisle. South of the DeLisle planning area, Wittmann Road provides access points to Bayou DeLisle. Continuing south, Wittmann Road becomes a two-lane elevated bridge that includes a shoulder as it crosses the Wolf River and connects with Pass Christian. Wittmann Road is the primary link between Pass Christian and DeLisle. The estimated 2004 daily traffic on Wittmann within the DeLisle Planning Area is 4,500 vehicles.

### Local Streets

All other roads within the DeLisle Planning Area are considered local streets. They mainly connect residential areas, and are designed to carry fewer than 500 vehicles per day. They are two lane streets with right-of-way widths between 40 and 50 feet.

The local street network consists of an asymmetrical grid pattern. Most of the streets connect at right angles. Geographical features, such as the floodplain generally determine the paths of the few dead-end streets and curvilinear roads. The exception to this pattern is The Oaks. This development is a conventional contemporary subdivision design with curvilinear streets that end at cul-de-sacs. The local streets within The Oaks do not offer road connections typical of the other areas of DeLisle. The Oaks is physically separated from the rest of DeLisle because its only access point is from Menge Avenue.

Local streets within DeLisle are generally paved with asphalt, although some are gravel. Local streets in DeLisle do not have curbs or sidewalks. Parallel to many of these streets are ditches that serve as drainage pathways for storm runoff. Again, the exception to that trend is The Oaks, where all streets have curbs, sidewalks, and street lighting.

### Road Conditions

Hurricane Katrina caused extensive damage to many local streets within DeLisle. Since September 2005, increased heavy vehicle traffic from debris removal activities has led to significant erosion of all roadway surfaces in DeLisle. Trucks continually haul debris from areas south of DeLisle along Wittmann and Vidalia Roads to the Waste Management site north of Interstate Highway 10. The other major traffic generator is DeLisle Elementary School. Since Hurricane Katrina, Pass Christian schools relocated all their classrooms, administrative offices, and operations, including bus parking, to this site in the center of DeLisle.

### Roadway Concerns

Citizens of DeLisle are concerned with excessive automobile speed, especially in residential areas. Speeding is a particular problem along Kiln-DeLisle Road. Another concern is the increase in traffic along the collector roads. Most of the collector roads contain residential frontage and community facilities such as schools, childcare, and churches. Researchers have shown that higher rates of traffic inhibit community cohesiveness.<sup>33</sup>

Results from the citizen survey also indicate that unpaved roads concern some residents.

### RAILROAD

A private freight rail line supplying the DuPont plant runs through the planning area south of Interstate Highway 10. It generally runs east and west parallel to Interstate Highway 10 then turns south as it approaches the DuPont facility. According to DuPont, one train arrives at the plant per day on this rail line. The freight primarily consists of titanium ore and chlorine.<sup>34</sup>

### SANITARY SEWERS

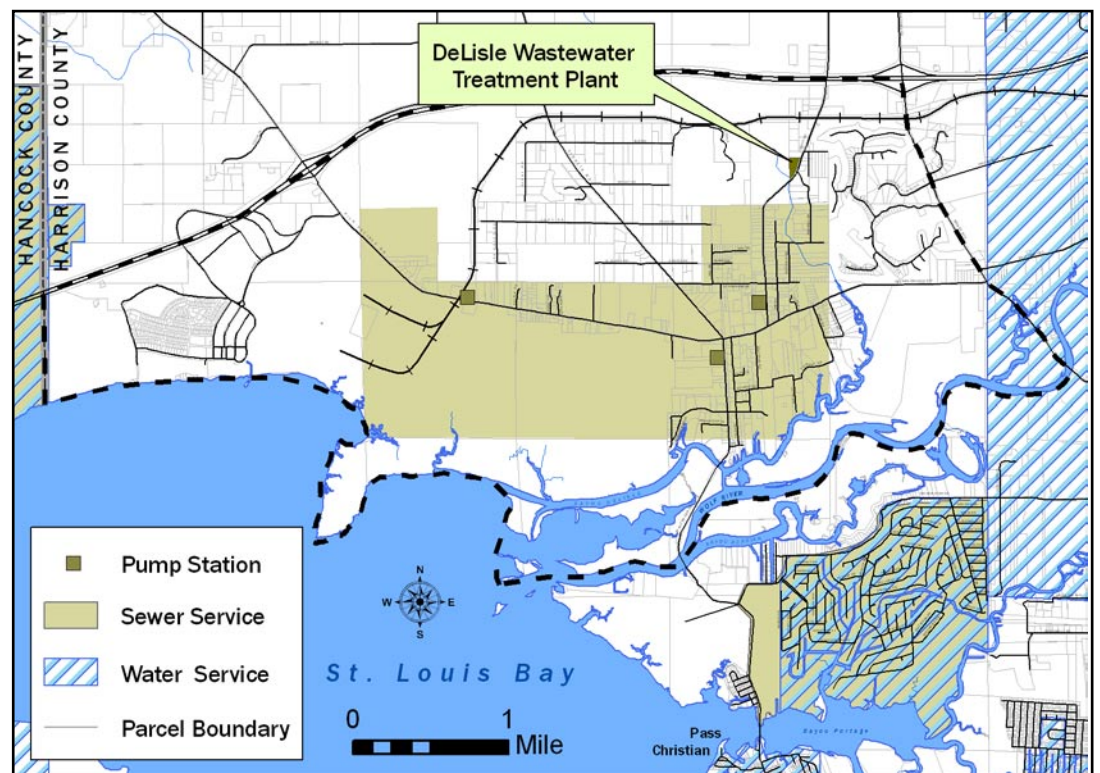
In 2005, sanitary sewer lines were installed to service a significant portion of central DeLisle. The sewer treatment facility is located on Lobouy Avenue at the intersection



of Frederick Road, which is in the northern part of the planning area. The sewer system will service the DeLisle Elementary school, the DuPont plant, and area homes. Connecting individual buildings to the sewer system has been delayed because of Hurricane Katrina (see Map 14).

## WATER

DeLisle is not serviced by a public water service area. Most lots are large enough to accommodate private wells. Concern over chemical contamination of groundwater from DuPont's activity has led a number of DeLisle residents to have bottled drinking water delivered from nearby Abita Springs, Louisiana. According to the survey conducted as part of this planning process, residents are in favor of a water service district. The low density of land use has not been sufficient, historically, to support a water system. However, a water service district has been discussed as a way of improving the fire safety of local residents, businesses and the public.



**Map 14.** Utilities. Sanitary sewer system and neighboring water service areas.

Source: Harrison County.

## NOTES

1. The Census Block Group changed from 1980 to 1990 making the land area within DeLisle incomparable to the Census Block Groups prior to 1980.
2. The Census Block Group changed from 1980 to 1990 making the land area within DeLisle incomparable to the Census Block Groups prior to 1980.
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## Appendix A. *Citizen Involvement*

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Citizens were invited to participate in the planning for DeLisle in a variety of ways. Citizens provided input at the Town Hall Meeting, through letters, surveys, and phone messages. Below is a summary of the input received throughout this planning process.

### Visual Preference Survey

A Visual Preference Survey (VPS) was conducted as part of the Town Hall Meeting on January 4, 2006 to develop a common vision of what the residents of DeLisle would like their community to look like. Based on a process developed by Nelson-Helb, the survey is a process by which a community can participate in evaluating its built environment and develop a common vision for the future.

Each person in the community has a vision of what they like. When planners use words like mixed-use or pedestrian-oriented, they partly portray an idea of what that looks like. The VPS helps to visualize those kinds of choices. The underlying premise is that to create a credible, responsive plan, the citizens of the community need to see, participate in, and understand the vision.

More than 85 citizens from DeLisle participated in the VPS. The participants in the survey were shown 24 images. These images included various types of residential and commercial development. The participants were asked to rate image on a scale of one to five. One would indicate that the participant felt the image was highly unacceptable for their community. Five would indicate that the image is highly acceptable for their community. Participants were

asked to evaluate the acceptability of seeing this image in their community rather than their specific property.



**Figure 54.** Survey participants rated images using an electronic voting device.





**Figure 55.** The following housing styles that were found to be acceptable in DeLisle.



**Figure 56.** The following housing styles were found to be unacceptable in the DeLisle.

Participants were provided with an electronic voting keypad that allowed them to rate a series of images. Results of the survey were instantly tabulated and displayed to the participants. The results were later analyzed to determine what kinds of development are preferred in DeLisle, and thus encouraged in the plan. Conversely, the images that scored the lowest represent the types of development that should be discouraged in the plan.

Participants were asked to evaluate which of four images would be the most acceptable for residential density in their community (see Figure 57). The image in the upper left corner was preferred by 68 percent of the participants, while the image in the upper right was preferred by 24 percent of the participants. DeLisle participants showed a preference for rural and suburban density rather than urban densities.



**Figure 57.** Alternatives for residential density.

To further emphasize the community's preference for rural residential development, large setbacks were found the most acceptable by DeLisle residents (see Figure 58).



**Figure 58.** These large setbacks were found to be the most acceptable by DeLisle participants.

Participants were asked to evaluate the acceptability of a variety of streetscapes, ranging from urban to rural. Participants found heavily landscaping parking lots more preferable than an urban streetscape (see Figure 59).



**Figure 59.** The image on the right is the least acceptable and the figure on the left is the most acceptable streetscape for DeLisle.



Participants were asked to evaluate which of four images would be the most acceptable for their town center. The image in the upper left corner of Figure 60 was preferred by 79 percent of the participants. This one-story main street includes on-street parking, lighting, and landscaping. This image includes shading and a sense of enclosure. Brick pavement designates the pedestrian right-of-way and on-street parking is included. The store on the ground level allows for many windows along the street front. Thirteen percent of participants found the image in the bottom right corner to be the most acceptable for DeLisle. This image included two- and three-story buildings with a public plaza in the middle with seating and on-street parking.

The responses to each image in the VPS are provided in Table 26A and 26B.









Figure 60. Alternatives for the DeLisle Town Center

Table 26A. Summary results of each image in the Visual Preference Survey.

	VERY UNACCEPTABLE	UNACCEPTABLE	NEUTRAL	ACCEPTABLE	VERY ACCEPTABLE
<b>Housing Style</b>					
	12%	13%	23%	14%	38%
	11%	15%	26%	20%	29%
	48%	25%	9%	7%	10%
	13%	16%	30%	15%	25%
	16%	12%	25%	24%	22%
	1%	4%	12%	20%	62%
	19%	11%	23%	13%	34%
	9%	9%	23%	16%	44%
	8%	3%	8%	7%	73%
	1%	3%	13%	16%	66%
	39%	12%	24%	9%	16%
	24%	6%	25%	17%	28%
	68%	13%	12%	4%	3%

**Table 26B.** Summary results of each image in the Visual Preference Survey.

	VERY UNACCEPTABLE	UNACCEPTABLE	NEUTRAL	ACCEPTABLE	VERY ACCEPTABLE
<b>Distance from the Road</b>					
	6%	1%	16%	9%	68%
	10%	19%	30%	7%	33%
	9%	7%	26%	13%	46%
	49%	20%	17%	1%	12%
	27%	13%	28%	13%	18%
	89%	1%	4%	0%	6%
<b>Streetscape</b>					
	56%	11%	15%	4%	14%
	66%	12%	15%	3%	4%
	49%	9%	25%	4%	13%
	13%	6%	16%	22%	43%
	57%	6%	16%	9%	12%

## Summary of Citizen Survey

During the Town Hall Meeting DeLisle citizens were asked to answer a written survey. Tables 27, 28, 29 and 30 provide complete results of the survey. Two sets of results are shown for Likert-type scale questions warranting a response based on varying degrees of opinion toward a topic. The first set of results is described as “disaggregated” meaning that averages were calculated for each of the possible response opinions. The second set of results is described as “aggregated” meaning that the responses of opinions of similar sentiment were added together to become one generalized combined group and then averaged as a whole. For example, non-aggregated response choices would include “strongly agree,” “agree,” “neutral,” “disagree” and “strongly disagree” while aggregated response choices for the same question would include “agree” (the combination of “strongly agree” and “agree”), “neutral,” and “disagree” (the combination of “disagree” and “strongly disagree”). This aided in interpretation because it is useful to understand the general sentiment of the respondents toward a topic.

Some questions offered a response option “other.” Respondents were prompted to write their response if it was not listed as a possible choice. These comments are included below.

Table 27 addresses survey questions pertaining to development that occurred in Harrison County before Hurricane Katrina. Table 28 addresses survey questions pertaining to development that has been occurring in Harrison County since Hurricane Katrina and that will occur in the future. Table 29 addresses survey questions pertaining to DeLisle in particular. Table 30 addresses survey questions pertaining to personal information about the respondents.



**Question 1:**

What roads do you consider to be the geographic boundaries of DeLisle?

- Anything North of Bayou Portage including Arcadia, Wolf and DeLisle to Hancock County
- Bay St. Louis, I-10, Menge, Wolf River
- Bayou DeLisle, I-10, Menge Avenue
- Bayou Portage
- Bayou Portage, Wolf River
- E: Menge Avenue; S: Bayou Portage; N: I-10
- E: Menge Avenue; S: Wolf River; W: I-10; N: Cable Bridge
- E: Menge Avenue; W: Wolf River
- I-10 and Portage
- I-10 north, Bayou DeLisle south
- I-10; Menge; Cuevas-DeLisle; Kiln-DeLisle Road
- I-10; Menge; Wolf River
- Intersection of DeLisle Kiln and I-10, Wolf River
- Kiln-DeLisle Road south to DuPont, I-10 south to south of Cuevas DeLisle Road
- Menge Avenue, I-10, Bayou DeLisle
- Menge Avenue/Cuevas DeLisle Road
- Menge, Bay St. Louis, Wolf River, I-10
- N to S: Bayou DeLisle to I-10; E to W: Wolf River to west of DuPont
- Menge Avenue, Bayou Portage, Henderson Avenue
- N: I-10; E: Wolf River; S: Wolf River/Bay St. Louis; W: DeLisle-Kiln Road

**Table 27A.** Harrison County pre-Hurricane Katrina.

**What is your opinion regarding the location of businesses that were being built in Harrison County before Hurricane Katrina? (aggregated)**

	DESIRABLE	NEUTRAL	UNDESIRABLE	TOTAL RESPONSES
Automotive service centers	50.0%	37.5%	12.5%	72
Banks	79.7%	14.9%	5.4%	74
Bars	14.9%	44.8%	40.3%	67
Casinos	32.4%	33.8%	33.8%	68
Check cashing stores	21.9%	30.1%	35.6%	73
Childcare centers	65.8%	27.4%	6.8%	73
Convenience stores	62.0%	25.4%	12.7%	71
Fast-food restaurants	54.2%	27.8%	18.1%	72
Gas stations	75.7%	13.5%	10.8%	74
Grocery stores	77.5%	12.7%	9.9%	71
Laundry facilities	47.1%	35.3%	17.6%	68
Medical offices	72.6%	15.1%	12.3%	73
Pawn shops	13.2%	39.7%	47.1%	68
Professional offices	68.6%	22.9%	8.6%	70
Retail stores	74.6%	11.3%	14.1%	71
Sexually oriented businesses	7.5%	31.3%	61.2%	67
Sit-down restaurants	76.4%	11.1%	12.5%	72

**What is your opinion regarding the location of businesses that were being build in Harrison County before Hurricane Katrina? (disaggregated)**

	VERY DESIRABLE	DESIRABLE	NEUTRAL	UNDESIRABLE	VERY UNDESIRABLE	TOTAL RESPONSES
Automotive service centers	19.4%	30.6%	37.5%	8.3%	4.2%	72
Banks	36.5%	43.2%	14.9%	4.1%	1.4%	74
Bars	1.5%	13.4%	44.8%	20.9%	19.4%	67
Casinos	11.8%	20.6%	33.8%	10.3%	10.3%	68
Check cashing stores	8.2%	13.7%	30.1%	16.4%	19.2%	73

**Table 27B.** Harrison County pre-Hurricane Katrina.

**What is your opinion regarding the location of businesses that were being built in Harrison County before Hurricane Katrina? (disaggregated)**

	VERY DESIRABLE	DESIRABLE	NEUTRAL	UNDESIRABLE	VERY UNDESIRABLE	TOTAL RESPONSES
Childcare centers	26.8%	31.7%	24.4%	3.7%	2.4%	73
Convenience stores	21.1%	40.8%	25.4%	8.5%	4.2%	71
Fast-food restaurants	18.1%	36.1%	27.8%	11.1%	6.9%	72
Gas stations	29.7%	45.9%	13.5%	9.5%	1.4%	74
Grocery stores	42.3%	35.2%	12.7%	8.5%	1.4%	71
Laundry facilities	23.5%	23.5%	35.3%	10.3%	7.4%	68
Medical offices	42.5%	30.1%	15.1%	6.8%	5.5%	73
Pawn shops	2.9%	10.3%	39.7%	17.6%	29.4%	68
Professional offices	31.4%	37.1%	22.9%	5.7%	2.9%	70
Retail stores	24.2%	43.7%	11.3%	8.5%	5.6%	71
Sexually oriented businesses	1.5%	6.0%	31.3%	9.0%	52.2%	67
Sit-down restaurants	36.1%	40.3%	11.1%	5.6%	6.9%	72

**What is your opinion regarding the location of housing that was being built in Harrison County before Hurricane Katrina? (aggregated)**

	DESIRABLE	NEUTRAL	UNDESIRABLE	TOTAL RESPONSES
Single-family homes	89.6%	6.5%	3.9%	77
Modular homes	47.8%	35.8%	16.4%	67
Manufactured homes	35.8%	35.8%	28.4%	67
Multi-family buildings	37.7%	34.8%	27.5%	69
Hi-rise apartments or condominiums	18.3%	31.0%	50.7%	71

**What is your opinion regarding the location of housing that was being built in Harrison County before Hurricane Katrina? (disaggregated)**

	VERY DESIRABLE	DESIRABLE	NEUTRAL	UNDESIRABLE	VERY UNDESIRABLE	TOTAL RESPONSES
Single-family homes	62.3%	27.3%	6.5%	2.6%	1.3%	77

- The Bay, Wolf River, Kiln-DeLisle, up to Cable Bridge Road
- W: I-10; S: Wolf River; E: Menge; W: DuPont; N: I-10
- What’s on the map already
- Wolf River east and south
- Wolf River to I-10 to Hancock County
- Wolf River, Bayou Arcadian, Menge Avenue, I-10 exit 20 (DuPont)
- Wolf River, Nico’s store on Cable Bridge Road, Bay Saint Louis
- Wolf River; Hancock County line; Menge
- Wolf River; Menge Avenue; Kiln DeLisle to Hancock; Cuevas
- Wolf River to I-10 (4 responses)

**Question 2:**

What building, intersection or other landmark do you consider to be the center of DeLisle?

- Elementary school (22 responses)
- Intersection of Cuevas DeLisle Road and Whittman (7 responses)
- Intersection by elementary school (2 responses)
- Menge Avenue area
- DuPont
- South side I-10, Menge Avenue to Vidalia Road
- Jasper Ladner store, elementary school, ballparks on Vidalia
- Fire station and St. Steven’s Church

- Menge Ave., Cuevas DeLisle

**Question 5:**

What types of communities facilities would you like to have in DeLisle that currently do not exist in or near DeLisle?

- “DeLisle is pretty much exactly good as is.”
- “I would like to see a park at the property on Bayou DeLisle. Open to the community—fishing pier...quiet walkways—community park.”
- A large department store (Wal-Mart)
- Automotive shops
- Bank (4 responses)
- Better roads with lights
- Bike trails
- Bike trails, walking trail, more access to the bayous
- Boat launch
- Child care
- Community center (6 responses)
- Community center with small store, grocery store, gifts (very small scale) and not next to housing
- County offices open a satellite office part-time
- Dollar General store
- Family housing, no subdivisions
- Fast internet service, broadband
- Gas
- Gasoline facilities
- Grocery store (4 responses)
- Health care center
- Health facilities (2 responses)

**Table 27C.** Harrison County pre-Hurricane Katrina.

<b>What is your opinion regarding the location of housing that was being built in Harrison County before Hurricane Katrina? (disaggregated)</b>						
	VERY DESIRABLE	DESIRABLE	NEUTRAL	UNDESIRABLE	VERY UNDESIRABLE	TOTAL RESPONSES
Modular homes	14.9%	32.8%	35.8%	9.0%	7.5%	67
Manufactured homes	13.4%	22.4%	35.8%	16.4%	11.9%	67
Multi-family buildings	11.6%	26.1%	34.8%	18.8%	8.7%	69
Hi-rise apartments or condominiums	4.2%	14.1%	31.0%	16.9%	33.8%	71

<b>Please indicate how well you think the government agencies in Harrison County were addressing the following issues before Hurricane Katrina. (aggregated)</b>				
	GOOD	NEUTRAL	FAIR	TOTAL RESPONSES
Providing affordable housing	26.8%	36.6%	36.6%	71
Addressing the needs of low-income residents	18.8%	31.9%	49.3%	69
Encouraging growth of quality jobs	32.8%	22.4%	44.8%	67
Stimulating growth of quality jobs	33.3%	20.3%	46.4%	69
Keeping neighborhoods safe	42.3%	11.3%	46.5%	71
Improving the attractiveness of the community	27.1%	24.3%	48.6%	70
Revitalizing older neighborhoods	10.4%	32.8%	56.7%	67
Controlling traffic congestion	29.0%	24.6%	46.4%	69
Providing public transportation	5.9%	25.0%	69.1%	68
Providing water, sewer and storm water facilities	27.1%	28.6%	44.3%	70
Providing parks and recreational facilities	36.2%	21.7%	42.0%	69
Preserving open space and natural areas	28.6%	30.0%	41.4%	70
Controlling environmental problems	18.8%	21.7%	59.4%	69

**Table 27D.** Harrison County pre-Hurricane Katrina.

**Please indicate how well you think the government agencies in Harrison County were addressing the following issues before Hurricane Katrina. (disaggregated)**

	EXCELLENT	GOOD	NEUTRAL	FAIR	POOR	TOTAL RESPONSES
Providing affordable housing	5.6%	21.1%	36.6%	16.9%	19.7%	71
Addressing the needs of low-income residents	2.9%	16.9%	31.9%	21.7%	27.5%	69
Encouraging growth of quality jobs	9.0%	23.9%	22.4%	29.9%	14.9%	67
Stimulating growth of quality jobs	8.7%	24.6%	20.3%	24.6%	21.7%	69
Keeping neighborhoods safe	9.9%	32.4%	11.3%	29.6%	21.7%	71
Improving the attractiveness of the community	7.1%	20.0%	24.3%	21.4%	27.1%	70
Revitalizing older neighborhoods	3.0%	7.5%	32.8%	23.9%	32.8%	67
Controlling traffic congestion	8.7%	20.3%	24.6%	20.3%	26.1%	69
Providing public transportation	1.5%	4.4%	25.0%	25.0%	44.1%	68
Providing water, sewer and storm water facilities	7.1%	20.0%	28.6%	18.6%	25.7%	70
Providing parks and recreational facilities	4.3%	31.9%	21.7%	20.3%	21.7%	69
Preserving open space and natural areas	5.7%	22.9%	30.0%	17.1%	24.3%	70
Controlling environmental problems	2.9%	15.9%	21.7%	18.8%	40.6%	69

**Before Hurricane Katrina, how would you have rated Harrison County on the following? As a place to...**

	WAS IMPROVING	WAS NOT CHANGING	WAS BECOMING WORSE	NO OPINION	TOTAL RESPONSES
Live	74.0%	13.0%	11.7%	1.3%	77
Raise children	65.8%	15.8%	14.5%	3.9%	76
Work	62.7%	22.5%	13.7%	1.0%	73
Retire	61.8%	14.6%	17.5%	5.8%	77

- Library (2 responses)
- Medical clinics
- Medical facility
- More activities for senior citizens
- More activities for youth
- More jobs
- More stores
- Movie theater
- No commercial because it encourages crime and takes away from the quiet living
- None-leave DeLisle like it was
- Pharmacy
- Pharmacy
- Playgrounds
- Post office (8 responses)
- Public access to Wolf River for swimming, fishing, picnics, etc.
- Public transportation
- Recreation center for youth
- Recreational facilities
- Restaurants
- Senior citizen center (3 responses)
- Service station (gas station)
- Shopping center (4 responses)
- Shopping facilities (grocery)
- Small grocery store
- Small stores



- Somewhere to shop without going other places to shop
- Street/road lighting
- Swimming pool
- To be able to walk to school
- Walking paths/bike paths
- Youth center

**Question 6:**

What characteristics of DeLisle are especially important to you?

- Closeness to nature
- Community atmosphere—people are close and look out for each other
- Country family atmosphere
- Country living
- Except for proximity to DuPont, I would like to see DeLisle grow as a single-family housing area
- Family, family housing
- Family-oriented
- Friendly neighbors
- Friendly, quiet and peaceful
- General location
- Great schools, close to work
- Individual houses
- Keep it country—don't change it much
- Keeping rural setting
- Keeping the heritage of a very old community

**Table 28A.** Harrison County post-Hurricane Katrina.

**Where should new development in Harrison County be encouraged? (Rank in order from 1-4 with "1" being your first choice)**

	AROUND EXISTING DEVELOPMENT IN CITIES	IN UNDEVELOPED AREAS OF CITIES	AROUND EXISTING DEVELOPMENT IN RURAL AREAS	IN UNDEVELOPED RURAL AREAS	TOTAL RESPONSES
First choice	55.7%	10.0%	17.1%	17.1%	54
Second choice	11.6%	51.2%	27.6%	54.8%	45
Third choice	4.8%	26.2%	54.8%	14.3%	50
Fourth choice	19.5%	12.2%	7.3%	61.0%	47

**What types of growth policies should be pursued in Harrison County? (aggregated)**

	AGREE	NEUTRAL	DISAGREE	TOTAL RESPONSES
Revitalize existing residential areas	97.2%	2.8%	0%	72
Encourage the construction of new housing	87.5%	8.3%	4.2%	72
Revitalize existing commercial areas and main streets	92.8%	5.8%	1.4%	69
Encourage the construction of new shopping centers	54.4%	26.5%	19.1%	68
Encourage the construction of new office and industrial parks	61.4%	30.0%	8.6%	70
Revitalize older industrial sites	63.8%	24.6%	11.6%	69

**What types of growth policies should be pursued in Harrison County? (disaggregated)**

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	TOTAL RESPONSES
Revitalize existing residential areas	73.6%	23.6%	2.8%	0%	0%	72
Encourage the construction of new housing	47.2%	40.3%	8.3%	1.4%	2.8%	72
Revitalize existing commercial areas and main streets	50.7%	42.0%	5.8%	0%	1.4%	69

**Table 28B.** Harrison County post-Hurricane Katrina.

**What types of growth policies should be pursued in Harrison County? (disaggregated)**

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	TOTAL RESPONSES
Encourage the construction of new shopping centers	30.9%	23.5%	26.5%	13.2%	5.9%	68
Encourage the construction of new office and industrial parks	25.3%	37.1%	30.0%	5.7	2.9%	70
Revitalize older industrial sites	21.7%	42.0%	24.6%	10.1%	1.4%	69

**Table 28C.** Harrison County post-Hurricane Katrina.

**If you had a choice, in what type of housing would you choose to live in Harrison County? Rate your top three choices.**

	SINGLE-FAMILY HOUSE ON A LARGE LOT IN A RURAL AREA	SINGLE-FAMILY HOUSE ON A SMALL LOT IN A RURAL AREA	SINGLE-FAMILY HOUSE ON A LARGE LOT IN THE CITY	SINGLE-FAMILY HOUSE IN A CITY	(OTHER) SINGLE-FAMILY HOUSE ON WATERWAY	MODULAR HOUSE IN A RURAL AREA	MANUFACTURED HOUSE IN A RURAL AREA	(OTHER) MOBILE HOME	TOTAL RESPONSES
First Choice	85.9%	5.6%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	71
Second Choice	80.8%	7.7%	7.7%	3.8%					26
Third Choice	31.6%	15.8%	10.5%	10.5%	5.3%	5.3%	5.3%	5.3%	19
Top 3 Choices Overall	54.3%	23.3%	6.9%						116

**Table 28D.** Harrison County post-Hurricane Katrina.

**In your opinion, what are the three biggest problems currently facing Harrison County? (Rank your responses with “1” being the biggest problem)**

<b>First Choice</b>	QUALITY OF LOCAL EDUCATION	AVAILABILITY OF QUALITY HOUSING	LEVEL OF CRIME AND DRUG ACTIVITY	HEALTH CARE QUALITY AND AVAILABILITY	LOCAL TRAFFIC CONGESTION	AVAILABILITY OF QUALITY JOBS	QUALITY OF DRINKING WATER	TOTAL RESPONSES
	17.9%	12.5%	10.7%	10.7%	8.9%	7.1%	7.1%	56
	LOCAL PROPERTY TAX	ENFORCEMENT OF ZONING AND BUILDING CODE REGULATIONS	LAND USE CONTROLS	LOSS OF YOUNG PEOPLE MOVING OUT OF THE COMMUNITY	ATTRACTIVENESS AND CLEANLINESS OF THE COMMUNITY	AVAILABILITY OF RECREATIONAL AND CULTURAL ACTIVITIES	AVAILABILITY OF PUBLIC TRANSPORTATION	
	3.6%	3.6%	3.6%	2.8%	1.8%	1.8%	1.8%	
	COST OF HOUSING	(OTHER) DESTRUCTION OF WILDLIFE	PROGRAMS FOR SENIOR CITIZENS					
	1.8%	1.8%	1.8%					
<b>Second Choice</b>	AVAILABILITY OF QUALITY JOBS	LEVEL OF CRIME AND DRUG ACTIVITY	HEALTHCARE QUALITY AND AVAILABILITY	QUALITY OF DRINKING WATER	COST OF HOUSING	LOCAL TRAFFIC CONGESTION	SHOPPING OPPORTUNITIES	TOTAL RESPONSES
	13.7%	13.7%	9.8%	9.8%	7.8%	7.8%	7.8%	51
	LAND USE CONTROLS	AVAILABILITY OF QUALITY HOUSING	ENFORCEMENT OF ZONING AND BUILDING CODE REGULATIONS	LOSS OF YOUNG PEOPLE MOVING OUT OF THE COMMUNITY	PROGRAMS FOR SENIOR CITIZENS	ATTRACTIVENESS AND CLEANLINESS OF THE COMMUNITY	AVAILABILITY OF RECREATIONAL AND CULTURAL ACTIVITIES	
	5.9%	3.9%	3.9%	3.9%	3.9%	2.0%	2.0%	
	LOCAL PROPERTY TAX	QUALITY OF LOCAL EDUCATION						
	2.0%	2.0%						
<b>Third Choice</b>	LEVEL OF CRIME AND DRUG ACTIVITY	ATTRACTIVENESS AND CLEANLINESS OF THE COMMUNITY	LOSS OF YOUNG PEOPLE MOVING OUT OF THE COMMUNITY	QUALITY OF LOCAL EDUCATION	QUALITY OF DRINKING WATER	AVAILABILITY OF QUALITY HOUSING	AVAILABILITY OF QUALITY JOBS	TOTAL RESPONSES
	12.2%	10.2%	8.2%	8.2%	8.2%	6.1%	6.1%	49
	COST OF HOUSING	HEALTH CARE QUALITY AND AVAILABILITY	AVAILABILITY OF RECREATIONAL AND CULTURAL ACTIVITIES	ENFORCEMENT OF ZONING AND BUILDING CODE REGULATIONS	AVAILABILITY OF JOB TRAINING OR RETRAINING	AVAILABILITY OF PUBLIC TRANSPORTATION	LOCAL PROPERTY TAX	
	6.1%	6.1%	4.1%	4.1%	2.0%	2.0%	2.0%	
	LOCAL SALES TAX	CONDITION OF THE DOWNTOWNS	LOCAL TRAFFIC CONGESTION	LAND USE CONTROLS	PROGRAMS FOR SENIOR CITIZENS	RACE RELATIONS	SHOPPING OPPORTUNITIES	
	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
<b>Top 3 Choices Overall</b>	QUALITY OF LOCAL EDUCATION	LEVEL OF CRIME AND DRUG ACTIVITY	AVAILABILITY OF QUALITY JOBS	HEALTH CARE QUALITY AND AVAILABILITY				TOTAL RESPONSES
	54.5%	12.2%	9.0%	9.0%				156

- Large private yards, house set back from road
- My children can play outside
- Open space between homes for more privacy
- Peaceful, green, friendly, small
- People
- Planned communities
- Preserving small town flavor, yet opening for future growth in new housing/single family
- Quiet, family-oriented, laid back style
- Quiet, people friendly, bedroom homes style
- Quietness
- Residential
- Rural, easy going, friendly
- Single-family properties
- Small community atmosphere
- To live in an area where neighbors and noise are at a distance
- Trees

**SUMMARY OF PUBLIC COMMENTS**

As part of the DeLisle Town Hall Meeting, citizens participated in small group discussions. Between four and eight citizens sat at a table with a facilitator from the planning team. Citizens were asked to identify what they like best about DeLisle, what are the biggest land use and development issues facing DeLisle, and what suggestions they have for dealing with the future of DeLisle especially in regards to rebuilding and future development. The following is a summary of the input from the discussion.

**What do you like best about DeLisle?**

- Rural, low density character
- Space
- Quiet
- Sense of community
- Friendly people
- Good place to raise family
- Good elementary school
- Easy access to I-10
- Access to natural areas and animals
- Small town feeling
- Laid Back Atmosphere
- There’s a lot of family. And even if you’re not related, you related.
- That there are no condos, subdivisions or housing projects.
- That there are no neighbors right next door.
- Slow relaxed pace
- Fishing
- Low Crime
- The sky at night
- Low traffic
- Pretty sunsets
- Not a bunch of piers on the water
- Can have a horse in one’s backyard
- Close to the city
- Affordable housing



**Table 28E.** Harrison County post-Hurricane Katrina.

**The Federal Emergency Management Agency (FEMA) has issued revised advisory flood zone maps for the Gulf Coast. It may take up to a year for these Flood Insurance Rate Maps (FIRM) to be finalized and adopted. What are your opinions regarding development or redevelopment in flood-prone areas? (Check all that you agree with)**

			TOTAL RESPONSES
Rebuilding should be permitted immediately without restrictions	35.3%		85
Rebuilding in advisory flood zones should be allowed as long as structures are elevated to meet or exceed the advisory height requirements.	40.0%		
Rebuilding in advisory flood zones should be limited to temporary structures until the final Flood Insurance Rate Maps are issued by FEMA.	12.9%		
Rebuilding in advisory flood zones should be delayed until the final Flood Insurance Rate Maps are issued by FEMA.	10.6%		
Rebuilding should be prohibited entirely in advisory flood zones.	1.2%		
<hr/>			
Would you support a policy that allowed the use of fill instead of a foundation elevated on pillars to get structures higher than the flood zone?	YES 72.1%	NO 27.9%	TOTAL RESPONSES 68

- Close to family
- No major stores or restaurants
- Churches
- Accept you right away despite race or religion
- No sprawl
- Good people, big smiles

**What are the biggest land use and development issues facing DeLisle?**

***Development/Buildings:***

- Need for affordable housing
- Over-development.
- Threat of condominium development

- Redevelopment of properties
- Don't want anything smaller than 3 acres (E-1).
- Need for convenience shopping, such as a grocery store
- Need for restaurants
- Prevent industrial development
- Lack of medical facilities
- Lack of a close gas station
- Metal buildings
- Density in town center
- Zoning problem with roads: can't subdivide a long (as opposed to wide) multi-acre property to accommodate more homes because the driveway leading to the subdivided lots must meet the standards of local streets and each home must have its own right-of-way

**Community Facilities:**

- Need a public park and fishing pier along the bayou
- Need to have a place for kids to play

**Environment/Nature:**

- Disappearing forest
- Pollution from DuPont in groundwater and waterways
- Dumping in bayou & waterways
- Growth of vegetation in the bayou
- Development runoff will affect water in the bayou
- Odor from the landfill
- Lowering of the water table
- Stress on aquifer
- Arsenic on school ground
- Sewage plant will contaminate DeLisle
- WPA ditch behind the Baptist Church is called a natural waterway but it isn't since it was man-made. This drainage ditch is getting larger and no one knows who is supposed to maintain it. It's washing away trees.
- Waterway regulations to prevent sea doos.
- Erosion on the bayou
- Destruction of wildlife

**Transportation:**

- Traffic volume on Kiln-DeLisle Road.
- Need for public transportation to serve the seniors

- Lack of bike lanes or sidewalks
- Increase in traffic
- Roads are a big issue. Wittman is the only way in from the Pass.

**Other:**

- Code enforcement including junk cars
- People's attitudes about doing whatever they want with their land has to change
- Noise from the raceway.
- The Oaks contributes to noise and traffic.
- Challenge of preventing zoning changes
- Need a water district
- Elevation requirements for rebuilding
- Influx of population from Pass Christian
- Stress on public services with development
- Lack of cable and DSL
- All debris coming to the landfill presents possibilities for future contamination of DeLisle
- Septic and water system too small; will have to add more infrastructure to accommodate more people
- Indian Burial grounds may have been harmed by Katrina or they could face development pressures
- Cemetary cleanup

**Table 29.** DeLisle.**What do you think about the pace of land development in DeLisle? The pace of development is...**

	TOO FAST	JUST RIGHT	TOO SLOW	I DON'T KNOW	TOTAL RESPONSES
	12.9%	38.7%	35.5%	14.5%	63

**To what degree do you support or oppose the following: (aggregated)**

	SUPPORT	NEUTRAL	OPPOSE	TOTAL RESPONSES
Growth of retail and restaurant uses along the Wolf River	25.4%	33.3%	41.3%	63
Growth of office uses along the Wolf River	6.3%	14.1%	79.7%	64
Growth of single-family housing development along the Wolf River	57.8%	15.6%	26.6%	64
Preserver/Conserve land along the Wolf River	68.9%	23.0%	8.2%	61
Creating a town center	68.9%	21.3%	9.8%	61
Growth of stores in the center of DeLisle	61.5%	24.6%	13.8%	65
Growth of offices in the center of DeLisle	50.8%	27.9%	21.3%	61
Growth of apartments above businesses in DeLisle	8.3%	20.0%	71.7%	60
Condominiums in the center of DeLisle	21.7%	30.0%	48.3%	60
Community facilities in DeLisle	78.1%	15.6%	6.3%	64
Encouraging more industrial uses around the DuPont site	14.5%	22.6%	62.9%	62
Creating a water-service district	60.9%	21.9%	17.2%	64

**To what degree do you support or oppose the following: (disaggregated)**

	STRONGLY SUPPORT	SUPPORT	NEUTRAL	OPPOSE	STRONGLY OPPOSE	TOTAL RESPONSES
Growth of retail and restaurant uses along the Wolf River	11.1%	14.3%	33.3%	12.7%	28.6%	63
Growth of office uses along the Wolf River	1.6%	4.7%	14.1%	28.1%	51.6%	64
Growth of single-family housing development along the Wolf River	17.2%	40.6%	15.6%	15.6%	10.9%	64
Preserver/Conserve land along the Wolf River	45.9%	23.0%	23.0%	3.3%	4.9%	61
Creating a town center	31.1%	37.7%	21.3%	3.3%	6.6%	61
Growth of stores in the center of DeLisle	29.2%	32.3%	24.6%	7.7%	6.2%	65
Growth of offices in the center of DeLisle	26.2%	24.6%	27.9%	9.8%	11.5%	61
Growth of apartments above businesses in DeLisle	3.3%	5.0%	20.0%	28.3%	43.3%	60
Condominiums in the center of DeLisle	5.0%	16.7%	30.0%	16.7%	31.7%	60
Community facilities in DeLisle	39.1%	39.1%	15.6%	4.7%	1.6%	64
Encouraging more industrial uses around the DuPont site	4.8%	9.7%	22.6%	9.7%	53.2%	62
Creating a water-service district	40.6%	20.3%	21.9%	10.9%	6.3%	64

**What suggestions do you have for dealing with the future of DeLisle especially in regards to rebuilding and future development?**

***Development/Buildings:***

- No junk yards, landfills, bars, nightclubs
- No more DuPonts or other heavy industrial
- Development in DeLisle anywhere from Kiln-DeLisle Road north to I-10.
- Improve zoning, i.e. commercial uses are currently in areas zoned for residential, more stringent requirements for industrial
- Modular housing is good because its better and cheaper than traditional stick built homes
- Need more stores for shopping (grocery, drug store, dry cleaner, post office) smaller shops, not a Wal-Mart
- Affordable single family housing
- No condos
- Want restrictions on heavy industrial
- No multifamily
- Limiting trailers over the long term
- Need single family housing
- No fast food
- Setbacks on Whitman are too small and lot size is small
- Menge and I-10 okay for Commercial
- Keep old historic homes.
- Add permit personnel in the field to make it easier to get a permit
- Keep out big box and other large chains
- Protect wetlands and river from development (no con-

dos, no casinos)

- Do not allow concern for gated communities
- Family entertainment: dance hall, movie theater, drive-in, swimming pool, ball fields, playground
- Add a post office
- Limit commercial to Menge and I-10, Viadlia and Whitman, and Menge and Cuevas-Delisle
- Better notification of land use proposals in their community
- Strengthen the center of the community through appropriate scale development (with protection from incompatible uses and too much traffic generation)
- Keep zoning the same
- Should be moving toward larger lots.
- Do not stack houses on top of one another.
- Allow subdivision of property to keep family on the land.
- Provide apartments over businesses to create affordable housing
- Protect the small, quaint an neighborly community in the face of pressure from incompatible uses including casinos, condos, and DuPont.
- No sexually-oriented uses
- Put multi-family and industry up by the interstate.
- Simply building permit process
- Code restrictions such as building height, setbacks

***Community Facilities:***

- More schools in DeLisle. Middle School and High School.



**Table 30A.** About the respondents.**Where did you live before Hurricane Katrina?**

DELISLE	PASS CHRISTIAN	HENDERSON POINT	LONG BEACH	PASS CHRISTIAN ISLES	SHELBY, MS	WAVELAND	TOTAL RESPONSES
80.6%	9.7%	2.8%	2.8%	1.4%	1.4%	1.4%	72

**Where do you currently live?**

DELISLE	PASS CHRISTIAN	LONG BEACH	HANCOCK COUNTY	BILOXI	CANTON	NEW ORLEANS	HENDERSON POINT	TOTAL RESPONSES
74.0%	8.2%	5.5%	2.8%	1.4%	1.4%	1.4%	1.4%	73

**Before Hurricane Katrina, what type of housing did you live in?**

OWNED SINGLE-FAMILY HOUSE	OWNED MANUFACTURED HOUSE	RENTED SINGLE-FAMILY HOUSE	RENTED MANUFACTURED HOUSE	RENTED IN A MULTIFAMILY BUILDING	TOTAL RESPONSES
85.3%	6.7%	5.3%	1.3%	1.3%	75

**What type of housing do you currently live in?**

FEMA TRAILER ON AN INDIVIDUAL PROPERTY	OWNED SINGLE-FAMILY HOUSE	RENTED SINGLE-FAMILY HOUSE	OWNED MANUFACTURED HOUSE	RV	FEMA CAMPER TRAILER PARK	EMPLOYER-PROVIDED RV PARK	TOTAL RESPONSES
41.7%	38.9%	8.3%	4.2%	2.8%	2.8%	1.4%	72

**How long have you lived in Harrison County?**

LESS THAN ONE YEAR	ONE TO FIVE YEARS	SIX TO TEN YEARS	ELEVEN TO TWENTY YEARS	MORE THAN TWENTY YEARS	NOT A RESIDENT OF HARRISON COUNTY	TOTAL RESPONSES
0%	10.0%	0%	20.0%	70.0%	0%	75

**Are you currently employed?**

YES	NO	TOTAL RESPONSES
54.7%	44.0%	75

**If you are employed, do you commute to a city or community that is different from the city or community you live in?**

YES	NO	TOTAL RESPONSES
61.4%	38.6%	44

**Table 30B.** About the respondents.

**If you commute to a city or community that is different from the city or community you live in, what is the name of the city or community you work in?**

GULFPORT	LONG BEACH	BAY ST. LOUIS	NEW ORLEANS	STENNIS SPACE CENTER	BILOXI	DELISLE	DIAMONDHEAD	TOTAL RESPONSES
25.9%	22.2%	11.1%	7.4%	7.4%	3.7%	3.7%	3.7%	26
HARVEY	PICAYUNE	WAVELAND						
3.7%	3.7%	3.7%						

**If you commute to a city or community that is different from the city or community you live in, how many miles do you commute per day?**

AVERAGE DISTANCE PER DAY (MILES)	TOTAL RESPONSES
24.1	20

**What is your gender?**

MALE	FEMALE	TOTAL RESPONSES
42.5%	57.5%	73

**How old are you?**

18 YEARS AND UNDER	19 TO 25 YEARS	26 TO 35 YEARS	36 TO 55 YEARS	56 TO 65 YEARS	OVER 65 YEARS	TOTAL RESPONSES
0%	0%	4.0%	44.0%	24.0%	28.0%	75

**How many children living in your household are under 18 years of age?**

0 CHILDREN	1 CHILD	2 CHILDREN	3 CHILDREN	MORE THAN 3 CHILDREN	TOTAL RESPONSES
62.7%	21.3%	6.7%	9.3%	0%	75
AVERAGE NUMBER OF CHILDREN PER HOUSEHOLD:				0.6	75

**What was your last year of schooling?**

EIGHTH GRADE OR BELOW	SOME HIGH SCHOOL	HIGH SCHOOL GRADUATE OR GED	SOME COLLEGE/ TECHNICAL SCHOOL	ASSOCIATE DEGREE FROM 2-YEAR COLLEGE	COLLEGE GRADUATE (4 YEARS)	POST-GRADUATE OR PROFESSIONAL EDUCATION	TOTAL RESPONSES
0%	8.2%	20.5%	23.3%	12.3%	19.2%	16.4%	73

- Retirement areas—need living and entertainment facilities for senior citizens.
- Need recreational facilities for youth/children
- Develop a Library
- Keep schools in DeLisle
- Add more Public parks, including neighborhood parks
- Add a Multi-purpose building for seniors and youth
- Health care professional offices (dental and medical),
- Keep K- 8th grades in DeLisle
- Improve fire station,
- Add a town hall
- Kids should be in their own towns for school. Have to have the kids in their own community.
- Add a child care facility
- Develop a small Farmer's Market of Vegetable Stand
- Develop the St. Stephens Church site into a town square

### ***Environment/Nature:***

- Could develop a nature walk, preserve along the bayou.
- Preserve land along Bayou DeLisle as a park.
- Preserve green space
- Provide public access to Wolf River
- Add a community center that would also serve as a hurricane shelter
- Reduce pollution from DuPont
- Better air and water

### ***Transportation:***

- Buses for the elderly
- Widen the major roads (Hand & Menge)
- Add bike trails in the community
- Make it safe for children to walk to schools
- Add blacktop on side roads
- Add light rail in the County
- Add Speed limit signs along Bradley Rd
- Make sure construction of new roads and neighborhoods have sidewalks and bike paths
- Slow traffic down

### ***Other:***

- Create a land use plan
- Improved code enforcement
- Sewer system completed
- Need more construction workers for recovery effort
- New flood elevations
- Add a water district
- More street lights
- Increase law enforcement
- Improve drainage
- When rebuilding make it as much as possible as it was pre-Katrina.
- Better maintained ditches to help rain water drainage

## Phone and Online Comments

Citizens were invited to use a toll free 1-800 number and online discussion forum to voice their input on this planning process.

Members of the DeLisle planning area were invited to discuss planning issues facing their community and Harrison County, Mississippi. The discussion forum was opened to discussions on January 5th, 2005. Participants envisioned and described what they wanted DeLisle to look like in the future and want amenities they wanted to add or expand on in the community.

Participants believed that the rural zoning in the community should remain. Participants expressed their ongoing concern about the advisory flood elevations and the impact that they could have on the rebuilding of DeLisle.

Other repeated responses were those that dealt with expanded park and recreational facilities. Participants thought such things as picnic tables and a boat launch would be desirable.

Many expressed appreciation for this process and the invitation to participate. Overall, it has had a positive response; those who have posted comments expressed that they are glad to participate. This has allowed the planning team to have a continued a presence in the community, albeit virtually.

Recently, the community used the forum as a place to communicate about broad topics related to the planning process. The forum served as a method for the planning team to ask questions of the community. The information obtained through the discussion community has been incorporated into this plan.

## March Town Hall Meeting

On March 20, 2006 a Town Hall Meeting for DeLisle residents was held at the West Harrison Civic Center. Approximately 75 residents attended this Town Hall

Meeting. This meeting provided an opportunity for the citizens of DeLisle to provide feedback on the draft community plan and assist in clarifying what the community wants for the future. Citizens participated in electronic voting and dot voting as described below.

### ELECTRONIC VOTING

DeLisle citizens were asked to provide some background information about who they are and their involvement in the planning process. Fifty-five percent of participants indicated that they have lived in DeLisle for more than 10 years. Only 8 percent had lived in DeLisle for less than two years.

A significant number of participants at the Town Hall Meeting have participated in the community planning process. Thirty-seven percent of participants also attended the January Town Hall Meeting. Almost half, 48 percent had seen the draft community plan prior to the Town Hall Meeting.

DeLisle participants were asked if they would support the creation of a community water service area, even if this would mean an increase in the amount of development in DeLisle. Sixty-nine percent of respondents indicated they would support the creation of a water service area, while 20 percent were opposed and 11 percent were not sure.

As discussed in Chapter 2 of this plan, participants

**Table 31.** Support for environmental protection policies.

POLICY	SUPPORT	OPPOSE	NOT SURE
Conservation Easement	70%	17%	13%
Conservation Subdivision	58%	28%	13%
Transfer of Development Rights	50%	38%	13%
Purchase of Development Rights	52%	30%	18%
Riparian Setbacks	40%	46%	13%
Historic Tree Protections	81%	19%	0%



were asked to vote on their preference for how the center of DeLisle could be developed. Nineteen percent of participants selected to allow industrial development to occur, 32 percent prefer 1 acre residential lots, 28 percent support conservation development, and 21 percent support traditional neighborhood development.

DeLisle participants strongly support the development of a multi-use hurricane shelter (such as a recreation center or special events center), with 82 percent supporting this type of development. Thirteen percent would not support this type of development and 5 percent were not sure.

Participants in the Town Hall Meeting were next asked whether they would support the utilization of a variety of environmental preservation policies, as shown in Table 31.

Participants in the Town Hall Meeting were then asked to indicate the degree to which they agree with the goals set out in the draft community plan. Based on citizen comments at the first Town Hall Meeting, the planning team developed seven goals to guide the future rebuilding and development of DeLisle, as shown in Table 32.

## DOT VOTING

Once the community agreed on the goals for the plan, they were asked to prioritize the strategies that they most support. Participants were provided with six green dots which they were asked to place next to the strategies that they believe are the highest priority. They were also provided with six red dots which they could use to vote for any strategies that they do not support. The feedback from the dot voting was used to refine the strategies that appear in the community plan.

**Table 32.** Support for community goals.

GOAL	SUPPORT	OPPOSE	NOT SURE
Ensure DeLisle Prepares for Growth	95%	2%	4%
Rebuild the Community	100%	0%	0%
Maintain the Rural Character of the Community	90%	7%	3%
Protect and Preserve the Environment	98%	0%	2%
Maintain and Enhance DeLisle's Close-Knit Community	100%	0%	0%
Protect the Health and Safety of Residents	100%	0%	0%
Encourage and support the development of a water district	85%	8%	7%

**Table 33A.** Dot voting results.

STRATEGY	SUPPORT	OPPOSE
<b>Goal: Rebuild the Community</b>		
Research funding programs for rebuilding.	18	0
Ensure that affected property owners are aware of requirements for elevating buildings in the floodplain.	9	0
Educate consumers about housing options.	2	0
Promote the placement of community appropriate affordable housing units.	1	9
<b>Goal: Maintain the Rural Character of the Community</b>		
Maintain a residential density of approximately 0.3 dwelling units per acre in the outskirts of DeLisle.	2	0
Maintain a residential density of approximately one dwelling unit per acre within the areas of DeLisle where a pattern of one-acre lots currently exists.	20	2
Encourage new residential development to preserve open space within each subdivision. Encourage development at a density of between 1 to 3 units per acre in a manner similar to the surrounding development.	1 3	0 23
Identify compatible building styles.	0	1
Allow the establishment of small businesses (such as small convenience retail and services intended to meet the needs of the community) at the intersection of Kiln-DeLisle/Cuevas-DeLisle and Vidalia/Wittmann.	19	0
Require all new development on land zoned for nonresidential use to maintain and enhance the existing natural environment.	5	0
Limit light pollution from residential and commercial sources.	2	0

**Table 33B.** Dot voting results.

STRATEGY	SUPPORT	OPPOSE
<b>Goal: Protect and Preserve the Environment</b>		
Encourage the protection of the riparian areas and coastal wetlands along the bayou, as well as other quality wetlands found throughout DeLisle.	13	2
Provide property owners financially viable alternatives to rebuilding when their damaged homes are located in environmentally sensitive areas.	1	1
Encourage property owners to establish conservation easements on the portions of their properties that are located in environmentally sensitive areas.	0	2
Partner with the Nature Conservancy, other educational providers, and the Pass Christian School District to utilize the Conservancy's land for outdoor environmental education programs.	12	0
Preserve existing trees.	13	0
Encourage homeowners to replant with species that are native to the area and can withstand storms.	3	0
<b>Goal: Maintain and Enhance DeLisle's Close-Knit Community</b>		
Promote the development of the pedestrian and bike trail connections through DeLisle, identified in the Mississippi Renewal Forum.	2	0
Continue to promote and conduct local events at community facilities, churches, and DeLisle elementary school that bring people together.	4	0
Provide a public park with picnic facilities.	6	0
Create public access to bayou.	3	0
Create a community recreation center.	16	0
Document the significant historical, architectural, and archaeological sites in DeLisle to preserve important aspects of the community's past.	7	0
Ensure community residents and visitors are aware of the DeLisle's heritage.	1	0
Enhance entrances to the community.	2	0
<b>Goal: Protect the Health and Safety of Residents</b>		
Private well owners perform routine tests on their water supply.	0	0
Build a community center that converts to a hurricane shelter during emergencies.	13	0
Work with FEMA, and other agencies to draft an emergency management plan and a hazard mitigation plan including updated evacuation procedures.	2	0
Direct the debris removal process to focus aggressively on opportunities to divert debris from the solid waste stream, and create a system to deal with source separation in future events.	1	0
Encourage cooperation between residents and local law enforcement to identify criminal activity.	16	0
Establish appropriate traffic controls.	2	1

**Table 33C.** Dot voting results.

STRATEGY	SUPPORT	OPPOSE
Ensure that any development of the land area currently zoned C-3 Resort Commercial west of Wittmann Road and south of the Wolf River properly mitigates anticipated traffic impacts.	6	0
Increase fire protection services.	3	0
<b>Goal: Encourage and support the development of a water service area</b>		
Work with the Regional Water and Sewer Authority to determine the necessary steps to establish a water service area.	18	0

# Appendix B. *Potential Grant Funding Sources*

FUNDING AGENCY	NAME OF FUNDING PROGRAM	DESCRIPTION	WEBSITE
<b>Economic Development</b>			
Foundation for the Mid South	Various	Supports programs in the areas of education, economic development, and families and children.	<a href="http://www.fndmidsouth.org/grants_funding.htm">http://www.fndmidsouth.org/grants_funding.htm</a>
US Dept of Agriculture	Rural Community Development Initiative	Provides grant funding for technical assistance in the areas of housing, community facilities, and community and economic development.	<a href="http://www.rurdev.usda.gov/rhs/rcdi/index.htm">http://www.rurdev.usda.gov/rhs/rcdi/index.htm</a>
US Economic Development Administration	Public Works and Economic Adjustment Program	This program assists distressed areas with grants to revitalize, expand, and upgrade physical infrastructure to attract new industry, encourage expansion and generate and retail private sector jobs and investment.	<a href="http://www.eda.gov">http://www.eda.gov</a>
<b>Historic Preservation</b>			
Mississippi Department of Archives	Community Heritage Preservation	Provide funding for a variety of historic preservation activities.	<a href="http://www.mdah.state.ms.us/">http://www.mdah.state.ms.us/</a>
<b>Housing</b>			
FEMA	Flood Mitigation Assistance Program	Provides funding to assist communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings.	<a href="http://www.fema.gov/fima/fma.shtm">http://www.fema.gov/fima/fma.shtm</a>
FEMA	Increased Cost of Compliance Program	This program helps homeowners cover the cost of meeting flood hazard mitigation requirements for all new and renewed Standard Flood Insurance Policies. Flood insurance policyholders in Special Flood Hazard Areas, can get up to \$30,000 to help pay the costs to bring their home or business into compliance with their community's floodplain ordinance. The funds can cover costs related to elevation, relocation, or demolition of flood-damaged structures.	



Mississippi Development Authority	Hurricane Katrina Homeowners' Assistance Grants	Provides up to \$150,000 grant for homeowners affected by flooding during Hurricane Katrina. To qualify, the home must have been owner-occupied as of August 29, 2005 and been outside of the federally designated 100-year floodplain, yet flooded during Hurricane Katrina. Additionally, the owner must have had flood insurance. Those receiving funds must comply with the 2003 International Building/Residential Codes and new FEMA Advisory Flood maps, and are required to purchase flood insurance.	<a href="http://www.mda.state.ms.us">http://www.mda.state.ms.us</a>
Mississippi Home Corporation	HB530 Construction Loan Fund Mississippi Affordable Housing Development Fund	This fund provides financing for the construction of low-to-moderate income single-family housing units	<a href="http://www.mshomecorpo.com">http://www.mshomecorpo.com</a>
US Dept of Agriculture	Mutual Self-Help Loans Housing Repair and Rehabilitation Loan Rural Housing Guaranteed Loans	Provides loans for homeowners and for communities to build and repair homes and provide water and sewer service.	<a href="http://www.rurdev.usda.gov/rhs/sfh/brief_repairgrant.htm">http://www.rurdev.usda.gov/rhs/sfh/brief_repairgrant.htm</a>
US Treasury	Low Income Housing Tax Credits	Provides tax credits for the development of housing development.	<a href="http://www.cdfifund.gov/programs/programs.asp?programID=5">http://www.cdfifund.gov/programs/programs.asp?programID=5</a>
<b>Infrastructure Improvements</b>			
Mississippi Development Authority	Capital Improvements Revolving Loan Program	Provides loans for the establishment and expansion of capital improvements, such as water and sewer.	
Mississippi Department of Environmental Quality	Drinking Water Systems Improvements Revolving Fund Loan Program	Provides loan funds to public agencies to improve drinking water systems.	<a href="http://www.deq.state.ms.us">http://www.deq.state.ms.us</a>
Mississippi Department of Transportation	Safe Routes to School Program	The Program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.	<a href="http://safety.fhwa.dot.gov/saferoutes/overview.htm">http://safety.fhwa.dot.gov/saferoutes/overview.htm</a>
<b>Natural Resources</b>			
Mississippi Audubon Society	Birdhouse clinics	The Society sponsors free clinics to help families build bird houses to help protect the bird population.	<a href="http://www.msaudubon.org/">http://www.msaudubon.org/</a>

Mississippi Department of Marine Resources	Coastal Preserves Program	This program provides funds for the acquisition, protection, and management of coastal wetland habitats.	<a href="http://www.dmr.state.ms.us/">http://www.dmr.state.ms.us/</a>
Mississippi Department of Marine Resources	Aquatic Resources Trust Fund	This fund allocates at least 15 percent of the revenues collected from the taxes on the sale of fishing equipment, pleasure boats, and motorboat fuel sales to the creation and expansion of boating access.	
Mississippi Department of Marine Resources	Tidelands Trust Fund	This program provides funds for tidelands management, such as conservation, reclamation, preservation, acquisition, education,	<a href="http://www.dmr.state.ms.us/tidelands/tidelands.htm">http://www.dmr.state.ms.us/tidelands/tidelands.htm</a>
Mississippi Department of Wildlife, Fisheries, and Parks	Mississippi Scenic Streams Stewardship Program	This program promotes the voluntary conservation efforts along Mississippi rivers and streams.	<a href="http://www.mdwfp.com/level2/scenicstreams/introduction.asp">http://www.mdwfp.com/level2/scenicstreams/introduction.asp</a>
Mississippi Department of Wildlife, Fisheries, and Parks	Land and Water Conservation Fund	This program provides funds for the development of recreational sites and facilities. Funding for the program is provided largely from Outer Continental Shelf mineral receipts, with additional income from the Motorboat Fuels Tax, recreation user fees, and through the sales of federal surplus property.	<a href="http://www.mdwfp.com/level1/lwcf.asp">http://www.mdwfp.com/level1/lwcf.asp</a>
Mississippi Forestry Commission	Urban and Community Forestry Assistance Challenge Grant	Provides funds for the development of community forestry programs.	<a href="http://www.mfc.state.ms.us/urban/uf3.html">http://www.mfc.state.ms.us/urban/uf3.html</a>
National Arbor Day Foundation	National Arbor Day Tree Planting Program	This program provides ten flowering or oak trees six to 12 inches tall for members.	<a href="http://www.nationalarborday.org">http://www.nationalarborday.org</a>
National Tree Trust	Seeds and Roots Grant Programs	Provides funding for the development and operation of community forestry programs.	<a href="http://www.nationaltreetrust.org">http://www.nationaltreetrust.org</a>
US Corp of Engineers	Aquatic Ecosystem Restoration	This program provides funds to restore and protect aquatic ecosystems if the project will improve the environment.	<a href="http://www.usace.army.mil/">http://www.usace.army.mil/</a>
<b>Parks and Recreation</b>			
Conservation Fund		This program provides funds to plan greenways.	<a href="http://www.conservationfund.org/">http://www.conservationfund.org/</a>
FundingFactory	Funding Factory	This is a fundraising program that provides funds for playground and other recreational equipment through community recycling.	<a href="http://fundingfactory.com/">http://fundingfactory.com/</a>

Mississippi Department of Marine Resources	Boat Access Program	Provides funds for the development of boat access facilities.	<a href="http://www.dmr.state.ms.us/sport-fish/Boat_Access.htm">http://www.dmr.state.ms.us/sport-fish/Boat_Access.htm</a>
Mississippi Department of Marine Resources	Tidelands Trust Fund	This program provides funds for enhancement of public access to the public trust tidelands or public improvement projects as they relate to those lands	<a href="http://www.dmr.state.ms.us/tidelands/tidelands.htm">http://www.dmr.state.ms.us/tidelands/tidelands.htm</a>
Mississippi Department of Wildlife, Fisheries and Parks, Outdoor	Land and Water Conservation Fund	Funds the acquisition and development of land for recreational development, such as sports fields and picnic facilities.	<a href="http://www.mdwfp.com/level1/lwcf.asp">http://www.mdwfp.com/level1/lwcf.asp</a>

## NOTES

1. The Coastal Preserves Program is currently developing the Wolf River Marsh management plan. The management program includes identifying areas for acquisition potential and underscores the need to establish intergovernmental and private cooperation to manage the unique ecosystem surrounding the Wolf River Marsh.

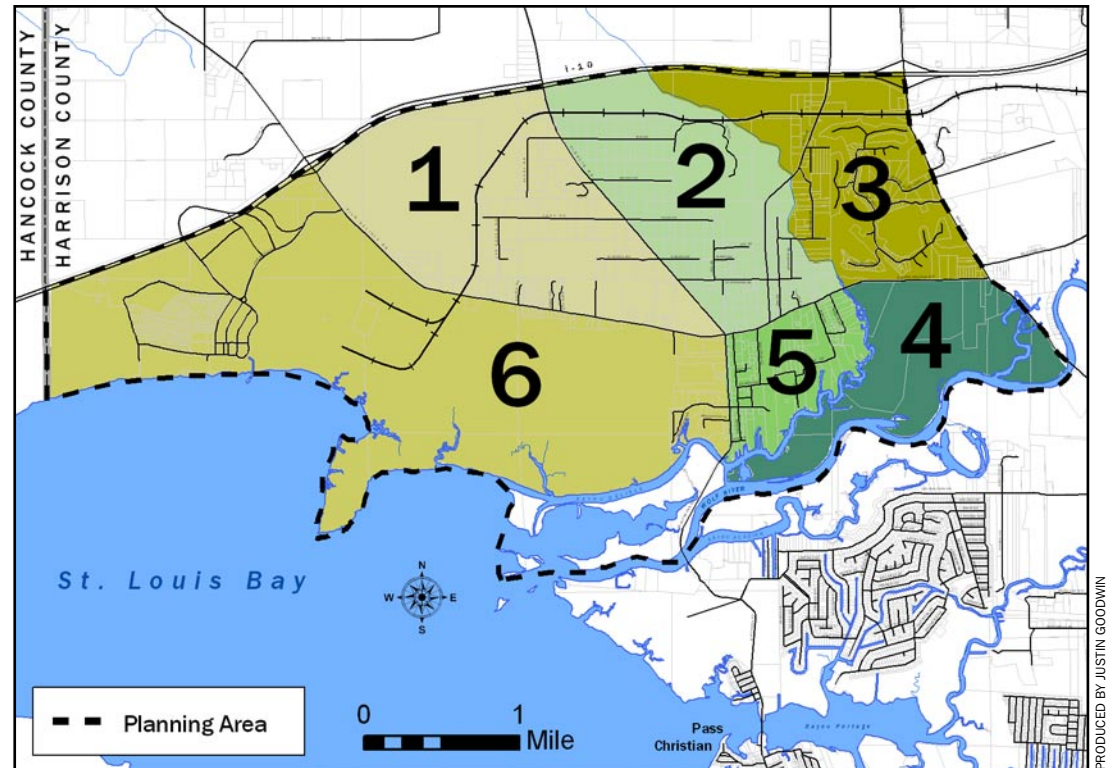
## Appendix C. Demographic Data Tables

### Population and Housing Demographics

The following data comes from the decennial Census of Population and Housing of the US Census Bureau. The entire planning area is contained within Census Tract Block Group 31.02.02. The boundaries for this Block Group remain unchanged between the 1990 and 2000 Census.

The data is primarily year 2000 Census data, but also includes previous Census years. Since DeLisle is an unincorporated community, historical census data was unavailable. In order to assess past trends and estimate future development, data tables compare DeLisle with Pass Christian, Harrison County and the state of Mississippi.

Where Census information is available at the block level, six areas within DeLisle are compared to determine trends within the planning area. These neighborhoods are defined by groups of census blocks selected by the planning team according to natural boundaries within DeLisle (see Map 15). The specific Census blocks from group 31.02.02 that make up each neighborhood are shown in Table 34.



**Map 15.** The DeLisle Planning Area was divided into six neighborhoods for comparison.

Sources: Political Boundaries, Roadways: SMPDD.



**Table 34.** DeLisle neighborhood composition by Census block.

NEIGHBORHOOD	CENSUS BLOCKS IN GROUP 31.02.02
<b>1 – Between Kiln-DeLisle Road &amp; Vidalia Road</b>	2003, 2004
<b>2 – Between Vidalia Road &amp; Bayou DeLisle</b>	2002, 2035, 2036, 2037, 2038, 2040
<b>3 – Between Bayou DeLisle &amp; Menge Avenue</b>	2000, 2001, 2039
<b>4 – South of Cuevas-DeLisle Road, East of Bayou DeLisle</b>	2043, 2044, 2046, 2047, 2048, 2999
<b>5 – South of Cuevas-DeLisle Road., Between Wittmann Road &amp; Bayou DeLisle</b>	2033, 2034, 2041, 2042, 2051, 2052, 2053, 2054, 2055, 2056
<b>6 – West of Wittman Road, South of Kiln-DeLisle Road</b>	2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2031

**Table 35.** Population change, 1960-2000.

	1960	1970	CHANGE 1960-1970		1980	CHANGE 1970-1980		1990	CHANGE 1980-1990		2000	CHANGE 1990-2000	
<b>DeLisle</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1,295	n/a	n/a	1,374	79	6.1%
<b>Pass Christian</b>	3,881	2,979	-902	-23.2%	5,014	2,035	68.3%	5,557	543	10.8%	6,579	1022	18.4%
<b>Harrison County</b>	119,489	134,582	15,093	12.6%	157,665	23,083	17.2%	165,365	7,700	4.9%	189,601	24,236	14.7%
<b>Mississippi</b>	2,178,141	2,216,912	38,771	1.8%	2,520,638	303,726	13.7%	2,573,216	52,578	2.1%	2,844,658	271,442	10.5%

Source: Census of Population and Housing, US Census Bureau, 1960-2000.

**Table 36.** Household change, 1960-2000.

	1960	1970	CHANGE 1960 - 1970		1980	CHANGE 1970 - 1980		1990	CHANGE 1980 - 1990		2000	CHANGE 1990 - 2000	
<b>DeLisle</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	424	n/a	n/a	473	49	11.6%
<b>Pass Christian</b>	1,095	876	-219	-20.0%	1,790	914	104.3%	2,089	299	16.7%	2,687	598	28.6%
<b>Harrison County</b>	30,981	37,531	6,550	21.1%	52,202	14,671	39.1%	59,557	7,355	14.1%	71,538	11,981	20.1%
<b>Mississippi</b>	568,070	636,724	68,654	12.1%	827,169	190,445	29.9%	911,374	84,205	10.2%	1,046,434	135,060	14.8%

Source: Census of Population and Housing, US Census Bureau, 1960-2000.

**Table 37.** Age composition, 2000.

	UNDER 10 YEARS	10-19 YEARS	20-24 YEARS	25-34 YEARS	35-54 YEARS	55-74 YEARS	75 YEARS +	TOTAL
<b>DeLisle</b>	182 (13.2%)	246 (17.9%)	80 (5.8%)	155 (11.3%)	441 (32.1%)	207 (15.1%)	63 (4.6%)	1374
<b>DeLisle Neighborhoods</b>	-	-	-	-	-	-	-	-
<b>1</b>	33 (11.7%)	51 (18.0%)	18 (6.4%)	38 (13.4%)	92 (32.5%)	38 (13.4%)	13 (4.6%)	293
<b>2</b>	66 (12.5%)	103 (19.5%)	29 (5.5%)	67 (12.6%)	157 (29.3%)	89 (16.8%)	18 (3.4%)	471
<b>3</b>	19 (12.3%)	34 (21.9%)	8 (5.1%)	6 (3.9%)	64 (41.3%)	16 (10.3%)	8 (5.1%)	159
<b>4</b>	3 (27.3%)	2 (18.2%)	0	2 (18.2%)	3 (27.3%)	1 (9.1%)	0	11
<b>5</b>	30 (10.9%)	33 (12.0%)	15 (5.5%)	32 (11.6%)	115 (41.8%)	43 (15.6%)	17 (6.2%)	247
<b>6</b>	19 (18.8%)	14 (13.9%)	8 (7.9%)	8 (7.9%)	34 (33.7%)	10 (9.9%)	8 (7.9%)	131
<b>Pass Christian</b>	837 (12.7%)	1,680 (12.8%)	317 (4.8%)	766 (11.6%)	1,805 (27.5%)	1,405 (21.3%)	606 (9.2%)	6,579
<b>Harrison County</b>	27,512 (14.5%)	28,417 (15.0%)	14,502 (7.6%)	27,398 (14.5%)	50,660 (28.9%)	20,596 (15.0%)	8,767 (4.6%)	189,601
<b>Mississippi</b>	421,284 (14.8%)	451,930 (15.9%)	212,947 (7.5%)	381,798 (13.4%)	787,353 (27.7%)	431,533 (15.1%)	157,813 (5.5%)	2,844,658

Source: Census of Population and Housing, US Census Bureau, 2000.

**Table 38.** Comparison of age composition, DeLisle, 1990, 2000.

	LESS THAN 10 YRS	10-19 YRS	20-24 YRS	25-34 YRS	35-54 YRS	55-74 YRS	75 YRS +	TOTAL
<b>2000</b>	182	246	80	155	441	207	63	1374
<b>1990</b>	210	216	88	220	290	203	68	1295
<b>number change</b>	-28	30	-8	-65	151	4	-5	79
<b>percent change</b>	-13.3%	13.9%	-9.1%	-29.5%	52.1%	2.0%	-7.4%	6.1%

Source: Census of Population and Housing, US Census Bureau, 1990 and 2000.

**Table 39.** Median household and per capita income, 1990, 2000.

	MEDIAN HOUSEHOLD INCOME			PER CAPITA INCOME		
	1990 (1989 SAMPLE DATA)	2000 (1999)	PERCENT CHANGE	1990 (1989 SAMPLE DATA)	2000 (1999)	PERCENT CHANGE
<b>DeLisle</b>	\$25,643	\$43,362	69%	\$9,536	\$18,521	94%
<b>Pass Christian</b>	\$21,022	\$40,743	94%	\$9,221	\$26,008	82%
<b>Harrison County</b>	\$22,157	\$35,624	61%	\$10,434	\$18,024	73%
<b>Mississippi</b>	\$20,136	\$31,330	56%	\$9,648	\$15,853	64%

Source: Census of Population and Housing, US Census Bureau, 1990 and 2000.

**Table 40.** Delisle racial composition by neighborhood, 2000.

DELISLE NEIGHBORHOODS	TOTAL	WHITE ALONE		BLACK OR AFRICAN AMERICAN ALONE		SOME OTHER RACE ALONE		TWO OR MORE RACES	
<b>1</b>	293	216	73.7%	65	22.2%	7	2.4%	5	1.7%
<b>2</b>	533	172	32.3%	346	64.9%	7	1.3%	7	1.3%
<b>3</b>	159	73	45.9%	84	52.8%	2	1.3%	0	0.0%
<b>4</b>	11	11	100.0%	0	0.0%	0	0.0%	0	0.0%
<b>5</b>	247	188	76.1%	47	19.0%	4	1.6%	8	3.2%
<b>6</b>	131	89	67.9%	40	30.5%	0	0.0%	2	1.5%
<b>Total</b>	1,374	749	54.5%	582	42.4%	21	1.5%	22	1.6%

Source: Census of Population and Housing, US Census Bureau, 1990 and 2000.

**Table 41.** Educational attainment, 2000.

	DELISLE		PASS CHRISTIAN		HARRISON COUNTY		MISSISSIPPI	
<b>Total Residents 25 years and older</b>	945		4,574		119,169		1,757,517	
<b>No schooling completed</b>	10	1.1%	48	1.0%	1,169	1.0%	26,981	1.5%
<b>Less than 9th grade</b>	81	8.6%	225	4.9%	6,279	5.3%	142,197	8.1%
<b>9-12, no diploma</b>	208	22.0%	404	8.8%	16,082	13.5%	307,852	17.5%
<b>High school graduate (includes equivalency)</b>	312	33.0%	1,044	22.8%	33,808	28.4%	516,091	29.4%
<b>Some college, no degree</b>	160	16.9%	1,294	28.3%	30,907	25.9%	366,744	20.9%
<b>Associate degree</b>	102	10.8%	290	6.3%	9,011	7.6%	100,561	5.7%
<b>Bachelor's degree</b>	47	5.0%	825	18.0%	14,062	11.8%	194,325	11.1%
<b>Graduate degree</b>	25	2.6%	444	9.7%	7,851	6.6%	102,766	5.8%

Source: Census of Population & Housing, US Census Bureau, 2000.

**Table 42.** Occupation of employed civilian population 16 years and over, DeLisle, 2000.

	MALE	FEMALE	TOTAL	PERCENT
<b>Employed Residents, 16 years old and older</b>	338	302	640	
<b>Management, professional, and related occupations</b>	43	100	143	22.3%
<b>Service occupations</b>	67	60	127	19.8%
<b>Sales and office occupations</b>	15	111	126	19.7%
<b>Construction, extraction, and maintenance occupations</b>	137	0	137	21.4%
<b>Production, transportation, and material moving occupations</b>	76	31	107	16.7%

Source: *Census of Population & Housing, US Census Bureau, 2000.*

**Table 43.** Industry in which civilian population 16 years and over is employed, DeLisle, 2000.

	MALE	FEMALE	TOTAL	PERCENT
<b>Employed Residents, 16 years old and older</b>	338	302	640	100.0
<b>Agriculture, forestry, fishing and hunting, and mining</b>	6	0	6	0.9
<b>Construction</b>	64	9	73	11.4
<b>Manufacturing</b>	64	30	94	14.7
<b>Wholesale trade</b>	7	10	17	2.7
<b>Retail trade</b>	11	48	59	9.2
<b>Transportation and warehousing, and utilities</b>	21	17	38	5.9
<b>Information</b>	7	12	19	3.0
<b>Finance, insurance, real estate and rental and leasing</b>	0	0	0	0.0
<b>Professional, scientific, management, administrative, and waste management services</b>	13	0	13	2.0
<b>Educational, health and social services</b>	25	108	133	20.8
<b>Arts, entertainment, recreation, accommodation and food services</b>	56	43	99	15.5
<b>Other services (except public administration)</b>	8	16	24	3.8
<b>Public administration</b>	56	9	65	10.2

Source: *Census of Population & Housing, US Census Bureau, 2000.*



**Table 44.** Housing occupancy characteristics, DeLisle, 1990-2000.

CENSUS BLOCK GROUP 31.02.2	UNITS		PERCENT OF TOTAL	
	1990	2000	1990	2000
<b>Owner-occupied</b>	370	400	85.6%	88.5%
<b>Rental</b>	62	52	14.4%	11.5%
<b>TOTAL OCCUPIED UNITS</b>	432	452	-	-
<b>Vacant</b>	37	52	7.9%	10.3%
<b>TOTAL</b>	469	504	-	-

Source: Census of Population & Housing, US Census Bureau, 1990 and 2000.

**Table 45.** Characteristics of housing, 2000.

	2000 TOTAL HOUSING UNITS	1-UNIT DETACHED		1-UNIT ATTACHED		2-4 UNITS PER BUILDING		5 OR MORE UNITS PER BUILDING		MOBILE HOME	
<b>DeLisle</b>	504	423	83.9%	0	0%	0	0%	0	0%	81	16.1%
<b>Pass Christian</b>	3,313	2,526	76.2%	54	1.6%	268	8.1%	398	12.0%	67	2.0%
<b>Harrison County</b>	79,636	49,754	62.5%	2,150	2.7%	5,806	7.3%	11,950	15.0%	9,843	12.4%
<b>Mississippi</b>	1,161,953	791,569	68.1%	20,145	1.7%	66,995	5.8%	87,605	7.5%	192,749	16.6%

Source: Census of Population & Housing, US Census Bureau 2000.

**Table 46.** Year housing built and median age of housing.

	1939 AND EARLIER	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-MARCH 2000	MEDIAN YEAR BUILT
<b>DeLisle</b>	30 (6.0%)	34 (6.7%)	38 (7.5%)	92 (18.3%)	127 (25.2%)	92 (18.3%)	91 (18.1%)	1975
<b>Pass Christian</b>	331 (10.0%)	162 (4.8%)	333 (10.1%)	698 (21.1%)	682 (20.6%)	419 (12.6%)	688 (20.8%)	1972
<b>Harrison County</b>	4,098 (5.1%)	4,345 (5.5%)	8,620 (10.8%)	14,144 (17.8%)	17,939 (22.5%)	13,053 (16.4%)	17,437 (21.9%)	1975
<b>Mississippi</b>	72,381 (0.6%)	62,969 (5.4%)	113,425 (9.8%)	179,489 (15.4%)	262,509 (22.6%)	214,865 (18.5%)	256,315 (22.1%)	1976

Source: Census of Population & Housing, US Census Bureau, 2000.

**Table 47.** Number of bedrooms per housing unit, 2000.

	2000 TOTAL HOUSING UNITS	1 BEDROOM		2 BEDROOMS		3 BEDROOMS		4 BEDROOMS		5 OR MORE	
<b>DeLisle</b>	504	21	4.2%	110	21.80%	273	54.20%	70	13.90%	25	16.10%
<b>Pass Christian</b>	3,313	299	9.0%	1059	32.00%	1439	43.40%	369	11.10%	140	4.20%
<b>Harrison County</b>	79,636	9831	12.3%	22903	28.80%	35573	44.70%	8476	10.60%	1399	1.80%
<b>Mississippi</b>	1,161,953	99938	8.6%	310864	26.80%	578453	49.80%	136253	11.70%	21598	1.90%

Source: Census of Population & Housing, US Census Bureau, 2000.

**Table 48.** Median value for all owner-occupied housing units, 1990, 2000.

	1990	2000	PERCENT CHANGE 1990-2000
<b>DeLisle</b>	\$44,300	\$78,800	77.90%
<b>Pass Christian</b>	\$60,300	\$99,000	64.20%
<b>Harrison County</b>	\$54,900	\$82,000	49.40%
<b>Mississippi</b>	\$45,100	\$64,700	43.50%

Source: Census of Population & Housing, US Census Bureau, 2000.

**Table 49.** Contract rent, DeLisle, 2000.

RENT	DELISLE		PASS CHRISTIAN		HARRISON COUNTY		MISSISSIPPI	
<b>\$250 or less</b>	15	40.50%	119	17.60%	3643	15.30%	79303	31.80%
<b>250-349</b>	9	24.30%	47	7.00%	2823	11.90%	54161	21.70%
<b>350-449</b>	6	16.20%	102	15.10%	5056	21.30%	48193	19.30%
<b>450-549</b>	0	0%	248	36.70%	5562	23.40%	31697	12.70%
<b>550-649</b>	7	18.90%	69	10.20%	3434	14.50%	18997	7.60%
<b>650 and higher</b>	0	0%	90	13.30%	3223	13.60%	16865	6.80%

Source: Census of Population & Housing, US Census Bureau, 2000.







