

Comprehensive Plan



With A New Beginning

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Introduction

What is a Comprehensive Plan?

A Comprehensive Plan is a document that, in broad terms, is a policy statement to guide the future placement and development of community facilities and it is the basis for a community's subdivision and zoning regulations, official maps and amendments to the subdivision and zoning ordinances. The Comprehensive Plan identifies a future vision for the community, determines the projected growth for the community and identifies policies to plan, direct and accommodate the growth. The new Comprehensive Plan took into consideration the Plan developed by the City in 2000.

The Mississippi legislature, through Mississippi Code §17-1-1 defines those minimum elements required to be addressed within a Comprehensive Plan. These include:

- *Goals and objectives* for the long range (20 to 25 years) development of the City. Required goals and objectives shall address at a minimum: residential, commercial and industrial development; parks, open space and recreation; street or road improvements, public schools and community facilities.
- *A land use plan* which designates in map or in policy form the proposed general distribution and extent of the uses of land for residences, commerce, industry, recreation and open space; public and quasi-public facilities and lands.
- *A transportation plan* depicting in map form the proposed functional classifications for all existing and proposed streets, roads and highways for the area encompassed by the land use plan and for the same time period. Functional classifications shall consist of arterial, collector and local streets, roads and highways.
- *A community facilities plan* as a basis for a capital improvements program including, but not limited to, the following: housing; schools; parks and recreation; public buildings and facilities; and utilities and drainage.

The 2007 Update to the City of Bay St. Louis Comprehensive Plan is organized in the following manner:

Chapter 1	Existing Land Use
Chapter 2	Goals and Objectives
Chapter 3	Future Land Use Plan
Chapter 4	Transportation Plan
Chapter 5	Community Facilities Plan
Chapter 6	Demographic and Economic Profile
Appendix A	Hancock County Greenways Plan
Appendix B	Mississippi Renewal Forum "Rebuilding Bay St. Louis"

This plan was initiated with funding from Mississippi Development Authority with a grant secured through the U.S. Economic Development Administration. The Mississippi Development Authority required the Bay St. Louis City Council and the Hancock County Board of Supervisors to develop their comprehensive plans in conjunction and coordination with each other.

Additionally, the Mississippi Development Authority required that the Comprehensive Plan build upon planning efforts initiated by the Governor's Commission on Recovery, Rebuilding, and Renewal, and consider methods to grow smarter, utilizing neo-traditional planning ideals and Smart Code based concepts proposed in the Governor's Rebuilding Process.

The City also received a grant from the U.S. Department of Housing and Urban Development, through CDBG Hurricane Katrina Supplemental Funds. These funds were utilized to make additions, amendments and revisions to the draft, funding specific action strategies for economic development, housing and the development of neighborhood plans.

Regional Coordination and Plan Interaction

The City of Bay St. Louis hired urban planning consultants Slaughter and Associates, PLLC to develop the comprehensive plan update for the City of Bay St. Louis. The Hancock County Board of Supervisors hired Gulf Regional Planning Commission and Planning Works to develop the comprehensive plan update for Hancock County. The consultants worked together to share tasks and to coordinate public meetings and advisory committee meetings. Additionally, the City of Bay St. Louis and Hancock County appointed one member shared by both committees, and the County appointed several members to the County Committee that were residents of the Cities of Bay St. Louis and the City of Waveland.

Gulf Regional Planning Commission (GRPC) provided the transportation elements of the project and developed the methodology for the capture of existing land use within the County and both Cities. GRPC also oversaw the collection and coding of the land use data into a GIS based system for analysis.

Additionally, Growth Allocation Workshops were held in the City of Bay St. Louis and Hancock County to determine how the people wanted the community to grow. Two workshops were held in December, 2006. From these two workshops, Planning Works developed three potential growth scenarios for Hancock County. These scenarios were discussed by the Citizen Advisory Committees to determine the effects of each of these models on the City of Bay St. Louis.

Planning Efforts After Hurricane Katrina

In the days after Hurricane Katrina, Governor Haley Barber and State leaders saw the devastation of the Mississippi Gulf Coast and pledged to help the Mississippi Gulf Coast build back better, stronger and smarter than before. The Governor convened architects, urban designers, and planners from across the Country to help the communities on the Mississippi Gulf Coast consider new patterns for redevelopment in the face of the devastation.

The following plans were developed after Hurricane Katrina for Bay St. Louis and Hancock County. These plans provided insight into the community and their vision for recovery. Planners utilized these visions and these goals to begin the planning process.

Governor's Commission on Recovery, Rebuilding and Renewal:

"The Commission proposes the following priorities that should be supported by resources available from the Commission or a state office continuing the Commission's efforts and by extended public efforts that will rebuild the Mississippi Gulf Coast:

- **Mixed use.** Each county and city should adopt amendments to land use ordinances for mixed-use alternatives which promote walkability. Walkability can be defined as pedestrian access to basic services, recreation, and retail within a five-minute walking

distance from their homes. Mixed-use alternatives include: (a) business and residential in downtown area; (b) mixed use in neighborhoods using “community-based” retail, which incorporates only commercial amenities needed and approved by residents; and (c) neighborhood residential areas without mixed use but connected to other areas by a sidewalk or pedestrian path system.”

- **Safe, affordable housing.** Redevelopment efforts should provide safe, affordable housing that can be easily financed for the Coast residents. Residential and mixed use development should encourage a specified percentage of affordable housing that is compliant with building standards.
- **Environmental sensitivity.** All counties, cities and regional authorities should make land use and economic development decisions that accommodate and are sensitive to the protection of existing natural areas including watersheds, wetlands, urban forests, and natural habitats.
- **Regional shared services.** On a regional level, coastal cities and counties should consider the feasibility of shared water and sewer systems while maintaining a sense of community identity.
- **Waterfronts and waterways.** Economic growth and development should match citizen expectations for protection of South Mississippi’s natural resources. Plans should take advantage of the waterfront as the Gulf Coast’s unique aesthetic and economic asset, balancing public access with potential development which is consistent with community identity.
- **Coastal access.** Public access to coastal waters should be encouraged through waterfront parks and networks of boardwalks and piers that connect areas with public spaces on the waterfront. Marinas should provide dockage and access to commercial and recreational boats of diverse sizes and price ranges, from working shrimp boats to small pleasure craft and large inter-coastal traveling yachts that enhance the tourism industry.
- **Working waterfronts.** Each coastal county and city should promote working waterfronts that coordinate water-related recreational and commercial uses and that specifically coordinate wharves and docks for commercial shrimp and oyster fleet with inland seafood park or parks. Land use and economic development decisions should preserve and promote public use and enjoyment of the beach, waterfront parks, the Mississippi Sound and inland waterways. Port facilities should institute emergency planning measures to minimize risk of damage and debris caused by shipping containers that are not secure.
- **Transportation.** Wise land use decisions are closely aligned with appropriate transportation planning. The quality of life and sustainability of cities and neighborhoods depends in large part upon changing the post-World War II conventional wisdom for design of streets, major thoroughfares and federal highways connectors. Hundreds and hundreds of citizens have said that Highway 90 should not become six-lanes. Rather this scenic highway should become a slower moving, pedestrian friendly boulevard that allows safe pedestrian crossing to the beach. Railroad traffic should be moved north of the Bays, allowing vacant CSX right-of-way to be redeveloped as a tree-lined avenue with light rail down the center connecting the 11 communities of the Coast with

landscaping and mixed uses bordering it in the manner of St. Charles Avenue in pre-Katrina New Orleans.”

The **Mississippi Renewal Forum** held a forum in **Bay St. Louis** and indicated they heard from the community that the following elements were important to the community:

- Keep the small-town character, the architectural heritage, and the natural beauty. Build on the arts character. Provide for growth without destroying what makes Bay St. Louis so livable.
- Make the town more appealing and safer for bicycles, walking and recreation.
- Rebuild the great architectural heritage in a more hurricane-resistant form.
- Make the gateways and Highway 90 corridor more inviting and more compatible with the character of the town.

The **Hancock County Long Term Recovery Plan** developed by FEMA ESF-14 (Federal Emergency Management Agency Emergency Service Function) in support of the Governor’s Office of Recovery and Renewal summed up previous planning efforts developed in the County and post-Katrina planning efforts in their vision statement:

“As a result of the Mississippi Renewal Forum and the efforts of the Long-Term Community Recovery team, the following visions have been identified for Hancock County:

- Rebuild housing in a manner that is consistent with historic precedence;
- Incorporate appropriate mitigation techniques when rebuilding;
- Preserve the small-town character of Bay St. Louis and Waveland;
- Preserve affordability of housing in Hancock County including the incorporated municipalities;
- Create safer environments for walking and bicycling in the community;
- Improve the Hwy. 90 corridor and the gateways to the community.”

And concurrently, the **Hancock County Task Force to the Governor’s Commission** tackled how to translate the broad goals from the region to Bay St. Louis, Waveland and Hancock County. Their statements in many cases become the starting point for goal identification and in many cases become the objectives to this Plan and the Hancock County Plan.

The **Governor’s Task Force for Sewer and Water Infrastructure** was established in the Spring of 2006 to realize one of the goals of the Governor’s Commission. The **Mississippi Gulf Regional Water and Wastewater Plan** was developed to address the regional need for shared water, wastewater and storm water infrastructure. Recommendations from that plan that are specific to Hancock County and Bay St. Louis are discussed within this Comprehensive Plan Update.

In Late Summer 2007, the U.S. Army Corps of Engineers and the Mississippi Department of Marine Resources held meetings to discuss the ***Mississippi Coastal Improvement Program***. The intent of the program is:

“to reduce hurricane and storm damage, reverse impacts of salt-water intrusion, preserve fish and wildlife and their habitats, prevent shoreline erosion, and other water resource purposes.”

The U.S. Army Corps of Engineers is the lead investigator on this project, and the agency is coordinating with the Mississippi Department of Marine Resources, through the Mississippi Coastal Restoration Initiative. The U.S. Army Corps of Engineers will be responsible for developing this plan and will present this plan to congress for consideration. The plan suggests

engineered and non-structural solutions to reduce hurricane and storm damage. Among the engineered solutions are ideas to develop a ringed levee system around populated areas in Hancock County, including the areas of Bay St. Louis and Waveland. A non-structural solution includes the elevating structures eligible for flood-proofing, and the buy-out of those structures located within a priority area, but not eligible for floodproofing. Since the October 10, 2007 report was presented and posted, the Corps has indicated that they would consider this program a voluntary program on the part of homeowners, and that priority properties for purchase would be properties that have repeatedly flooded and are identified as Repetitive Loss Properties. In Bay St. Louis this may include up to 365 structures which are listed by the National Flood Insurance Program as properties which have flooded on three or more occasions within a ten-year period.

During the Fall of 2007, the Bay St. Louis City Council hosted a series of public meetings to discuss the Bay St. Louis Comprehensive Plan. Nearly one hundred residents attended the first meeting, but attendance average about twenty-five people at each of the meetings. The meetings were held to gather the public comments of residents within the planning area. Overwhelmingly, residents are very concerned about recovery within their neighborhoods and the community. Comments were presented to the City Council for review and revisions within this document attempt to take into account many of the comments received at the meetings.

In general, the community longed the City that they once had. Among residents there was great support for returning the small town character that was once Bay St. Louis. Residents urged restraint in increasing density and height within the city. Business owners were torn. Several business owners indicated that there was both a need and an opportunity to access a larger market area. Increased taxes for larger scale developments like condominiums, resorts and additional casinos could fuel reconstruction and provide a tax base for the city to rebuild so that it would not have to rely as heavily on its existing residents for operating and rebuilding funds. Other business owners indicated that Bay St. Louis, especially downtown Bay St. Louis, held a unique quality and that quality of small town coastal living should be preserved where possible and recreated.

Existing Plans Reviewed

In addition to the plans that were developed after Hurricane Katrina, consultants also reviewed the following plans:

- Regional Long Range Transportation Plan
- Hancock County Greenways Plan
- City of Bay St. Louis Comprehensive Plan Update, 2000

Recommendations from these plans have been incorporated into the Comprehensive Plan.

Planners were confronted with incorporating recovery actions into a long term plan. And while this document looks to the future, it does so during a period of uncertainty. This plan should be reviewed and updated, periodically. Additionally, the City Council, with assistance from City staff may consider establishing benchmarks to determine the extent of the City's recovery. This information will aid City leaders in their implementation of this plan and reformulation of strategies, if needed.

Chapter 1

Existing Land Use

Introduction

Gulf Regional Planning Commission performed the Existing Land Use Study for the Bay St. Louis' incorporated area of 15.8 square miles, as well as 33 square miles of unincorporated area that is within the planning area for this comprehensive plan (see Map 1).

The Existing Land Use Study is an important element of a Comprehensive Plan providing the base data for developing a functional plan for the orderly growth of Bay St. Louis and surrounding area. The land use inventory along with input from concerned citizens and the City of Bay St. Louis Planning and Development staff and elected officials will be combined to provide the framework for future development and re-development patterns and will be used as the basis for zoning and subdivision regulations.

Land Use Survey Methodology

The field inventory of existing land use was conducted from November 2006 to March 2007. The land use inventory was completed for the entire area of Hancock County, including the cities of Bay St. Louis and Waveland. Gulf Regional Planning Commission designed a land use survey and code that would capture existing land use within the County. Due to the damage from Hurricane Katrina, the decision was made to add additional codes to the land use survey to try to determine the former land use of the site, if the site was destroyed, and to identify the certainty or the uncertainty of the property owner to rebuild. Planners added the following codes to their typical land use category codes:

- Destroyed residential unit that had not been cleaned or secured
- Destroyed mobile home that had not been cleaned or secured
- Empty residential unit that may have been damaged, but was not cleaned or secured
- Empty mobile home that may have been damaged, but was not cleaned or secured
- Building site no longer had a structure, but there were indications that a structure was once on site due to slab, piers or ground disturbance
- Travel trailer on site utilized as temporary home, with damaged structure or mobile home.
- Travel trailer on site utilized as temporary home, with evidence that structure was destroyed

Gulf Regional Planning Commission (GRPC) organized six teams to gather land use data throughout Hancock County. GRPC mapped the land use throughout the county utilizing building footprints and land use data from the 2005 County Tax Assessment. GRPC also color coded land uses of parcels that they could not identify through the tax assessment data.

The field work maps, broken into grids, were provided to each of the six teams. The teams were directed to:

- Verify the land use on the map.
- Determine if the building footprints still existed.
- Determine if the coding for damage would be used on the parcel and if so, determine the most likely code.
- Check the special color coded parcels to investigate the land use on that particular parcel.

GRPC developed quality control tests of the data. GRPC tested the data weekly against the 2005 and 2006 County assessment data, and the team supervisor randomly selected completed maps to review for accuracy. Additionally, the GIS Manager randomly selected completed maps, and field checked the maps for accuracy on a monthly basis.

Land uses in this study were grouped into twelve (12) major categories.

1. Residential: This category included single family (low density), multi-family duplex to quadraplex (medium density), apartments (high density) and mobile homes.

2. Industrial: This category included a variety of manufacturing and construction establishments.

3. Transportation/Communication/Utilities: This category included railroads, motor freight transport, airports, marine terminals, communication facilities and utilities.

4. Commercial: All types of wholesale, retail trade establishments; hotels, motels, eating and drinking establishments, and related types of businesses and heavy commercial such as automotive repair were included in this category.

5. Services: This category included education, business, personal and professional services.

6. Public and Semi-Public: This category included governmental and other related community serving uses.

7. Churches and Related: This category included all parcels associated with religious activities.

8. Cultural/Entertainment/Recreational: This category included parks, golf courses, camping, swimming areas, libraries, fairgrounds and other similar activities.

9. Resource Production and Extraction: This category included field crop farming, livestock farming, fruit and vegetable farming, forestry and mining.

10. Undeveloped or Non-Urban: This category included undeveloped and unused land, water areas, wetlands and flood plains, and agricultural land.

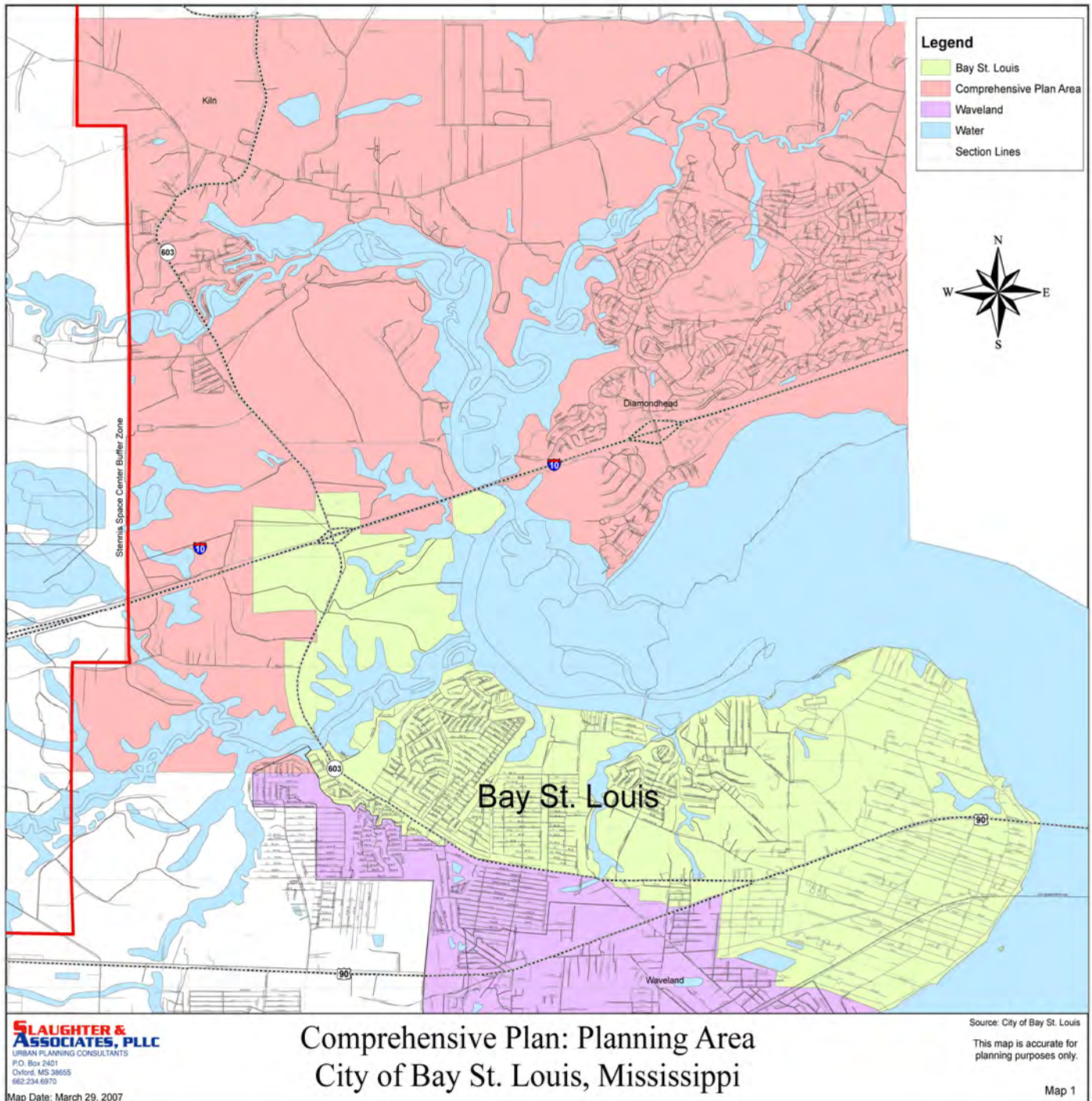
11. Rights-of-Way and Water Areas: This category included highways, streets, railroads and areas covered by water.

12. Casinos: This category included casino, and related ancillary functions on the site of the casino grounds.

These use categories indicate only how the land is presently being used and does not indicate the zoning classification.

To determine present land use by parcel and overall land use patterns of the community, a visual lot-by-lot survey was made within the city and planning area by Gulf Regional Planning Commission. Uses of land were then classified into the above listed and defined categories and presented graphically on Map 2. The Existing Land Use Map and Table 1 present the various categories in relationship to total land area and the total developed area. The map and table provide information necessary to evaluate current development patterns within Bay St. Louis and the planning area. Based on this information, problems or limitations to growth in the area can be analyzed to provide for their orderly removal. Assets of the planning area can also be evaluated and their area benefit determined.

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Adopted March 23, 2009*



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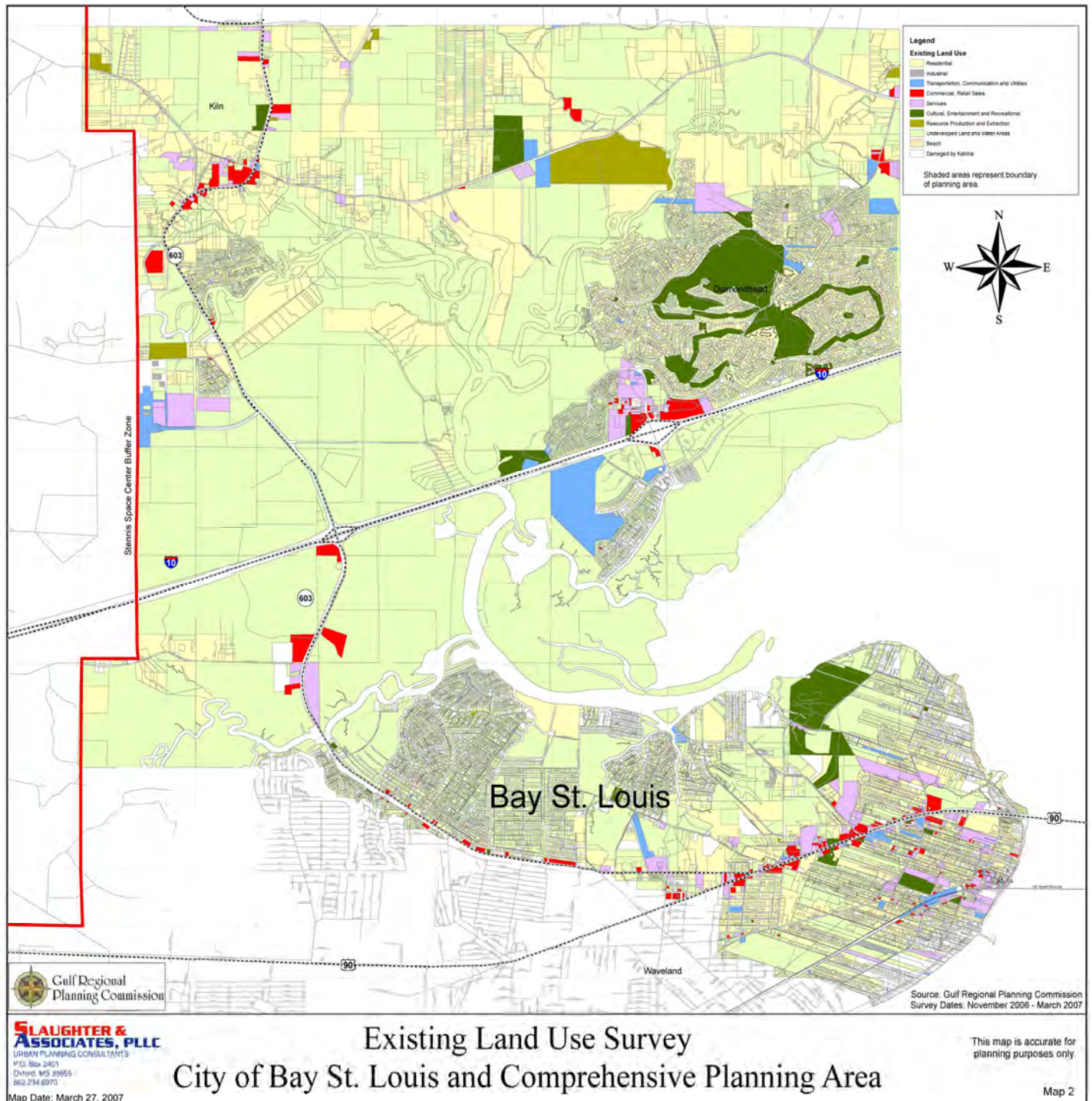


Table 1
Existing Land Use
Bay St. Louis, Mississippi

	Bay St. Louis (includes newly annexed area)			Planning Area (outside the new corporate limits)			Combined Area		
	Inside Corporate Limits Acres	% of Developed Land	% of Total Land	Outside Corporate Limits Acres	% of Developed Land	% of Total Land	Acres	% of Developed Land	% of Total Land
1. Residential									
Low Density	1482	59	16	4583	64	23	6065	63	20
Medium Density	45	2	0	58	1	0	103	1	0
High Density	59	2	1	3	0	0	61	1	0
Mobile Home	44	2	0	683	10	3	727	8	2
Sub-Total	1630	64	18	5326	75	27	6957	72	23
2. Industrial	11	0	0	8	0	0	19	0	0
3. Transportation/Communication/Utilities	79	3	1	386	5	2	464	5	2
4. Commercial/Retail Trade	168	7	2	173	2	1	341	4	1
5. Services	105	4	1	140	2	1	245	3	1
6. Public	172	7	2	113	2	1	284	3	1
7. Churches/ Related	78	3	1	99	1	1	178	2	1
8. Cultural/Entertainment/Recreational	119	5	1	583	8	3	702	7	2
9. Resource Production and Extraction	2	0	0	312	4	2	314	3	1
10. Casino	165	7	2	0	0	0	165	2	0.5
Total Developed	2529	100	28	7140	100	36	9669	100	32
Undeveloped	5087		56	12574		60	17661		59
Under Construction	56		1	103		0	159		1
Right-of- Way and Water Areas	1351		15	1280		6	2631		9
Total Land	9023			21098			30121		

Note: Acreages and percentages have been rounded to nearest whole number; therefore totals may vary slightly from actual figures.

Source: Field Inventory November 2006-March 2007

Findings

1. Residential

Residential land is defined as that area occupied by dwelling units and the land or lot associated with the structure. The properties may be used for single or multi-family dwellings, apartments, or mobile homes, whether in a park, court or scattered singularly throughout the area.

Within the corporate limits of Bay St. Louis, 65% of the developed land area is devoted to residential uses. This shows an increase of 15% from the previous land use survey completed in 1999, when 50% of the developed land within the corporate limits was under residential development. This equated to 1,630 acres of land developed residentially. Nearly 91% of the residential land was developed as low-density residential development.

In the planning area, outside of the corporate limits of the City of Bay St. Louis, residential development is even more prevalent as 75% of the developed land is used for residential purposes. However, it should be noted that only around 36% of the planning area is currently developed.

Residential uses occupy 72% of the developed land but only 23% of the total land when the incorporated area is combined with the planning area.

Gulf Regional Planning Commission indicated that there were 3,419 single-family, multi-family or mobile homes located on lots identified in the land use survey as residential within the corporate limits of the City of Bay St. Louis. Additionally, there were 546 temporary travel trailers located on vacant single-family residential lots, 989 temporary travel trailers located on lots with a residence that was likely under reconstruction, 70 temporary travel trailers located on lots with a mobile home that was likely undergoing renovation, and 143 new residential construction starts identified within the City of Bay St. Louis. This may mean that 5,167 residences may be under construction or currently inhabited as of March, 2007. Census data from the year 2000, indicated that there were 6,016 housing units located within the City of Bay St. Louis.

Dwelling Units within Bay St. Louis, 2007

Type of Dwelling Unit	Within City Limits prior to 2006 Annexation	Within Area annexed into the City in 2006	Total in Newly Defined City Limits
Single-family, Multi-family & Mobile Homes	2,187	1,232	3,419
Temporary Trailer on a vacant single-family lots or on a commercial lot	313	233	546
Temporary trailer on the same lot as house	598	391	989
Temporary trailer on the same lot as a mobile home	25	45	70
New Construction of single-family dwelling	63	80	143
TOTAL	3,186	1,981	5,167
2000 Census –Number of Residential Units	3,806	2,210	6,016

Source: Gulf Regional Planning Commission, March 2007

Planners assumed that the placement of a travel trailer on a vacant lot as an indication that the homeowner or property-owner will rebuild. Based upon this assumption, that would mean that the city can anticipate, during the immediate timeframe, all but 14% of the residential units being

built back. However, prior to Hurricane Katrina, there was continued and steady growth within the area annexed by the City, so two other assumptions must be considered:

1. There were more residential units within the City than the 6,016 units captured by the 2000 Census.
2. That some of the 1,605 homeowners or property-owners with a travel trailer on their lot, may rebuild.

Based upon a conservative figure of 2% growth per year, about 120 new homes per year would have been built in Bay St. Louis and the newly annexed area over a 4 1/2 year period, increasing the number of housing units from 6,016 in 2000 to approximately 6,550 units by July, 2005.

Based upon the possible scenarios, as few as 14% of households to as many as 21% of the households have not yet started to rebuild in Bay St. Louis.

2. Industrial

There are 19 acres of industrial land representing less than 1% of the total developed land in the combined incorporated and unincorporated planning area. Only 11 acres of land was developed industrially within the City of Bay St. Louis. Industrial development has occurred primarily in other parts of Hancock County. As was noted in the 2000 Comprehensive Plan, the industrial category of land use in Bay St. Louis is quite small compared to other Mississippi towns of the same size.

3. Transportation/Communication/Utilities

There are 79 acres with these types of land uses within Bay St. Louis and 464 acres within the total planning area. These figures represent 3% of the developed area of Bay St. Louis and 5% of the total developed planning area.

4. Commercial/Retail Trade

This category of land use contains 168 acres or 7% of the developed land within the corporate limits, there are another 173 acres in the unincorporated planning area. Combined commercial uses represent around 4% of the developed area. Bay St. Louis is positioned in the New Orleans and Gulfport/Biloxi trade areas.

Based on this data Bay St. Louis could accommodate additional commercial development, providing that the development is in character and/or compatible with the surrounding development.

5. Services

There are 105 acres or 4% of the developed land within Bay St. Louis devoted to this category, as well as 140 acres or 4% of the developed land in the unincorporated planning area.

6. Public

There are 284 acres or 3% of the total developed planning area occupied by these uses. This category is consistent with other communities of the same size.

7. Churches and Related

Churches and associated uses encompassed 178 acres within the total planning area, including 78 acres in Bay St. Louis and 99 acres in the unincorporated area.

8. Cultural/Entertainment/Recreational

There are 119 acres or 1% of the total area of Bay St. Louis devoted to these types of uses. Additionally, there are 583 acres of these types of uses in the unincorporated area. Approximately 7% of the developed land within the combined planning area is currently used by this category.

9. Resource Production and Extraction

There are 314 acres or about 1% of the total planning area being used by these types of endeavors located within the Planning Area. None of these types of land uses occurred within the current city limits of the City of Bay St. Louis.

10. Undeveloped

Within the present corporate limits of the City of Bay St. Louis, there are 5,087 acres of land that are undeveloped. Within the expanded planning area, there is another 12,574 acres. Together within the combined city and planning area 59% of the land area is undeveloped. Due to the coastal location of Bay St. Louis, there is a large portion of vacant land in wetlands, floodplains, floodways and large lot residential development.

11. Right-of-Way and Water Areas

This category of land use is composed of street, highway and railroad rights-of-way, as well as municipal and private utilities. The average developed land use for this category is 25% for communities of similar size. Fifteen percent (15%) of the total land area land in Bay St. Louis is used for rights-of-way.

12. Casino

Approximately 165 acres of land was devoted to casino land uses within the City of Bay St. Louis, including ancillary land uses located on the same lot as the casino. Casino land uses accounted for about 2% of all land uses within the City of Bay St. Louis.

Special Land Use Circumstances within the City of Bay St. Louis

The City of Bay St. Louis is a coastal community, blessed with beautiful vistas, varied waterfront areas and access to rivers, bayous, coastal marshes and the Mississippi Sound. The waterfront and water access have been one of the primary reasons for the existence and the development of the community since its inception sometime around the turn of the 18th century. The City has been a fort and garrison, a trading community, fishing and fishing processing community and destination for tourists.

One of the primary determinants of the location of development and land use within this community has been shaped by the coastal nature of the area. These determinants have been shaped by the need to be near or on the water, the need to be away from the water after hurricanes and storms, and the desire to be on the water.

Hurricanes and severe weather have transformed the community on several occasions. Hurricane Katrina is not the first, nor will it likely be the last hurricane to have an effect on this community. But as a result of Hurricane Katrina the community is grappling with rebuilding. And local, state and federal agencies are proposing or have imposed various programs, both regulatory and voluntary, which have an intent to remove people from harm that has been caused or is projected to be caused by another hurricane making landfall within the local area.

In the consideration of rebuilding, the community will need to consider the special circumstances are areas of the City that may be effected by updated FEMA floodplain maps which were released for review in December 2007 and a projected proposed by the U.S. Army Corps of Engineers, which would seek to implement structural and non-structural solutions to property damage caused by flooding throughout the region, including the purchase of up to 365 homes within the City of Bay St. Louis and restoration of the property that these homes were on. These special circumstances are discussed in the following paragraphs.

In Late Summer 2007, the U.S. Army Corps of Engineers and the Mississippi Department of Marine Resources held meetings to discuss the *Mississippi Coastal Improvement Program*. The intent of the program is:

“to reduce hurricane and storm damage, reverse impacts of salt-water intrusion, preserve fish and wildlife and their habitats, prevent shoreline erosion, and other water resource purposes.”

The U.S. Army Corps of Engineers is the lead investigator on this project, and the agency is coordinating with the Mississippi Department of Marine Resources, through the Mississippi Coastal Restoration Initiative. The U.S. Army Corps of Engineers will be responsible for developing this plan and will present this plan to congress for consideration. The plan suggests engineered and non-structural solutions to reduce hurricane and storm damage. Among the engineered solutions are ideas to develop a ringed levee system around populated areas in Hancock County, including the areas of Bay St. Louis and Waveland. Non-structural solutions include elevating structures eligible for flood-proofing, and the buy-out of those structures located within a priority area, but not eligible for flood proofing. Since the October 10, 2007 report was presented and posted, the Corps has indicated that they would consider this program a voluntary program on the part of homeowners, and that priority properties for purchase would be properties that have repeatedly flooded and are identified as Repetitive Loss Properties. In Bay St. Louis this may include up to 365 structures which are listed by the National Flood Insurance Program as properties which have flooded on three or more occasions within a ten-year period.

Planners reviewed maps provided to the City by FEMA which identified properties defined as Repetitive Loss Properties by the National Flood Insurance Program. These properties would be eligible to be bought out under the Mississippi Coastal Improvement Program. The City has identified approximately 365 properties inside the corporate limits of the City, but they were currently reviewing these properties to determine if any of these properties had been mitigated. Concentrations of these properties that were potentially eligible for the Mississippi Coastal Improvement Program were located in the following neighborhoods:

An area bounded by Highway 603 on the south, Bayou Lacroix on the west, the Jourdan River on the north and West Bayou Drive on the east.

An area bounded by Highway 603 on the south, East Bayou Drive on the west, 9th Street on the north, and Old Nicholson Road on the east.

An area bounded by Jourdan River on the south, Locust on the west, the Jourdan River on the north and a bayou on the east.

An area generally known as Garden Isles Subdivision.

An area bounded by Hollywood Street on the South, a canal on the west, Mitteer Street on the north and Stewart on the east.

An area bounded by Bluemeadow on the South, Harrison Road on the west, the Jourdan River on the north and Wolf Road on the east.

An area of Cedar Point bounded on the south by Blakemore, by the Bay of St. Louis on the north and north Beach Boulevard on the west.

Other properties were spread throughout the City, but not in the same concentration as experienced within these areas.

While the Mississippi Coastal Improvement Program does not have funding appropriated yet by Congress, the program would create new opportunities and challenges within the neighborhoods, for residents, city government and service providers. Full participation in this program would likely indicate a loss of population to the City of nearly 1,000 residents, or a reduction in population of nearly 10%. Based upon standards utilized within this Plan that may mean the reduction of police and fire slotted professional staff of about 2 firefighters and 2 police officers. Additionally, the service providers would see a reduction in population in these neighborhoods which are already serviced by water and sewer lines. Costs for maintenance and operations would then be projected onto the existing population. This may be of more concern to the Hancock County Water and Sewer District, which provided water distribution and sewer collection to many of these neighborhoods and to the Hancock County Utility Authority which provides sewer treatment to residents throughout the County.

Residents, however, are given an opportunity to sell their homes. And homeowners that remain, will live in neighborhoods with fewer homes. Residents that remain as concerned with how the properties will be maintained, since many of the properties eligible for this program are on lots within subdivisions. Less dense neighborhoods, which still provide waterfront access and views, with properties that are restored to provide privacy to remaining homeowners as part of a neighborhood greenway system could increase the value of the remaining properties within the neighborhoods.

There will be costs associated with the restoration of these properties and the maintenance of these properties once they are restored. Additionally, the City, the County and the School District would lose tax revenues generated from ad valorem taxes for the properties purchased through this program.

The 100 Year Floodplain Area has a major influence on land utilization in Bay St. Louis and surrounding areas. Although the Floodplain area represents a high percentage of undeveloped land, it does not mean that the land is totally unusable. Planning for hurricanes and storms that cause flooding rains or subject lands to storm surge should be a major concern. Participation on the National Flood Insurance Program (NFIP) requires that the city adopt minimum regulatory requirements for floodplain management. Participation within this program allows property owners within the City of Bay St. Louis to be eligible for flood insurance. Failure by the City to adopt or enforce those minimum standards would place all property owners within the City at risk of losing flood insurance. Additionally, the City of Bay St. Louis participates in the NFIP Community Rating Systems Program. This Program allows local governments to implement proactive floodplain management programs that include a range of regulatory, educational and open space acquisition programs. The successful implementation of the local programs translates to a rating system, and this rating system can translate to reduced premiums for property owners that carry flood insurance within the City.

Since Hurricane Katrina, FEMA has re-evaluated and updated the Flood Insurance Rate Maps for the City of Bay St. Louis. In the months after Hurricane Katrina, FEMA released Advisory Base Flood Elevations or ABFEs. The intent of the release of these maps was to provide the coastal communities and residents with a estimation of the anticipated updated floodplain and elevations within the floodplain.

On November 15, 2007, FEMA released preliminary Flood Insurance Rate Maps for the Mississippi Gulf Coast, including the City of Bay St. Louis. Local governments will be allowed to review and provide comments on these maps to FEMA. The maps could yet be revised, before made final.

The preliminary Flood Insurance Rate Maps indicate the floodplain covers additional land area in Bay St. Louis compared to the 1984 Flood Insurance Rate Maps that were in effect prior to Hurricane Katrina. The VE or Velocity zone, that are which requires structures to build to Coastal Construction Standards has expanded in certain areas, and A_zones have expanded in certain areas. Additionally the required base flood elevation in these zones has increased.

An estimated two-thirds of the City of Bay St. Louis now lies within the floodplain defined by the Preliminary Flood Insurance Rate Maps. This means that structures built within the flood zones will be required to comply with the City's Floodplain ordinance. Notably, the City's VE or Velocity zone has expanded. One notably area in which this zone has increased is in the Cedar Point area. The VE zone extended inward from the Bay of St. Louis to Julia Street. The VE zone has also been extended in the newly annexed area of the City. The VE zone now extends inward from the Jourdan River to Fourth Street near Bayou LaCroix and northeast to South Carolina Street, continuing northeast to 9th Street, moving further northeast to 16th Street, and moving further northeast through the northwestern portion of Garden Isles Subdivision. Homes within this area will be required to be elevated and built to Coastal Construction Standards.

The area defined by FEMA as an A flood zone covers a substantial portion of the City of Bay St. Louis. Within the newly annexed area of the City of Bay St. Louis, all that area not in the V zone is located within the A flood zone. On the front beach, the A flood zone travels north of 3rd Street to the vicinity of St. Charles Street. From St. Charles Street to an area south of Washington Street, the flood zone is located about one-half of a block inland from the Beach. Washington Street however, is outside the A zone.

Much of the area north of Highway 90, with the exception of the first several blocks of Bluemeadow Road, the area included Greenmeadow Road and the streets north of Greenmeadow Road, and the Drinkwater Road area are also located outside the A zone.

Additionally, south of Highway 90, the A zone follows several significant drainage ways in the City, including a drainage way that crosses Second Street, a drainage way that crosses Ulman, Carroll and Necaise Streets, and a drainage way near Highway 90 to Webster Street. A substantial number of new lots within the City will be subject to the City's Floodplain Ordinance.

In addition to the City's floodplain, wetlands play a role in development not only in Bay St. Louis, but in coastal Mississippi. The U.S. Fish and Wildlife Service defines wetlands as

“Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes (plants

specifically adapted to live in wetlands); (2) the substrate is predominantly undrained hydric (wetland) soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.”

If an area has one or more of these qualities, it is then helpful to have a determination done to determine if indeed, the land area is a wetland, and if it is a wetlands, the type and extent of the wetland can be determined. The following maps indicates the potential location of wetlands within the City of Bay St. Louis. The City is prone to three types of wetlands. These include estuarine or marine wetlands, which are wetlands which are brackish in nature, and often part of an Estuary. Two types of freshwater wetlands have the potential to be located within the City of Bay St. Louis. These are freshwater emergent wetlands and freshwater forested or shrub wetlands. Freshwater emergent wetlands are areas which are subjected to extended period of flooding. And freshwater forested or shrub wetlands are wetlands that develop in rich organic soils, such as hydric loamy or clayey soils or hydric sandy soils.

Estuarine wetlands have the potential to exist within estuaries along the Bay St. Louis and Jourdan River coastlines. Much of the Jourdan River delta can be defined as estuarine wetlands, and potentially, areas along the Bayous that punctuate the shoreline in Shoreline Park and in areas located north of Highway 90 may also be estuarine wetlands. Additionally, soils provide an indication that other areas throughout the City could potentially be freshwater emergent wetlands or freshwater forested or shrub wetlands.

Hurricane Katrina’s Impact on Existing Land Use

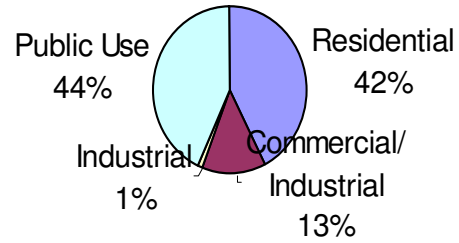
Gulf Regional Planning Commission developed a unique land use classification system to determine the extent of damage caused by Hurricane Katrina and to ascertain if there was any uncertainty in specific neighborhoods damaged by Hurricane Katrina. The resulting data from the survey indicated that 3,143 parcels in the City and planning area had sustained significant damage or were completely destroyed. These 3,143 parcels equaled 1,441 acres.

Eighty-seven percent (87%) of the vacant land in Bay St. Louis had a primary land use prior to Katrina. Eight hundred thirty (830) acres of land use was destroyed by Katrina and was categorized as vacant undeveloped land. Furthermore, 1,578 parcels have a slab only, 354 parcels had a travel trailer indicating intent to rebuild by the owner. There were 899 parcels which had a travel trailer and a structure on the lot. Eight parcels included a travel trailer and commercial or service business. Twenty-eight parcels had a travel trailer and a new residential structure under construction. The remaining 863 parcels contained a travel trailer and a home.

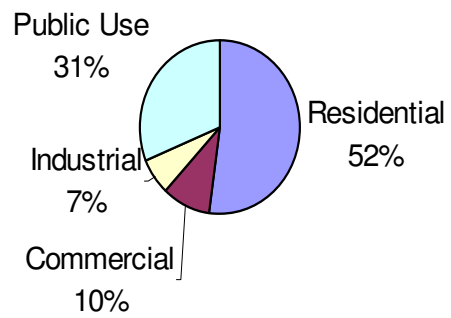
Comparative Analysis

General standards for land use were developed through the Harris Study (August 1992). Harris utilized data from 1992 for small cities under 100,000 in population. Based upon this analysis, on average, about 52% of the land use of small cities was in residential land uses, 10% of the land use was in commercial land uses, 7% of the land use was in industrial land use and 31% of the land use was in public use. Within the public use, on average about 15% of the land is utilized for civic activities and about 16% of the land use is utilized for rights of way.

Land Use in City of Bay St. Louis by Land Use Type 2006



Typical Land Use Ratio for Small Cities Based Upon 1992 Harris Study



By comparison, the City of Bay St. Louis has significantly more acres in right of way. The City of Bay St. Louis, by comparison, has slightly less land utilized in commercial land uses, and has less land developed residentially than more common land use ratios for small cities. Based upon a comparison with other small communities, the City of Bay St. Louis still has a need to grow commercially.

An analysis based upon zoning district indicates that there is not much “available” land left in nearly any of the zoning classifications within the pre-annexation corporate limits of the City of Bay St. Louis. However, there is some available land left in the newly annexed area.

An review of land use by zoning classifications was performed by planners. Planners reviewed the amount of vacant land by zoning classification. The base for the determination was the land use survey performed by Gulf Regional Planning Commission in 2006 and 2007, after Hurricane Katrina. The analysis utilized the land use to determine if the property was undeveloped or being utilized, but did not review the land use to determine if the land use was conforming to the prescribed zoning.

Vacant land by Zoning Classifications Within the City of Bay St. Louis, 2007

Zoning Classification	Undeveloped Land	
	Number of Acres	Percent of Zoning Classification
Bay St. Louis Zoning Ordinance		
R-1	737.5	37.0%
R-1A	34.5	78.0%
R-1B	7.2	18.3%
R-2	71.0	19.8%
R-3	84.5	26.9%
R-4	2.4	4.9%
CRD-1	33.5	33.0%
C-1	1.6	4.4%
C-2	17.4	16.6%
C-3	54.6	23.9%
I-1	24.0	60.9%
I-3	34.2	75.4%
Hancock County Zoning Ordinance		
R-1	668.2	60.0%
R-2	815	57.3%
R-2A	252.9	57.2%
C-2	40.8	27.0%
Agriculture	1,506.25	82.0%

Source: Gulf Regional Planning Commission

Based upon an analysis of this information, it appears that there is adequate land zoned for industrial development and adequate land zoned for low density residential development. During the planning timeframe of this plan, it is likely that there will be a need for additional medium density residential development, and additional downtown commercial type development.

Land Use Inconsistencies and Inefficiencies

An analysis of land use within the City of Bay St. Louis indicates several inconsistencies. These include desires to rebuild after Hurricane Katrina, pre-existing development patterns established in the last decade, and the need to rezone an area recently annexed into the City.

Comments received at public meetings identified a desire by residents to live within the same community that existed prior to Hurricane Katrina. To accomplish that the City is dependent on independent decisions made by many independent homeowners to build back in a timeframe. Grover Mouton, an architect and urban designer living in New Orleans indicates that the same desire exists in neighborhoods in New Orleans.

“Asked what he'd like to see there, he speaks of maintaining the neighborhoods' historic fabric with infill projects. But such incremental development is difficult to do, he acknowledges, because it involves multiple property owners. ‘I think what people will probably look to do instead is a larger scale kind of development,’ he says.¹”

It is important for the City to keep monitoring the progress of neighborhoods to see if the incremental, patchwork redevelopment of independent homeowners is an effective strategy to sustain the city, in light of changing building requirements and changing insurance policies which will increase the cost of development in many of Bay St. Louis' neighborhoods.

In general, the following inconsistencies were identified based upon analysis of the existing land use and land use information documented historically (including the 2005 Tax Assessments).

Approximately 91% of the developed land within the City of Bay St. Louis was defined as low density residential, identifying the primary land use as single-family residents units. Yet a significant portion of the City's mid town area is zoned as either multi-family or zoned for residential housing including duplexes. These areas tend to be in the higher portions of the City, and while there was significant damage within these neighborhoods, these neighborhoods to escape some of the wave action from the storm surge or some neighborhoods escaped flooding. The Citizen Advisory Committee identified a need to allow these neighborhoods to develop at a higher density, but still as single family units. Therefore, the committee recommended investigating the need for a new zoning classification for single family homes on smaller lots. The smallest single-family lot currently allowed within the City by right is 8,500 square feet.

Such projects as Chapel Hill in Bay St. Louis, provide an opportunity to decrease lot size, while conserving character of the neighborhood and preserving the land area. These clustered subdivisions may provide a solution for the incremental redevelopment of some neighborhoods within the city, clustering residential units on the higher and more buildable portions of lots.

The City has two unique commercial areas that compliment the City's highway commercial district and their gaming and resort area. These areas are the Bay St. Louis Downtown and the Depot District. These districts are populated with mixed land uses, including commercial businesses, public and institutional buildings and residences. Both of these areas rebounded quickly after Hurricane Katrina. The community felt that the synergy within this area, which draws both tourists and locals, should be protected and indicated that a mixed use zoning or “Smart Code”, a form based land use regulation should be standardized for these two areas to protect the mix of land uses within these districts.

¹ Ruth Eckdish Knack, “Let the Rebuilding Begin,” Planning, January 2006.

The City of Bay St. Louis was awarded the Shoreline Park area in an annexation in July 2006. The City is currently administering the Hancock County Zoning Ordinance requirements within this area, as prescribed by State Law, until the Comprehensive Plan is complete and a new future land map is adopted by the City Council, and a new zoning map can be developed for the City, which will define new zoning districts within the newly annexed area. This area is predominately zoned for single and medium density residential use at densities that are slightly different from those in the City.

Existing Land Use and Existing Zoning

A comparison of the current zoning map, with amendments, the 2007 Existing Land Use Map, and the geographic land features of Bay St. Louis illustrates the choices made for land use over the last 30 years. The Existing Land Use Map illustrates how land use has or has not followed zoning in the development of the City. There are several examples of existing land use that have remained unchanged while zoning would have permitted a different use.

Zoning is a management tool, which allocates land use according to:

- Its impact on surrounding parcels;
- The availability of public services to properties;
- The suitability of land to be used while minimizing the impact on the environment.

The land uses which were zoned, but have not changed, provide a scenario for future land use choices that are addressed in the land use plan (Chapter 3).

Chapter 2

Goals and Objectives

What do we want our community to be?

In the days after Hurricane Katrina, this question has been asked by many people, in many ways and for many plans. The Governor's Commission on Recovery, Rebuilding and Renewal brought together leaders from across the Mississippi Gulf Coast and the State, and leaders in Planning and Urban Design from across the United States and the world to focus on rebuilding the Mississippi Gulf Coast.

They asked, what do you want Bay St. Louis to be like? And the community answered:

From the *Governor's Commission on Recovery, Rebuilding and Renewal*:

"The Commission proposes the following priorities that should be supported by resources available from the Commission or a state office continuing the Commission's efforts and by extended public efforts that will rebuild the Mississippi Gulf Coast:

- **Mixed use.** Each county and city should adopt amendments to land use ordinances for mixed-use alternatives which promote walkability. Walkability can be defined as pedestrian access to basic services, recreation, and retail within a five-minute walking distance from their homes. Mixed-use alternatives include: (a) business and residential in downtown area; (b) mixed use in neighborhoods using "community-based retail", which incorporated only those commercial amenities needed and approved by residents; and (c) neighborhood residential areas without mixed use but connected to other areas by a sidewalk or pedestrian path system.
- **Safe, affordable housing.** Redevelopment efforts should provide safe, affordable housing that can be easily financed for the Coast residents. Residential and mixed-use development should encourage a specified percentage of affordable housing that is compliant with building standards.
- **Environmental sensitivity.** All counties, cities and regional authorities should make land use and economic development decisions that accommodate and are sensitive to the protection of existing natural areas including watersheds, wetlands, urban forests, and natural habitats.
- **Regional shared services.** On a regional level, coastal cities and counties should consider the feasibility of shared water and sewer systems while maintaining a sense of community identity.
- **Waterfronts and waterways.** Economic growth and development should match citizen expectations for protection of South Mississippi's natural resources. Plans should take advantage of the waterfront as the Gulf Coast's unique aesthetic and economic asset, balancing public access with potential development which is consistent with community identity.
- **Coastal Access.** Public access to coastal waters should be encouraged through waterfront parks and networks of boardwalks and piers that connect areas with public spaces on the

waterfront. Marinas should provide dockage and access to commercial and recreational boats of diverse sizes and price ranges, from working shrimp boats to small pleasure craft and large, inter-coastal traveling yachts that enhance the tourism industry.

- **Working Waterfronts.** Each coastal county and city should promote working waterfronts that coordinate water-related recreational and commercial uses and that specifically coordinate wharves and docks for the commercial shrimp and oyster fleet with inland seafood park or parks. Land use and economic development decisions should preserve and promote public use and enjoyment of the beach, water front parks, the Mississippi Sound and inland waterways. Port facilities should institute emergency planning measures to minimize risk of damage and debris caused by shipping containers that are not secure.
- **Transportation.** Wise land use decisions are closely aligned with appropriate transportation planning. The quality of life and sustainability of cities and neighborhoods depends in large part upon changing the post-World War II conventional wisdom for design of streets, major thoroughfares and federal highways connectors. Hundred and hundreds of citizens have said that Highway 90 should not become six-lanes. Rather this scenic highway should become a slower moving, pedestrian friendly boulevard that allows safe pedestrian crossing to the beach. Railroad traffic should be moved north of the Bays, allowing vacant CSX right-of-way to be redeveloped as a tree-lined avenue with light rail down the center connecting the 11 communities of the Coast with landscaping and mixed uses bordering it in the manner of St. Charles Avenue in pre-Katrina New Orleans.”

From the **Rebuilding Bay St. Louis** forum (sponsored by the Governor’s Commission):

- “Keep the small-town character, the architectural heritage, and the natural beauty. Build on the arts character. Provide for growth without destroying what makes Bay St. Louis so livable.”
- “Make the town more appealing and safer for bicycles, walking and recreation.”
- “Rebuild the great architectural heritage in a more hurricane-resistant form.”
- “Make the Gateways and Highway 90 Corridor more inviting and more compatible with the character of town.”

The FEMA Long Term Recovery Planning Team tried to tie it all together in the **Hancock County Long Term Recovery Plan**:

“As a result of the Mississippi Renewal Forum and the efforts of the Long-Term Community Recovery team, the following visions have been identified for Hancock County:

- Rebuild housing in a manner that is consistent with historic precedence;
- Incorporate appropriate mitigation techniques when rebuilding;
- Preserve the small-town character of Bay St. Louis and Waveland;
- Preserve affordability of housing in Hancock County including the incorporated municipalities;
- Create safer environments for walking and bicycling in the community;
- Improve the Highway 90 corridor and the gateways to the community.”

“A post-disaster recovery vision for housing in Hancock County has emerged from the community planning process. In this vision, every resident in the County who wants to return home should be able to regardless of income or whether they are a homeowner or

renter. In this vision, the County is a place where all residents in temporary housing can locate into permanent housing in neighborhoods designed to meet resident's needs and where the cultural and historic fabric of these communities has been restored and enhanced."

The Bay St. Louis Comprehensive Plan Advisory Committee considered these visions and thoughts when they answered the question. What do you want Bay St. Louis to be? The Committee said that their vision of the community was that:

Bay St. Louis will remain "A Place Apart"

Following is a discussion of issues considered by the committee. The issues include some of the key thoughts and justifications for the series of goals that were developed by the committee. Objectives that follow are recommended by the consultants and from the City's 2000 Comprehensive Plan.

Additionally, a series of public meetings was held throughout the fall of 2007 on a draft of the Comprehensive Plan.

In general, the community longed the City that they once had. Among residents there was great support for returning the small town character that was once Bay St. Louis. Residents urged restraint in increasing density and height within the city. Business owners were torn. Several business owners indicated that there was both a need and an opportunity to access a larger market area. Increased taxes for larger scale developments like condominiums, resorts and additional casinos could fuel reconstruction and provide a tax base for the city to rebuild so that it would not have to rely as heavily on its existing residents for operating and rebuilding funds. Other business owners indicated that Bay St. Louis, especially downtown Bay St. Louis, held a unique quality and that quality of small town coastal living should be preserved where possible and recreated.

Public comments from these meetings have been incorporated into the elements of the Comprehensive Plan, including the Goals and Objectives section.

Key Issues Facing the City

1. FEMA Advisory Base Flood Elevations

About two months after Hurricane Katrina made landfall on the Gulf Coast, the Federal Emergency Management Agency released the Advisory Base Flood Elevations (ABFE) for Mississippi Gulf Coast Communities, including the City of Bay St. Louis. The intent of the ABFE was to provide guidance to people rebuilding after Hurricane Katrina, as FEMA finished updating flood maps for the Mississippi Gulf Coast. FEMA released draft updated flood maps in December 2007.

The City of Bay St. Louis did not adopt the ABFE as part of their review of their floodplain management ordinance after Hurricane Katrina, but instead required 4 feet of freeboard, above the Base Flood Elevation for homes that were significantly damaged (approximately 50% or more of the value of the structure). This modification to the ordinance will likely be reviewed by the City Council and City staff when FEMA releases their updated Base Flood Elevation sometime in 2008.

FEMA anticipates, that like the ABFE, areas of the City of Bay St. Louis that were not located within a designated floodplain prior to Hurricane Katrina will now be located within a floodplain. FEMA also anticipates that the coastal high hazard flood zone- that area subject to wave action from storm surge- will be larger and will extend inland to areas not directly adjacent to the waterfront. Finally, FEMA anticipates an increase in elevations within the floodplain.

For example, an area in Cedar Point, west of Engman Avenue adjacent to the waterfront, according to the ABFE, would be required to have the first finished floor of the structure at an elevation of 24 feet or 25 feet depending on the exact location. A typical topographical elevation within this area is between 4 to 8 feet. Typical BFE within this area prior to the release of the ABFE would have been about 15 feet. The draft maps released in December 2007 indicate that the elevation within this area would be required to be between 22 feet to 23 feet depending on the location.

An area in Cedar Point, located east of Dunbar Avenue, located adjacent to the waterfront would be required to have the first finished floor of the structure at an elevation of between 22 feet to 24 feet depending on the exact location. A typical topographical elevation within this area is between 7 to 10 feet. Typical BFE within this area prior to the release of the ABFE would have been between 15 and 18 feet. The draft maps released in December 2007 indicate that the elevation within this area would be about the same as the ABFE.

An area on Fiber Street off of Bluemeadow Road would be required to have the first finished floor of the structure at an elevation of between 24 feet and 25 feet. FEMA maps indicate an outdoor high water mark associated with Hurricane Katrina within this area of 20.6 feet. Typical BFE within this area prior to the release of the ABFE would have been about 15 feet. Typical topographical elevation within this area is about 6 feet. The draft maps released in December 2007 indicate that the elevation within this area would be between 20 to 22 feet depending on the location.

An area in Shoreline Park, adjacent to the Jourdan River, would be required to have the first finished floor at 26 feet. Typical topographic elevations within this area are between 4 feet and 8 feet. The BFE would have required a first finished floor elevation of between 14 to 20 feet within this area. The draft maps released in December 2007 indicate that the elevation within this area would be between 22 to 23 feet depending on the location.

An area adjacent to South Beach Boulevard in Bay St. Louis would be required to have a first finished floor of the structure at an elevation of between 23 to 27 feet, depending on the exact location. Typical BFE required within the VE Flood Zone within this area prior to the release of the ABFE were 14 to 19 feet. Typical outside high water marks from Hurricane Katrina's storm surge near Central Avenue near the Waveland/Bay St. Louis City line indicate water reached between heights of 22.7 to 25.5 feet within this area. Typical topographical elevations within this area are about 10 to 20 feet depending on the exact location. The draft maps released in December 2007 indicate that the elevation within this area would be between 22 to 26 feet depending on the location.

ABFE for the City's downtown area are limited to the immediate area adjacent to the coastline and would require a first finished floor to be 20 feet msl. Typical topographical elevations within this area are between 18 to 22 feet. The draft maps released in December 2007 indicate that the elevation within this area would be between 21 to 25 feet depending on the location.

The City of Bay St. Louis participates in the National Flood Insurance Program. The City's participation is expressed by the City actively managing the floodplain, by the adoption of a floodplain ordinance and the implementation of that ordinance. That ordinance requires that the structures located within the floodplain

have first finished floor of the structure elevated to the required BFE as adopted by the City, which may be the base flood elevation recommended by FEMA, or the City may adopt a higher elevation;

that homeowners within the floodplain provide an elevation certificate for the first finished floor to the City's building office;

that the City building office must maintain elevation certificates within its files;

and if improvements are made to a structure which cumulatively equal 50% or more of the value of the structure (over a period of time), then the structure must comply with current elevation requirements.

Participation in the National Flood Insurance Program by the City, allows residents the opportunity to purchase flood insurance. Additionally, the City of Bay St. Louis participates in the Community Rating System Program. Their participation, by actively administering flood management programs which may reduce the amount of damage due to flooding within the City and allows flood insurance policy holders to reap reductions in premiums.

Continued participation by the City in the NFIP program will require that the City adopt the final revised Base Flood Elevations. The final Base Flood Elevations are anticipated for release in early 2008, and may be similar in scope and height to the current ABFE.

Building to these new heights reduces the amount of damage that will occur to structures within the floodplain, but also increases the cost of construction. Prior to Hurricane Katrina, much of the City's coastal and bayside waterfront were single-family homes. Construction costs will be a consideration as people determine if they will build back and the size and scope of the homes that they will build back. In some cases, it may be cost prohibitive to build back a single-family home on a waterfront lot.

2. Insurance

Another barrier to redevelopment in Bay St. Louis and along the entire Mississippi Gulf Coast is access to and cost of insurance, and insurance settlements from Hurricane Katrina. Many policyholders along the coastal area have not yet reached settlements with their insurance companies, delaying rebuilding, not only in Bay St. Louis, but along the Mississippi Gulf Coast.

Additionally, both access and cost of insurance will likely affect redevelopment and growth in Bay St. Louis in the near future. Most major insurance companies are continuing renewal policies for home and commercial businesses. However, according to the Mississippi Department of Insurance none of the top five national insurance carriers are writing new wind policies in Coastal Mississippi, only a handful of small carriers are writing new wind insurance policies in Coastal Mississippi, and therefore, the Mississippi Wind Pool is likely to be the only option for new policies.

Besides limited access to insurance, cost is also an issue. The Mississippi Wind Pool, according to the Mississippi Department of Insurance, "provides wind coverage at a higher rate than private

carriers for residents of six South Mississippi counties.” Renewal costs have risen drastically, contributing to the cost of not only building in Bay St. Louis, but also living and doing business in Bay St. Louis.

3. Sustainability of the Community

Damage from Hurricane Katrina was extensive throughout Bay St. Louis. Discussion is still ongoing among scientific and technical experts as to whether Hurricane Katrina was a unique hurricane, or a common occurrence. The Mississippi Renewal Commission asked local governments to consider utilizing building and planning methods that could make the communities along the Mississippi Gulf Coast more sustainable, and speed recovery from future storms.

These steps include elevating homes to new elevation standards, building with new construction technologies and building structures consistent with the International Code Standards and Standards for Coastal Construction. Additionally, the Mississippi Renewal Commission asked local governments to encourage development on higher ground, away from high hazard areas.

The Comprehensive Plan Advisory Committee indicated that issue was very important to the safety of residents within the community and to the economic vitality and long term health of the City of Bay St. Louis. The Committee recognized that structures must be safer and built to reduce damage exposure from hurricanes. This would not only protect residents of the city, but also protect investments within the community, and reduce the cost of damage.

Through a series of Growth Allocation Workshops, residents of the county and city considered how the County may grow in the next two decades. One possible scenario for development, residents indicated was that most development would shift away from the coastal areas to land areas less impacted by coastal flooding and storm surge. If this occurred, recovery within the coastal areas could be slowed. And it would be likely that there would be a shift away from Bay St. Louis and maybe even Waveland for basic retail goods and services. Planners conducting the workshop indicated the City would require a redevelopment strategy to mitigate the loss of vitality, which could translate to loss of character and downtown disinvestment.

The Advisory Committee felt strongly that the downtown area would remain vital even if development moved inland away from the coastal areas, due to the unique characteristics of the downtown area, and the draw for regional tourists. However, recommendations were made to establish a position which could market and recruit businesses and developments to Bay St. Louis. Additionally, the committee made recommendations which would encourage denser developments on higher land within the City of Bay St. Louis, and encourage less intensive developments on areas likely to flood, or wetlands areas which may serve to mitigate some of the flooding from storm surge.

4. Long Term Economic Recovery

Bay St. Louis’ character also defines its economic strength as a quaint, historic seaside community. A significant portion of the City’s economic vitality is based upon this image and tourism in general. The committee recognized that tourism was one of the most important economic generators in the City of Bay St. Louis. This draw attracts tourists and many factors threaten the viability of recovery of the City of Bay St. Louis. Businesses that were located along the waterfront will not be effectively operating back on the waterfront until late 2008 or 2009, as the city completes utility work and construction of Beach Boulevard.

Additionally, Bay St. Louis' economy was a unique retail and service economy that catered to a regional tourist population. Arts, antiques and food, as well as second homes were the draw to downtown. Hollywood Casino Resort is another important tourist draw. Hollywood Casino offers gaming, one of the best golf courses within the Country, entertainment and first class hotel and recreational vehicle accommodations.

The committee recognized that tourism was one of the most important economic generators of the City of Bay St. Louis. The tourism base included people attracted to the community for the quality of life offered and people attracted to the community to visit the City's gaming industry. In some cases, these tourists were the same, in some cases, these visitors are distinct but complimentary tourist market segments.

Tourists that might be attracted to the community for the quality of life can include:

- People attracted to the seaside community for shopping and dining.

- People attracted to the seaside community for the arts community- which may include other artists attending workshops, or patrons seeking art work.

- People attracted to the community's quality of life and maintain a second home.

The committee embraced the continuation of the tourism as an important draw to the community, and sought to enhance the draw by marketing eco-tourism. Eco-tourism activities may include bird-watching, fishing, hiking, canoeing and kayaking.

Additionally committee members saw the need to recruit businesses to the community that would be supportive of Stennis Space Center. Scientific and technical information businesses could benefit from the quality of life offered in Bay St. Louis, provide a residential base of population that could support local businesses, and diversify the economy of the city, while supporting the "Get Away" feel of the downtown area, while developing along a Highway 90 business corridor.

While the committee was optimistic that the City of Bay St. Louis would recover, they felt that character was important to that recovery, to insure that the city stayed an attractive tourism destination, with a high quality of life associated with waterfront living. However, the City should consider working with the Chamber to establish a benchmarking system to monitor recovery, and provide information to public decision-makers to help them develop public re-development strategies, if needed.

5. Increased Density and Height

As a response to the widespread devastation from Hurricane Katrina, and as a method to address the high costs of rebuilding, it is likely that land uses will become denser on lands within the city that are on higher ground, and that structures may need to be taller, with more floor space, in order to amortize the costs of reconstruction.

The idea of Traditional Neighborhood Development was introduced to the Gulf Coast during the Mississippi Renewal Forum. Traditional Neighborhood Development allows for a compact community that is walkable. Density is increased, due to smaller lot sizes, and in some cases, garage apartments or cottages are allowable. This idea made sense in the aftermath of Hurricane Katrina as planners and community members tried to determine where housing could safely be built along the coastline.

A Traditional Neighborhood Development is compact, designed for human scale, provides for a mix of uses in proximity to one another within the neighborhood, provides a mix of housing styles, types and sizes to accommodate households of all ages, sizes and incomes, incorporates a

system of relatively narrow interconnected streets with sidewalks, bikeways and in some cities, transit, and offers multiple routes for motorists, pedestrians and bicyclists. Traditional Neighborhood Designs retain existing buildings with historical features or architectural features that enhance the character of the community.

Options for implementing greater density may include allowing garage apartments in existing neighborhoods, and may include “mother and daughter apartments” suggested by the Mississippi Renewal Forum for Bay St. Louis;

“Long Blocks and lots, legacy of the French survey units called arpades, leave odd bits of land on many lots that can be used for certain types of infill. This ‘Mother and Daughters’ approach of raised cottages is one such typology. Other might be courtyard housing, townhouses, granny flats and mansion houses with multiple units.

“All of these are important strategies to hold at bay the simplistic density and value increase that high rise buildings represent. Owners of houses lost in Bay St. Louis will be hard pressed to build back the homes they enjoyed unless there is a way to fund the additional costs of new, hurricane resistant construction. Added density on linear lots provides that opportunity to remake the community in its own image (Mississippi Renewal Forum, Rebuilding Bay St. Louis, p. 20).”



From **Mississippi Renewal Forum**, Rebuilding Bay St. Louis, p. 20
“Cottage Court to rear of rebuilt Wagner House”

Costs to rebuild in downtown along the beachfront, may require that buildings have more area to amortize the cost of building. The issue of height is both a character issue and also an economic

issue for small businesses seeking to rebuild in downtown. The Comprehensive Plan Advisory Committee considered a height limitation of 50 feet within the downtown area would provide for a four story structure. The Committee also recommended that a workshop be held with architects, engineers and developers to understand the costs of construction, requirements of FEMA and City to meet new elevation requirements and coastal construction requirements, and the cost of insurance. The intent of the workshop would be to provide an idea of the cost to small business and help city decision makers determine appropriate height and design requirements.

Height restrictions will also be an issue with single-family residential development within certain floodplains of the City of Bay St. Louis. With elevation requirements currently as high as 23 feet, a one story home will likely be the only type of residential structure allowed within some of the lower areas of the floodplain.

Height restrictions should also be considered for multi-family residential and mixed use developments including condominiums.

During the public meetings, public comment was not favorable for heights above four stories. A workshop held by Architect Bill Dennis indicated that people should not think about height alone, but that height must be part of the volume of the building, which would include elements such as height, setbacks and the façade of the building. Therefore height considerations should be tied to architectural standards to insure that the character of the neighborhood is maintained.

As with height, public comments clearly stated that density needed to be specifically defined. Within the existing zoning ordinance there was little to encourage single-family units on smaller lots, but instead the zoning classification which would allow small single family units on smaller lots would also allow multi-family units. It was identified that there was a need for a new type of zoning classification that would allow smaller lots for single family residences.

6. Redevelopment and growing with character

The City of Bay St. Louis had unique charm. Key elements of that charm include architectural heritage, town character and natural beauty. This charm has inspired artists, residents and visitors to the community. The Comprehensive Plan Citizen Advisory Committee felt that that re-establishing that character was important to the economic well-being of the community. Character was important to the redevelopment of the downtown area. The Committee also felt that Highway 90 and Highway 603 should be attractive in order to encourage economic vitality along the business corridor.

7. Second home development

Second homes have been an important part of this community. Census data from 2000 indicates that as much as 12% of the housing within the City of Bay St. Louis, prior to annexation was maintained as second homes, and as much as 25% of the homes within the area annexed by the City of Bay St. Louis were maintained as second homes. This part-time population supported local businesses, and for years fostered the need to maintain a great quality of life.

Prior to Hurricane Katrina, almost all second homes were single-family detached homes and cottages nestled within the older neighborhoods of the city or along the canals in the annexed area. Construction costs and insurance costs may preclude many second home owners from rebuilding. Additionally, many second home owners may still be renovating their primary homes which were also damaged by Hurricanes Katrina or Rita.

The Comprehensive Plan Advisory Committee felt that second homes must continue to be an important part of the redevelopment of the Bay St. Louis. Second homes in Bay St. Louis provided a market for local businesses, contributed to tax base of the community, and many second home owners became full-time residents.

Options for redeveloping the second home market within the community can include, on an individual level- allowing apartments and guest cottages on single family residential sites; and on a larger scale- encouraging clustered residential developments that can offer a range of housing sizes and styles, including condominiums and mixed uses.

Goals and Objectives

Community Character

Significant Finding: Prior to Hurricane Katrina the City of Bay St. Louis was identified as a unique community on the Gulf Coast, with a thriving downtown waterfront area. Residents and visitors value this character. The character of the City was defined by historic buildings, vernacular architecture, natural beauty and scenic vistas overlooking St. Louis Bay and the Mississippi Sound.

GOAL 1. Preserve the small town and unique character of the city, by protecting and nurturing architectural heritage, natural resources, the arts community and small businesses.

Objective 1. Establish design guidelines and architectural standards to capture the natural beauty of the area.

Objective 2. Establish a height limitation of *50 feet* within the downtown area of Bay St. Louis to retain the character of the community. Establish a height limitation for businesses on the beachside of Beach Boulevard in the downtown area of *35 feet*. Develop design standards which would consider the volume of the building and link height, setbacks and the façade of the structure.

But the Committee felt that the City should host a workshop with developers and architects to understand the economic feasibility of building within these height limitations, as well as actual costs of reconstruction and illustrate how the downtown may look with higher buildings. The result of this workshop indicated to the community that the volume of the building was more important than the height. Elements, such as setbacks and facade, along with height should be addressed with design standards.

Commercial developers will be faced with higher construction costs, higher insurance costs, and higher elevations and/or construction standards. The economic feasibility of rebuilding, in conjunction with models or sketches that illustrate heights might explain what businesses may need , in terms of space, to be able to build back within the downtown area.

GOAL 2. Encourage vibrant and diverse neighborhoods and a healthy downtown business district, incorporating mixed use techniques that foster walkability and community interaction and attraction as a tourist destination.

Objective 1. Investigate form based codes (Smart Code) in areas of the City in which new building is necessary and desirable, and through form based codes, new development can enhance local character and local vitality.

Objective 2. Utilize cluster development and Traditional Neighborhood Development standards to incorporate condominium, housing redevelopment and mix-use developments into existing neighborhoods. These standards should establish the height, density and scale of the development to be complimentary to existing adjacent developments.

GOAL 3. Enhance and preserve residential neighborhoods within the City of Bay St. Louis.

Objective 1. Ensure that new development is compatible with the existing development and the characteristics of existing neighborhoods.

Objective 2. Continue to enforce applicable property maintenance, buildings and zoning codes to minimize the physical deterioration of properties in established neighborhoods.

Downtown and Retail Development

Significant Finding: Sales revenues from establishments in City of Bay St. Louis account for only about 24% of all retail sales in Hancock County, yet Bay St. Louis retail establishments average 61.8% of all miscellaneous retail sales, 63.9% of all miscellaneous services and 33 % of all food and beverage sales. The City's magnetism before Hurricane Katrina was as a seaside art community, with unique character and southern charm.

GOAL 1. Maintain a healthy retail and small business community, which attracts customers from across the region and people seeking to establish second homes in Bay St. Louis.

Objective 1. Consider mixed use development in the downtown area to encourage residential living areas over commercial and service oriented land uses. It is important that the mixed land uses contribute to one another and do not detract from each other.

GOAL 2. Maintain and market historic, cultural and ecological and recreational based tourism in Bay St. Louis.

Objective 1. Establish a plaza in Downtown Bay St. Louis in the proposed waterfront park

Objective 2. Encourage loft and gallery space in the Depot District.

GOAL 3. Public buildings will remain in Downtown Bay St. Louis, to bring people into downtown at all times of the year.

Objective 1. Encourage the county to rebuild county buildings and reuse these buildings for daily county business in downtown Bay St. Louis.

Objective 2. Establish a parking garage in downtown Bay St. Louis.

GOAL 4. Establish a public marina in or around the downtown area.

Significant Finding: Retail sales from Bay St. Louis establishments declined by 30% in the year after Hurricane Katrina. The loss of local population, the loss of the Highway 90 Bridge between Pass Christian and Bay St. Louis and the loss of Beach Boulevard will impact the recovery of sales in the community.

GOAL 5. Explore options to develop and redevelop businesses and housing in Bay St. Louis.

Objective 1. Establish the Hancock County Resource Business Center, one-stop shop, for people seeking to develop businesses and housing developments to coordinate permits, programs and incentives that may be available for redevelopment.

Objective 2. Establish and maintain selected economic data and materials concerning major commercial and institutional properties available, workforce availability, taxes, schools, and other matters pertinent to attracting businesses to Bay St. Louis.

Objective 3. Make an effective effort to occupy or redevelop vacant commercial properties along major roadways, especially Highway 90 and the Downtown area.

Economic Development

Significant Finding: Hancock County is home to the John C. Stennis Space Center, and economic developers within the County have targeted the Aerospace sector. Employees of the Stennis Space Center and the Aerospace Industry are highly skilled, and technical.

GOAL 1. Develop Bay St. Louis to have a quality of life attractive to businesses seeking to relocate to Hancock County. This includes an emphasis on culture, recreation, education and stable taxes.

GOAL 2. Establish education programs in the Bay St. Louis schools that build an educated technical workforce.

Objective 1. Rebuild schools in Bay St. Louis to include state of the art technology and science labs.

Objective 2. Provide high school students with the opportunity to gain college credits while in high school to prepare for careers in science and technology.

Objective 3. Establish mentoring programs between school classes and businesses at Stennis Space Center and Port Bienville Industrial Park.

Objective 4. Create a Center for Higher Education. Regardless of how small the center may start out, higher education is directly proportional to a higher standard of living. NASA and the technical agencies at the Stennis Space Center require educated personnel.

GOAL 3. Position Bay St. Louis to capture a diversity of businesses, including spin-off businesses from the Stennis Space Center, government, defense and aerospace technology contracts or businesses.

Objective 1. Encourage employers to make use of the local workforce.

Objective 2. Encourage high quality office space development, as well as technology centers, to capture businesses that support Stennis Space Center mission or to house spin-off businesses from Stennis Space Center.

GOAL 4. Diversify the City's economy, but maintain one casino district within the City Bay St. Louis, welcoming other casinos and the types of supportive facilities needed to keep the casino industry thriving within this one district.

GOAL 5. Establish an aggressive economic development campaign to attract new service, retail and professional businesses to all business areas in Bay St. Louis.

Objective 1. Establish the Hancock County Resource Business Center, one-stop shop, for people seeking to develop businesses and housing developments to coordinate permits, programs and incentives that may be available for redevelopment.

Objective 2. Establish a Resort zoning classification to allow resort developments that are isolated from the built community and to do not intrude on existing neighborhoods in Bay St. Louis, Waveland and unincorporated Hancock County.

Housing

Significant Finding: Hurricane Katrina caused significant damage to the housing stock in Bay St. Louis. As many as 1,448 residential acres were damaged by storm surge from the Hurricane. The process to rebuild has been slow, and homeowners and developers are faced with many decisions and issues in the rebuilding process. Chief among these issues are the higher costs for insurance and the smaller insurance market, higher construction costs, and changing base flood elevations implemented to mitigate the risk of flooding. Public comments indicated the City should assist single-family homeowners return to the City.

GOAL 1. Make housing available in appropriate quality, quantity, and range of costs in locations, densities and arrangements forming attractive, diverse and sustainable neighborhoods (from the City's 2000 Comprehensive Plan).

Objective 1. Make every effort to encourage the continuation and upkeep of existing freestanding, single-family dwellings in residential neighborhoods that compose the bulk of the housing in Bay St. Louis. Preserve or improve the neighborhood settings where these houses mainly occur.

Objective 2. Remain open to innovative structures and arrangements providing dwelling units consistent with site and neighborhood characteristics. Obtain efficient use of land to be occupied by housing, especially in dense developments. Provide opportunities to integrate affordability into neighborhoods keeping with the context of the neighborhood. This objective applies to both public and private housing.

Objective 3. Strongly encourage residential developments to locate where suitable roads and utilities are already installed.

Objective 4. Recognize and understand the hazard of neighborhood deterioration (blight) and take every opportunity to prevent its occurrence or to reverse its course if already begun.

Objective 5. Make use of required design elements, discourage demolitions, and allow for special lot dimensions and building placements when these measures will preserve or enhance market values or other residential property in a locale or district.

Objective 6. Officially and consistently apply applicable standards of residential construction and building systems to obtain stable, durable houses that will maintain their physical integrity and suitability for occupation.

Objective 7. Implement a non-profit land bank or Housing Trust program to assemble vacant property for redevelopment for housing.

Objective 8. Establish incentive programs such as down payment assistance programs and low interest mortgage programs to help keep housing affordable.

Objective 9. Develop a long-term affordable housing strategy.

GOAL 2. Rebuild housing in a manner complementary with historic precedent or the vernacular style in architectural design and scale.

Objective 1. Develop design and zoning standards to encourage the style of housing that existed prior to Hurricane Katrina to be built back on Beach Boulevard, but allow additional density to the rear of these homes, to counter act costs associated with rebuilding.

Objective 2. Work with the Mississippi State Department of Archives and History to develop Historic Preservation Ordinance for neighborhoods with significant historic housing stock.

GOAL 3. Ensure that everyone displaced by Hurricane Katrina will be given a reasonable opportunity to return home.

Objective 1. Establish and maintain a Housing Recovery Center to help residents rebuild during the recovery phase. This Center could help people understand funding that is available to assist rebuilding and provide information on building back to safer standards.

Objective 2. The Housing Recovery Center could work with developers to build market rate and affordable housing in Bay St. Louis and Hancock County.

Land Use

Significant Finding: A Traditional Neighborhood Development (TND) is a neighborhood that shares the following features: it is generally compact, designed for human scale, provides a mix of uses in proximity to one another within the neighborhood; provides a mix of housing styles, types and sizes to accommodate households of all ages, sizes and incomes; incorporates a system of relatively narrow interconnected streets with sidewalks, bikeways, and sometimes, transit, that offer multiple routes for motorists, pedestrians and bicyclists; retains existing buildings with historical features or architectural features that enhance the visual character of the community; incorporates significant environmental features into the design; and is a self- sustaining community consistent with the Comprehensive Plan.

GOAL 1. Provide the opportunity for higher density subdivisions that incorporate green space into their design, to allow for concentration of populace in the areas least vulnerable to storm surge.

Objective 1. Review zoning ordinance and investigate the use of Smart Code to allow Traditional Neighborhood Developments.

Objective 2. Higher density subdivisions should compliment the adjacent neighborhoods in character.

GOAL 2. Take maximum advantage of natural and historic elements. Bring about and maintain an appearance of neatness, order, prosperity, and small coastal town character and scale. Show thoughtful design of structures and landscapes, and considered placement, architecture and scale of new commercial, institutional, and industrial developments and redevelopments.

Objective 1. Review zoning ordinance and investigate the use of Smart Code to allow Traditional Neighborhood Developments.

Objective 2. Incorporate standards for mixed use developments within the City's zoning ordinance.

Significant Finding: The City's adherence to life and safety codes, including building codes, stormwater ordinances and floodplain ordinances, contributed to the survivability during Hurricane Katrina of some homes, businesses and neighborhoods in Bay St. Louis. The City should continue to plan for resilience.

GOAL 3. Planning for future storms should be one of the primary concerns, in order to maintain lower community insurance ratings reduce damage to structures and infrastructure and facilitate evacuation.

Objective 1. Become, and remain, knowledgeable in disaster preparedness as an influence on planning, obtaining certifications and keeping up to date publications on the subject.

Objective 2. Seek pertinent advice, design guidelines, and interagency cooperation as appropriate, especially concerning hurricane winds and floods, and hazardous materials releases resulting from railroad derailments or highway accidents. Keep up to date plans and agreements that might result.

Objective 3. Support proposed land use plans with documented evidence of their sufficiency for purposes of evacuation.

Objective 4. Survey city properties and resources for their potential availability and employment in temporary care for people made homeless or stranded due to a hurricane.

Objective 5. Continue to participate in the Community Rating System Program.

Objective 6. Continue to work with FEMA to adopt Floodplain Management measures that mitigate against the risk of flooding and hurricane damage.

GOAL 4. Make a consistent and effective effort to adopt, utilize, promote and enforce accepted engineering based codes, standards and recommendations for the safety of buildings and other structures. Provide for adequate staffing (From the City's 2000 Comprehensive Plan).

Objective 1. Include all building systems and features: mechanical, electrical, plumbing, fire safety and means of egress, security against intruders, stability against weather (especially high winds and floods), and others that may be realized.

Objective 2. Provide trained City personnel and furnish them with time and resources as necessary for prompt, uniform, and complete enforcement of the adopted building standards and codes.

Objective 3. Give special attention to procedures concerning certificates of occupancy and condemnation of vacant or dilapidated property, including coordination with utility providers and relocating occupants to safe quarters in unusual cases.

Objective 4. Rarely make local modifications to standard building and safety codes, and then only for good and preferably permanent reasons recorded at the time.

GOAL 5. Establish an intergovernmental mechanism that would coordinate city and county land use decisions.

Objective 1. Establish a joint Planning and Building Department between the City of Bay St. Louis, the City of Waveland and Hancock County that could share support services, mapping capacity and specific areas of building expertise.

Objective 2. Establish regular county and city meetings to share information about land use projects which may have extra-territorial impacts.

Significant Finding: The City's adherence to public welfare and safety codes, contribute to the sustainability of neighborhoods and business districts. By controlling nuisances, property values within the city are maintained and neighborhoods maintain viable, sustainable and pleasant places for people to live, to work and to socialize.

GOAL 6. Consistent with safety, regulate sources of noise and light to minimize intrusion into residential areas and individual dwellings. Regulate sources of noise and light interfering with commercial or institutional activities (from the City's 2000 Comprehensive Plan).

Objective 1. In considering and permitting a development or redevelopment, take into account whether it will be a source of or be adversely affected by noise and light.

Objective 2. Reduce, to the greatest extent feasible, noise associated with transportation due to vehicle starts, stops, speed, turning, and exhaust noise.

Objective 3. Control by regulation the intrusion of sound from car audio equipment on public streets and, when parked, within hearing range of residential areas, and sound escaping from audio equipment used at home.

Objective 4. Reduce, where possible, intrusive noise and light from industrial and commercial sources.

GOAL 7. Minimize storm water runoff through effective building, landscaping and site planning (from the City's 2000 Comprehensive Plan).

Objective 1. Continue to implement the City's NPDES Phase II Program.

Objective 2. Continue to implement the City's storm water control ordinance.

Objective 3. Include storm water runoff as a consideration in development planning and approval due to considerations of life, safety, security of property, and environmental considerations.

Objective 4. Participate in regional planning for storm water runoff to ensure that a regional system is adequately funded.

Objective 5. Evaluate and improve maintenance practices for ditches, drains, and catch basins.

Objective 6. Place special emphasis on FEMA guidelines and apply related engineering models as applicable when elevating or altering the contours in flood plain zones.

Objective 7. Provide sufficient trained personnel and resources to enforce the adopted flood ordinance.

Objective 8. Promote public understanding of City and interagency flood related policies and requirements as these pertain to land uses, building practices, and insurance costs.

Objective 9. Encourage the use of conservation easements by developers.

Objective 10. Keep family-oriented activities, such as fishing, biking, shopping and water sports in mind when planning for future land use.

GOAL 8. Bay St. Louis will preserve its wetlands to be enjoyed by citizens and visitors, act as a nursery for fisheries, provide storm protection and provide a base for eco-tourism.

Objective 1. Work proactively with community and regional partners to purchase and preserve wetlands areas within the City.

Community Facilities

Significant Finding: The City must ensure that its public facilities are adequate to service the needs of the community. As the City recovers from Hurricane Katrina, it is challenged to both reconstruct utility systems and public facilities within the City, while planning ahead for an uncertain future which will include growth, but possibly only slow growth in the immediate future.

The City's challenges are complicated by financial constraints. The City borrowed \$8 million in loans in the year after Hurricane Katrina to begin reconstruction and to continue basic city operations. Additionally, the City is responsible for providing a 10% match for reconstruction costs funded through the FEMA Public Assistance Program for Local Government, and should have cash flow to be able to carry about 25% of the cost of the local reconstruction projects, as

FEMA reimburses the final amount only after the project is complete. Recently, Congress forgave the 10% match required by the City for the Federal Emergency Management Agency Public Assistance program. However, Congress may not forgive this match for future disaster declarations. Still, the City has been operating on reduced taxes and reduced revenues from services.

GOAL 1. Plan growth and manage growth through the provision of adequate infrastructure.

Objective 1. Work with the County Authority to establish a regional wastewater treatment plant.

Objective 2. Complete and keep up to date diagrams and maps of the municipal wastewater collection system.

Objective 3. Plan projected wastewater collection capacity in accordance with projected land uses.

Objective 4. Assuring the availability and the estimated cost of wastewater treatment should be considered in the City's decisions to expand services.

Objective 5. Adopt and follow engineering and design standards and specifications to assure acceptable wastewater collection systems in subdivisions.

Objective 6. Re-establish a recycling program, and work with organizations to make the program sustainable.

GOAL 2. Provide safe and reliable drinking water and water flow adequate for fire protection.

Objective 1. Work with the County Authority to establish the east county water system proposed in the Mississippi Gulf Region Water and Wastewater Plan, to increase the supply and insure the reliability of water in Bay St. Louis. This should address the need for an additional well by the City to insure reliability of the City water system.

Objective 2. Complete and keep up to date diagrams and maps of the municipal water system.

Objective 3. Plan projected capacity in accordance with projected land uses.

Objective 4. Assure that existing residents have available water at a fair cost.

Objective 5. Adopt and follow engineering and design standards and specifications to assure acceptable water systems in subdivisions.

Objective 6. Ensure Fire Department participation in water system plans, modifications, and performance evaluations.

Objective 7. Encourage water conservation by consumers and by maintaining a leak-free delivery system.

Objective 8. Work with the Hancock Water and Sewer District to provide water service to the area newly annexed into the City of Bay St. Louis.

Objective 9. While the City's water is healthy, due to the mineral content, it is not often clear in color. Establish a reverse osmosis system to clarify the color of the City's water.

GOAL 3. Promote and cooperate in the provision of facilities, programs, and parks or open spaces in a variety of locations and settings for use by all citizens (from the City's 2000 Comprehensive Plan).

Objective 1. Make the most of the beauty and utility of public lands through recreational, park, and open space uses.

Objective 2. Take advantage of lowlands too frequently flooded for building to set aside for recreation and open space. The City may utilize Hazard Mitigation Grant Program funds available through the Federal Emergency Management Agency to purchase contiguous properties with homes that repetitively flood to achieve this objective.

Objective 3. A recreation commission should monitor, initiate, and evaluate parks, public open space, and recreation programs.

Objective 4. Establish waterfront recreational areas near downtown and along the beachfront in areas designated in the County Sand Beach Master Plan.

Objective 5. Cooperate with the County to accommodate beachfront recreational activities, providing required amenities, i.e.; parking, restrooms, showers, pavilions, public piers, etc. Utilize the County Sand Beach Master Plan for direction.

Objective 6. Cooperate with the County and with the City of Waveland in providing recreational opportunities.

Objective 7. Establish neighborhood centers and community centers throughout the City to promote active recreation and life-long social, cultural and artistic learning.

Objective 8. Maintain portions of the Valena C. Jones Center as a Community Center.

Objective 9. Revisit the development of the Science Nature Center in Cedar Point as an educational tourist draw.

GOAL 4. Provide fully effective fire protection, prevention and expert fire related knowledge throughout the City. Maintain a highly rated fire department able to respond in sufficient time and force to rescue persons and preserve property (from the City's 2000 Comprehensive Plan).

Objective 1. The City should consider National Fire Protection Association or NFPA recommended information, publications and services (as accepted by Mississippi rating authorities) to assess the fire department capabilities, capacities, training needs, and economic performance.

Objective 2. Offer fire prevention, safety inspections and education throughout the City while "in service" or by special assignment. Encourage the public to make use of fire department expert knowledge over a wide range of fire and hazardous materials related subjects. Continue the existing fire safety liaison with the schools, training children and teachers as well as gaining familiarity with school buildings and grounds.

Objective 3. Encourage City officials to seek consultations and cooperation from the Fire Department. Provide knowledgeable assistance to City officials in instances of planning and management where fire safety is a consideration - water mains, hydrants, standpipes, access for emergency vehicles, and means of egress.

Objective 4. City administration should provide to the Fire Department sufficient time and knowledge of City decisions, which will affect Fire Department planning capabilities, and requirements - especially as to the type, extent, height, and location of developments and potential enlargement of the City perimeters.

Objective 5. The Fire Department should make effective mutual aid agreements with surrounding fire departments and interests.

Objective 6. The Fire Department should be present for public safety at special events involving large assemblies indoors and out.

GOAL 5. Provide fully effective police protection and related knowledge. Maintain a highly rated police department able to respond in sufficient time and force to reduce crime and protect life and property (from the City's 2000 Comprehensive Plan).

Objective 1. The City administration should continue to maintain the high level ratio of sworn officers to population.

Objective 2. The City Council and City administration should make use of National Law Enforcement Organizations for recommended information, publications, and services assessing police department capabilities, capacities, training, needs, and economic performance.

Objective 3. The Police Department should offer education throughout the City while "in service" or by special assignment.

Objective 4. Encourage the public to make use of police department expert knowledge over a wide range of law enforcement. Continue the drug education program in the schools, training children, and teachers as well as gaining familiarity with school buildings and grounds.

Objective 5. Encourage City officials to seek consultations and cooperation from the Police Department. Provide knowledgeable assistance to City officials in instances of planning and management where crime prevention and traffic safety is a consideration.

Objective 6. The Police Department should make effective mutual aid agreements with surrounding law enforcement departments and interests.

Objective 7. The Police Department should be present and provide training to officers to prepare for public safety at special events involving large assemblies indoors or out.

Objective 8. Special emphasis should be placed on cooperation with casino security managers and casino staff to secure seamless public safety, economy of City operations, and traffic management.

Objective 9. The Building Department should provide an orientation to zoning and building ordinances for the police from time to time.

Objective 10. City administration should obtain police knowledge in planning and selecting lighting for public places and roadways.

Objective 11. The Police Department should re-establish Neighborhood Watch Programs.

GOAL 6. Support a fully effective emergency management agency within Hancock County. Work with the county to insure that the agency is able to prepare for and respond to all natural and man-made disasters in Hancock County.

Objective 1. Work with the County Board of Supervisors to establish a location for a New Emergency Operations Center that is not likely to flood.

Objective 2. Work with the County Board of Supervisors to establish safe shelters within the County.

GOAL 7. Establish organized recreation, social and cultural programs for the City's youth.

Objective 1. Work with non-profit organizations to develop summer and after school programs in Bay St. Louis.

GOAL 8. Establish community centers in neighborhoods throughout Bay St. Louis.

Objective 1. Identify city and county facilities that can be re-built as community centers for youth, senior and adult programs.

Objective 2. Develop an arts business incubator which can also be utilized for community programming.

Objective 3. Establish the Valena C. Jones Center as a community center.

Transportation

Significant Finding: Attractive roadways and ample vehicle parking welcome people into a community, market the community to visitors and create opportunities for additional retail sales.

GOAL 1. Make corridors into and within the City more attractive.

Objective 1. Complete the Gateway Project slated for Highway 603 and Interstate 10.

Objective 2. Establish a Gateway at the Bay St. Louis bridge.

Objective 3. Rebuild Beach Boulevard in a manner that is attractive and functional and preserve views of the beach and Bay.

Objective 4. Require businesses located on corridors of the City to provide attractive buildings, signage and landscaping.

GOAL 2. Establish attractive boulevards throughout the city to include tree-lined streets and landscaped medians.

Objective 1. Establish Drinkwater Boulevard as a tree lined boulevard.

Objective 2. Establish streetscape improvements on Beach Boulevard.

GOAL 3. Provide ample vehicle parking, preferably off-street parking in the business district.

Objective 1. Establish a parking garage in downtown.

Significant Finding: Many residents of Bay St. Louis commute to New Orleans, Stennis Space Center, Port Bienville or Gulfport and Biloxi to work. Provide an opportunity for transportation other than private vehicle transportation.

GOAL 4. Explore options of inter-city/regional transportation in our area.

Objective 1. Re-establish public transit between Bay St. Louis and Gulfport.

Objective 2. Investigate the opportunity and feasibility for commuter passenger rail service between the Mississippi Gulf Coast and New Orleans and Mobile.

Objective 3. Establish Park and Ride area for people to park and use if they commute to their workplace in other areas such as New Orleans or Stennis Space Center.

Significant Finding: Other forms of transportation, including walking and biking which are growing in popularity, can help reduce traffic problems and pollution and encourage tourist-related activities.

GOAL 5. Make Bay St. Louis safer for bicycles by creating a network of sidewalks and bike paths throughout the City.

Objective 1. Work with the Bay-Waveland School District to plan their "Safe Routes to School Program".

Objective 2. Work with the school district to obtain funding to implement the planned walking and biking routes.

Objective 3. Enforce subdivision regulations requiring sidewalks in and between subdivisions and neighborhoods.

Objective 4. Provide new sidewalks were needed to link neighborhoods with commercial areas and to link neighborhoods with community centers and recreation areas.

Significant Finding: Failure of citizens and visitors to observe vehicle speed limits and traffic signals adversely affects public safety and detracts from the pleasantness of daily living. This will become an ever increasing problem as the population of the area grows in the years ahead, unless extraordinary efforts are taken to control vehicular traffic.

GOAL 6. Make enforcement of traffic laws a high priority for City police.

Objective 1. Provide resources and staffing as needed to insure safe highways.

Objective 2. Seek authority from State government, as necessary, for City police to use modern law enforcement devices such as radar and street cameras to provide safer streets.

GOAL 7. Make use of innovative traffic calming measures such as round-a-bouts and speed humps which can effectively reduce vehicle speeding without requiring a police presence. The Comprehensive Planning Advisory Committee recommended round-abouts at Main Street and Dunbar Avenue and at key intersections on Highway 90.

Chapter 3

Land Use Plan

Introduction

Hurricane Katrina devastated existing land uses in Bay St. Louis. Planners estimated that in July 2005, there were likely 6,550 housing units within the City of Bay St. Louis and the newly annexed area. As of March 2007, there were 5,167 housing units located within the same area. This is a reduction in housing units of 21%, fully fifteen months after Hurricane Katrina struck the Gulf Coast. During that 15 month time frame, many homes had been renovated, or rebuilt within this area. And eighteen months after Hurricane Katrina, the City was finally able to issue contracts to reconstruct utilities along Beach Boulevard in the downtown area and to begin construction of Beach Boulevard.

The Goals and Objectives and Land Use Plan serve as a framework for all administrative and regulatory measures relating to the physical development and re-development of the City of Bay St. Louis. Although the Land Use Plan is closely related to zoning regulations, the Land Use Plan equally guides the development and implementation of capital improvement programs, water and sewer improvements, subdivision regulations, building and housing codes and the delivery of public services.

The Land Use Chapter translates the community vision for future growth into a recommended physical pattern for neighborhoods, commercial and industrial areas, roads, and public facilities. Land use policies seek to influence the location, type, amount and timing of future growth through private real estate development, public investment in infrastructure and community facilities, and conservation of natural areas. In addition, the chapter policies are intended to ensure that the environment, as well as the economic well-being of the community are considered in the long term recovery of the City of Bay St. Louis from Hurricane Katrina.

The Land Use Chapter will be used by the City in making decisions about annexations, private development proposals, and the location, size and timing of public improvements. The chapter will also be the basis for preparing more specific sub-area or sketch plans for smaller subsections of the community, such as residential neighborhoods, business districts or key perimeter future growth areas.

The Land Use Plan is for the current incorporated area of Bay St. Louis. The Land Use Plan is based on information collected during the November 2006-March 2007 Field Inventory of Existing Land Use which is presented in Chapter 1 and illustrated on the Existing Land Use Map (see Map 2).

Additionally, the Land Use Plan incorporates recommendations from two growth allocation workshops conducted by the City of Bay St. Louis and Hancock County on December 8th and 10th of 2006 and meetings held March 8th and 22nd of 2007 with the Hancock County Comprehensive Plan Advisory Committee, as well as, input from Bay St. Louis' Planning and Development staff, the Comprehensive Plan Advisory Committee and elected officials from Bay St. Louis and public comments from a series of public meetings held in the fall of 2007.

The Comprehensive Land Use Plan defines a pattern for development, which will best serve area needs and desires based upon existing conditions and potentials. As a foundation for formulating

Bay St. Louis' Comprehensive Plan, the unincorporated area surrounding the City has been reviewed. This review includes that of general conditions, land use characteristics, and the use capabilities of land which is either undeveloped or improved with a potential for redevelopment. This information was defined in Chapter 1, Existing Land Use.

The Land Use goals and objectives will be implemented through intergovernmental agreements with adjacent governmental jurisdictions, through the City's zoning and subdivision regulations, through the administration of those ordinances by the City Council, Planning Commission and City staff. However, the Land Use Chapter should not be construed as a final blueprint for a specific site development, nor as a prospective zoning map. The identification of preferred land uses does not imply that rezoning a specific area is immediately appropriate. While the zoning and subdivision ordinances must be consistent with the Comprehensive Plan, the rezoning process is separate from the planning process and must consider the timing of zoning decisions, availability of similar land and the impact of the rezoning decision on other city goals, objectives and policies.

The Land Use Plan should serve as a flexible outline to guide future growth rather than a rigid pattern that would limit future urban development. Prevailing trends should be identified from time to time, and the Plan should be amended as necessary to meet changing conditions. Future land use needs for Bay St. Louis were derived from the projection of land requirements for the population growth anticipated.

A comparison of the Existing Land Use map with the Future Land Use Map indicates the projected directions of growth for residential, business and industrial, public and semi-public, right-of-way, and special use. These land uses are discussed below in more detail in the context of Bay St. Louis' physical attributes and the Plan's Goals and Objectives as stated in Chapter 2.

Land Use Functions and Space Requirements

The Comprehensive Plan is composed of four main elements - the Land Use Plan, Goals and Objectives, the Transportation Plan, and the Community Facilities Plan. The Land Use Plan is composed of units of similar and compatible land use in three categories, residential, commercial, and industrial, as they relate to community facilities and transportation infrastructure.

Knowledge and understanding of the projected growth of population and employment and of the logical distribution of that growth are applied in the formulation of a practical Land Use Plan. Based upon the patterns of growth, needs for community facilities are determined; including schools, parks, libraries, and police stations. All of these elements must be integrated into the Land Use Plan.

Although the purpose of the Land Use Plan is to set forth the ultimate highest and best use for each piece of land, it necessarily reflects an awareness of the influence of existing patterns of land use. Suitable and desirable existing patterns of use have been recognized. Undesirable patterns of use have been recognized only in the event of conditions indicating little likelihood of change by 2030.

A number of existing residential areas are designated to remain in that use until at least 2030. Although it is recognized that because of the condition of housing, inadequacy of community facilities, proximity of other uses, these residential areas may give way to business or other uses at some time in the future. Conversely, certain areas of business and industry are designated to

remain in the same use until 2030, even though the land could be used more appropriately for residential purposes.

Total New Dwelling Unit Requirements
City of Bay St. Louis, 2030

Current Number of Units	5,167
Estimates of Total Units by 2030	8,215
Losses Due to Hurricane Katrina	1,383
Allowance for 5.75% Vacancy Rate	472
Total New Units Needed by 2030	3,048
Source: U.S. Bureau of Census, Gulf Regional Planning Commission	

Based upon a projected city population of 18,896 people by 2030, the City of Bay St. Louis will require an additional 3,048 residential units. The city may consider monitoring both the number of housing units being built and the number of businesses reopening to determine if recovery is fully underway, or if additional assistance is needed in controlling growth or encouraging growth. At the time of this plan, two large scale residential proposals had been introduced and had been approved by the Site Planning Committee. These two proposals would create about 1,750 residential units (town homes, condominiums-live work units and vacation units, and single family homes) over a proposed ten-year build out period).

Prudent implementation of well-designed subdivision, platting of land, and location of streets is critical to preserving community character and creating viable neighborhoods and commercial districts. Subdivision Regulations play an extremely important role in the development and redevelopment of land, the delivery of services, and the accommodation of land use impacts.

The City of Bay St. Louis Planning Commission, Mayor and City Council, in their consideration of zoning matters, should base their recommendations and decisions on the ultimate highest and best use of the land - that being the use that is in the broad community interest. The ultimate highest and best use of land, however, does not necessarily mean utilization, which brings about the greatest economic return to an individual or individuals, nor the use that at the outset would create the highest market value at the expense of neighboring properties. It is, rather, that use which balances individual interest with the broad community interest that will, in the long run, sustain the property values, character and amenities of the area; and provide for the most practical and economical expenditures for public facilities. Zoning districts should be created to include appropriate area for development and not be established on a piecemeal or property-to-property basis.

Neighborhood and Land Uses

The neighborhoods of Bay St. Louis are/were composed of a variety of land uses, characteristics, histories and purposes. The Land Use Plan proposes to blend purposes with compatible uses, helping to unite and rebuild individual neighborhoods into a community that creates a vital economy at a human scale and with a safe living environment.

Prior to Hurricane Katrina Bay St. Louis had developed as a series of neighborhoods based on their own period and style of residential development. Other natural geographic and man-made factors helped the people living there feel closeness. Generally, these neighborhoods were joined to form somewhat homogeneous areas of families with similar incomes, education and social preferences. The history and geography of Bay St. Louis has created a unique coastal city that is divided into areas by Interstate 10, U. S. Highway 90, State Highway 603, the CSX Railroad,

floodplains and coastline. Prior to Katrina the land use patterns created: a small town atmosphere; a place apart; and a place to visit, retire, walk to school, or enjoy the arts community and a compact downtown of historic character with shops and restaurants, views of the bay and the Gulf, historic and contemporary housing, and sidewalks. Much of that character and environment were lost, severely damaged or destroyed by the storm.

In order to re-establish, re-create and enhance those community characteristics the City should utilize development techniques and strategies associated with “Traditional Neighborhood Development” and “Smart Codes.” These development strategies promote mix-used development in addition to being environmentally and socially sensitive.

Implementation

The Land Use Plan, implemented through a continuous planning process, will help to rebuild and ensure a better place for living and for doing business in the future. Property values will be protected and stabilized because the neighborhoods will remain free of the principal hazards that tend to cause early deterioration and blight, namely detrimental land uses and through traffic.

Neighborhood and city activities will tend to develop awareness of people and places and civic pride. Improved maintenance of buildings and surroundings will ensure the sense of community and provide the structural organization for cooperative action in the achievement of City goals.

It should be noted that one of the administrative goals of this plan is to apply zoning regulations to the newly annexed area. However, before zoning can be applied the City must first satisfy the requirements of Section 17-1-1 of the Mississippi Code 1972. The statute requires the adoption of a comprehensive plan prior to the adoption of zoning regulations. Bay St. Louis recently completed the annexation of a large area of land along Highway 603, the Jourdan River and Interstate 10 which is currently under the control of Hancock County zoning regulations. In the interim, the City is in the position of enforcing two different sets of zoning regulations. Enforcing two different sets of regulations can lead to confusion with City staff as well as the general public. Therefore, time is of the essence in the completion and approval of this plan.

As previously stated, the Land Use Plan is based on the: historical zoning pattern, the Existing Land Use Study completed in March 2007, community meetings held in December 2006 and the Fall of 2007, and consultation with staff and elected officials in Bay St. Louis.

Some Concepts in Administering Compatible land Uses

The administering of the following concepts through subdivision regulations, zoning, sensible location of public facilities and appropriate transportation infrastructure will be critical to the implementation of the Comprehensive Plan's goals and objectives. The following concepts should be of value and additional Planning Commission policies should be adopted as needed.

•**Community Facilities:** The cooperative programming of public facilities by the City (through its departments and boards), County, School Board, regional, state and federal agencies are vital to the Land Use Plan. The participation and partnership of neighborhood groups, civic, and social organizations should be sought and welcomed in the planning process.

•**Financial Planning:** Understanding the Land use Plan and the neighborhood concept must guide capital improvements for community facilities and transportation improvements.

•**School Settings and Partnership Uses:** Schools should be set in an attractive park and playground type setting and should be used on a full-time basis, serving the function of a

neighborhood center for social, recreation, civic and cultural activities, as well as for educational purposes.

•Roadways and Streets: Major traffic-ways have the strongest influence in determining the neighborhood character and can destroy the neighborhood unity if they cut through rather than bond a neighborhood. With this in mind traffic-ways should be recognized and some designated as collector streets and major thoroughfares. All other streets should be protected as the local streets they were originally constructed to be. It is important to protect and re-establish the intimate narrow streets that contributed to the character of Bay St. Louis neighborhoods. The correlation between thoroughfares and land use is most important when considering locations of major traffic generation. The length of major streets, the types of land uses, and the traffic generators they connect will determine future traffic volumes; and, therefore, must be carefully considered if the integrity and quality of life of neighborhoods are to be preserved or enhanced. Appropriate measures should be taken to make the routes which cut through residential neighborhoods uninviting to through traffic. This can be accomplished by closing portions of streets and by the use of loops or cul-de-sacs to maintain proper circulation and access. Application of traffic control measures, although not a substitute for good street layout can assist in discouraging the use of local residential streets and collector streets for through traffic.

The effect on the neighborhood should always be taken into account when proposals to widen or improve existing streets are considered. In many instances, public interest might better be served by making a residential street less favorable for high volumes of traffic.

•Residential Development: When residential development of land on a major thoroughfare is necessary, the development can be done quite successfully by fronting the residences on streets which intersect the major traffic route or by fronting them on a paralleling residential street and backing them on the traffic. In the first instance, the few houses siding on the traffic artery can be protected by adequate side yards and landscaping; in the second case, fences and planting along the rear can buffer the dwelling units and enhance the beauty of the rights-of-way of even the most heavily traveled routes. Small parcel, high density, multi-family intrusions into single-family residential development must be avoided. Small parcel, high-density, multifamily developments must have sufficient setbacks to allow quality of life for inhabitants and neighbors. Apartment buildings must be spaced and located so as to provide a transition between residential housing types. Multi-family areas should be fitting, appropriate and serviceable to the City.

•Location of Business and Institutions: Certain business activities such as automobile sales, single-occupancy office buildings and large commercial amusement centers attract patronage of the "drive-in, one-stop type" and do not depend on pedestrian shopping from store to store. Such activities appropriately are clustered on major traffic routes; and, whenever possible should be located adjacent to shopping centers or industrial areas. Sites adequately sized with sufficient building setbacks are required for such uses to accommodate the needs for parking, turning movements, and visibility. Business activities with storage facilities, equipment and building materials that are not compatible to shopping center development should be located along major thoroughfares. The unsightly portions of these areas require permanent buffers. Space, landscaping and/or walls in combination serve to adequately protect adjacent single-family residences; and wherever possible, can be buffered by duplex, apartment, or single occupancy office uses. Business and industry are not the only feasible uses for the property along highways and major thoroughfares. Public and semi-public uses, including junior and senior high schools and churches; institutional uses, including hospitals, colleges, offices, and high-density residential development are among the traffic-generating uses which can be related properly to high traffic routes.

•Strip Commercial Development: Strip commercial developments can cause considerable inconvenience for customers and businessmen in parking and access, reduce the capacity of the street to carry traffic, decrease speeds, increase accidents, deter the use of the land and have an adverse effect upon properties in the surrounding areas from suitable uses. In a strip commercial development the owners and businessmen should jointly consider improving the area to provide adequate access and circulation, sufficient off-street parking, greater attractiveness, and other features that a well-designed site plan will provide. The City should assist in the design through site plan review to achieve a mutual benefit to all interests and the community.

•Anticipating Re-Development and New Development: In order to provide more flexibility to the developers, any revision of current regulations should anticipate the needs of future businesses. Private interest should take the primary initiative in planning a particular development, subject to the well-established zoning principle of protecting neighboring properties and the public good. It is necessary to insulate residential areas against any adverse effect of adjacent commercial use, even though a shopping center, for instance, carries with it the built-in protective features of off-street parking and landscape improvements. Where a shopping center or commercial district is to be located on a site close to a built-up residential area, buffers should be introduced. For example, a minimum-planting strip 20 feet in width should be used with high dense foliage, masonry walls, or solid fences. This buffer strip is part of the landscaping treatment of the commercial development. Landscaping and buffering serve to promote, protect, and preserve the appearance, character, value, and safety of the total area. Planting and seasonable floral displays in appropriate places within the commercial development add greatly to customer appeal.

•Manufactured Housing: The Manufactured Home Zoning Regulations should set standards for the manufactured home subdivisions and parks to ensure that they have an acceptable appearance. Special attention should be given to such things as the design of streets, minimum lot sizes, the placement and use of storage areas, parking, trash receptacles, and recreation areas. The purpose is to have the manufactured home development conform to the general standards of the neighborhood.

•Public Space: The more intense the residential use of land, the greater the need for recreational space, sidewalks, shorter blocks, and off-street parking. In multi-family developments, special considerations must be given to land coverage and open space requirements.

•Site Plan Review: Site Plan Review should continue to be a required procedure that ensures compliance with the Zoning and Subdivision Regulations and other ordinances as they apply to large-scale and special projects. It will also serve to expedite the building permit process, provide the developer with one central source of official response and review of the development proposal, and conserve the time and efforts of City employees in various departments.

•Conservation Development: Conservation development allows the layout of a subdivisions to be based upon the natural features of the land, instead of the prescriptions required by subdivision regulations. Instead of developing checkerboard subdivisions, developers identify unique characteristics of the property which can be incorporated within the design of the subdivision. After these characteristics are defined, the locations of homes can be determined. Homes can be placed on smaller lots, requiring less maintenance, and residents can still have access to open space or green space.

Land Use Categories

The following land use categories are derived from the analysis of the Existing Land Use map, the current Zoning Map, Goals and Objectives, and the Transportation Plan. Through the planning process a Future Land Use Plan has been created (see Map 3). The Future Land Use Plan illustrates the analysis and creates a flexible guide for future land use decisions. These categories will be used in the development of specific zoning regulations. The categories describe the types of uses that may make up larger neighborhoods, commercial corridors or special use districts.

•Residential Uses: All residential areas should be defined and protected from the encroachment of uses not performing a function appropriate to the residential environment. Providing for adequate light, air and open space for dwellings, related facilities, and institutions encourage internal stability, attractiveness, order and efficiency. The following residential uses shall be considered appropriate and zoning regulations shall provide for their existence: single-family detached dwellings, two-family dwellings and low to high density multi-family dwelling units. Additionally, the City may consider increasing density in some neighborhoods that are located on higher ground. The density increased might include smaller lot sizes and smaller lot frontages for single-family homes and/or garage or “granny” apartments. The City should also consider developing a new zoning classification which would allow single-family residential units on smaller lots, possibly as small as 7,500 square feet. However, these areas should be served by sewer, water and adequate roadways.

The future land use plan defines three types of residential development. These are low density residential development; medium density residential development and multi-family residential development. Low density residential development is characterized as allowing up to four units per acre. Medium density residential development would allow four to eight units per acre. Homes built within this category may include single family homes and duplexes, with granny flats or in-law cottages allowed. The specific locations of duplexes could be determined through the City’s zoning map. Multi-family residential development would allow residential development of more than two units.

•Commercial uses: Commercial districts are composed of land and structures occupied by or suitable for uses furnishing goods and/or services required by the local residents, the City in general and the region. The development of these uses is encouraged within designated areas and the City shall provide for their placement and growth. Within these commercial areas the following commercial classifications should be considered, but not limited to: highway commercial uses (automobile sales, building material sales, golf courses, truck stops, garden centers, regional shopping, etc.), downtown commercial uses (retail trade, restaurants, offices, government, etc.), and neighborhood commercial uses (retail trade, personal services, etc.). In addition, certain requirements may be placed on commercial uses to protect surrounding residential development. However, it is intended that additional commercial development will be created, as needed to serve the public, in accordance with adopted codes. Additionally, as commercial development should be encouraged at nodes around intersections on Highway 603 to encourage shared drives and shared points of access on Highway 603 in order to avoid additional access points entering Highway 603. This will create a safer highway and preserve the capacity of the roadway.

Mixed use development combines several types of land uses within a district to provide a unique living and working experience. Allowable land uses within this classification would include retail, services, offices, restaurants, public uses, and semi-public uses and living spaces. Live-

work spaces would also be encouraged within this district. Many of these uses already exist and thrive in the Depot District.

•**Industrial Uses:** To provide an area for production and assembly that are conducted so the noise, odor, dust and glare of each operation is properly controlled and located. This area may also include the hi-technology parks or campuses where a community college or other technical education institutions and industrial business may support and work together on joint ventures.

•**Flood Plain:** To identify those areas that are subject to periodic or occasional inundation from stream and river overflows in order to stipulate careful development practices to protect the property from flooding. FEMA regulations and the Bay St Louis Flood Ordinance must govern any development that occurs in the flood plain. Lands that are subject to inundation by the 100-year base flood are defined on the current Flood Insurance Rate Maps.

•**Wetlands:** To consider those areas of tidal marsh or wetlands that are subject to the Wetlands Protection Act in order to effectively protect these properties from encroachment by unsuitable development.

•**Historic Preservation:** To provide a regulated district for the preservation of historic neighborhoods and structures by maintaining historic architectural guidelines. Historic structures create “a sense of place” that illustrates the culture, character and scale of Bay St. Louis. The historic character of Bay St. Louis is an important contributor to the City's tourist industry, adds to the character of the community and the quality of life, and enhances the tax base of the city.

Waterfront Land Uses: Mixed use and mixed density special use districts intended to promote a vibrant waterfront that includes uses such as primary and secondary residences, as well as tourism and recreational uses, but excluding casinos. Height and density will vary within a district to respect adjacent residences with appropriate buffers or gradients. For the areas located south of Bayou LaCroix, it is recommended that height should be restricted to no more than fifty feet above the base flood elevation. Certain sites may want to be restricted to residential land uses only; and/or may or may not wish to allow mixed use neighborhoods.

These developments will create broader green space and have less impact on the environment. It will also be more cost effective for the city to serve and may help landowners avoid repetitive losses due to flooding. It will add properties to the tax base that will create a higher tax base without increased taxing on city services. And it would be easier to comply with new flood maps construction and height requirements. It would also keep more properties on the tax rolls versus rolled into government buy-outs, negatively impacting the tax base and increasing taxes for remaining citizens. What would be allowed could be defined for each area after obtaining input from property owners during the zoning process.

•**Special Land Uses:** These special uses, such as casinos and their related land uses, public and semi-public facilities, beach and waterfront activities, are intended to identify those specific uses which occur in areas of the City with unique characteristics, geography, or which create impacts requiring regulations which may not need to be addressed in general land use area of the City.

Other Suggested Land Use Categories

Mixed Use Development: The Governor’s Commission on Recovery, Rebuilding and Renewal suggested that teach city adopt amendments to land use ordinances to allow the creation of mixed use developments. These could include (a) business and residential in the downtown area, (b) mixed use in neighborhoods using “community-based” retail, which incorporated only

commercial amenities needed and approved by residents, and (c) neighborhood residential areas without mixed use, but connected to other areas by a sidewalk or pedestrian path system.

Resort Destination: The City may consider a resort destination classification for zoning at some point in time. Citizen Advisory Committee members indicated that second homes and tourism were important industries to the City. But advisory committee members indicated that the densities allowed in Gulfport and Biloxi may not be appropriate for the City of Bay St. Louis. Biloxi currently allows 30 units per acre in their District and Gulfport allows 50 units per acre in their Entertainment District.

Possible guidelines for regulations from other communities include requiring that 50% of the resort site be kept as Open Space, as in Mount Airy, Pennsylvania. Resorts within Hawaii offered the most comprehensive regulations. The communities developed a market study and defined their tourist market niche. Densities ranged from 10 units per acre for retreat resorts to 33 units per acre for intermediate resorts of 1,500 rooms. Additional requirements indicated that both active and passive recreation must be provided and employee housing must also be provided. Finally, the ordinances for the Island of Hawaii required that existing lands zoned for resort development must be developed, before new lands could be rezoned to resort.

Land Use Recommendations

The Future Land Use Plan and Thoroughfare Map are important tools that will guide individual land use decisions. All land use decisions should promote flexibility and compatibility. The Future Land Use Plan primarily follows existing land use patterns that had been stable for over 20 years. The plan recognizes the need to re-establish and protect residential property and neighborhoods by appropriate placement of future land uses. Recommended land use, while possibly different from uses permitted by current zoning, follow existing land use or preserve existing development densities. The majority of the City remains low to medium density residential, and U.S. Highway 90 will continue to serve as the City's primary shopping area.

Specific recommendations include:

- Establish commercial nodes along Highway 603 to control access to Highway 603 from businesses developing along the Highway.
- Establish Smart Code Overlays for the Downtown Area and the Depot District to encourage mixed uses and good design elements.
- Continue to review proposals for casino development as Special Land Uses.
- Consider the establishment of a resort district.
- Rezone areas of the newly annexed area to insure consistent administrative procedures.
- Development architectural and design standards to integrate better building into the City.
- Encourage conservation design subdivisions in areas slow to redevelop, which would allow homeowners to cluster structure on higher portions of the property, preserving low-lying areas from development.
- Establish a medium density zoning district allowing single-family detached homes with densities within the neighborhood from 4 to 8 units per acre.
- Allow in-law cottages on lots with single family homes, but maintain the density of the district.
- Waterfront land use sites should have plenty of buffer space between the waterfront land use district and pre-existing residential neighborhoods. These buffers should be at least 150 feet between the waterfront land use district and existing neighborhoods along Harrison and Wolfe Streets, and approximately 200 feet from Old Lazy River Road, Nineteenth Street and Jourdan River Drive.

Chapter 4

Transportation Plan

Introduction

Transportation planning is an important part of a community's comprehensive planning process. The community's future development, economic growth, and quality of life are influenced by its transportation system. Growth in Bay St. Louis over the years has been strongly influenced by the modes of transportation that operate in the City. Water, rail, air and vehicular operations contribute toward the sustainability of the economy.

This transportation component of the Comprehensive Plan examines issues related to transportation in the City of Bay St. Louis and Hancock County providing information regarding the operation and development of the transportation system. The comprehensive plan presents transportation-related goals for City of Bay St. Louis and provides recommendations for the maintenance and improvement of the transportation system in order to realize those goals.

Multimodal Services

Hancock County Port and Harbor Commission is the economic development authority that manages Port Bienville Industrial Park and Stennis International Airport for the County. The key economic attribute of these two facilities is their capability to move goods through multiple modes of transportation. Thus--attracting commerce to the City of Bay St. Louis.

Rail Service

The CSX Corporation, a Jacksonville, Florida company, owns the class one rail line running east and west through southern Mississippi and is the only connection to the national rail network for Port Bienville and the Ports of Gulfport and Pascagoula with direct access to New Orleans, Louisiana and Jacksonville, Florida. CSX services inter-modal port terminals and from the Gulf Coast region contributes to moving approximately 18% of the 2.5 million tons of commodities by rail to other markets.

Amtrak passenger service Sunset Limited (New Orleans to Jacksonville) stopped at the Bay St. Louis Depot tri-weekly but was discontinued after Hurricane Katrina. According to an Amtrak spokesperson, future rescheduling of the stop in Bay St. Louis has not been determined. For those residents who want to travel by rail can catch the train in Picayune and or Slidell on Amtrak's Crescent from New Orleans to New York along the Norfolk Southern Rail. During the city's planning process, public comment encouraged reinstatement of a passenger rail service to meet commuter demand especially during commute hours of early morning and early evening.

Port Bienville Industrial Park Rail Service

Port Bienville Railroad provides a short line service that connects to the CSXT line. The CSXT rail line runs east and west through southern Mississippi and is the only connection to the national rail network for the Port with direct access to New Orleans, Louisiana and Jacksonville, Florida.

The full service short line railroad can handle eight thousand (8,000) carloads per year. Because of the capacity of their multi-modal warehouse and trans-load facilities (rail, water, and or motor-freight), inbound cars can be delivered to customers the same day received. The property can

store up to four hundred twenty-nine (429) rail cars at one time. The rail within the Port has two hundred eighty-six thousand (286,000) pound gross-weight-on-rail capability.

Port Bienville looks forward to implementing a number of short term and long term plans to improve and enhance services such as the following:

- Expand the Port's short line rail north to the Norfolk Southern Railroad through NASA Space Center including a future extension to the Stennis International Airport.
- Construct new CSXT Rail Bridge over Pearl River.
- Increase inter-modal capacity.
- Build a new access road from old Highway 90 to new Highway 90.
- Install a railcar scale and construct a rail spur to serve the scale.

Port Bienville Industrial Park Water Access

Port Bienville is located five (5) miles from the Intracoastal Waterway. Connecting the shallow draft port to the Mississippi Sound is a twelve foot (12) wide channel. There are three (3) berths totaling six hundred (600) feet in length with a draft between sixteen (16) feet to twenty (20) feet. There are five (5) barge berths totaling one thousand fifty (1,050) feet. Their most competitive feature is attracting short sea and container-on-barge shipping. To remain competitive, Port Bienville plans to address the following improvements in the future:

- Improve drainage challenges with additional flow outlets and repair drainage basins.
- Increase domestic cargo tonnage by marketing to specific cargo categories for example plastics manufacturing, steel and pipe, metal fabrication, limestone, aviation, fresh produce, etc.

Stennis International Airport

The airport is a full service facility, with a fixed based operator providing a passenger terminal, aircraft fueling, tie down and hanger service, aircraft maintenance, air charter, student flight training, and other amenities. Stennis International Airport is a FAR-139 facility that is not presently receiving scheduled air service. Currently, approximately 78 general aviation aircraft are based at the airport, daily operations include a moderate mix of general aviation and military traffic. Stennis International Airport plans to address the following improvements in the future:

- A runway extension of 1,000 feet to allow the airport to handle additional types of aircraft.
- Runway improvements, strengthening of the existing runway allowing heavier aircraft to utilize the airport.
- Construction of a lighted helipad to accommodate helicopter service.

Roadways

Federal Functional Classes

Functional classifications group streets and highways into classes or systems according to their intended character of service. Functional classification defines the role any particular road or street plays in facilitating the flow of traffic through a highway network. The transportation system provides access to property and travel mobility. Access is a fixed requirement, necessary at both ends of any trip. Mobility along the path of a trip can be provided at varying levels, usually referred to as "level of service." Mobility can incorporate many elements, ranging from riding comfort and freedom to speed changes. The most basic mobility element is operating speed or trip travel time.

The four functional classifications for urbanized areas—*urban principal arterials, minor arterial streets, collector streets, and local streets*—are described below and derived from the FHWA “Functional Classification Guidelines.”

Local streets are characterized by a high level of land access. Arterials emphasize a high level of mobility for through movement. Collectors are mid range streets providing both mobility and access.

1. Urban Principal Arterial: Principal arterials should serve major centers of activity and the highest traffic volume corridors. They also should carry the major portion of trips entering and leaving an area and the majority of through movements by passing the area. Principal arterials serve significant travel between central business districts and outlying residential areas. Right-of-way width minimum should be at least 110 feet.

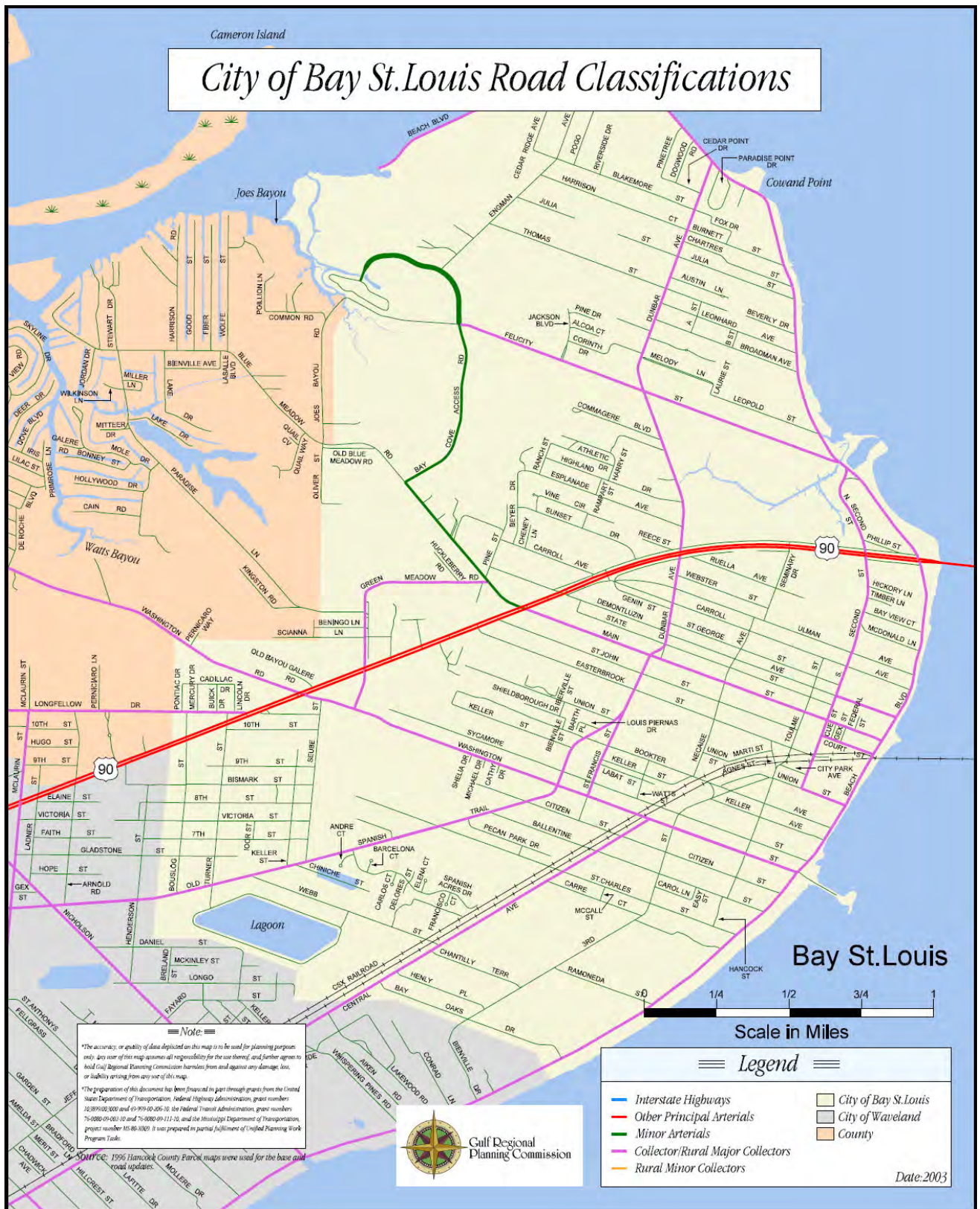
2. Urban Minor Arterial: The minor arterial street system should connect with the principal arterial system and distribute travel to geographic areas smaller than those identified with the principal arterials. The minor arterial street system includes all arterials that are not classified as principal arterials, place more emphasis on land access and offer a lower level of traffic mobility. Minor arterials may provide intra-community continuity, but ideally should not penetrate identifiable neighborhoods. Right-of-way width minimum should be at least 110 feet.

3. Urban Collector: The collector street system gathers traffic from local streets and provides traffic circulation within residential neighborhoods, commercial and industrial areas and provides land access as a secondary function. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector system also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. Right-of-way width should vary between 60 to 80 feet.

4. Local Street: The local street system comprises all facilities not included in one of the higher systems and provides direct access to abutting land and access to the higher order systems. Local streets offer the lowest level of mobility and usually contain no bus routes. In addition to moving traffic and accessing land, local streets provide easement for all types of utilities and in some cases temporary parking. Through traffic movement on local streets usually is discouraged. Right-of-way width should vary between 45 and 60 feet in residential areas and 60 to 100 feet in commercial locations.

The functional classifications are used to establish eligibility for roadway funding projects. All roads in the City of Bay St. Louis classified as urban principal arterials, urban minor and arterial urban collectors are eligible for various federal funding programs. The classifications for the City of Bay St. Louis are established by the Mississippi Department of Transportation (MDOT) with collaboration from the region’s Metropolitan Planning Organization, Gulf Regional Planning Commission. Recommendations to change the functional classification of some roadways may be made as a result of the information and projects presented in this plan. The City of Bay St. Louis’ existing functionally classified roads are presented in the following Map.

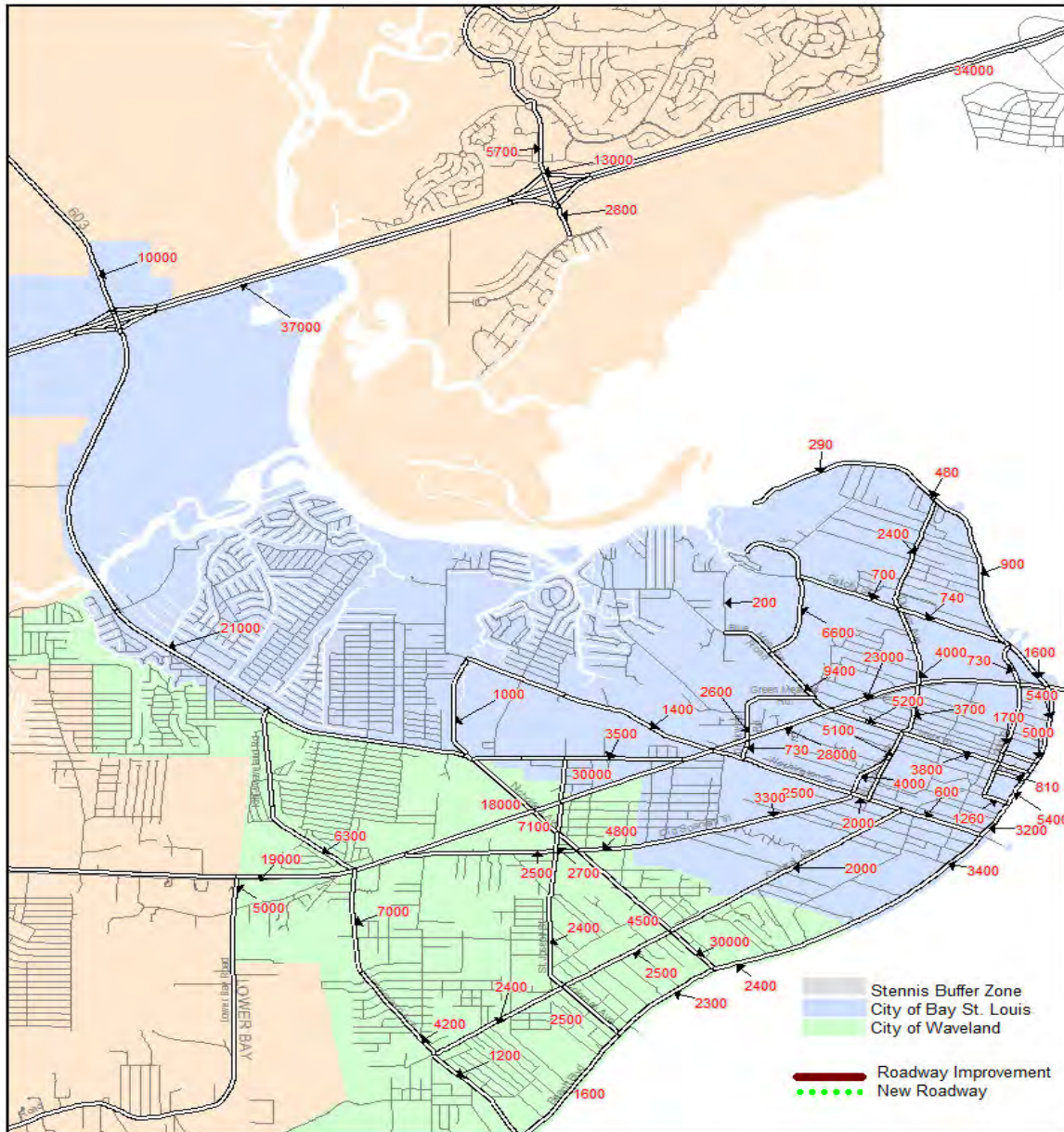
MAP 4.



Average Annual Daily Traffic

According to the Highway Capacity Manual (HCM2000), traffic volume is the number of vehicles passing a point on a lane or roadway during some time interval. Volume is the most basic traffic variable used to quantify traffic. Volume most commonly is expressed as annual average daily traffic (AADT), which represents the total volume on a highway segment for one year divided by the number of days in the year. Annual average daily traffic for roadways in the City of Bay St. Louis and the Mississippi Gulf Coast region are provided by the Gulf Regional Planning Commission (GRPC). The AADTs show the existing traffic flow on the each segment of roadway in the City of Bay St. Louis. The AADTs for 2005 are presented on the following Map 5.

MAP 5. 2005 Average Daily Traffic Counts



2005 Annual Average Daily Traffic (AADT)

Bay St. Louis



City of Bay St. Louis should pay particular attention to roadways with the heaviest traffic volume in order to meet traffic flow and safety needs. These roadways impact more Bay St. Louis residents on a daily basis than other roadways. Projects identified on these high volume roadways should receive priority when funds are allocated. Table 2 shows the roadway segments with the highest traffic counts in Hancock County.

Table 2. Roadway Segments with the Highest Daily Traffic Counts

Roadway	Segment	2005 AADT	Functional Classification
I-10	E. of Hwy. 603	37000	Interstate
I-10	W. of Hwy 607	36000	Interstate
I-10	W. of Hwy 603	35000	Interstate
Hwy 90	E. of McLaurin St.	30000	Principal Arterial
Hwy 90	E. of Greenmeadow	28000	Principal Arterial
Hwy 90	E. of Main Street	23,000	Principal Arterial
Hwy 90	W. of Hwy 603	21000	Principal Arterial
Hwy 90 Bridge	E. of Beach Blvd.	19,000	Principal Arterial
Hwy 90	E. of Lower Bay Road	19,000	Principal Arterial
Hwy 603	N. of Hwy 90	18,000	Minor Arterial
Hwy 90	E. of Lakeshore Road	11,000	Principal Arterial
Hwy 603	S. of Hwy 43	10,000	Minor Arterial

Traffic Generators

According to the 2000 Census, over 6,500 commuters travel to Hancock County to work every day, in addition to the City's resident workforce. A majority of these workers travel from Harrison County, Pearl River County and St. Tammany Parish, Louisiana. It is essential to the City's economic wellbeing that these workers are provided with good mobility and accessibility to their jobs.

Major Employment Centers

Following is a brief discussion of a number of major employment centers in the City of Bay St. Louis. These are the areas that generate the majority of daily commuter trips on the City's roadways.

a. Stennis Space Center- This work center consists of many government contractors that support our national defense and the national space program. In 2005, there were approximately 4,500 employees who travel to the site. NASA and support contractors employ approximately 1,760 persons. U.S. Navy and support contractors employ approximately 1,455. The U.S. Department of Commerce employs 200 persons. The remaining tenants employ approximately 1,100.

b. Hollywood Casino- The gaming industry in City of Bay St. Louis is seasonal and the work force fluctuates. Approximately 725 persons were employed in October of 2006.

c. Silver Slipper Casino- Opened in 2006 and presently employs approximately 643 employees as of October 2006. The success of this Casino will demand future road improvements in the southwestern portion of the County. It is likely that these improvements will be north/south improvements, but no specific requests have been made.

d. Hancock County- The District employed 540 personnel during the 2006 school year with future plans of opening an elementary school on Highway 43 near the Leetown community.

e. Hancock Medical Center- The hospital employed approximately 530 people in 2005 and will continue to grow after recovering from Hurricane Katrina.

f. Wal-Mart- The popular retail store employed approximately 460 persons in 2005 and has successfully rebounded since the storm.

g. Bay St. Louis-Waveland School District- Serving both cities, the School District employed approximately 400 persons.

Congestion

An assessment of traffic congestion was used to identify problems and show conditions on individual segments in the transportation system in order to make performance measures relatively easy to interpret by decision makers and the public. Volume-to-capacity ratios were used as the primary measure to evaluate traffic flow. The ratios were used to assess the transportation system by assigning a Level of Service (LOS) to each roadway segment. This indicator addresses the vehicular volume on the roadway compared to its estimated capacity as shown in Table 3.

Table 3: Level of Service

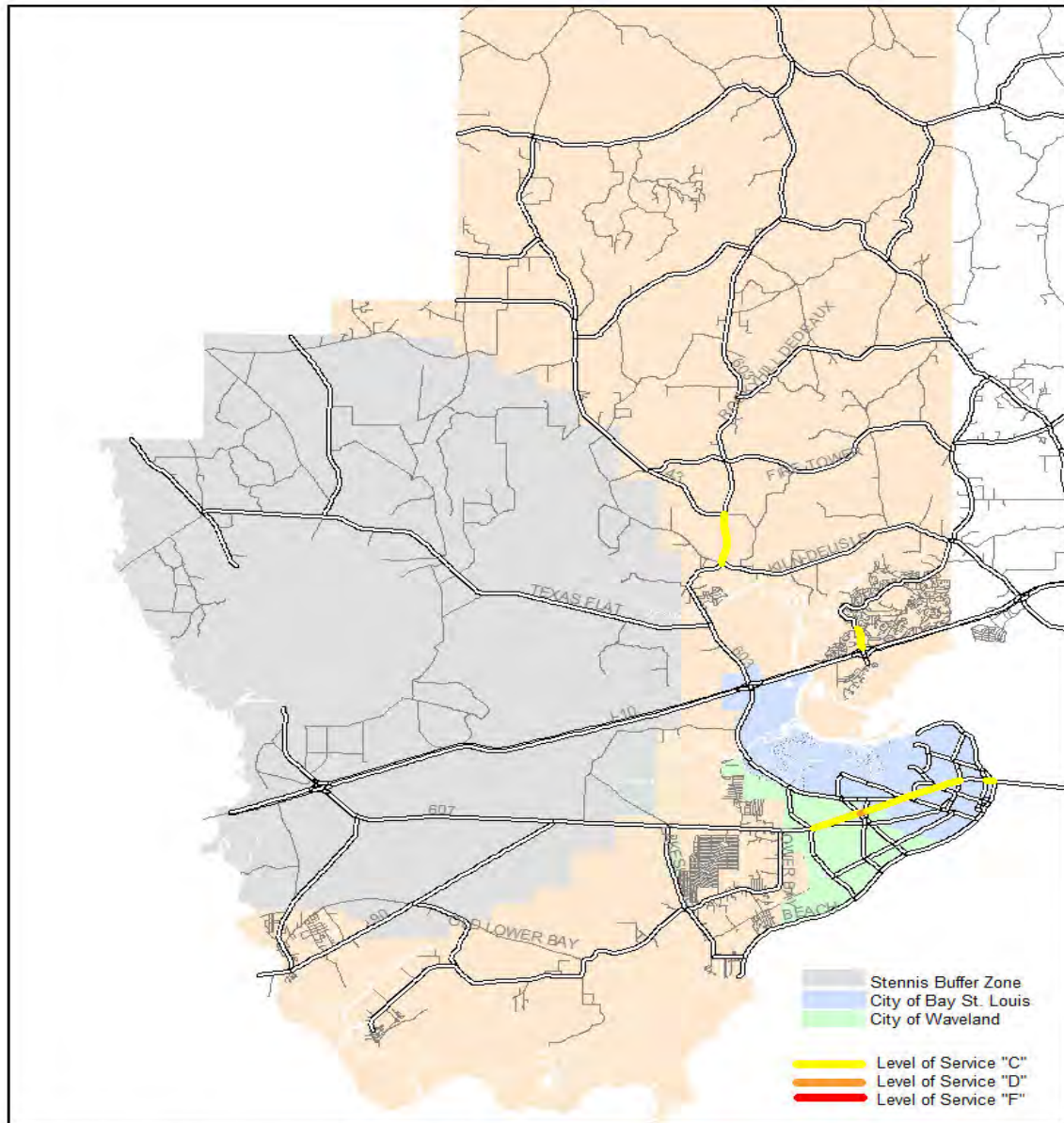
Level	Characteristic
A	Vehicles are virtually unaffected by other vehicles in the traffic stream
B	Other vehicles in the traffic stream begins to be noticed
C	Vehicles are becoming significantly affected by interaction with others
D	Speed and freedom to maneuver are severely restricted
E	Comfort and convenience levels are extremely poor
F	Operations are extremely unstable

Capacity is a characteristic of the roadway system and is determined by the way it currently affects travel. According to the Highway Capacity Manual (HCM2000), capacity is the maximum sustainable flow rate at which vehicles or persons can reasonably be expected to traverse a point or segment of lane or roadway during a specified time period under given roadway, geometric, traffic, environmental, and control conditions. For our purposes, capacity estimates based on the Highway Capacity Manual, are expressed as maximum vehicles per hour for a given roadway. The estimated capacity of the roadways in this plan was determined by factors including: signal densities, number of lanes, turn lanes, and medians.

This method does not account for the impacts of on-street parking, driveway access, lane additions leading up to or lane drops leading away from intersections, grades between intersections, any capacity constraints between intersections (such as a narrow bridge), mid-block medians and two-way left turns, turning movements that exceed 20 percent of the total volume on the street, queues at one intersection backing up to and interfering with the operation of an upstream intersection, or cross-street congestion blocking through traffic. Peak hour traffic volumes are developed from the AADTs and were used in the volume/capacity performance measure described above.

The Level of Service Map 6. illustrates estimated existing levels of service for various roadways in Bay St. Louis. After evaluating all of the road segments, two had LOS characteristics and are estimated to be at LOS level C and D. Please review the following Map 6.

Map 6. Estimated Existing Level of Service

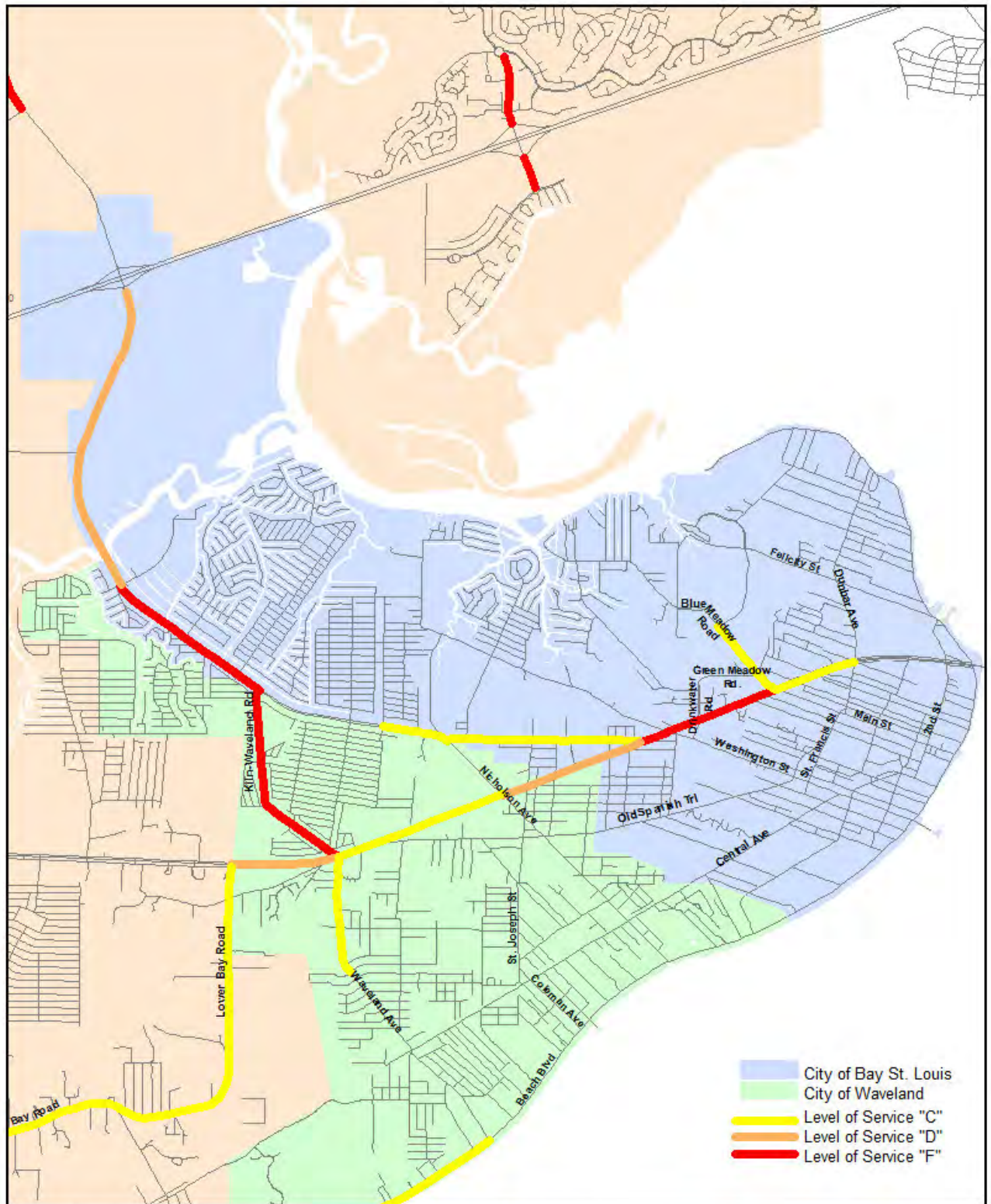


Hancock County Existing Level of Service
2005



Travel Demand Forecasting

The travel demand forecasting model is a tool the MPO planners use to estimate the amount of traffic in a given horizon year. Using traffic estimates, planners have the ability to estimate where future capacity deficiencies will occur. This tool provides for the identification and evaluation of roadway projects for the study area. The model estimates daily trips made by trip purposes such as work, recreation, casino, hotel patrons, etc. The future traffic is then compared to the capacity of the roadway and concerns are identified. However, the present modeling process does not forecast demand on roadways during emergency evacuation time-periods. To address the travel demand during emergency situations, local officials will need to solicit assistance from the Mississippi Department of Transportation and Gulf Regional Planning Commission prior to the five-year update planning process of the Mississippi Gulf Coast Area Transportation Study. The following MAP 7 shows Hancock County's transportation system in the year 2030 and the congestion deficiencies that will occur based on the traffic estimated.



City of Bay St. Louis Projected 2030 Roadway Deficiencies
(for existing roadway system)



Map 7.

Safety and Access

Park and Ride

Since rail and bus transit opportunities are limited along the coast for commuting purposes, park and ride lots provide a place for commuters to meet a carpool, vanpool, but or catch a train. Park and ride lots provide a place for commuters to meet a carpool, vanpool or ride a bus. The establishment of park and ride lots for use by commuters traveling to major employment centers on a daily basis would benefit the City of Bay St. Louis. Much of the City's daily traffic is directly attributed to trips to and from some major employment destinations within the Bay St. Louis. According to the 2000 Census, approximately one thousand nine hundred (1,900) of Bay St. Louis's work-force leaves the city to work. In Waveland, there are one thousand eight hundred (1,800) residents working outside their community and in the County approximately eight thousand seven hundred (8,700) residents travel outside the county to work.

Park and ride programs are often used to reduce the number of cars on the road. Park and ride lots provide an easily accessible location for carpoolers or vanpoolers to meet on their way to work. This program attempts to place single occupancy trips into higher occupancy modes such as carpools or transit. They create changes in trip patterns which lead to changes in vehicle activity such as the total number of vehicle trips traveling to a destination.

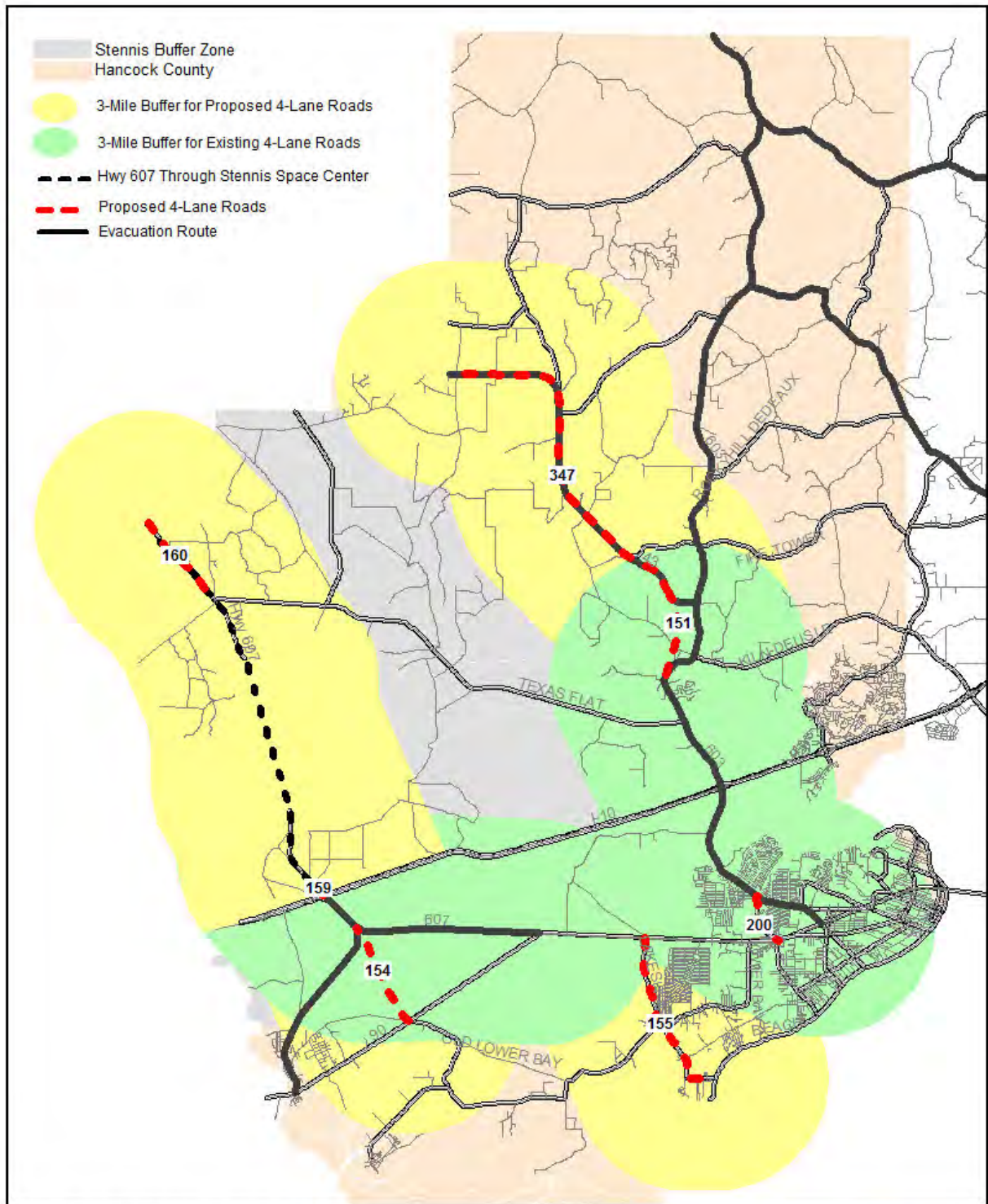
The success of park and ride depends on proper planning and developing an understanding of the issues that affect the transportation decision-making of the roadway users. Any transit improvement (train or bus) requires the evaluation of the needs of the potential rider. It is important to evaluate the entire trip made when developing a strategy used to shift the vehicle trips to transit trips. Changes in the mode of travel must benefit the potential user in lower travel time or financial savings. Factors such as parking costs, effective and efficient connections, public education and marketing impact the success of park and ride programs.

High levels of public agency and/or employer support for park and ride programs also are needed. Employers can support park and ride programs by giving carpoolers preferential treatment such as special parking or other incentives. Park and ride programs and facilities require extensive planning at the regional and corridor level in order to maximize the effectiveness of the systems and coordination of the programs. General locations have been identified for Park and Ride at the intersections of Highway 90 and Highway 603, I-10 and Highway 603 and Highway 43 and Highway 603.

Hurricane Evacuation

Hurricane evacuation concerns are extremely important to Bay St. Louis. It is important to provide the City's residents with efficient north-south routes for safe and efficient hurricane evacuation. To enhance future evacuation, Bay St. Louis should develop projects that provide better connectivity by constructing new roads to link with existing roads that would provide better access for north-south mobility. The two primary evacuation routes are Highway 90 to Highway 603 or to I-10 and Highway 603 to I-10, to Highway 43, and/or to Highway 53. Highway 43 will lead to I-59 and Highway 53 will lead west to I-59 or east to Highway 49. These routes lead evacuees north to places such as Hattiesburg, Meridian, and/or Jackson.

Map 8. Hurricane Evacuation



Existing and Future 4-lane Evacuation
Hancock County



The MAP 8. above shows existing and future evacuation facilities for Hancock County. The **green buffer** shows the area in the county that is within 3 miles of an existing 4-lane roadway. It is assumed by this process that this standard is the acceptable threshold for a person's access to and adequate transportation facility for the purposes of north-bound evacuation in the event of an emergency such as a hurricane. As you can see, there are parts of the county that do not have adequate access to existing 4-lane evacuation such as Pearlington, Lakeshore, Clearmont Harbor, in the southern part of the county. In the central and northern parts of the county, area such as Diamondhead, Standard, Sellers, Necaise, Ceasar, Leetown , Flatop, and Rockyhill do not currently have adequate access to a 4-Lane north-south roadway.

The idea has been discussed to use Hwy 607 through Stennis Space Center in the event of an emergency to improve evacuation options for Hancock County. This roadway and the improvements at the I-10 interchange (project #159) and Hwy 607 north of Stennis (project#160) would enhance evacuation tremendously. The map above shows these improvements and other proposed 4-lane facilities with a 3 mile **yellow buffer**. As you can see when the proposed 4-lane facilities are constructed and the Stennis route is made available, much more of the county is within 3 miles of a 4-lane facility. Areas such as Pearlington, Clermont Harbor, and Lakeshore are now within acceptable distance to a 4-lane roadway. Also, Flat Top, Rocky Hill, and Leetown will then be adequately served by a 4-lane facility to enable evacuation to the north.

Transit Service

Feasible transit opportunities are limited for Bay St. Louis due to current transit operation costs and the City's lack of population density. Currently transit service is provided within the City to serve those seniors that participate or who want to participate in the City of Bay St. Louis' Senior Citizens Program. The Coast Transit Authority (CTA) is in the process of developing a plan to improve transit service in the City of Bay St. Louis and the other coastal counties. To improve upon rail opportunities, local officials should continue to work with neighboring cities to promote and lobby for reinstated Amtrak passenger service to provide for commuting and tourism opportunities.

Identified Needs

The primary needs identified during a January 2007 public hearing were the lack of service to public housing and service for seniors with specific service requests from seniors in the Diamondhead community. CTA is working with the City to address special need populations such as seniors and residents with disabilities. Public input received during a public hearing to review the draft of this comprehensive plan indicated interest in providing commuter services especially by rail during peak commute times. As the City grows along with the frequent increase in gas prices, transit will become a more attractive mode of transportation for City residents.

Proposed Service Concepts

To address service needs, CTA is working on a number of concepts in an attempt to provide an affordable transit service for the City. These services are planned over a 20 year period. With proper funding and planning, the Coast Commuter Service and Public Demand Response Service could take place during the first year of implementation and the ADA service in the second year. It is anticipated that the fixed route service will take additional time to implement pending future growth over the next 20 years. Within CTA's plan there was no rail service proposed for Bay St. Louis. However, a rapid bus transit system is planned in 20 years to transport residents between the City and Gulfport. The following service concepts include:

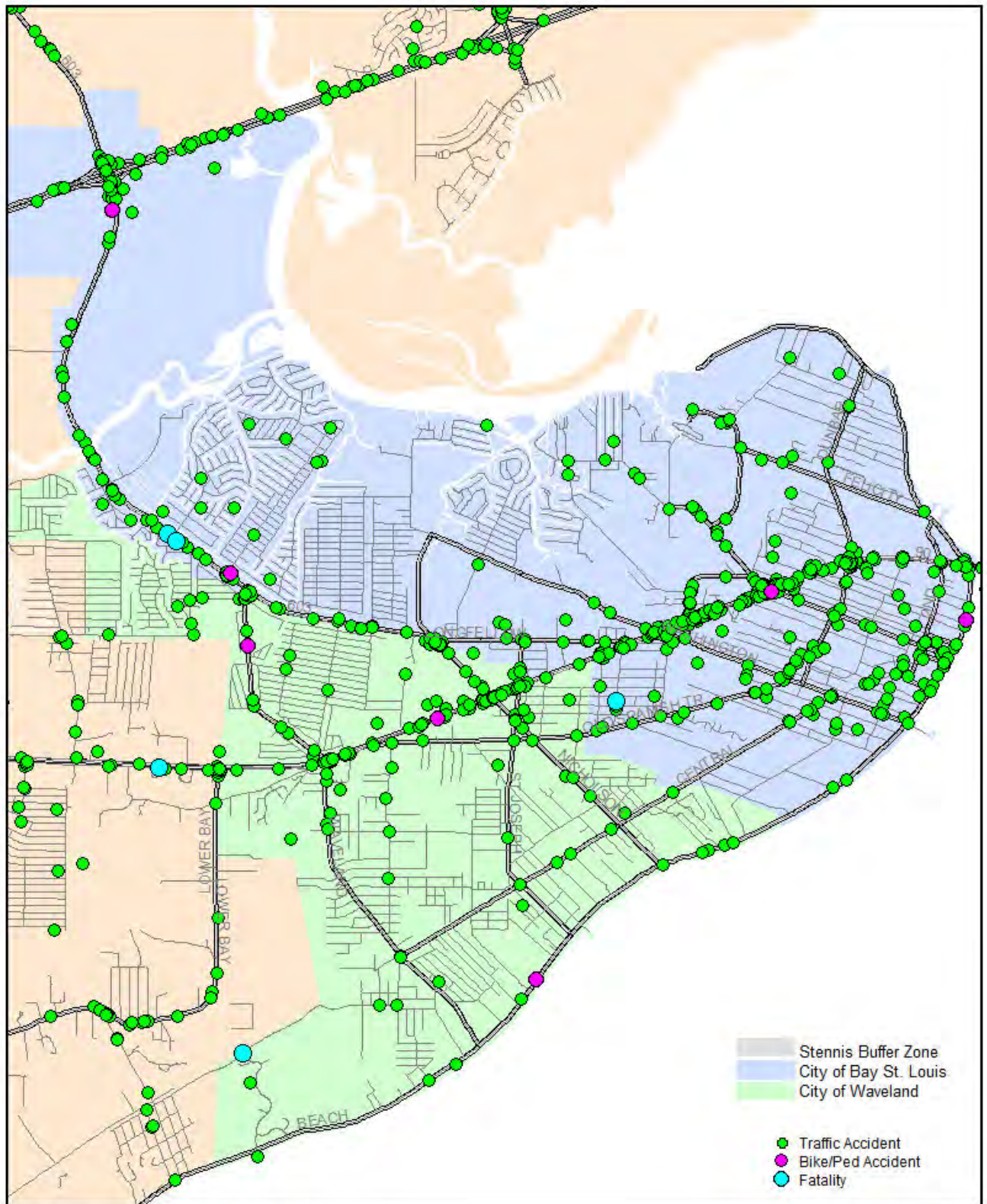
- Coast Commuter Service-Working with Park and Ride Lots establishing a Van and Car Pool service to employment sites such as for example Stennis Space Center and or Casinos.
- Develop a Public Demand Response Service. During a certain time frame and or in certain locations, the public may request service.
- City of Bay St. Louis ADA Service.
- Provide a fixed bus route along Highway 90 from Waveland to Gulfport.

Bicycle and Pedestrian

Many local governing bodies have a difficult time maintaining their streets and roadways and are not able to consider pedestrian and bicycle amenities such as sidewalks, crosswalks, and cycling facilities. Pedestrian and bicycle friendly roadways are in demand as public comments indicated from the Governor's Commission's and FEMA's Long Term Recovery planning efforts. Providing this alternative mode of transportation improves safety and the overall quality of life.

Safety and Access

Pedestrian and bicycle projects can be implemented in conjunction with other roadway improvements or developed as stand-alone projects. Pedestrian and bicycle trips help reduce automobile travel and result in less highway congestion, better air-quality and fewer parking problems. Depending on the characteristics of a roadway and its adjacent land uses, traffic calming strategies can be used to create a safer environment for pedestrians and reduce fast moving traffic in nearby residential areas. The following Map 9. Traffic Accident Map illustrates and provides awareness to those potentially dangerous locations.



Traffic Accidents 2004 to May 2006
Hancock County



Constructing pedestrian and bicycle routes should be designed according to latest standards while being sensitive to the location for proper mobility and safety. Since bicycle lanes are not always feasible, existing roadways with wide lanes or good shoulders may be suitable for bicycle traffic especially on local streets with maximum speed of 25 miles per hour. Refer to the *Table 7: Roadway Types and Right of Way* in the Project Planning and Development section of the plan. Signs can be used to mark bicycle networks and encourage travel on designated roadways.

Schools and Parks

The City of Bay St. Louis should consider improving upon safety and accessibility for pedestrians and bicyclists. Roadways leading to schools and parks should be high on any priority list of improvements. The city and School District should continue to work together on a Safe Routes To School Program that is administered through Mississippi Department of Transportation providing funding to educate, promote and build safe and convenient facilities for children to walk or ride their bicycles.

The roadway improvements projects identified in this plan should incorporate proper pedestrian and bicycle facilities in the design and development of the projects. Although pedestrian and bike accessibility and mobility near schools are of paramount importance, other destinations such as shopping areas, community and recreation facilities also could benefit from such improvements. Stand-alone pedestrian and bicycle projects should be considered if roadway projects are not planned near schools or other important areas.

Existing and Proposed Routes

The three mile Sand Beach Pedestrian Pathway and Bikeway is the longest combined route of its kind on the Mississippi Gulf Coast. The City of Bay St. Louis worked closely with Hancock County and the City of Waveland to obtain a Transportation Enhancement Grant in 1995 to build the popular beach pathway and the bike way along the Dunbar Avenue from U.S. Highway 90 north to Beach Boulevard.

Connecting to existing facilities and to traffic generators such as schools, parks and neighborhoods can be more affordable for the city and ideal for establishing a functional interconnected network for walking and biking. To build a walkable community the following proposed projects were planned during FEMA's Long Term Recovery Plan planning process:

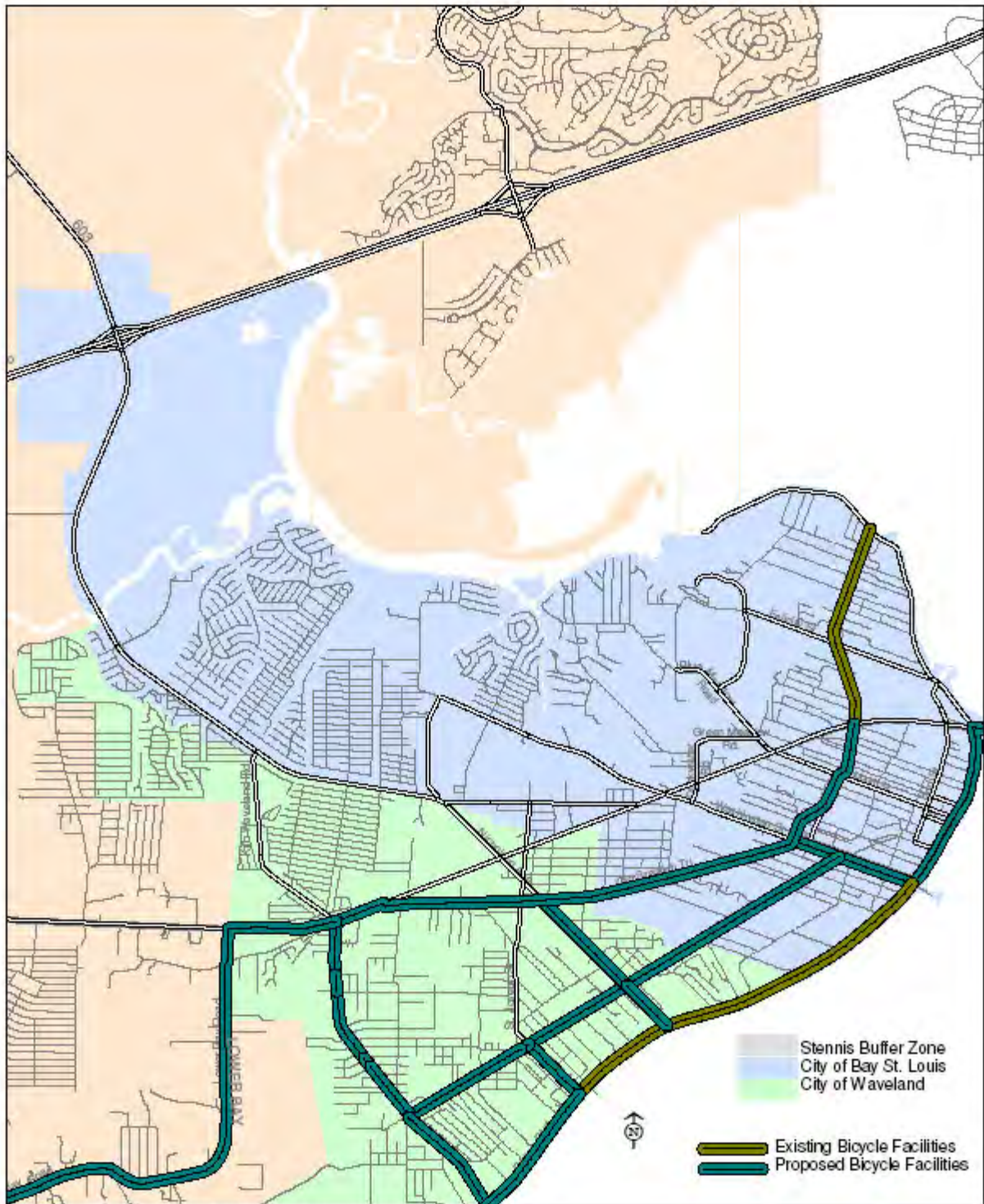
- Old Spanish Trail from Bay St. Louis to Waveland
- Washington Street
- Main Street
- Longfellow Road
- Nicholson Avenue
- Waveland Avenue
- Highway 90

Hancock County Greenways Plan also recommends a comprehensive number of pathways and trails connecting neighborhoods, schools, commercial areas and the city's natural resources. The following is a sample of proposed projects:

- Recommends continuation of the beach pathway from Bayou Caddy to Cedar Point creating a 14 mile trail.
- Creating sidewalks and pathways from neighborhoods to the beach path.
- Natural Area Trail connecting Bay High and Middle School to the Sports Complex and Neighborhoods

The City of Bay St. Louis has been identified as a walkable community. The City, in conjunction with Hancock County and the City of Waveland, developed a pedestrian pathway on the beach in Hancock County in 1999. That pathway and a bike path on Dunbar Avenue are the spine of a Bicycle and Pedestrian Facility Vision for the City of Bay St. Louis and southern Hancock County. The new Bay St. Louis Bridge construction will have a bicycle/pedestrian pathway that will provide opportunity and justification to link the Beach Pathway to the Highway 90 at the Bridge.

To assist with the realization of this vision within the City of Bay St. Louis, the Bay-Waveland School District has applied for a planning grant to determine Safe Routes to School within the City of Bay St. Louis and Waveland. Through this effort, the School District hopes to work with the cities to identify safe routes for children and their parents to walk and ride their bikes to school from their neighborhoods and to their after school community facilities. Additionally, Gulf Regional Planning Commission, in their Long Range Plan has identified bike routes to include Old Spanish Trail to U.S. Highway 90, Lower Bay Road to Lakeshore Road, and Beach Pathway extension from Waveland to Bayou Caddy, and connections from Washington Street, Nicholson Avenue and Waveland Avenue to the Beach Pathway. The following Map 10 indicates locations of the proposed future routes.



Bay St. Louis Bicycle/Pedestrian Facility Vision



Implementation

Federal Highway Administration (FHWA)

Federal Highway Administration, one of 13 agencies under the U.S. Department of Transportation, coordinates many transportation programs in cooperation with the Mississippi Department of Transportation and other partners to ensure our country's roadways are safe while generating economic vitality and maintaining a good quality of life.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
The SAFETEA-LU Act that the President signed in August of 2005 provides two hundred forty-four billion dollars (\$244,000,000,000) billion dollars to the states to improve safety, reduce traffic congestion, improve efficiency in freight movement, increase intermodal connectivity, and protect the environment. Working with Mississippi Department of Transportation and the local Metropolitan Planning Organization, the City should take the opportunity to use these funds.

Emergency Relief Program

Authorized under the SAFETEA:LU, this program disseminates funding to local governments for the repair or reconstruction of federal-aid highways that have suffered serious damage as a result from a natural disaster or catastrophic failure from an external cause. After Hurricane Katrina, the City received emergency repair funding for those roadways that were eligible.

Metropolitan Planning Organization (MPO)

Metropolitan Planning Organizations (MPOs) are regional transportation planning agencies, which provide a forum for cooperative decision-making concerning area-wide transportation issues. Gulf Regional Planning Commission (GRPC) is the MPO for the Gulf Coast and coordinates the transportation programs for all jurisdictions within the urbanized areas of Hancock, Harrison, and Jackson Counties. MPOs were created by Federal and State law to develop transportation plans and programs to encourage and promote the implementation of transportation systems while embracing the various modes of transportation to maximize the mobility of people and goods.

The Federal legislation focuses on planning for urban areas rather than individual cities. Urbanized areas with populations of more than 50,000 must have a designated Metropolitan Planning Organization for transportation planning and programming to qualify for federal highway or transit assistance. The City of Bay St. Louis is included within the urbanized area for the Mississippi Gulf Coast MPO. The City's transportation projects should be supported and coordinated with the MPO's long range plans to be eligible for Federal funds. These federal funds are processed through the Surface Transportation Program (STP) through the MPO and listed on the MPO's Transportation Improvement Program (TIP). The Mississippi Gulf Coast MPO is one of four in the State.

Long Range Transportation Plan (LRP)

Gulf Regional Planning Commission develops the 2030 Long-Range Transportation Plan for the MPO planning area. During this process, a multimodal plan is developed by determining a desired transportation system to best meet the established goals and objectives for the year 2030. Transportation planners examine current conditions, demographic characteristics and travel patterns for a given area to predict the future needs of the transportation system.

Planners analyze alternatives for the area's transportation system. The results are provided to the public for review and input and ultimately to the local decision makers who evaluate the alternatives to determine the most expeditious use of local, state, and federal transportation funding to provide a system to meet future needs.

The result of the long-range transportation planning process is a staged improvement program. The document is a collaboration of the region's and or state's transportation systems and is the defining vision for the transportation system and services. In metropolitan areas, the staged improvement program documents all of the transportation improvements scheduled for funding during the next 20 or 30 years. The MPO will use transportation goals and objectives to guide a planning process that will direct the development and maintenance of the Mississippi Gulf Coast transportation system. In order for the City of Bay St. Louis to use federal money for transportation projects, their projects must be included in the long-range plan.

The following are the long range goals for the MPO:

- Support the economic viability of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
- Increase safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non motorized users;
- Increase the accessibility and mobility of people and for freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system

The City of Bay St. Louis' proposed projects that were determined from the long range planning process are listed below in Table 5.

Table 5: Gulf Coast Area Transportation Study (GCATS)
City of Bay St. Louis Roadway Project Staged Improvement Program

	Project	Type	Status	Program
1	Casino Magic Blvd to Hwy 90	Capacity Improvements	Proposed	FHW/MDOT
2	Hwy 90-Dunbar Ave to Washington Street	Capacity Imp./Access Management	Proposed	FHW/MDOT
3	Hwy 90-Nicholson to Washington Street	Capacity Imp./Access Management	Proposed	FHW/MDOT
4	Hwy 603-Kiln Cut-off to I-10	Capacity Imp./Access Management	Proposed	FHW/MDOT

Surface Transportation Program (STP)

The Surface Transportation Program (STP) is a block grant type program that may be used by the Mississippi Department of Transportation (MDOT) and municipalities for projects on any roads not functionally classified as a local street. Eligible activities include roadway construction, reconstruction, restoration, rehabilitation, operational improvements, safety improvements, and bicycle or pedestrian facilities. The following table lists projects that received STP funding through the Mississippi Gulf Coast Metropolitan Planning Organization. As roadway projects are developed, the City may apply to Gulf Regional Planning Commission for funding of the identified project.

Table 6: Statewide Transportation Improvement Program
FY 2007 - 2012

ID	Project	Limits	Project Type	Fund Source	Fiscal Year
9	Waveland-Nicholson Avenue	Hwy 90 to Fayard St.	Traffic Operations & Maintenance-Reconstruct	STP/Local	2007
21	Bay St. Louis-Main Street	Hwy 90 to South Beach Blvd.	Traffic Operations & Maintenance-Reconstruct	STP/Local	2007
27	Waveland-Hwy 90	Idlewood Subdivision to Hwy 603	Safety-Lighting	STP/Local	2007
28	Waveland-Old Spanish Trail	Hwy 90 to Waveland City Limits	Traffic Operations & Maintenance-Reconstruct	STP/Local	2007
36	Waveland-Coleman Avenue	St. Joseph to Beach Blvd.	Traffic Operations & Maintenance-Reconstruct	STP/Local	2007
2313 1	Hwy 43 Kiln By-Pass	From end of Hwy 603 4 Lane	Construct 4 Lane	STP/Local	2007
2330 1	I-10 @ NASA	Eastbound	New Truck Scales	STP/Local	2007
2420 2	US 90	Hwy 90 From City to Bay Bridge	Traffic Cameras	STP/Local	2007

Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) is a 6-year transportation construction program funded by the STP. The TIP is a list of actual transportation related projects that the cities, counties, MDOT and other State and Federal agencies intend to build within the MPO's urbanized area. Projects are selected by the MPO and listed on the TIP. Once on the TIP, the projects are directly incorporated into the Statewide Transportation Improvement Program (STIP). The STIP is a listing of all surface transportation programs in the state for the next six years with projects and allocations budgeted for each of the six years. The STIP involves numerous entities in the management of capital projects, including MDOT, MPOs, Transit, and Rail.

Every two years Gulf Regional Planning Commission (GRPC) develops a TIP. GRPC formally requests local jurisdictions to submit their desired projects for addition to the TIP. Participating governments submit formal letters or resolutions of requests to GRPC for their desired projects.

After receipt of the nominations, GRPC conducts public meetings after advertising in local newspapers and seeks public input regarding the proposed projects.

After review of input, eligible projects are then prioritized by GRPC, using an adopted "Project Selection Process". The process scores each project based on objectives established by the MPO Technical Coordinating Committee (TCC) and Transportation Policy Committee (TPC). The TCC and TPC committee members are representation of local elected officials and or their appointees, agencies who operate or administer major modes or systems of transportation and appropriate state officials.

GRPC submits the recommendations to the MPO committees for final project selection. The final TIP is prepared, published and submitted to MDOT for incorporation into the Statewide Transportation Improvement Program (STIP) where funding is allocated.

Project Planning and Development

Gulf Regional Planning Commission in their 2030 Planning Process considered context specific recommendations for new roadway projects and substantial roadway renovations. These recommendations address access management and roadway types and the right of way needed for safe and attractive roadways. Additionally, Gulf Regional Planning Commission identified future projects in Table 8, in which these recommendations could be utilized.

Access Management or Frontage Roads

Access management strategies are designed to improve traffic flow by controlling entrance and exits on the roadway. Future improvements to Highway 90 and Highway 603 would warrant such management strategies prior to development. These strategies improve driveway control (limit access). Median and turning land improvement can improve safety while the connection of parking lots and construction of frontage roads can also enhance the control of traffic. The strategies improve driveway control, median control, and use frontage roads control traffic flow. Ideally a new roadway would be built to incorporate these strategies, however, this is usually not an option. To retrofit existing roadways requires studies to identify the impact of the proposed changes to allow for the inclusion of alternate access when the existing access point is proposed to be limited. These strategies will require significant public and stakeholders outreach with special attention to property that will be directly impacted by the plan.

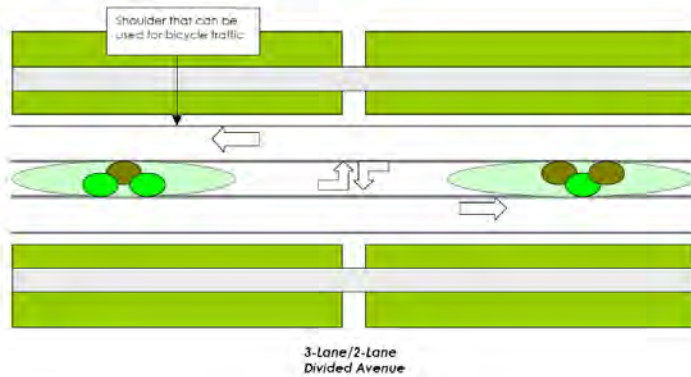
Restricting or prohibiting access onto a roadway reduces the number of points where through traffic potentially can be forced to slow as vehicles enter or exit the road. Limiting the number of access points also reduces the number of potential conflict points along a road or street, which can lead to a reduction in the number of accidents. Access management is especially beneficial for those busy roadways with 2 or more lanes and no parking on the sides. These strategies can also be used to complement Boulevards or Parkways with the following control measures: Median control, frontage roads, driveway control, left-turn restrictions, interchange modifications, interchange spacing control.

2-Lane Avenue

Roadways through neighborhoods or areas sensitive to speeding traffic which capacity is not a concern may utilize more narrow lanes to keep traffic speeds lower. Shoulders to make travel more comfortable and safer on the roadway should be constructed. The 2-Lane Avenue would have slower travel speeds than the Super 2-Lane. The intersections provide no turn lanes. This roadway acts more like a local street.

3-Lane/2-Lane Divided Avenue

This improvement would accommodate more traffic than a 2-Lane by providing a center turn lane with landscaped medians or refuge islands. The advantages of this configuration are to provide better access to adjacent property by removing turning traffic from the travel lanes when driveway or side street access is high. The landscaped refuge islands will keep travel speeds to 30 to 40 miles per hour per hour and provide pedestrian refuge and additional aesthetics. A 3-lane avenue should be used over a 2-Lane when driveways and access roadway are frequent. Another characteristic that should be heavily considered on this roadway are round a bouts at the intersections.



better access to adjacent property by removing turning traffic from the travel lanes when driveway or side street access is high. The landscaped refuge islands will keep travel speeds to 30 to 40 miles per hour per hour and provide pedestrian refuge and additional aesthetics. A 3-lane avenue should be used over a 2-Lane when driveways and access roadway are frequent. Another characteristic that should be heavily considered on this roadway are round a bouts at the intersections.

4-Lane or 6-Lane Boulevard

In most cases it is desirable to use a 4-Lane over a 6-Lane if at all possible. As roadways get wider than 4-Lane it becomes less friendly to modes of transportation other than the vehicle. This roadway would be intended to move large amounts of traffic from one part of the city to another. A boulevard is intended to accommodate high levels of traffic while still being sensitive to adjacent land uses such as neighborhoods or community level retail. Design speeds for this roadway are 40 to 45 miles per hour. The roadway would ideally have a raised median in the center of it controlling access to only specific places. However, sometimes this is not feasible because of various realities. If it is decided that a raised median is not feasible, refuge islands should be placed in certain locations and intersections similar to the “3-Lane Avenue” shown above.

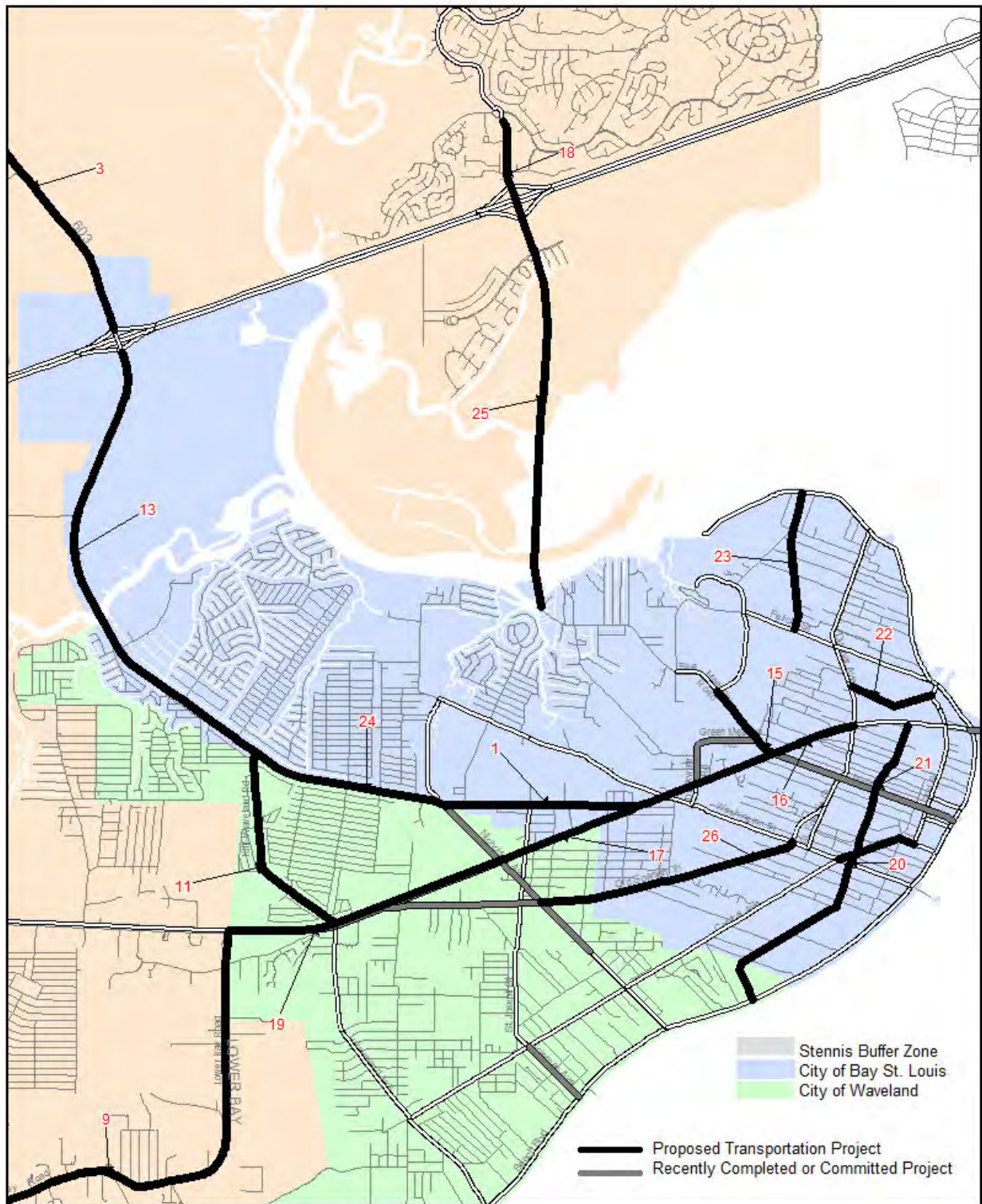
Table 7: Roadway Types and Right-Of-Way

	Roadway	5' Sidewalks (w/ buffer)	5' Bike Lane	ROW Needed
1	2-Lane			28 ft
2	2-Lane	X		44 ft
3	2-Lane	X	X	54 ft
4	3-Lane/2-Lane Boulevard			40 ft
5	3-Lane/2-Lane Boulevard	X		56 ft
6	3-Lane/2-Lane Boulevard	X	X	66 ft
7	4-Lane Boulevard			64 ft
8	4-Lane Boulevard	X		80 ft
9	4-Lane Boulevard	X	X	90 ft
10	6-Lane Boulevard			88 ft
11	6-Lane Boulevard	X		104 ft
12	6-Lane Boulevard	X	X	114 ft

Table 8: Future Bay St. Louis Transportation Projects

ID	Roadway	Location	Project	Type
1	Longfellow Road	US 90 to MS 603	Widen to 2-Lane Divided or 3-Lane	5
3	Hwy 603	Hwy 43 to Stennis Airport	Widen to 4-Lane	8
9	Lower Bay Road	US 90 to Lakeshore	Widen to 2-Lane Divided or 3-Lane	5
11	Kiln-Waveland Road	US 90 to 603	Widen to 4-Lane	9
13	Hwy 603	Kiln Cut-Off to I-10	Access Management	-
14	Washington	Old Spanish Trail to Hwy 90	Widen to 3 lands	5
15	Blue Meadow Road	Casino Magic Blvd to Hwy 90	Widen to 2-Lane Divided or 3-Lane	5
16	US 90	Dunbar Ave to Washington	Widen to 4 lanes (Improve Access Management)	4 9
17	US 90	Nicholson to Washington	Widen to 4 lanes (Improve Access Management)	4 9
18	Diamondhead Drive		Widen to 4-Lane	8
19	US 90	Nicholson to Lower Bay Rd	Widen to 6-Lane	11
20	3 rd Street	Bienville to Blaize	Reconstruct & New	2
21	Necaise Avenue	Blaize to US 90	Reconstruct & New	2
23	Engman Avenue	Beach Blvd to Felicity St	Reconstruct & New	2
24	Hwy 603	Kiln-Waveland Rd to Longfellow Rd	Access Management	-
26	Old Spanish Trail	City Limits to Washington	Widen to 2-Lane Divided or 3-Lane	6

Map 11. Future & Recently Completed and Committed Projects



Future Bay St. Louis Transportation Projects



Goals

The City of Bay St. Louis Comprehensive Plan Advisory Committee decided on the following seven transportation goals. These goals are consistent with the MPO's long range goals for the region.

1. Make Corridors into and in the City more attractive.
2. Provide Park and Ride area for people to park and use if they commute to their workplace in other areas such as New Orleans or Stennis Space Center.
3. Explore options of high speed inter-city/regional transportation in our area.
4. Make Bay St. Louis safer for bicycles, walking and recreation.
5. Create a network of sidewalks throughout the City.
6. Provide efficient, effective and aesthetic means to travel by air, water, foot or vehicle in the local community.
7. Provide parking along Hwy 90 and downtown Beach Boulevard by the Courthouse, as well as other strategic parking lots, and one-way roads that are needed throughout the area.

Additionally the Comprehensive Plan Advisory Committee recommended that

1. Traffic calming activities be considered instead of widening U.S. Highway 90 to six lanes between Dunbar Avenue and Washington Street.
2. That within the Washington Road area, that roadway improvements are made to local roads to provide safe access to increased traffic associated with proposed developments within the area.

Chapter 5

Community Facilities Plan

The Community Facilities Plan for the City of Bay St. Louis identifies community facilities throughout the City, and determines a level of adequacy for the facility based upon existing conditions and projected population growth. The establishment and adoption of community goals and objectives in this plan form the basis for evaluating the adequacy of existing and proposed facilities.

Methodology

Planners met with City staff with the City of Bay St. Louis, staff with the Hancock County Board of Supervisors and staff with the Hancock County Water and Sewer District to identify community facilities located within the City of Bay St. Louis and the area newly annexed by the City. Information was gathered by written survey and by interview. Additionally, planners relied upon plans recently completed to determine the inventory and to define the adequacy of existing city, county and regional services. The plans that were utilized include the Mississippi Gulf Region Water and Wastewater Plan completed by the Mississippi Engineering Group, the Hancock County Greenways Plan, and the City of Bay St. Louis Comprehensive Plan, 2000.

Public Buildings

When the City purchased their new City Hall Complex on the corner of Main Street and U.S. Highway 90, the City was finally able to unify City departments at one location. This action not only increases the convenience for residents of the City, but it also increases the interaction between the City staff and departments.

The provision of public buildings reflects upon the community and its perception of itself. Adequate space answers only part of the question. Good design is also an important question that must be addressed. A well designed facility with proper amenities and adequate space for the functions to be carried out improves work output and worker morale.

City Hall Complex

Main Street and U.S. Highway 90

In 2006, the City of Bay St. Louis purchased the former Coast Electric Power Association Complex located on Main Street and U.S. Highway 90. The City will consolidate its city departments at this site. As of March 2007, the City moved administrative offices to this site, the Police Department and the Building Department, and most of the Public Works Department to this site. The City's fire station is still located at the Valena C. Jones Public Safety Center and the City is seeking funding to construct a new fire station within the City's Governmental Complex at Main Street and U.S. Highway 90. Within the City Hall Complex is a conference room, which is the City's new Council Chambers and City Courtroom.

In the City's 2000 Comprehensive Plan, the Planners indicated that the City needed more space for city operations and should consolidate services in one service location to make city business more convenient for city residents and make the daily functions of City government more effective. The purchase of the City's new facility provides an opportunity to accomplish these objectives. Additionally, during Hurricane Katrina, City Hall Annex and Old City Hall sustained flood damage, forcing the City to consider new locations for city operations.

Former City Hall

300 Second Street

The original City Hall, which still bears the name, was constructed in 1905 and is located on Second Street at the CSX Railroad. Prior to Hurricane Katrina, this building housed the offices of the Building Department and the Public Works Department. This building sustained flooding of the first floor and wind damage. These offices were moved to the City Hall Complex in 2006 and 2007. The City will renovate and maintain old City Hall.

City Hall Annex

111 Court Street

With the consolidation of City Services at the New City Hall Complex, the City will no longer need the City Hall Annex. Therefore, the City will likely sell this property.

Maintenance and Service Buildings

Old Spanish Trail

The Public Works Department service and equipment storage area was located on Old Spanish Trail behind and east of the Fire and Police Department. With the purchase of the City Hall Complex, the Public Works Department is moving the yard and machine shops to the City Hall Complex.

Fire Department

Valena C. Jones Complex

Old Spanish Trail

The City of Bay St. Louis achieved a Class 5 Fire Insurance Rating and is so certified by the Mississippi State Rating Bureau. The Fire Department's current location is on Old Spanish Trail in Bay St. Louis in the Public Safety Building. The building has three apparatus bays, with living and administration areas. The building is approximately 3,400 square feet.

In July 2006, the City of Bay St. Louis annexed an area north and along Highway 603 to Interstate 10. The East Hancock County Fire Protection District and its fire department are now within the City's municipal limits. The East Hancock Fire Department is located on Chapman Road in the Shoreline Park area. This station is a two bay station, with a small office space. The City has assigned an engine and fire fighters to this station, utilizing a portable trailer for a station.

Architectural plans and specifications are underway to build a new fire station adjacent to the City's Municipal Complex located on Main Street and U.S. Highway 90. The City applied for a Community Development Block Grant to fund this project. The new station will be a three bay station. The City will build a second fire station on Highway 603 in the newly annexed area of Bay St. Louis. With the completion of both of these stations, the City will have two fire stations centrally located to provide fire services within Bay St. Louis.

Equipment owned by the City of Bay St. Louis through the Fire Department includes the following:

- 2005 Ferrara Pumper 1250 gallons per minute with 1000 gallon storage
- 2005 Ford Brush Truck
- 2003 Kenworth Pumper-Tanker
- 2000 International Pumper
- 1999 Ferrara Pumper 1750 gallons per minute with 750 gallon storage
- 1999 Ford Rescue/Pumper 350 gallons per minute with 250 gallon storage
- 1990 Grumman Pumper 1500 gallons per minute with 750 gallon storage

2006 Dodge Ram Pickup Truck
2006 Dodge Dakota Pickup Truck
1999 Fire Safety House for prevention training

The Department is comprised of 24 full-time paid firefighters, and six part-time firefighters who are trained and back-up the full-time firefighters.

Within the newly annexed area, only about 60% of the area has a hydrant system in place. The land area within the City prior to this most recent annexation was fully covered by hydrants.

The Department has mutual aid contracts with all fire departments in Hancock County and the Gulf Coast Mutual Aid Agreement for all fire services in Hancock, Harrison and Jackson Counties.

The City will continue to communicate and coordinate with the Mississippi State Rating Bureau regarding future water lines, fire hydrants, personnel and equipment needs.

Police Department

City Hall Complex
Main Street and Highway 90

The Bay St. Louis Police Department relocated from the Valena C. Jones Complex on Old Spanish Trail to the City Complex located on Main Street and U.S. Highway 90 in January, 2007. Their new station is 10,975 square feet.

The Police Department currently has 22 sworn full-time paid police officers, including 16 patrol officers, 4 investigators, an interim chief of police and an interim assistant chief of police. The Department has 4 sworn part-time police officers and 4 reserve officers. Prior to Hurricane Katrina, the Department had 28 sworn full-time paid police officers, including 22 patrol officers, 4 investigators, a chief of police and an assistant police chief. The Department had eight sworn part-time police officers and eight reserve officers.

Since Hurricane Katrina, the City of Bay St. Louis, the City of Waveland and the Hancock County Sheriff's Office have established centralized dispatch and communication for all city and county emergency services in Hancock County. Dispatch services are temporarily relocated with E-911 on Rocky-Hill Road in central Hancock County. The County will complete a new Emergency Operations Center in the near future, and dispatch services and E-911 will relocate to the new facility.

The projected growth for the City of Bay St. Louis will be 18,896 people by 2030. Based upon these population projections;

the Bay St. Louis Police Department will need 49 officers by 2030, as well as vehicles and equipment for these officers.

the new police station will be adequate for the near and mid-range future. However, by 2030, the City will need about 1,325 square feet of additional space to adequately meet the space needs for its projected officers and may consider a substation on Highway 603, or consider a new facility.

Schools

Bay-Waveland School District

Children within the City of Bay St. Louis can attend the Bay St. Louis-Waveland School District. The School District is governed by a five member Board of Directors. Three members from the City of Waveland are elected, and two members are appointed by the City Council of the City of Bay St. Louis.

The Comprehensive Plan should consider the capacity of schools to handle projected growth within the community, when considering the future. In the near term, the Bay St. Louis-Waveland School District is rebuilding after Hurricane Katrina. Every school within the District was flooded during the hurricane.

Since the School District re-opened its schools in November 2005, enrollment has steadily increased. As of the week of February 12, 2007 enrollment was 68% of Pre-Katrina enrollment for the school district, averaging about 1,630 students.

The school district has fully re-opened the Bay St. Louis Middle School and the Bay St. Louis High School. The School District is holding classes in a section of the Waveland Elementary School, while completing renovations to this school, and the School District is holding classes in temporary travel trailers at the Second Street Elementary Site and the North Bay Elementary Site. The Bay St. Louis-Waveland School District is in the process of determining plans for reconstruction, based upon new advisory base flood elevations, eligible funding from FEMA, funding from insurance and projected increases in student enrollment.

The School District is currently considering reducing the number of schools from five schools to four schools, re-establishing classes in the Bay-Waveland Middle School, the Bay-Waveland High School and establishing a grade K-2 school site and a grade 3-5 school site.

Prior to Hurricane Katrina, the following schools existed in Bay St. Louis and Waveland:

North Bay Elementary was located on Dunbar Avenue. The school housed grades kindergarten through third grade. The school is located on approximately 7.1 acres.

Waveland Elementary was located in Waveland, near Old Spanish Trail. The school housed grades kindergarten through third grade. The school is located on approximately 10.70 acres. A new early elementary school facility will be built in this property. The school will also provide a childcare and early education center.

Second Street Elementary was located in Bay St. Louis on Second Street, approximately one block from Beach Boulevard. The school housed fourth and fifth graders. Central Administrative Offices were located at this facility. The school and central offices are located on 2.0 acres. Second Street Elementary School is a historic structure.

Bay-Waveland Middle School, re-opened on Carroll Avenue near the High School. The middle school houses grades 6 through 8 and is the newest school in the District, completed in 2003.

Bay-Waveland High School, re-opened on Bluemeadow Road in Bay St. Louis. The high school houses grades 9 through 12. Together the middle school and the high school are located on 31.60 acres. Tiger Stadium is located on 6.7 acres to the north and east of this complex.

A new upper elementary school will be built on the grounds of the Bay-Waveland Middle School.

Based upon state standards for school, the Bay St. Louis–Waveland School District currently and into the near future meets standards. Planners projected that enrollment in the Bay St. Louis–Waveland School District will be 2,739 students by 2030. Based upon the projected student population for the Bay St. Louis–Waveland School District, the School District will need about 3 more acres of land for elementary schools by 2030 and 1.5 more acres of land for the high school by 2030.

Parks, Recreation and Cultural Affairs

The Parks/Recreation/Cultural Affairs portion of the Community Facilities Plan includes an inventory of the public recreation and cultural facilities in the planning area, including neighborhood and city playgrounds, parks, community centers, mini-parks, tennis courts, sports fields, etc. An analysis of these facilities was made to determine their capability to serve the existing and future population.

Parks and Recreation is a division of Public Works for budgetary purposes and draws from the casual labor pool as needed for facility and field maintenance. A director manages activity planning, development, and implementation. The director manages all facility scheduling for parks, playgrounds and public gymnasium uses for civic and private activities.

Cultural Affairs is a division of the Department of Administration for budgetary purposes and draws from additional staff support from other departments as needed to meet the demands of planned activities. A director manages all non-sports related public activities and special projects, including the activities of the depot building for civic and private activities.

The following City and County parks and recreational facilities are within the City Limits of Bay St. Louis:

City Park is located on Second Street adjacent to Old City Hall. The park was established by ordinance in 1916. The 1.48 acre park has two lighted tennis courts, playground equipment including a new KaBoom Park, picnic tables, and a memorial cannon. The park includes a shoofly around one of the largest oaks on the park grounds. City Park has been used for community concerts and events. This park is owned by the City of Bay St. Louis.

Commagere Park is located on Old Spanish Trail and Bookter Street. The site has a practice football field with bleachers, which has also been used for soccer. The site is 2.1 acres. This park is secured through a year by year lease by the City of Bay St. Louis.

Commodore Park is located on Beach Boulevard and Second Street, and overlooks the Bay-Waveland Yacht Club. This area is an open space area with several native species of trees and a giant anchor. This open space is owned by the Bay-Waveland Yacht Club.

Scott Demboski Memorial SoccerPlex is located on Longfellow Road in the area newly annexed by the City of Bay of Bay St. Louis. The facility is 11 acres and is leased to the Bay Area Youth Soccer (BAYS) Organization by the Hancock County Board of Supervisors. BAYS schedules games and maintains the site. The existing layout at the SoccerPlex includes for four 30' x 20' U-5 and U-6 fields, four 40' x 28' U-7 and U-8 fields, two 50' x 40' U-10 fields and two 70' x 50' U-12 fields. Prior to Hurricane Katrina, the county maintained a Civic Center,

Human Services Complex, work barn, and Farmer's Market adjacent to this site. Currently, this space is the temporary location of the Hancock County Courthouse and offices.

Martin Luther King Park on Washington Street, between St. Francis Street and Old Spanish Trail, in Bay St. Louis, shares its open space with one of the City's water towers. The park is 1.82 acres and includes playground equipment, a basketball court, picnic pavilions, tables and benches. There is limited parking at this site. Martin Luther King Park is used for both public events and scheduled private events.

Larroux Park is located on Dunbar Avenue in Bay St. Louis. The park is 0.91 acres. Prior to Hurricane Katrina the park was fenced, with playground equipment and a basketball court. Limited off street parking was available at this site. There is land area available that could be utilized for practice fields or courts.

Little League Park is located on Athletic Drive in Bay St. Louis. The park is a 9.8 acre complex of seven baseball fields. All fields are lighted for league and evening play. Other amenities at this site included a concession area, raised scoring towers, little league office and restrooms. The fields have hosted regional Little League tournaments and State Dixie Youth softball tournaments.

McDonald Field is located on Dunbar Avenue between Ulman and Carroll Avenues. The field had two softball diamonds that were used for girls' league softball. The fields are lighted, and there are dugouts, a concession area, and restrooms. Since Hurricane Katrina, hurricane relief efforts have been coordinated at this location.

Seventh Street Park is located on Seventh Street on the west side of Bay St. Louis. The park is located on an infill lot in the middle of a neighborhood, with no onsite parking available. The park includes a basketball court, playground equipment, picnic tables and seating. This Park was adopted by Moore Friends of Mississippi, a non-profit relief organization from North Carolina.

Tercentenary Park is located on Beach Boulevard in downtown Bay St. Louis and dedicated in 1999 on the 300th anniversary of the landing of Sieur de Bienville. The plaza was donated to the City by Hancock Bank and within this Plaza is a statue of Bienville and a sealed time capsule that can be opened in 2099. The park was heavily damaged by Hurricane Katrina.

Legacy Park is located at the intersection of Old Spanish Trail and Bookter Street. The park is on the same property as the Hancock County Senior Citizen Center and was dedicated to the City in 1999 "to commemorate the city's 300th anniversary of European discovery (Bay St. Louis Comprehensive Plan, 2000)." Access to parking is available at the Senior Center. The city identified a need for ¼ mile walking track on the site to enhance amenities for seniors utilizing the center in the 2000 Comprehensive Plan.

Jimmy Rutherford Fishing Pier was located on Beach Boulevard at Ulman Avenue. The pier was more than 1,000 feet and built to standards to withstand minor hurricanes. The pier had restrooms and an overlook to insure accessibility to everyone. Along the pier was covered seating and fishing areas, leading out the very end of the pier. A ramp from the pier led to the beach. The pier was destroyed by Hurricane Katrina. The City is considering rebuilding the pier in the downtown area. This pier was owned and maintained by the City of Bay St. Louis.

Dunbar Avenue Pier is located at the end of Dunbar Avenue in the Cedar Point area of the City of Bay St. Louis. The pier is owned and maintained by the Hancock County Board of

Supervisors. The pier was lighted for safety and included a covered pavilion at the end of the pier over the Bay of St. Louis. There was no offsite and very limited on-road parking for this pier. This pier was destroyed during Hurricane Katrina and was rebuilt in 2007.

Washington Street Pier and Boat Launch is located on Beach Boulevard at Washington Street. The entire facility is owned by Hancock County and the American Legion Post. The county maintains a lease with the American Legion for use of the site. Prior to Hurricane Katrina this site had two boat launches, the American Legion Pier, and a jetty. Further upland from this site, but south of the seawall, is located the terminus point of the Hancock County Beach Pathway and a parking area. This area was utilized by the Bay St. Louis Ferry. The County is currently rebuilding the boat launches and piers at this site, along with a beachfront activity node.

Cedar Point Boat Launch is located at the very end of Beach Boulevard in Bay St. Louis. The two boat launch is located inland from the seawall. Hancock County owns and maintains this facility, which also includes a small dock and seating area adjacent to launch. Parking is available adjacent to the site. This facility is fully operational.

The **Hancock County Walking Track** is located on Highway 90 at the Hancock Medical Center. The track is ½ mile in length, with a KaBoom playground and seating areas along the waking track. The track is lighted for night time use.

St. Rose de Lima Parish built a community center with a lighted tennis court and lighted basketball court in response to needs identified within the City and Parish.

The Hancock County Greenways Plan identified deficiencies in the level of service of recreational facilities for the entire County. Based upon this level of service analysis, which is included in the Appendix, the following recreational needs were determined:

- Centrally located multi-court basketball complex of 4 to 8 courts, possibly at the SoccerPlex
- Additional 2 to 4 tennis courts within Bay St. Louis and 8 tennis courts throughout the county
- Walking trails at the Little League Park, SoccerPlex and Commagere Park
- Beach volleyball courts (2 to 4 courts)
- Swimming pool
- Re-establish a Farmers Market at the SoccerPlex
- Community Plaza at the foot of Main Street
- Public courts for handball, racquetball and weight lifting
- Neighborhood community centers
- Organized recreation, social and cultural programs for youth

Valena C. Jones Complex

Old Spanish Trail

The Valena C. Jones Complex is located on Old Spanish Trail. Prior to the relocation to the City Hall Complex, both the Bay St. Louis Public Works Yard and the Police Department were located at this facility. The last City Department utilizing this facility is the Fire Department, but City plans call for the relocation of the Fire Department to the City Hall complex. Currently, the Hancock County Emergency Management Agency occupies temporary facilities at this site.

The Valena C. Jones Complex has a gymnasium that is used for basketball and volleyball play, and a stage. The gym has been used for community events. The Comprehensive Plan Advisory Committee felt that the Valena C. Jones Complex or parts of the complex have value as a community center. The City has received grant funding to renovate the gymnasium and several classrooms to develop a recreational center.

Historic Bay St. Louis Depot

1928 Depot Way

The Bay St. Louis Train Depot sits in a park like setting between three distinct neighborhoods in Bay St. Louis. The building was purchased by the City from CSX in 1996, and renovated with a Mississippi Department of Transportation Enhancement Grant. The Train Depot is a historic facility, built in 1928 in a Mission architectural style which was not common in the southeast. The building is a Mississippi Landmark Building, and therefore, renovations to the building must be approved by the Mississippi Department of Archives and History.

Since its restoration it has hosted community and social events and been available to host workshops and seminars. The City of Bay St. Louis has an office of Cultural Affairs and the Director of this department has an office on the second floor. The director is responsible for programming within the facility and promoting the culture of Bay St. Louis. She utilizes the Depot to host art classes, art shows and art seminars to promote the artists and culture of the Community. The Hancock County Tourism Development Bureau has moved their offices into the second floor of the Depot.

The Bay St. Louis Train Depot is 8,000 square feet. On the ground floor is a large meeting room, and a kitchen to cater events at the site. On the second floor is a meeting room and office space. The Depot and the grounds are handicap accessible.

Currently the building and its surrounding park grounds are used for several city-sponsored events including regular exhibits for local artists, an annual military exhibition on Veteran's Day, car shows, Public Safety Day, summer reading program special events, artists' workshops, and special events for senior citizens, student tours and as a designated tour stop. The Division of Cultural Affairs schedules seminars, workshops and educational events to benefit city employees, other governmental agencies and non-profit agencies. The City charges a minimal fee for use of the facility to cover the costs of cleaning the rooms. The facility is available for private and public events.

Rotary International Community Center

Depot District

Through the community rebuilding process, Rotary International has donated funding to build a new community center within the Depot District. This new facility will be an asset to the community and to the Depot District.

Senior Citizens Complex

Bookter Street

In the late 1990's the City of Bay St. Louis and the Hancock County Board of Supervisors worked together to develop a new Senior Center for Hancock County's ambulatory and active seniors. The facility is located on Bookter Street at Old Spanish Trail. The City constructed the building, and the County, through the Hancock County Human Resources Agency, provides

regular and daily programs for seniors. The building contains administrative offices, a large public room, dining room and kitchen, several classrooms for a variety of interests including ceramics, painting and framing.

Taylor School

Leonhard Avenue

Besides the Bay St. Louis Train Depot, the City of Bay St. Louis also owned the Taylor School located on Leonhard Avenue. This building was listed on the National Register of Historic Places. The facility was available to the community for meetings, hosting the Bay-Waveland Garden Club and many scout meetings over the years. The Comprehensive Plan completed in 2000 indicated that the Bay-Waveland Garden Club met at the Taylor School for almost 50 years. This building was completely destroyed by Hurricane Katrina. The Taylor School was located within a residential neighborhood in the Cedar Point area of Bay St. Louis. It seems likely that the City will sell this property, and not replace the facility.

A replica of the Taylor School will be rebuilt on the grounds of the City's new City Hall. This facility will be used for public meetings.

Water System

Two water systems operate within the City of Bay St. Louis. The City of Bay St. Louis owns and operates a water system that provides potable water for domestic, commercial, and industrial consumption to its citizens in its corporate limits as the limits existed prior to the July 2006 annexation award. The Hancock County Water and Sewer District provides potable water for domestic and commercial consumption in some of the area that was recently annexed by the City. The Hancock County Water and Sewer District provides water to homes and businesses located on the east side of Highway 603. The area on the west side of Highway 603 that was recently annexed by the City of Bay St. Louis is not served by water.

Both the City of Bay St. Louis and the Hancock County Water and Sewer District draw water from Miocene Aquifers. The water is of very good quality and requires chlorination to meet the Bureau of Environmental Health standards for a safe public water supply.

Water Supply

There are five operating wells within the City of Bay St. Louis including the newly annexed area. The City of Bay St. Louis operates four of the wells that supply potable water to residents that lived within the City's pre-annexation boundaries. And the Hancock County Water and Sewer District operates one well.

City of Bay St. Louis Owned and Operated Wells

Name of well	GPM Capacity	Year Constructed
#2 - Easterbrook St.	300	1963
#3 - St. Charles St.	400	1959
#4 - Harry St.	1000	1982
#5 - 10th St.	1090	1988

Source: City of Bay St. Louis Public Works Department

Wells 2, 3, 4, and 5 are utilized on a regular basis for water supply. These wells will supply 2490 gallons per minute. During a 1000-minute day of operation (approximately 16 hours) the wells could, on a normal basis, supply 2,490,000 gallons per day.

All wells are between 914 and 1200 feet deep with capacities ranging from 200 to 1,090 gallons per minute. The average life span for a well is about 30 years. Three of the City's four wells have exceeded the life expectancy, and the city relies on these wells for everyday use. The City is in need of a new well with a minimum of 1100 gpm capacity. As of December 31, 2007, the City had 2,509 residential customers and 316 commercial customers.

Within the newly annexed area, the Hancock County Water and Sewer District provides potable water services to residents located on the east side of Highway 603. The District estimated that they had about 1,400 customers before Hurricane Katrina struck. Hancock County Water and Sewer District has one well and the well has the capacity to pump 1100 gallons per minute.

Water Treatment

The City of Bay St. Louis chlorinates their water to meet requirements from the Mississippi State Department of Health. But generally, the City's water is of good quality. The City of Bay St. Louis Public Works Department has three staff members qualified to add chlorine to the Bay St. Louis water system.

The Hancock County Water and Sewer District also chlorinates their water. Their system is chlorinated and maintained by a qualified water systems contractor.

Water Storage

The City of Bay St. Louis has two elevated tanks. Both tanks are 250,000-gallon tanks and constructed from steel. One elevated tank is located at Harry Street (north of U.S. Highway 90) and one elevated tank is located on Washington Street (south of U.S. Highway 90).

Within the newly annexed area, the Hancock County Water and Sewer District has one elevated tank. The tank is constructed of steel, holds 150,000 gallons and is located at First Street. Both the City of Bay St. Louis and the Hancock County Water and Sewer District believe that water storage is adequate.

Distribution System

The City of Bay St. Louis estimates that its water system is nearly fully operational after Hurricane Katrina. There is only one section of the City in which water is still not fully functional. This is along Beach Boulevard between Our Lady of the Gulf Recreation Center and Bay View Court. But this segment of the system is currently under contract. Additionally, the City is still searching for leaks throughout the system.

The City of Bay St. Louis distribution system is made up of lines, which vary in age and size. The majority of the system is in good condition and is adequate to fulfill the requirements of the customers. There are approximately 520 fire hydrants located throughout the city. The fire hydrants are numbered for location and to help keep records of the system. The city has a program in place, which requires semi-annual inspections. The hydrants are cleaned and tested to assure that the hydrants are in good working order. During this check-up process the water pressure of the distribution system is verified at each hydrant location. The process assures that there is sufficient water pressure throughout the system for domestic use and fire fighting purposes. The City regularly flushes the 39 deadline hydrants located in the city to assist in the effective circulation of chlorine throughout the city's water system. Careful review of all new development plans are made by the Public Works, Fire and Building Departments to insure that adequate sized water lines and sufficient hydrants are installed for the public's health, safety and welfare. These programs are beneficial and should be continued.

The water system for the Hancock County Water and Sewer District was completed in 2002. The system is completely operational since Hurricane Katrina. The water system has 132 hydrants, including some dead-end hydrants. Like the City of Bay St. Louis, the Hancock County Water and Sewer District flushes the system at the dead-end hydrants, and since the water turnover is low within the District at the current time, the District flushes the system regularly to insure adequate and effective chlorine circulation. The District estimates that at this time only about 45% of its customers are living within the area and consuming water.

Recommendations

The City of Bay St. Louis identified a need for a new well with a minimum pumping capacity of 1100 gpm. Three of the existing wells, while working, have exceeded their life expectancy. Additionally, the water service should be provided to city residents in the newly annexed area west of Highway 603.

Sanitary Sewer System

The City of Bay St. Louis owns, maintains and operates a sewer collection system within the pre-annexation corporate limits of the City of Bay St. Louis. And the Hancock County Water and Sewer District owns, maintains and operates a sewer collection system within the newly annexed area. Wastewater collected from both entities is transferred to the Waveland Regional Wastewater Treatment Plant for treatment.

The Sanitary Sewer System in the City of Bay St. Louis has a large amount of old, short length concrete pipe, particularly in the older sections of the City. This type of construction, typical for that time period, is susceptible to high amounts of inflow and infiltration (I&I) particularly during periods of rainfall. Infiltration and inflow was found to be a serious problem in the City's wastewater collection system. The City instituted an aggressive program several years ago to reduce the level of I&I entering the system. This program has been effective and should be continued.

Due to the flat terrain in the Bay St. Louis area the sanitary sewer wastewater collection system requires 31 lift stations and a large number of small pumping facilities and force mains. Gravity mains range in size from 8" to 24". Force mains run from 3" to 18" in diameter.

The City's Sanitary Sewer System is operational after Hurricane Katrina, with the exception of a segment of Beach Boulevard from Our Lady of the Gulf Recreation Center to Bay View Court. This segment of the system is under contract for repair.

The Hancock County Water and Sewer District operates a wastewater collection system within the newly annexed area. The system is a closed low pressure system with minimal I & I issues. The system utilizes grinder pumps at the structure and 23 lift stations. The Hancock County Water and Sewer District estimated that prior to Hurricane Katrina, the system on average transported 700,000 gallons per day of wastewater for treatment.

The Waveland Regional Wastewater Treatment Plant is nearing capacity. The plant is currently permitted to treat 4.9 mgpd of wastewater. The Mississippi Gulf Regional Water and Wastewater Plan cites that influent flows prior to Hurricane Katrina at the Southern Regional Wastewater Treatment Plant "were above capacity 34% of the time (Mississippi Engineering Group, p. 2-17)." Southern Regional provides wastewater treatment for the City of Bay St. Louis, Waveland and for the Hancock Water and Sewer District.

On April 18, 2006, the Governor's Commission on Recovery, Rebuilding and Renewal Senate Bill (SB) 2943 was signed into law. That bill created the Gulf Coast Utility Authority to oversee the development and some redevelopment of wastewater and water infrastructure in the six southern counties of South Mississippi, including Hancock County. Through SB 2943, a county-wide utility authority was created to coordinate the management and development of water, wastewater and storm water systems.

The Hancock County Utility Authority is the representative agency that will oversee management and new development in Hancock County. Representatives from both the City of Bay St. Louis and the Hancock County Water and Sewer District are members of this Authority.

Under the oversight of the Governor's Commission on Recovery, Rebuilding and Renewal, the Mississippi Gulf Region Water and Wastewater Plan was developed. Engineers developing the Plan identified the following water and wastewater projects to meet the needs of the City of Bay St. Louis and Hancock County.

- Eastern Hancock County Regional Water System to enhance water supply and distribution from Bay St. Louis to Lakeshore Road and from Highway 603 to Hancock North Central Elementary School
- Force Main Extension for the City of Bay St. Louis
- Hancock County Regional Wastewater Treatment Facility in Kiln to serve all collection systems located south of Interstate 10, including the City of Bay St. Louis. Planned for construction is a 1.5MGD wastewater treatment facility. Effluent will be discharged to the buffer zone for treatment. The Waveland facility where Bay St. Louis currently transfers wastewater to will become a pumping station.

Most of the funding for these projects will come from U.S. Department of Housing and Urban Development Community Development Block Grant- Katrina Supplemental Funds.

Summary

The City of Bay St. Louis will continue in the rebuilding mode for at least the next five years, but must also consider capital needs to replace aging equipment and to support growth. As the City prepares for the future it should consider the following recommendations:

Short Term (2008-2013)

- Complete Fire Station on Main Street. (CDBG Funds)
- Complete Fire Station on Highway 603.
- Complete Sewer and Water repairs. (FEMA funds with local match)
- Continue to address inflow and infiltration issues of the City's sewer system.
- Establish new well.
- Expand gas system as opportunities and funding permits.
- Hire firefighters and police officers to public service departments in keeping with standards.
- Expand building department offices.
- Renovate Old City Hall for Public Use.
- Establish walking trails around City athletic parks.

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- Re-establish Farmers Market at Soccerplex.
- Establish Community Plaza at foot of Main Street (CDBG Funds)
- Establish Basketball Courts.
- Renovate Valena C. Jones Complex as a Recreation Center.
- Complete reconstruction of old Taylor School for public meeting space.
- Complete sewer force main extension for City of Bay St. Louis (CDBG funds).
- Expand Hancock County Regional Wastewater Treatment Facility in Kiln.
- Re-establish Recycling Program.
- Begin planning a new marina in the downtown area.

Mid-Term (2014-2019)

- Hire firefighters and police officers to public service departments in keeping with standards.
- Build new Marina.
- Continue to address inflow and infiltration issues of the City's sewer system.
- Expand gas system as opportunities and funding permits.
- Replace Fire Truck in 2014.
- Establish tennis courts within the City

Long Term (2020-2030)

- Hire firefighters and police officers to public service departments in keeping with standards.
- Continue to address inflow and infiltration issues of the City's sewer system.
- Expand gas system as opportunities and funding permits.
- Replace Fire Trucks.
- Establish Police Sub-Station on Highway 603.
- Establish beach volleyball courts.
- Establish swimming pool.
- Establish public courts for handball and raquetball and public area for weights.





*Bay St. Louis Comprehensive Plan Update, 2007
Adopted March 23, 2009*





Chapter 6

Demographic and Economic Profile

In 2006, the population of the City of Bay St. Louis was effected by two significant events. On August 29, 2005, the City was impacted by Hurricane Katrina, and then in July 2006, a Chancery Court Judge awarded the City of Bay St. Louis a 10.7 square mile area that was part of annexation court case.

In 2004, Court proceedings began between the Cities of Bay St. Louis and Waveland over an area located to the north of both cities along Highway 603. In July 2006, a Chancery Court judge ruled that Bay St. Louis would receive a portion of the area located north of Highway 603, except for an area up to the intersection of Highway 603 and Longfellow Road, which would become part of the City of Waveland. The judge ruled that the City of Bay St. Louis would also receive an area located on the west side of Highway 603, from near Pearl Street to Bayou LaCroix, bounded on the west by a canal. According to Census data, from 2000, approximately 3,283 people were added to the City of Bay St. Louis through the annexation.

Prior to the award of the newly annexed area, the City of Bay St. Louis and the soon to be annexed area were struck by Hurricane Katrina on August 29, 2005. The Hurricane's storm surge inundated most of southern Hancock County, including most of the City of Bay St. Louis and all of the annexed area. In the aftermath of this storm, as many as 60% of the homes in Bay St. Louis were deemed to be uninhabitable. Residents within these areas were forced to temporarily and in some cases permanently relocate.

Current Population

In 2000, the population of the area which is now Bay St. Louis and includes the area of Bay St. Louis that was annexed in 2006 was 11,492 people. This included 8,209 people living inside the City's pre-annexation corporate limits and approximately 3,283 people living within the area awarded to the City through annexation in July 2006.

Population Within the City of Bay St. Louis

Year	New City Limits of Bay St. Louis	Former City Limits of Bay St. Louis	Annexed Area
2005	11,884	8,317	3,567*
2000	11,492	8,209	3,283

* represents estimate of population, based upon county growth rate of 8.7%

Source: U.S. Bureau of Census, Provisional Census Estimates and 2000 Census.

Provisional population estimates developed for the City of Bay St. Louis by the Census Bureau indicate that the population within the City of Bay St. Louis' pre-annexation corporate limits in July 2005 was likely to be 8,317- an increase of 108 people or about 1.3% between 2000 and 2005. Based upon a growth rate of 8.7% experienced within Hancock County, it was likely that the population within the newly annexed area was

about 3,567 people in July 2005. Therefore, in the weeks prior to Hurricane Katrina, it was likely that the City's population was approximately 11,884 people.

Provisional population estimates developed for the City of Bay St. Louis by the Census Bureau indicate that the population within the City of Bay St. Louis' pre-annexation corporate limits in July 2006 was 6,391 people. This would have been a loss of 1,818 people or about 22.2% of the City's 2000 population.

A special Census estimate was prepared for counties in Alabama, Mississippi and Louisiana that were affected by Hurricanes Katrina and Rita. The population of Hancock County was estimated to have decreased by 24.0% between July 2005 and January 2006. The Census estimates were not developed for the cities, but it is likely that Bay St. Louis experienced a greater population loss than 24% due to the extent and magnitude of the damage from Hurricane Katrina.

Estimates made by the company Claritas indicate that the population within Hancock County was rebounding throughout 2006. In fact, of the 11,111 people that the Census indicated relocated from Hancock County after Hurricane Katrina, Claritas estimated that by July 2006 as many as 7,600 people had already moved back to Hancock County.

Building permit data from the Hancock County Building Office indicates that there are a significant number of new homes that were built and are being built in the northern portions of Hancock County and in Diamondhead.

Many questions are still to be answered about how fast the City of Bay St. Louis and Hancock County will rebound from Hurricane Katrina. It is likely, that in the near future, the population distribution in Hancock County will change. Many people displaced by the Hurricane are moving north of the area which was inundated by storm surge. Comparing tax appraisal data between 2005 and 2006 for rural Fire Protection Districts in Hancock County, planners noted that several northern districts had increases in the number of single-family homes and mobile homes within the District, while the number of residential units in rural southern fire protection districts dropped significantly.

Many factors will affect near-term and short-term decisions to build back in areas that were affected by Hurricane Katrina. Typical issues that affect the decision to rebuild in the southern portion of the county include insurance costs, new building elevation requirements, and funding to rebuild. GulfGov Reports, a document developed by the Rockefeller Institute of Government indicates in their report *A Year and a Half After Katrina and Rita, an Uneven Recovery* that, "housing rebuilding efforts have become mired in the morass that is skyrocketing insurance premiums, minimal insurance payouts, FEMA elevation standards, rising construction costs, and indecision on the part of residents about how to move forward (Rockefeller Institute, p. 5)."

Gulf Regional Planning Commission indicated that there were 3,419 single-family, multi-family or mobile homes located on lots identified in the land use survey as residential. Additionally, there were 546 temporary travel trailers located on vacant single-family

residential lots, 989 temporary travel trailers located on lots with a residence that was likely under reconstruction, 70 temporary travel trailers located on lots with a mobile home that was likely undergoing renovation, and 143 new residential construction starts identified within the City of Bay St. Louis, through the land use survey implemented by Gulf Regional Planning Commission. This may mean that 5,167 residences may be under construction or currently inhabited as of March, 2007. Census data from 2000, indicated that there were 6,016 housing units located within the City of Bay St. Louis and the area that would be annexed to the City in 2006.

Dwelling Units within Bay St. Louis, 2007

Type of Dwelling Unit	Within City Limits prior to 2006 Annexation	Within Area annexed into the City in 2006	Total in Newly Defined City Limits
Single-family, Multi-family & Mobile Homes	2,187	1,232	3,419
Temporary Trailer on a vacant single-family lots or on a commercial lot	313	233	546
Temporary trailer on the same lot as house	598	391	989
Temporary trailer on the same lot as a mobile home	25	45	70
New Construction of single-family dwelling	63	80	143
TOTAL	3,186	1,981	5,167
2000 Census –Number of Residential Units	3,806	2,210	6,016

Source: Gulf Regional Planning Commission, March 2007

Planners assumed that the placement of a travel trailer on a vacant lot as an indication that the homeowner or property-owner will rebuild. Based upon this assumption, that would mean that the city can anticipate, during the immediate timeframe, all but 14% of the residential units being built back. However, prior to Hurricane Katrina, there was continued and steady growth within the area annexed by the City, so two other assumptions must be considered:

1. There were more residential units within the City than the 6,016 units captured by the 2000 Census.
2. That some of the 1,605 homeowners or property-owners with a travel trailer on their lot, may not build back.

Based upon a conservative figure of 2% growth per year, about 120 new homes per years would have been built in Bay St. Louis and the newly annexed area over a four and one-half year period, increasing the number of housing units from 6,016 in 2000 to approximately 6,550 units by July, 2005.

Based upon the possible scenarios, as few as 14% of households to as many as 21% of the households have not yet started to rebuild in Bay St. Louis.

Planners reviewed information gathered about communities in south Florida after Hurricane Andrew to gain insight into the long term recovery of the county. In general, research seems to indicate that temporary displacement of residents due to disasters, “tends to be temporary, but may become permanent, particularly if the disaster permanently alters or destroys the local economic base. However, the outcome is usually not entirely the result of the agent alone, but rather government response.”¹

Anthony Oliver-Smith reviewed data on Miami-Dade County regarding displacement of residents after Hurricane Andrew. His research found the following:

“When Hurricane Andrew hit Miami-Dade County in 1992, it inflicted nearly 30 billion dollars worth of damage and displaced roughly 353,000 people temporarily. Forty thousand of the displaced (roughly 11%) permanently migrated. But, of the 40,000 that migrated about half (20,000) moved only about half an hour’s drive north, sparking a population boom in Plantation and other Broward County communities.”²

Oliver-Smith reveals that in the decade after Hurricane Andrew, more than 20,000 new residents migrated into Miami-Dade County.

Reviewing Census data from Homestead and Florida City, two cities particularly hard hit by Hurricane Andrew, Provisional Census data indicates that Florida City experienced a 32.6% decrease in population in the year after Hurricane Andrew and the City of Homestead experienced a 30.8% decrease in population in the year after Hurricane Andrew. However, Census data from 2000 indicated that Florida City had a 35% increase in population from 1990 to 2000 and that Homestead experienced an 18.8% increase in population between 1990 and 2000. The Miami Sun-Sentinel reported that 10 years after Hurricane Andrew, Broward County, located less than thirty minutes west of Homestead Florida, experienced a 29% increase in population. Ten years after Andrew, little land is left for building in Broward County, so the residential development market is now a redevelopment market and moving back towards the east into Miami-Dade County and Homestead³.

Reviewing historic population data from Hancock County, population rebounded significantly in the decade after Hurricane Camille. It is estimated that about 2,000 people had not returned to Hancock County when the 1970 Census was taken. And prior to Camille the County would have likely experienced a 19% increase in population between 1960 and 1969. In the decade after Hurricane Camille, the Stennis Space Center expanded its mission, the Port Bienville Industrial Park opened, and Diamondhead began building homes creating significant employment and housing opportunities within the region. Population grew by 40%.

¹ Anthony Oliver-Smith, “Disasters and Forced Migration in the 21st Century,” <http://understandingkatrina.ssrc.org>, p.5.

² Anthony Oliver-Smith, “Disasters and Forced Migration in the 21st Century,” <http://understandingkatrina.ssrc.org>, p. 6.

³ Robin Benedick, “Hurricane Andrew left legacy of higher housing costs.” The Sun-Sentinel. [http:// sun-sentinel.com/news/weather/hurricane/sfl-sbuildaug20,0,5553762.story](http://sun-sentinel.com/news/weather/hurricane/sfl-sbuildaug20,0,5553762.story)

The time of the recovery of Hancock County after Hurricane Katrina will be dependent on the continued economic recovery of the region, and the government's ability to meet the challenges imposed by rising insurance costs and a limited insurance market, and by the new advisory base flood elevations that call for increasing the finished first floor elevations of homes across the Hancock County coastline.

Historical Population

The City of Bay St. Louis is located on the highest waterfront elevation on the Gulf of Mexico⁴. Long before, the French established their third settlement on the Gulf Coast at Bay St. Louis, early Native Americans lived and hunted within this area. In 1699, Pierre LeMoyne, Sieur d'Iberville and his brother Bienville, were commissioned by Louis XIV to establish a colony at the mouth of the Mississippi River. In February 1699, the explorers first explored the Mississippi Gulf Coast, after discovering that the Spanish built a fort in Pensacola. Temporary camp was made on Ship Island, while the explorers sought out the mouth of the Mississippi River. After successfully finding the mouth of the river and exploring the Mississippi River as far as Baton Rouge, d'Iberville returned to Ship Island and in April, began building Fort Maurepas, a garrison for 81 men. Bienville stayed on the coast, while d'Iberville returned to France.⁵

M. de Bienville explored the Bay of St. Louis on August 25, 1699, and named the Bay for the feast day of St. Louis. When d'Iberville returned to the coast in December 1699, he brought additional men and several families to establish a colony on the Gulf Coast. A fort was built on Bay St. Louis in December 1699 and was populated with 15 soldiers and five families. As such, it was the third settlement on the Mississippi Gulf Coast⁶.

Over the next twenty years, the capital of the French coastal colony was moved from Biloxi to Mobile and then to New Orleans by 1722. The Mississippi Gulf Coast and the City of Bay St. Louis grew very little until the early 1800's. During that time frame the area was transferred from France to England, and then to Spain. In 1779, Spain recognized the property rights of settlers living in Spanish West Florida. And in 1810, the settlers within this area declared their independence, establishing the "free and independent Republic of West Florida." This country lasted for approximately 74 days. The area west of the Perdido River to the Pearl River was incorporated into the Louisiana Territory in late 1810.

Mr. Charles Gray, director of the Hancock County Historical Society, finds documentation that not many people lived within this region, prior to the claim of independence. Mr. Gray relies upon a written account of the population within this area "not 20 families on the east bank of the Pearl, 10 or 15 French families at the Bay of St. Louis, 4 or 5 French free negroes and mulattos at Pass Christian, where the citizens of New Orleans were beginning to take refuge in the summer, about 12 families at Biloxi, half as many again on the Pascagoula, with more living up that river."⁷

Mr. Gray explains that the United States opened this territory, after the territory was annexed. During a three year period from 1813 to 1816, when this territory was opened,

⁴ Hancock County Historical Society. Bay Saint Louis, Mississippi: Commemorating 300 Years, A Presentation to the Citizens and Friends of the City of Bay Saint Louis. July 1998, p. 11.

⁵ Ibid, p. 14.

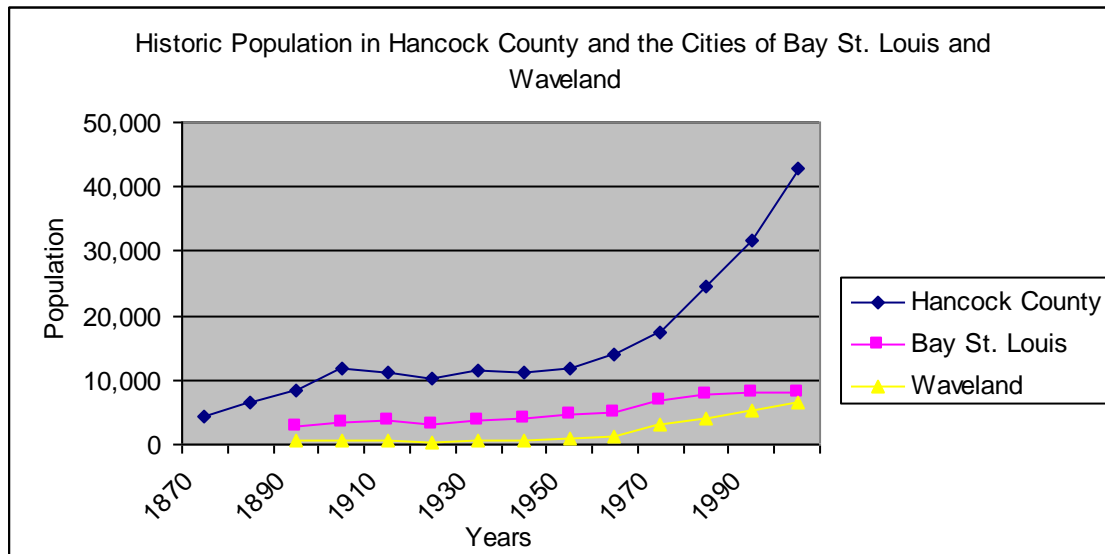
⁶ Ibid, p.14.

⁷ Ibid, p. 17.

about 3,300 families settled along the Mississippi Gulf Coast. The new settlers were from Virginia, Tennessee, the Carolinas and Georgia, and most of the new settlers did not settle in coastal Hancock County, but instead stayed east of the Bay of St. Louis, due to the difficulty getting to the City of Bay St. Louis and coastal Hancock County.⁸

The difficulty getting to Bay St. Louis, then called Shieldsboro, kept the population limited and mostly French-catholic. Rail lines between Mobile and New Orleans were completed in 1870. This transportation improvement leads to the development of hotels, boarding houses, summer camps and summer homes in Bay St. Louis. These new buildings were populated by residents of New Orleans escaping the summer heat of the City.⁹

The Census of 1890 documented the population of the City of Bay St. Louis at 2,872 people, or about 34% of Hancock County's population. The population of Bay St. Louis grew steadily for the next twenty years, from a population of 2,872 in 1890 to 3,588 in 1910. This translated to a rate of growth of about 25% over two decades. However, between 1910 and 1920, the population of Hancock County and the Cities of Bay St. Louis and Waveland decreased. Nearly 82% of the population lost in Hancock County occurred within the Cities of Bay St. Louis and Waveland. The population within Bay St. Louis dropped by 15.5%, and the population of Waveland dropped by 22.2%.



During the next three decades almost all population growth which occurred in Hancock County, occurred within the City of Bay St. Louis and the Town of Waveland. Between 1920 and 1930 nearly 90% of the population growth which occurred in Hancock County occurred within Bay St. Louis and Waveland. Between 1930 and 1940, the County experienced a very slight decline in population, yet the population of Bay St. Louis and

⁸ Ibid, p. 17.

⁹ Ibid, p. 19.

Waveland increased by 11% and 16% respectively. Between 1940 and 1950, fully 90% of the population growth within the County took place in Bay St. Louis and Waveland.

Population rebounded in Hancock County between 1920 and 1930. The County saw a population increase of 1,035 people. About two-thirds of this new population growth occurred within the City of Bay St. Louis, and about 22% of this population growth occurred within the Town of Waveland.

Population within Hancock County declined by less than 1% between 1930 and 1940. However, the population in both Bay St. Louis and Waveland increased. In Bay St. Louis the population increased by 11% and the population within the Town of Waveland increased by 16%. Hancock County would have been impacted by the Great Depression, and many people may have moved into the cities to find employment to supplement farming income.

Between 1940 and 1950, the population of Hancock County grew by 5%. Nearly 86% of the new growth occurred within the City of Bay St. Louis. Between 1950 and 1960, Hancock County population grew by 2,148 people. The City of Bay St. Louis gained 452 people and the Town of Waveland saw an increase of 313 people.

Several occurrences happened between 1960 and 1970 that affected population growth and distribution in Hancock County. NASA developed the Stennis Space Center in Hancock County in 1963, purchasing land along the Pearl River at Logtown for the site, and purchasing development rights in a 128,000 acre buffer zone around the site. Hancock County families within the area moved to other communities throughout the region. Many of these families moved to Pearlinton, other families moved to the Cities of Bay St. Louis, Waveland and Slidell and northern Hancock County. As local families relocated due to the development of Stennis Space Center, still other families moved into Hancock County to be employed at the Space Center. And at the end of the decade between 1960 and 1970, Hancock County and cities of Bay St. Louis and Waveland grappled with two major events; Hurricane Camille in 1969 and the loss of a mission and possible closure of the newly opened Stennis Space Center. In spite of, and because of, the tumultuous occurrences during this decade, population within Hancock County increased by 24%. The population within the City of Bay St. Louis increased by 33%, and the population within the City of Waveland increased by 181%.

**Population in Hancock County and the Cities of Bay St. Louis and
Waveland Over Time**

	Hancock County	Bay St. Louis	Waveland
2000	42,967	8,209	6,674
1990	31,760	8,063	5,369
1980	24,496	7,891	4,186
1970	17,387	6,752	3,108
1960	14,039	5,073	1,106
1950	11,891	4,621	793
1940	11,328	4,138	768
1930	11,415	3,724	663
1920	10,380	3,033	431
1910	11,207	3,588	554
1900	11,886	3,388	
1890	8,317	2,872	
1880	6,439		
1870	4,239		

Source: U.S. Bureau of the Census

In 1970, a trend began in which for the first time in the history of the County, population grew faster outside of the cities than within the Cities. Prior to 1970, population from the rural portions of Hancock County generally migrated to urban areas to find employment. In Hancock County, residents historically left the rural portions of Hancock County and moved to Bay St. Louis, Gulfport or Biloxi, or to New Orleans to find employment. And in 1970, people rebuilt after Hurricane Camille in other areas of Hancock County that were not subject to flooding from storm surge, and the master-planned community of Diamondhead was developed, providing an urban option to Bay St. Louis and Waveland.

During the next three decades, population in Hancock County exploded. Each decade, Hancock County was listed as one of the fastest growing counties within the State of Mississippi, and the City of Bay St. Louis' growth slowed in comparison, as the City approached build-out. Between 1970 and 1980, the City's population grew by 16.9%, between 1980 and 1990 the City's population grew by only 2.1% and between 1990 and 2000, the City's population grew by only 1.8%. Land became more and more limited within the City of Bay St. Louis for residential development, limiting the amount of growth within the City. However, the City's role as County seat continued to draw residents of the County into the City, the City established its downtown as a unique place to work, shop, dine, recreate and develop and enjoy art, and in 1994, the City adopted gaming, providing yet another tourist draw to the community.

Population Projections

The population for Hancock County for 2030 is projected to be 78,269 people. The population for the City of Bay St. Louis is projected to be 18,896 people by 2030 and the City of Waveland is projected to be 11,333 people by 2030. This projection indicates that the population of the two incorporated cities will be about 38% of the County's total population.

**Population Projections for Hancock County and the
Cities of Bay St. Louis and Waveland, 2030**

	2030
Hancock County	78,269
City of Bay St. Louis	18,896
City of Waveland	11,333
Source: Gulf Regional Planning Commission	

Gulf Regional Planning Commission is projecting an 82.2% population growth within Hancock County over the next twenty-five years. This projection is based upon potential projects identified by county planners after Hurricane Katrina and developed through a transportation model.

Gulf Regional Planning Commission estimates that the City of Bay St. Louis's population will increase by 64% by 2030, and the population of the City of Waveland will increase by 31.4%.

Housing

Census data from the 2000 Census indicated that there were 6,016 housing units located within the area which is now the City's current limits within the year 2000. About 3,806 of these housing units were located within the pre-annexation limits of the City of Bay St. Louis and an estimated 2,210 housing units were located within the newly annexed area.

Housing Units Within the City of Bay St. Louis

Year	New City Limits of Bay St. Louis	Former City Limits of Bay St. Louis	Annexed Area
2007*	5,167	3,186	1,981
2000	6,016	3,806	2,210

* represents house count from land use survey prepared by Gulfport Regional Planning Commission
Source: U.S. Bureau of Census, Provisional Census Estimates and 2000 Census and Gulf Regional Planning Commission.

Based upon an estimation of growth of about 2% per year, it is likely that somewhere between 11% to 25% of the residential property owners within the city of Bay St. Louis that have not yet started to rebuild or have not yet committed to rebuild.

Historically, the Cities of Bay St. Louis and Waveland have been seaside retreats for residents of New Orleans and other large cities across the south. Many coastal homes were maintained by families for generations as summer homes and camps along the Mississippi Sound. Additionally, a new generation of residents fell in love with the City of Bay St. Louis and purchased camps and second homes within the City and spent weekends away from the City.

Number of Seasonal or Vacation Homes Within the City of Bay St. Louis

Year	New City Limits of Bay St. Louis	Former City Limits of Bay St. Louis	Annexed Area
2000	893	241	652

Source: U.S. Bureau of Census, Provisional Census Estimates and 2000 Census and Gulf Regional Planning Commission.

Census data from 2000 indicated that as much as 15% of the housing units in Bay St. Louis and its newly annexed area were maintained as second homes or vacation homes. Seasonal homeowners contributed to the tax base of the community. These homeowners are not eligible for Homestead Exemption tax relief that residents are eligible for, and these residents tend to utilize local businesses for dining and entertainment while vacationing within the area.

Many people who owned second homes within the community, along with many weekend and day tourists were from the New Orleans area. Census Bureau estimates from July 1, 2006 believe that New Orleans' population was only 49% of its population prior to Hurricane Katrina.

Population Diversity

Less than 16% of the population of the City of Bay St. Louis, including the newly annexed area was racially diverse, according to the 2000 Census. The largest racial minority within the City of Bay St. Louis and the newly annexed area was African-American. Approximately 12.3% of the population of the City was African-American. Other ethnically diverse populations included Native American, Asian, Hawaiian and Pacific Islander, as well as multi-diverse populations.

Population Diversity in the City of Bay St. Louis and Hancock County, 2000

Population	Bay St. Louis, including Annexed Area	Bay St. Louis Pre- Annexation	Annexed Area	Hancock County
African- American	1414	1372	42	2,934
Native American	68	33	35	257
Asian	108	91	17	377
Hawaiian and Pacific Islander	8	4	4	16
Other	34	22	12	143
Two or more Races	178	130	48	488

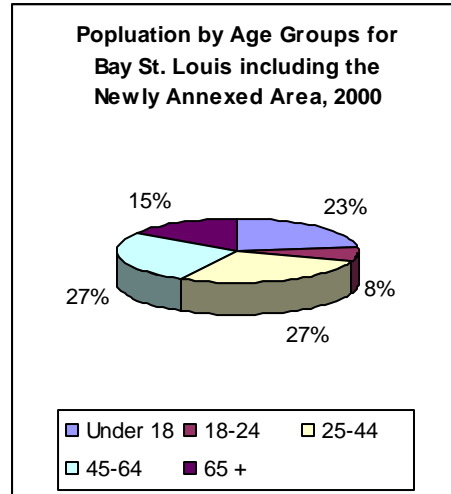
Source: U.S. Census Bureau

Age of the Population

Population within the City of Bay St. Louis, including the newly annexed area tends to be older than that for the County, for the region and for the State. And trends for the city and the recently annexed area indicate that the proportion of the population is gradually getting older than that for Hancock County.

In general, the population in Hancock County and the City of Bay St. Louis tends to be older than the average age for the State of Mississippi and for the regional average. The City of Bay St. Louis tends to have a slightly higher percentage of the population over the age of 45 than percentages for other communities across the Mississippi Gulf Coast and for the State.

Within the City of Bay St. Louis, including the recently annexed area, about 15% of the population was over the age of 65, compared to 12.5% of the State and 10.8% for Harrison County and 9.4% for Jackson County.



Census data from 2000, indicates that about 23% of the population within the City of Bay St. Louis was under the age of 18. Compared with similar statistics for the State and for the region, Bay St. Louis tends to have a lower percentage of its population under the age of 18. About 62% of the population within the City of Bay St. Louis is working age, compared to 58.5% for the State of Mississippi.

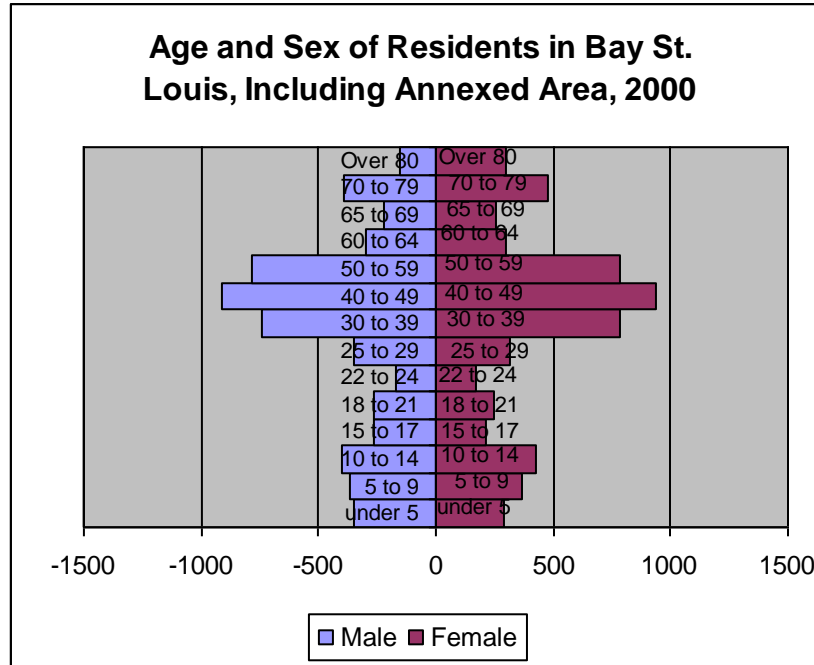
**Percentage of Population by Age Group in the City of Bay St. Louis,
the Newly Annexed Area of Bay St. Louis, and Hancock County, 2000**

	Under 18	18-24	25-44	45-64	65+	Median Age
2000						
City of Bay St. Louis (with newly annexed area)	23.0	8.0	27.0	27.0	15.0	
City of Bay St. Louis (pre-annexation corporate limits)	24.5	7.6	26.8	24.5	16.6	39.2
Newly annexed area*	20.0	7.9	27.5	31.9	12.7	
Hancock County	25.1	7.3	28.0	25.6	14.0	38.5
1990						
City of Bay St. Louis (pre-annexation corporate limits)	29.3	8.5	28.1	18.3	15.9	33.4
Newly annexed area*	20.7	7.0	28.2	27.5	16.6	
Hancock County	27.3	8.8	28.3	21.3	14.2	34.5

Source: U.S. Census Data

* Data from Census Tracts 303, Block groups 3000, 4000 and 5000, and comparable Block groups from 1990.

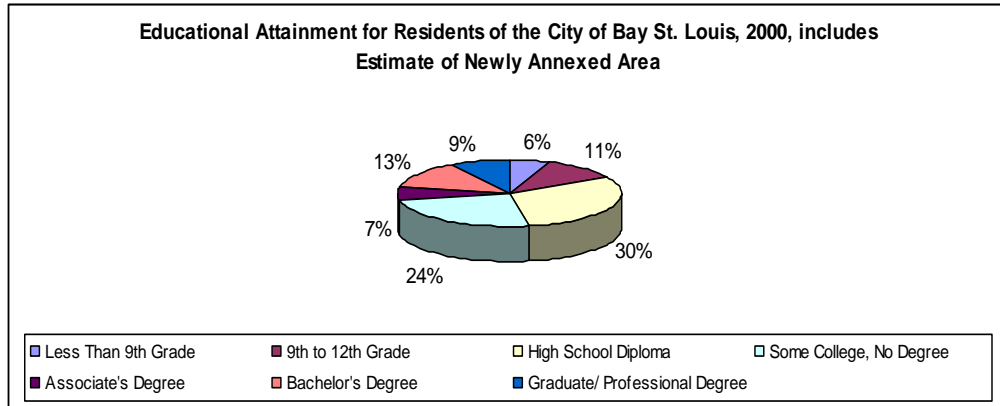
Between 1990 and 2000, the population within the City of Bay St. Louis changed to reflect a lower percentage of the population under the age of 18 and a higher percentage of the population over the age of 45. Indeed, throughout Hancock County, the distribution of population indicates that in 2000, there was a higher percentage of the population under 18 in the City of Waveland, Kiln and Diamondhead.



Educational Attainment

According to the 2000 Census, approximately 83% of the people that lived within the new limits of the City of Bay St. Louis had achieved a high school diploma or equivalency. Additionally, 22% of the population within the new city limits of Bay St. Louis had achieved a bachelor's degree, graduate degree or professional degree.

Comparatively, the City of Bay St. Louis exceeds the averages for the State and compares favorably with the Nation. Additionally, Bay St. Louis has a comparable number of college graduates, despite the fact that there are few opportunities for advance degree educational opportunities in Hancock County. The City of Bay St. Louis is likely to have such a high level of educational attainment for several reasons. Chief among these reasons is the location of the Stennis Space Center, which employs nearly 5,000 people, of which a significant number of employees are scientists.



Source: U.S. Census Bureau

Specific Census data from the year 2000 for the population of the City of Bay St. Louis and including the newly annexed area indicated that 83% of the population had achieved a high school diploma or equivalency. Residents within the City of Bay St. Louis far exceed the average for the state of Mississippi which is 42.5% and exceed the national average of high school graduates which is 80.4%.

**Percentage of Population with High School Diploma or Equivalency and
with Bachelor's Degree or Higher for Selected Places and Counties, 2000**

	% of Population High School Graduates or Equivalency	% of Population Bachelor's Degree or Higher
<i>Cities and Places</i>		
Bay St. Louis	83.0	22.0
Waveland		
Diamondhead	92.1	33.3
Biloxi	82.0	17.7
Gulfport	79.2	16.3
Long Beach	86.3	16.5
Ocean Springs	88.6	21.9
Pascagoula	78.5	15.6
Picayune	74.0	15.5
<i>Counties</i>		
Hancock County	77.9	17.3
Harrison County	80.3	
Jackson County	81.0	16.5
Pearl River County	74.6	
Mississippi	42.5	16.9
United States	80.4	24.4

Source: U.S. Census, 2000

Across the Mississippi Gulf Coast, the percentage of the population with a high school equivalency or diploma, higher than Bay St. Louis includes only Diamondhead (92.1%), Ocean Springs (88.6%) and Long Beach (86.3%). The percentage of Hancock County residents with a high school diploma or equivalency was 77.9% in 2000. Both Harrison County and Jackson County had a higher percentage of the population that had achieved a high school diploma or equivalency.

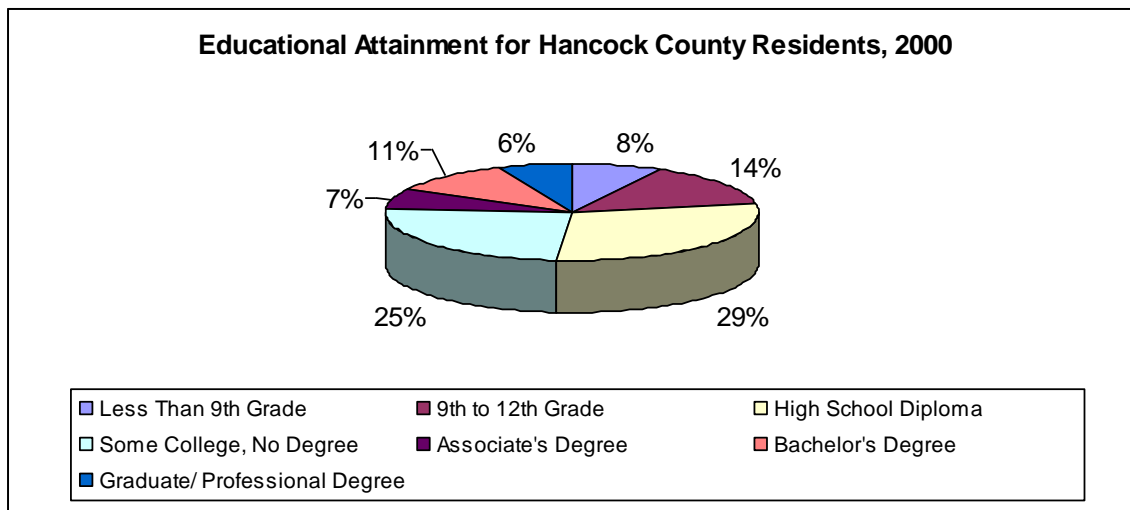
Educational Attainment of Residents of the City of Bay St. Louis Over the Age of 25, 2000

	New City Limits	Pre-Annexation Limits of Bay St. Louis	Newly Annexed Area*	Hancock County
Less 9 th Grade Education	457	325	132	2,264
9 th to 12 th Grade, with no diploma	848	617	231	4,122
High School Diploma or Equivalency	2,412	1,629	783	8,450
Some College, no degree	1,957	1,216	741	7,133
Associate's Degree	518	339	179	1,893
Batchelor's Degree	1,015	796	219	3,130
Graduate or Professional Degree	685	584	101	1,848

Source: U.S. Census

* Based upon Census Tract 303 block groups 3000, 4000 and 5000.

The population within the City of Bay St. Louis, including the newly annexed area had a significantly higher percentage of the population that had earned a bachelor's degree or higher, compared to Hancock County, other regional cities and the State of Mississippi. According to 2000 Census data, approximately 22% of the population within the City of Bay St. Louis and its newly annexed area had achieved a bachelor's degree, masters degree, graduate degree or professional degree. In Hancock County, only Diamondhead had a higher percentage of the population with a college degree, at 33.3% of the population. Nationally, about 24.4% of the population achieved a bachelor's degree, graduate degree or professional degree, and within the State of Mississippi 16.9% of the population achieved such a degree.



Source: U.S. Census Bureau

About one-third of the people with advanced college degrees in Hancock County lived within the pre-annexation limits of Bay St. Louis. Approximately 30.9% of the people in Hancock County with a master's degree lived within the City of Bay St. Louis, compared

to 21% in Waveland and 26% in Diamondhead. Approximately 34% of the people in Hancock County that had a professional degree lived in Bay St. Louis, compared to 21.1% in Waveland and 19.6% in Diamondhead, and about 30.2% of the people in Hancock County with a doctorate degree lived within Bay St. Louis compared to 4.3% in Waveland and 54.7% in Diamondhead.

About 24% of the population in Bay St. Louis had taken college classes, but had not earned a degree. This is consistent with the City of Pascagoula and with Hancock County. Additionally, approximately 7% of the population within the City of Bay St. Louis had earned an associates degree, again consistent with statistics from the City of Pascagoula and Hancock County.

A Community Survey Census was taken after Hurricane Katrina, which also estimated the social and economic information about the remaining population. The social and economic data was determined based upon a three county region in Mississippi, with an estimation of error for each category. Data from this Census indicated that after Hurricane Katrina, the percentage of people with degrees and with some college had decreased, as a percentage of the remaining population. The Census data suggests that the percentage of the population with an Associates degree may have decreased from 11.3% prior to Hurricane Katrina to 7.7% in the months after Katrina, the percentage of the population with a some college but no degree may have decreased from 22.1% to 19.0%, and the percentage of the population with a bachelor's degree may have decreased from 13.4% coast wide to 11.0%. This survey suggests that professional and technically trained and educated residents may have been more likely to relocate to find employment.

New Resident Population

In the year 2000, Census data indicated that approximately 45% of the City's population, which included the newly annexed area of the City had lived in a different house five years previously. Approximately 60% of the population that had moved to the City of Bay St. Louis between 1995 and 2000, moved from another county, another state or from another country. Census data for the state of Mississippi, indicate that about 40.6% of the population lived in a different house in the five years between 1995 and 2000.

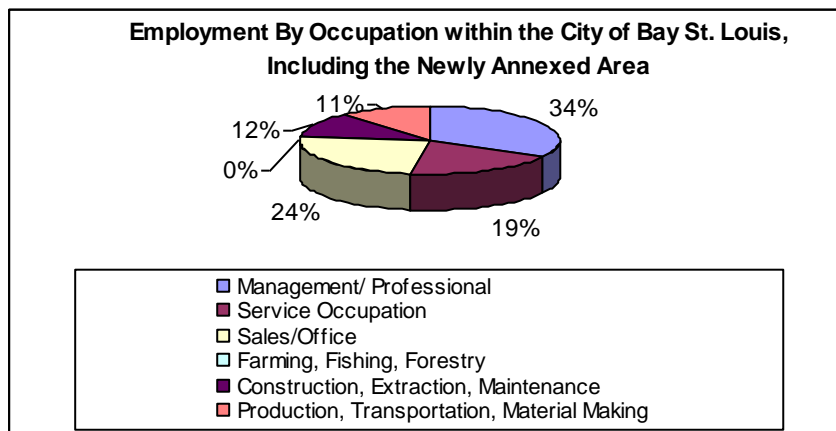
Approximately 40% of the population that indicated that they lived in a different house between 1995 and 2000, moved from a different house from within the County, about 36% of the population moved to Bay St. Louis from a different state, 22% of the population moved to Bay St. Louis from a different county within Mississippi, and 2% of the population moved to Bay St. Louis from another country.

Since 1990, the City's population has grown more stable. Between 1985 and 1990, Census data indicated that about 54% of the population of the City of Bay St. Louis and the newly annexed area moved to the City. According to the 1990 Census as much as 45% of the population which had moved to the City of Bay St. Louis was from another

state and 40% of the population that moved to the City of Bay St. Louis moved from another house in Hancock County.

Residential Employment by Occupation

Within the City of Bay St. Louis, including the newly annexed area, more than one-third of the population is employed in a management or professional occupation. About one-quarter of the population is employed in a sales or office occupation. Additionally, about 19% of the population is employed within a service occupation, which would include gaming and health services.

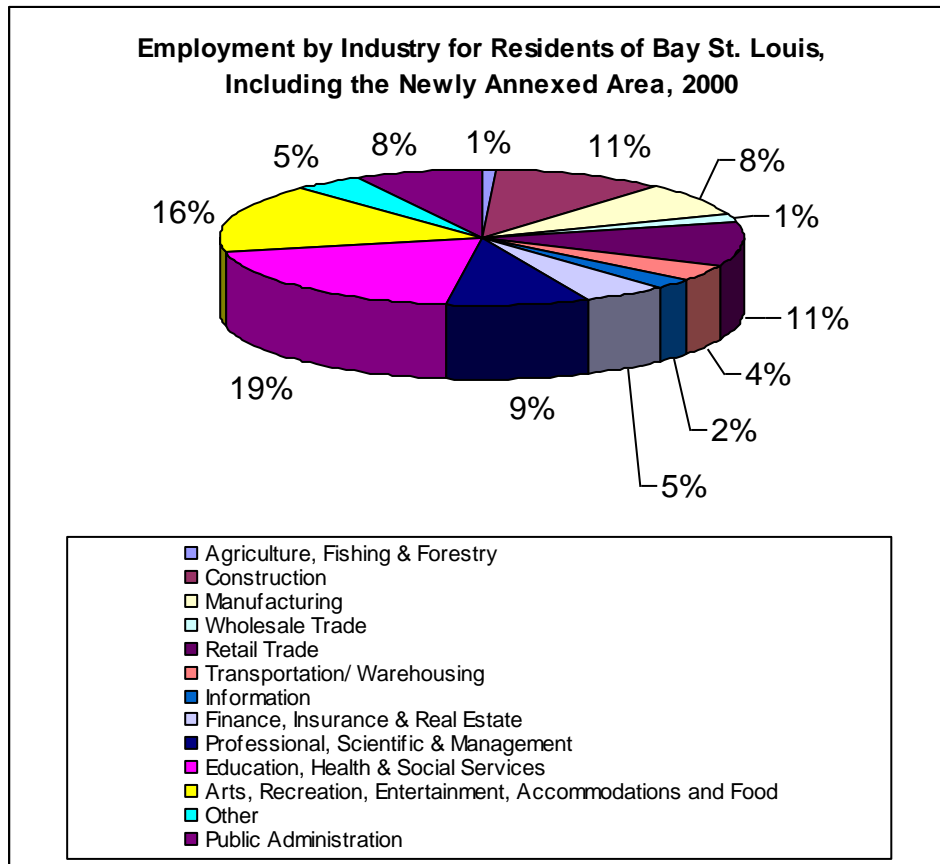


Stennis Space Center employs about one-quarter of the residents within Hancock County. It is likely the reason that the City of Bay St. Louis has higher than average percentage of residents employed in service occupations and in management and professional occupations is due to the location of the Space Center and their employment at the Center or at supportive businesses to the Center. A significant number of residents in Bay St. Louis work in the service industry, including the casino industry and the accommodations industry coast wide.

Residential Employment by Industry

Bay St. Louis residents tended to be employed in the following industrial sectors, education, arts, entertainment and accommodations, construction, retail and professional, science and technical. Approximately two-thirds of the residents within the City of Bay St. Louis and the newly annexed area were employed within these five industrial sectors.

The City of Bay St. Louis is unique for three features; nearly 16% of the population is employed within the arts, entertainment and accommodations industry, and a higher percentage of the population tends to be employed in the professional, science and technical sector and the construction sector.



Specifically, about 16% of the residents of the City of Bay St. Louis and the newly annexed area were employed in the arts, recreation, entertainment, accommodation and food industry. This is nearly double the percentage of the state population employed within the sector, but consistent with regional employment trends in Harrison County.

Residents in Bay St. Louis are more likely than both State and Harrison County residents to be employed in the Professional, Scientific and Management Industrial Sector and in Construction.

Income

According to 2000 Census Data, the per capita income for residents of the City of Bay St. Louis, including the newly annexed area was higher than the per capita income for the State of Mississippi, and lightly higher than the per capita income for Hancock County. The per capita income measures the average amount of income generated by all residents within the boundaries of the city from all sources of income including wages and transfer payments.

The 2000 Census indicated that the per capita income in the City of Bay St. Louis was \$18,483. Per capita income in the newly annexed area was determined for each Census block group within this area. The per capita income for Census block group 3 was

\$22,546, for Census block group 4 was \$34,643 and for Census block group 5 was \$29,576.

Comparison of Income, 2000

	Per Capital Income	Median Household Income
Hancock County	\$17,748	\$35,202
Bay St. Louis	\$18,483	\$34,106
Waveland	\$16,413	\$33,304
Diamondhead	\$26,631	\$51,361
Kiln	\$16,351	\$38,125
Pearlington	\$14,040	\$31,224
Shoreline Park	\$13,984	\$28,258
Jackson County	\$17,768	\$39,118
Harrison County	18,024	35,624
Pearl River County	15,160	30,912
Mississippi	\$15,853	\$31,330
Escambia County	\$18,641	\$35,234
United States	\$21,857	\$41,994

Source: Bureau of the Census, U.S. Department of Commerce

In 2000, the median household income for the City of Bay St. Louis was \$34,106 and the median household income for the Census block groups within the newly annexed area was \$44,808 for Census block group 3, \$34,643 for Census block group 4, and \$29,576 for Census block group 5.

Again the median household income was comparable or slightly higher than that for the region and the State of Mississippi. The 2005 American Community Survey developed by the Census Bureau indicated that in the four months after Hurricane Katrina, it is likely median household income increased slightly and that the per capita income decreased slightly.

About 1,051 of the individuals that lived within the City of Bay St. Louis had an income below the poverty level in 2000, according to the Census Bureau. This number equated to about 13.2% of the population. Within the newly annexed area, approximately 360 people were determined to have an income below poverty. This equated to 10.7% of the population in the newly annexed area. The percentage of people living below poverty within the City of Bay St. Louis and the newly annexed area is well below the percentage of people in Mississippi living below poverty of 19.9%. Within the region, the percentage of the population in Bay St. Louis and Hancock County living below poverty is slightly lower than that for Harrison County (14.6%) and Pearl River County (18.4%). Data from the 2005 American Community Survey developed by the Census Bureau indicated that four months after Hurricane Katrina, the percentage of people living below poverty may have increased between 4.7% and 5.2%.

Unemployment Rate

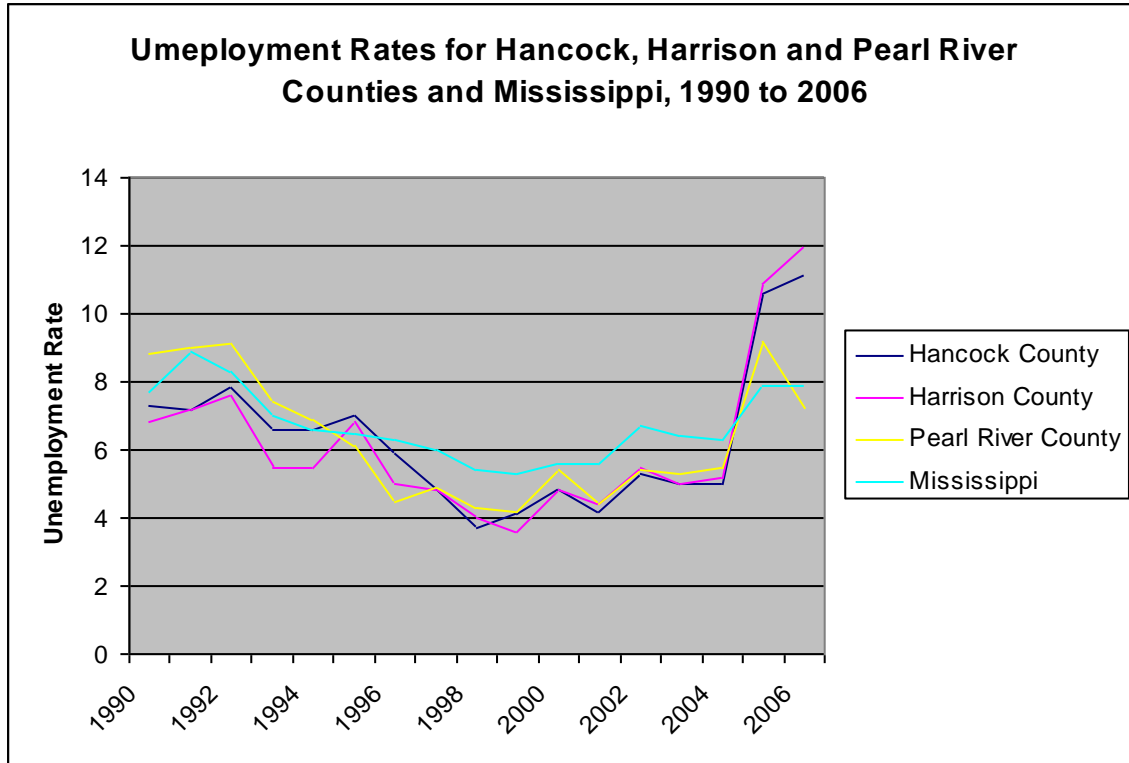
In response to Hurricane Katrina, the Annual Average Unemployment Rate for Hancock County rose from 5.0 in 2004 to more than double in 2005 and 2006. But during the eight years prior to 2005, Hancock County's unemployment rate was the lowest within the region.

Annual Average Unemployment Rate for Hancock, Harrison and Pearl River Counties and the State of Mississippi, 1990 to 2006

	Hancock County	Harrison County	Pearl River County	State of Mississippi
2006	11.1	12.0	7.2	7.6
2005	10.6	10.9	9.2	7.9
2004	5.0	5.2	5.5	6.3
2003	5.0	5.0	5.3	6.4
2002	5.3	5.5	5.4	6.7
2001	4.2	4.4	4.4	5.6
2000	4.8	4.8	5.4	5.6
1999	4.1	3.6	4.2	5.3
1998	3.7	4.0	4.3	5.4
1997	4.8	4.8	4.9	6.0
1996	5.9	5.0	4.5	6.3
1995	7.0	6.8	6.1	6.5
1994	6.6	5.5	6.9	6.6
1993	6.6	5.5	7.4	7.0
1992	7.8	7.6	9.1	8.3
1991	7.2	7.2	9.0	8.9
1990	7.3	6.8	8.8	7.7

Source: Mississippi Department of Employment Security, Labor Market Information

Noticeable drops in the unemployment rate occurred following 1992, with the opening of Casino Magic and in 1996 with the opening of Wellman Plastics at the Port Bienville Industrial Park. Lockheed Martin and Boeing opened facilities at the Stennis Space Center and federal missions were expanded at the Stennis Space Center.



Employment by Industry Grouping

Over the past fifteen years, the County's establishment based employment has increased substantially from 11,250 to 15,330, an increase of 36.3%. Not surprisingly, and consistent with national and regional trends, manufacturing employment decreased as a percentage of total employment within Hancock County. And service type employment and government employment increased as a percentage of employment.

Historically, government employment accounted for approximately one-quarter of the establishment based employment in Hancock County. Government employers in Hancock County include the local, state and federal governments. Statistics from the Mississippi Department of Employment Security indicate that in 1990, government employment accounted for 28.5% of the establishment based employment and in 2004, government employment accounted for 26% of the establishment based employment. However, the number of jobs within this sector increased from 3,210 in 1990 to 3,900 in 2004.

Establishment Based Employment in Hancock County, 1990 and 2004

	2004	1990
Manufacturing	1,070	2,010
Government	3,900	3,210
Retail Trade and Wholesale Trade	1,760	1,590
Services	6,420	2,970
- Information	(80)	--
- Professional, Scientific, Technical Services	(1,580)	--
- Management of Companies	(90)	--
- Administrative Support and Waste Management	(1,150)	--
- Educational Services	(80)	--
- Health Care and Social Assistance	(760)	--
- Accommodations and Food Service	(2,420)	--
- Other Services	(260)	--
Education	880	600
Transportation and Public Utilities	200	300
Finance, Insurance, and Real Estate	400	310
Construction	660	250
Agriculture, Forestry, Fishing and Hunting	30	--
Mining	10	10

Source: Mississippi Department of Employment Security

Service type employment increased significantly in Hancock County between 1990 and 2004. In 1990, the Mississippi Department of Employment Security estimated that 2,970 establishment based service jobs existed in Hancock County. This was about 26.4% of all employment within the County. By 2004, service types employment accounted for about 39% of all employment and included employment in (a) Accommodations and Entertainment, (b) Professional, Science and Technical, (c) Management, (d) Administrative Support, and (e) Health Care. Employment in service type jobs increased from 2,970 to nearly 6,100 jobs between 1990 and 2004.

Manufacturing decreased as both a percentage and in terms of real jobs in Hancock County between 1990 and 2004. In 1990, manufacturing employment accounted for 17.9% of the establishment based employment in Hancock County, and in 2004, manufacturing employment accounted for only 7% of establishment employment in Hancock County. The number of manufacturing jobs within Hancock County decreased from 2,010 in 1990 to 1,070 in 2004.

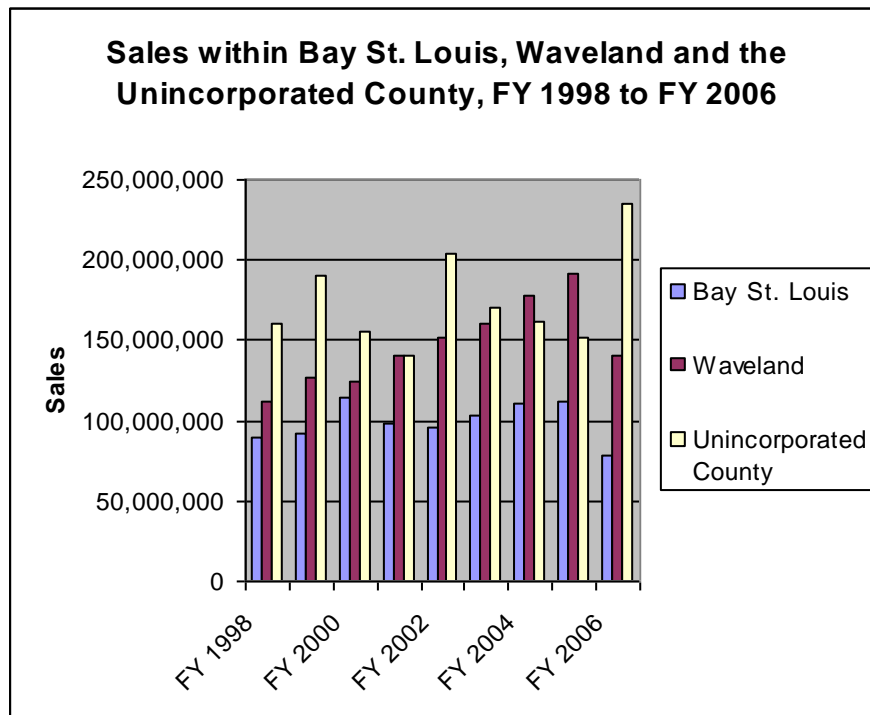
The increase in establishment based employment in Hancock County is consistent with trends within the region. Hancock County gained a higher percentage of employment within the county between 1990 and 2004 than that for the state, and lower than that for Harrison County. The number of jobs in the State of Mississippi increased by 20% between 1990 and 2004, compared with an increase in the number of jobs in Hancock County of 36.3% and an increase in the number of jobs in Harrison County by 55%.

Sales Tax Diversions

Total gross sales from 372 retail establishments within the City of Bay St. Louis, during FY 2005, prior to Hurricane Katrina, resulted in \$112,328,695. Between FY 1998 and FY 2005, gross sales within the City of Bay St. Louis increased by 25.9%, consistent with retail sales growth in Hancock County and the City of Waveland. The number of establishments providing these sales and services increased by 13.8% within the City of Bay St. Louis and by 19.6% overall within Hancock County.

In FY 1998, the top four retail sectors accounted for approximately 64% of retail sales. These four retail sectors were Food and Beverage (32.4%), Automobiles (15.6%), Miscellaneous Retail (9.6%), and Lumber and Building Supplies (6.0%). By FY 2005, the top four retail sectors has changed slightly and now accounted for nearly 69% of all retail sales within Bay St. Louis. These sectors included Food and Beverage (24.2%), Miscellaneous Services (16.6%), Miscellaneous Retail (15.1%), and Automobiles (12.9%).

Data from the Mississippi State Tax Commission provides an indication of the extent of Hurricane Katrina in Hancock County. Within Hancock County, retail sales rose slightly between FY 2005 and FY 2006, from \$455,014,403 to \$455,088,434. But more than 55% of the retail sales in FY 2006 occurred within the unincorporated County, since the business districts of the Cities of Bay St. Louis and Waveland suffered significant damage.



Source: Mississippi State Tax Commission

As a result of Hurricane Katrina, retail sales in Bay St. Louis decreased by 29.9% between FY 2005 and FY 2006, and in Waveland retail sales decreased by 26% between

FY 2005 and FY 2006. Retail sales establishment in the unincorporated county, located outside of the area inundated by Hurricane Katrina contributed to maintaining consistent sales within the county during FY 2006. Sales generated by establishments located outside the cities increased significantly during FY 2006, due to Hurricane Katrina, from \$151,681,426 in FY 2005 to \$235,500,797 in FY 2006. This was an increase in sales of 55%.

Prior to Hurricane Katrina, sales within the City of Bay St. Louis averaged slightly less than 24% of the retail sales within Hancock County. Slightly less than one-third of the business establishments were located within Bay St. Louis. Bay St. Louis generally led the county in sales for miscellaneous retail establishments and miscellaneous services. Establishments within the City of Bay St. Louis captured 39% of miscellaneous retail sales in FY 1998, approximately 61.8% of miscellaneous retail sales in FY 2004 and 47% of miscellaneous retail sales in FY 2005. Historically, slightly more than one-third of the miscellaneous retail establishments in Hancock County were located within Bay St. Louis.

Prior to Hurricane Katrina, all retail sales sectors in Bay St. Louis saw an increase in sales with the exception of the Machinery and Equipment Sector, between FY 1998 and FY 2005. The Food and Beverage Sector sales remained consistent during this timeframe.

Retail Sales by Sector in Bay St. Louis, FY 1998, FY 2005 and FY 2006

Category of Sales	FY 2006	FY 2005	FY 1998
Food and Beverage	\$17,521,219	\$27,230,390	\$28,926,704
Miscellaneous Services	\$1,1028,672	\$18,607,606	\$4,783,737
Miscellaneous Retail	\$3,732,786	\$16,994,918	\$8,589,441
Automobiles	\$9,191,889	\$14,577,943	\$13,933,054
Lumber and Building Supplies	\$11,389,005	\$8,289,358	\$5,373,981
Furniture	\$1,448,277	\$1,328,230	\$317,380
Apparel and General Merchandise	\$2,001,961	\$3,452,055	\$2,274,030
Contracting	\$5,983,892	\$6,220,693	\$3,472,949
Machinery and Equipment	\$1,534,880	\$1,615,200	\$2,070,737
Total Sales	\$78,711,337	\$112,328,695	\$89,188,257

Source: Mississippi State Tax Commission

Retail sales within the City of Bay St. Louis after Hurricane Katrina indicated that there were different priorities and needs of consumers, and that some businesses are still not operational or not yet built back after Hurricane Katrina. Traditional retail markets are not easily accessible for merchants of Bay St. Louis. The Highway 90 Bridge over the Bay of St. Louis was destroyed, making quick and convenient commutes from Pass Christian and areas east nearly impossible. As much as 60% of the homes in Bay St. Louis were destroyed, and many second homes and vacation homes located on the waterfront and beach were destroyed. Indicative of the changing needs within the community, during FY 2006, Food and Beverage sales accounted for 22.3% of all retail sales within the City, Lumber and Building Supply sales accounted for 14.5% of all sales

within the City and Miscellaneous Services sales accounted for about 14% of all sales within the City.

Chapter 7

Implementation Recommendations and Plan Maintenance

To achieve the recommendations and to execute the policies defined within the *City of Bay St. Louis Comprehensive Plan Update, 2007*, the City can utilize the following implementation approaches:

- Construction of physical facilities;
- Provision of services;
- Regulation of land use and development;
- Project review; and
- Fiscal policies.

Various tools are available to implement these approaches. The following is a brief description of the tools that the City can utilize to achieve the policies defined within the Comprehensive Plan and to achieve the recommendations listed within the Comprehensive Plan.

Implementation Tools

Annual Budget

Most local governments implement recommendations and policies defined within their Comprehensive Plans through their annual budget process. Decisions are made during the budget process time to fund services, operational budgets for implementation of programs, operational budgets for the implementation of land use and development regulations and to fund capital expenditures. Short term yearly work programs developed by department directors should be related to and consistent with the Comprehensive Plan and its policies.

Among projects in the Comprehensive Plan which will likely be part of the budgetary process are:

- Additional fire and police staff in keeping with population growth; and
- Library improvements that may include lighting, re-plumbing and new flooring.

Among operational budgets for the implementation of land use and development regulations are:

- Code enforcement;
- Building inspection; and
- Planning staff.

Capital Improvement Program

A Capital Improvement Program (CIP) is a budgeting process which plans expenditures of major public improvements for a prescribed time frame into the future. However, a CIP is usually a five year program which prescribes expenditures for a five year period for major capital investments. These can be gas, water and sewer lines or fire trucks.

The CIP can be utilized to achieve recommendations within a plan. For example, the City can utilize the CIP program funds for the purchase of fire trucks as they are retired. And the CIP can be utilized to execute policy. For example, the City can guide commercial growth along Highway 603 by developing a shared point of access to and from Highway 603 for businesses to share, encouraging commercial development in those areas adjacent to these points of access.

Among the benefits of the CIP is that it can ensure that the city's capital projects are consistent with community objectives, anticipated growth, and financial capabilities. A CIP also helps the city stay focused on objectives. Once adopted, the CIP keeps the public informed about the county's future plans and helps reduce the pressure to fund projects not included in the plan. Another major benefit of the CIP is that it facilitates more efficient administration and management. The coordination of necessary capital improvements can reduce scheduling problems, conflicting and overlapping projects, and over emphasis on any single function or geographic area. Finally, the CIP can spread the cost and the implementation of a large, costly project over several years, thereby reducing any dramatic changes in the City's tax structure and level of bonded indebtedness can be avoided when capital projects are planned and spaced over several years.

Among projects which could be included in a Capital Improvement Program:

Near Term (within Five Years)

- Well construction
- Fire Station on Highway 603
- New Fire Truck- Pumper
- Sewer line improvements to address I & I
- Expand City Building Offices
- Renovate Old City Hall for Community Use
- Complete Reconstruction of Old Taylor School for Community Use
- Complete Renovation of Valena C. Jones Complex for Community Use
- Establish Farmer's market at Soccer Complex

Long Term (Six to Twenty Years)

- New Fire Truck –Pumper (2)
- Build Downtown Marina
- Replace Fire Trucks as needed
- Establish Police Substation on Highway 603

Intergovernmental Agreements

Intergovernmental agreements are agreements between government entities to provide shared services to benefit all entities. For example, The Hancock County Library System has an agreement with the Hancock County Board of Supervisors and the City of Bay St. Louis to provide library services in Bay St. Louis. The City also has agreements with the Hancock County Utility Authority to provide wastewater treatment. The Hancock Water and Sewer District provides water and wastewater collection to residents in the newly annexed area. The Hancock County Emergency Management Agency provides emergency management services to the City of Bay St. Louis. Hancock County E-911 provides emergency dispatch of calls to the City's fire department and police department. Finally, the Hancock County Solid Waste District provides solid waste collection for residents of the City of Bay St. Louis.

Intergovernmental agreements can be utilized for a variety of services. The Comprehensive Plan does not recommend any specific services, but this tool can be an effective tool. The Citizen Advisory Council recommended that both the City of Bay St. Louis and the City of Waveland, establish an agreement with the County for planning services.

Adequate Public Services

The City may require that public services be available when needed to serve new development. This may be implemented with the adoption of an Adequate Public Facilities Ordinance. The ordinance would define specific levels of service and that new development would only be allowed when the service is available and adequate at the prescribed level of service. The intent of the ordinance would be to insure that there is adequate service capacity for new development without sacrificing the level of service provided to pre-existing development. The ordinance would allow for mitigation of existing deficiencies of services at the time of development.

Zoning Regulations

Zoning is a land use regulation which was originally designed to protect the health, safety and welfare of residents within a community by

“The dividing of a county or a municipality into districts and the establishment of regulations concerning the use of lands within those districts, and the placement, spacing and size of buildings¹.”

Zoning regulates activities; minimum lot sizes; placement and the spacing of structures on a lot by establishing minimum required front yards, back yards and side yards; maximum percent of a lot that can be built upon or covered with an impervious coverage; maximum building height; the amount and design of off street parking; the size, shape and the location of signs; the minimum floor area of single-family homes; and design review.

Zoning, as it is typically accepted and utilized, can preserve the status quo within a community, and thereby protect the investment of existing property owners. Zoning can also be used to guide development in undeveloped areas, providing developers with rules and guidelines of what is expected and anticipated.

A form of zoning that the City may desire to consider is Smart Code. Smart Code is a form based code or regulation in which the focus is not on the land use or function, but how the function compliments the public space. The Code may be appropriate to encourage the continued mixed uses and densities of the City’s Downtown area and Depot District.

Subdivision Regulations

A subdivision regulation is an

“An ordinance, adopted and administered by a local government, which regulates the division of land into two or more lots, tracts, or parcels, for the purpose of sale, development or lease².”

Subdivision regulations address the design standards for the subdivision of land, the improvements required as part of the subdivision of land, and the administrative procedures followed by the local government to review the subdivision of the land.

Subdivision regulations are important because they ensure that clear legal records are kept of land transfers. The regulations also allow properties to be described in lots and blocks as opposed to metes and bounds.

¹ Lars T. Anderson. Guidelines for Preparing Urban Plans. American Planning Association Planners Press, 1995, p.153.

² Ibid, p. 154.

Subdivision regulations define minimum design standards that ultimately reflect the character of the community. The size of the lots, location of the lots to roadways and the location of roadways within the subdivision, over the long-term will reflect the character of the community.

The design standards within subdivision regulations prescribe the standards and quality of the on-site improvements that are required to be installed by the developer or subdivider. The standards include the type and size of water and sewer piping, the size and composition of roadways, and the location and capacity of drainage systems. The enforcement of these regulations ensures that the new property owners within the subdivision have adequate access to public services, and protects existing residents within the city from having to pay the cost of new development.

Additionally, environmental resources can be identified during the site planning process and the city can require the developer to consider and to plan the site with these resources in mind. Conservation Development techniques can be adopted into the subdivision regulations.

Historic Preservation

The City adopted a historic preservation ordinance for certain neighborhoods within the city. The City is currently in the process of developing a plan for the preservation of historic structures within these neighborhoods. The City may also establish grant or low-interest loan program to work in conjunction with the regulatory program or in the place of the regulatory program to encourage the preservation of historic structures.

Community Design and Appearance

The City may choose to adopt community design and appearance standards to assist with establishing a consistent design within commercial areas of the City. Design review provides for the review and regulation of the design of buildings and their sites. It often includes structural elements, exterior facades, heights, setbacks and roof lines and exterior materials. Sometimes design standards also address color.

Construction Codes

Construction codes provide a standard upon which to build safe structures. Adoption of up to date versions of the International Building Code and International Property Maintenance Code will greatly assist the City in their efforts to insure safe housing within the City. It can also be utilized as an effective tool to maintain neighborhoods.

Plan Maintenance

By its nature, the Comprehensive Plan is a document which reflects the desires of the community. These desires can change over time, influenced by the economic conditions of the region, changes in technology and, in some cases, impacts from large scale changes within the local area or the region. The Comprehensive Plan should be a dynamic document, which is monitored yearly to update the changes in the community, success or lack of success at meeting goals and addressing policies, and to reflect the costs and revenues of development to the community.

Ideally, the plan should also be reviewed yearly to incorporate any special topic or area plans that are developed within the City, the County or the Region. The plan should also incorporate a process to amend the land use plan to reflect the changing desires of the community, and finally the plan should be updated every five years

Land Use Plan Amendments

The Future Land Use Plan and Map and the Future Transportation Plan and Map are guides for the long range development of the City of Bay St. Louis. These plans identify areas suitable for growth and identify the type of growth that may be suitable for areas of the City. Amendments to the plan should be anticipated, but should also be limited in scope and in nature. Amendments to the Land Use Plan can create unintended consequences that may place policies determined to be important to the community and defined within the Comprehensive Plan at odds with conditions created by multiple uncoordinated Land Use Plan amendments.

Market conditions within the City or the region may change and major infrastructure investments may be made by entities other than the local government that may allow for different patterns of growth. Therefore, a process should be established for amendment to the Future Land Use and the Future Transportation Plans.

Review the Comprehensive Plan and Update

The Comprehensive Plan should be updated every three to five years depending on the changes occurring within the community. At this time the Planning Commission and the City Council will review the goals and policies established within the plan and determine if there is a need for change to the policies and amend the goals and policies.

Ideally, the City should review their success in implementing the plan, determine the changes within the community that make the re-evaluation of the vision, the goals and the policies necessary, review the city's finances and the ability of the City to implement needed public investments that are documented in the adopted plan, determine the community's goals and support of policy in the adopted plan, and update the plan to reflect any changes in federal and state laws or in funding programs that may require advance planning.

After these elements have been considered and updated, changes to goals and policies should be considered and drafted and a public hearing will be required to incorporate these changes into the City's Comprehensive Plan.

APPENDIX A

Hancock County Greenways Plan

APPENDIX B

Mississippi Renewal Forum
“Rebuilding Bay St. Louis”

APPENDIX A
Hancock County Greenways Plan



Toolbox: Outdoor Recreation Space

Park Development Guidelines

Hancock County Recreation Activity Guidelines

Activity	Plaza	N'borhood	School	Community	Sports Complex
Seats	6	12	12	18	20+
Open Space	1/4 acre	2 acre	2 acre+	5 acre+	N/A
Playground	N/A	1	1	1	1+
Picnic Table	N/A	2	5+	5+	N/A
Pavilion	N/A	1	1	1+	2+
Basketball	N/A	1	1	1+	4 multi-purpose, indoor
Tennis	N/A	N/A	N/A	1	8 court complex
Ath Fields	N/A	N/A	1	1	8 baseball 8 soccer
WalkTrack	N/A	1/2 mi	1/2 mi	1 mi	1 mi
Multi-Purpose	N/A	N/A	1 court	1 court	N/A
Meeting Rm	N/A	N/A	N/A	1	1
Concessions	N/A	N/A	N/A	N/A	1+
Pool	N/A	N/A	N/A	1	1 olympic
Maint Shed	N/A	N/A	N/A	N/A	1
Parking	N/A	5	N/A	20	60-120+
Total Size	1/2 acre	5-10 acre	varies	10-20 acre	20+ acre
Service Area	1/4 mi.	1 mi.	N/A	3 mi.	varies*

*The extended service area reflects facilities for specific sports such as baseball and soccer. Extended service area is generally a six mile radius, but may draw players from greater distances for league play or tournaments.

Source: Miami/Dade County Recreational and Open Space Plan



Toolbox: Outdoor Recreation Space

Level of Service Guidelines

Many existing recreational facilities in Hancock County serve our resident and visitor populations. From fishing piers to bike paths, the array of possibilities for promoting outdoor activities is wide. The State Comprehensive Outdoor Recreational Plan, developed by the Mississippi Department of Wildlife Fisheries and Parks every 5 years, offers capacity information for each of the types of facilities, as well as general information about the resident participation in outdoor recreation.

The average Mississippian spends 10.6 hours per week engaged in outdoor recreation. The primary reasons are to enjoy the outdoors, to spend time with family and friends, and to promote better personal health. Only a very few participate for reasons of excitement and thrills (6%) or because they excel in a particular activity (3%). (All facts are referenced from the 1995 SCORP, Mississippi Department of Wildlife, Fisheries and Parks.)

The favored pursuits statewide include jogging/running/walking (70%), gardening (62%), fishing (57%), picnics (52%), swimming (43%), baseball/softball (38%), playgrounds (33%). Other options included: canoeing, scuba/skin diving, camping, skydiving/hangliding, hiking/birdwatching/collecting, outdoor concerts, and horseback riding. The rankings of these activities has a remarkable concordance with the survey the Greenways project completed in March 2003: use of the beach path for walking/jogging was first, followed by biking, fishing, playgrounds, hiking, canoeing, camping, and horseback riding.

The total population of Hancock County as listed in the 2000 census is 42,967 people. The age divisions are as follows:

<u>Age</u>	<u>Percentage of Population</u>
0-18	25%
18-24	7.3%
25-44	28%
45-64	25%
65+	14%



Toolbox: Outdoor Recreation Space

Recreation Facility Supply

A listing of the existing facilities in Hancock County follows and their capacity to serve the people of Hancock County. This information and the local demand for recreational facilities may be used to determine the population that is served at each park, helping to determine the current Level of Service for Hancock County. The supply or capacity is identified as the number of available visits per year that each park area and facility can accommodate. It is the number of persons who may use a facility at the same time, multiplied by the daily turnover rate, multiplied by the days of the year (or of the season.)

Expected Use (#Visits/Day/Unit) x Availability (#Days/Year/Unit) = Recreation Facility Supply

For example: one baseball field = one unit

Heavy use: season is April to early July = 100 days

24 visits/game x 2 games/day = 48 visits/day x # of days = 4,800 visits

Light use: August through March: 265 days

1.5 visits/day (10 visits/week) x # of days = 400 visits

Total users: 5,200 visits/year

The availability is the average number of days per year that the facility is open for use by the public. A park area may be closed due to bad weather, preventive maintenance, or holidays. Most park facilities in Hancock County are not secured, leading to constant availability.

This calculation is done for each unit (example: tennis court, playground, picnic pavilion) to determine the capacity of the existing facilities. Occasionally the capacity is set not by the availability, but by the demands of field maintenance and required periods of rest (in order to maintain acceptable field conditions) to mitigate for overuse. The carrying capacity used in determining the Minimum Population Service Requirements comes from Mississippi's State Comprehensive Outdoor Recreation Plan (1995).



Toolbox: Outdoor Recreation Space

Recreation Activity Demand

The Recreation Facility Demand is determined by assessing the number of times someone actually participates in a recreation activity. A survey was used to obtain information about residents' use of different types of activities. Then the data was extrapolated to determine the per capita demand for the entire population.

Participation (#Participants/Year/Unit) x Frequency (#Visits/Year/Unit) = Rec Facility Demand
Sample Size

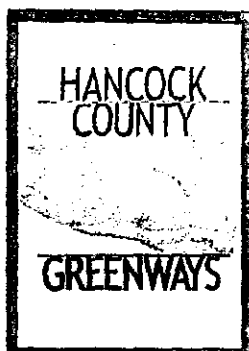
In a 2003 survey for the Greenways Project, the following information was collected, with a sample size of 80 households:

Beach/Walk Path:	$4002 \text{ Visits/Year} \div 80 = 50.0 \text{ Visits/Person/Year}$
Bike Path:	$1454 \text{ Visits/Year} \div 80 = 18.2 \text{ Visits/Person/Year}$
Playground:	$582 \text{ Visits/Year} \div 80 = 7.3 \text{ Visits/Person/Year}$
Fishing Area:	$932 \text{ Visits/Year} \div 80 = 11.7 \text{ Visits/Person/Year}$
Canoeing:	$202 \text{ Visits/Year} \div 80 = 2.5 \text{ Visits/Person/Year}^*$
Hiking Trail:	$208 \text{ Visits/Year} \div 80 = 2.6 \text{ Visits/Person/Year}^*$

*This information may be unreliable due to the current lack of existing facilities within the county for these activities, and due to the small sample size.

Information from similar surveys in Dade County, Florida have determined the following levels of Recreational Facility Demand:

Basketball Court:	4.7 Visits/Person/Year/Court
Soccer Field:	4.8 Visits/Person/Year/Field
Tennis Court:	3.1 Visits/Person/Year/Court
Baseball Field:	2.87 Visits/Person/Year/Field
Picnic Area:	6.0 Visits/Person/Year/Area



Toolbox: Outdoor Recreation Space

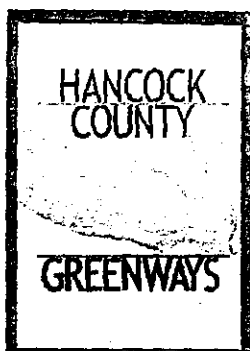
Minimum Population Service Requirements

Recreation Facility	Open Field	Baseball	Basketball	Soccer	Playground	Tennis	Walk Track	Picnic Area
Neighborhood Parks								
Berry Patch		30,240					30,825	1568
Catahoula Park			13,200		24,375			
Commenge Park	20,010							
Dedeaux Ballfields		45,360						
Gex Park/Coleman				11,880	24,375			1568
Fenton Comm Center	20,010		13,200		12,188			1568
M.L. King Jr. (B&L)	20,010		13,200		24,375			1568
M.L. King Jr. (Westland)		15,120	13,200		24,375			1568
Larroux Park	20,010		13,200		24,375			
Necaise Ballfields		30,240			12,188			
Pearlington		30,240					30,825	1568
Reverend Ben's			13,200		12,188			1568
Seventh St			13,200		24,375			
Total Visits Available	60,040	161,200	22,400	11,880	182,812	0	61,350	10,676
+ Rec Facility Demand	+1.5	+2.57	+4.7	+4.8	+7.3	+3.1	+2.98	+6.0
Population Served	63,380	163,771	27,100	16,360	190,143	3032	64,338	16,676
Community Parks								
Bourgeois		45,360	13,200		24,375			
City Park					24,375	6160		1568
Historic L&N Depot								
Hancock Walking Track					24,375		30,825	
Lakeshore Ballfields		30,240					30,825	1568
Total Visits Available	0	75,600	13,200	0	73,125	6160	61,350	3136
+ Rec Facility Demand	+1.5	+2.57	+4.7	+4.8	+7.3	+3.1	+2.98	+6.0
Population Served	0	78,171	17,900	0	80,477	9322	64,338	3736
Sports Complex								
Scott Desbost				69,400				
Hancock County Arena								
Kin Ballfields		60,480						1568
Little League Park		105,840						
McDonald Fields		30,240						
Total Visits Available	0	196,560	0	69,400	0	0	0	1568
+ Rec Facility Demand	+1.5	+2.57	+4.7	+4.8	+7.3	+3.1	+2.98	+6.0
Population Served	0	202,221	0	74,240	0	0	0	2128
Total Population Served	63,380	142,344	22,480	14,880	36,680	3032	41,386	2812

Current Population of Hancock County
Projected Population of Hancock County

42,967 people (2000 census)
55,117 people (projected 2010)
59,082 people (projected 2015)

Source: population projections: Center for Policy Research and Planning, Mississippi Institutions of Higher Learning
carrying capacity: State Comprehensive Outdoor Recreation Plan 1995



Toolbox: Outdoor Recreation Space

Recreation Facility Summary

The calculations point out the surplus facilities and deficiencies of the existing recreation facilities, based upon the supply of facilities and the demand for the activities they provide. Based on the 2000 census population figure of 42,967 people, the only activity with a surplus of facilities is baseball. Planning numbers are based on the projection for 55,117 residents by the year 2010.

Baseball There are ten locations for baseball fields in Hancock County, serving 142,244 people. The 27 baseball fields serve a population beyond the borders of Hancock County, with league play between teams from Hancock, Harrison, and Pearl River counties, and regional tournaments. Even with this surplus, there can be competition for fields at popular times during pre-season practices (primarily at evenings and weekends.) No new fields are proposed within the Greenways plan.

Basketball Team sports such as basketball may be played in leagues or in "pick-up" games. Public basketball courts serve 22,469 residents in eight locations, but there are no facilities for league play, with multiple, concurrent games. A centrally located sports complex with 4 to 8 basketball courts is desirable. A site adjacent to the Soccerplex is proposed, so that the offset seasons may allow sharing of parking and facilities. In addition, individual multi-purpose courts are recommended for Lakeshore Ballfields, Dedeaux Ballfields, and Kiln Ballfields. Ample space exists to accommodate a court at each location.



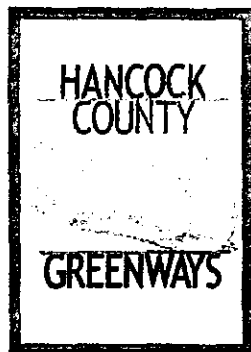
Toolbox: Outdoor Recreation Space

Recreation Facility Summary

Soccer Soccer may be played informally in open fields, but designated fields with goals occur in only two locations, serving 14,850 people. One of these is the Soccerplex, with a configuration of 5 to 12 fields (the range indicates the flexibility to change depending upon age-specific demands.) Additional goals may be provided at recreational areas with open fields such as Fenton, Larroux, and Kiln Ballfields for practices. An additional soccer complex of 5 to 12 fields should be considered for the north part of the county, preferably in conjunction with school property such as Hancock High or Hancock North Central.

Playgrounds/Picnics Activities with high demands such as playgrounds and picnic areas should be included in every recreation facility. Currently playgrounds serve 35,060 residents and picnic pavilions serve 2,612 residents. Playgrounds and picnic pavilions should be included in every recreational facility in Hancock County. Meeting this standard would require 10 new playgrounds at existing facilities, as well as some improvements at 3 existing play areas; and also require 12 pavilions to be built at existing parks.

Tennis The lowest population served is tennis players, with only a single public court in the county, able to serve 2,632 people. This court gets heavy usage year-round on weekends and in evening hours. Private and school courts are available for some residents, and a court at Buccaneer State Park is available for a fee. Increasing demands upon the public court indicate that additional courts would be well-utilized. A centrally located sports complex with 6 to 10 courts could serve individuals and league play. A nominal fee could be charged for use of the courts and maintenance. A small office could take court reservations, arrange lessons, clinics, and tournaments, and provide summer programs for children. The proposed location is adjacent to the Soccerplex. In addition, 2 to 4 courts are proposed as part of the Riverfront Community Park, raising the number of courts to approximately 12 courts, able to serve 31,587 people.



Toolbox: Outdoor Recreation Space

Recreation Facility Summary

Walking Tracks

Currently Hancock County has walking tracks in five locations throughout the county. These walking tracks of 1/4 to 1/2 mile each offer activity space for 41,386 people. In addition, the 3-mile beach path serves a great number of walkers, runners, joggers, bicyclists, and rollerskaters. According to the SCORP carrying capacity, this number equals 367,500 people. However, the National Recreation and Park Association "Open Space Standards" suggests a ratio of 1 mile per 2000 people for biking/walking trails. Using these figures, there would be need for an additional 21 miles of trails by 2010, bringing the total up to 27.5 miles of trail.

Two main issues should be addressed in proposing new walking tracks and trails: the number of seasonal residents and visitors in the southern portion of Hancock County, and the number of residents located at distances from the walking tracks. Walking tracks should be located conveniently near residential areas in Hancock County.

Because of the lack of sidewalks in most areas of Hancock County, providing safe, accessible walking space is a high priority, especially in conjunction with other recreational activities or scenic areas such as the beach. Continuation of the beach path will allow residents of many more neighborhoods including North Bay, Clermont Harbor, and Lakeshore, as well as visitors to downtown Bay St. Louis, Bayou Caddy, and Buccaneer State Park to easily reach the path and walk for miles without interruption. Hancock County Greenways recommends continuing the beach path from Bayou Caddy to Cedar Point, an additional 9 miles. (See Beach Toolbox for more information.)

Walking tracks are needed where existing recreational areas exist to serve families. Proposed locations to add tracks include: Dedeaux Ballfields, Kiln Library, Little League Park, Pearlington Ballfield, Hancock County Arena, Soccerplex, and Commagere Park. In addition, nature trails at McLeod and the proposed Riverfront Community Park, Ansley Nature Trail, and Buccaneer Nature Trail will serve residents and visitors in rural areas.



Toolbox: Outdoor Recreation Space

Recreation Facility Summary

Additional Sports

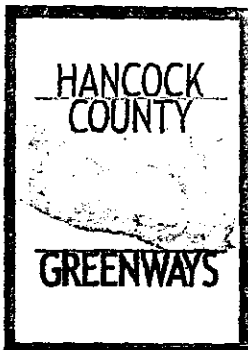
Other recreational activities are uncharted due to lack of existing public facilities. Sand volleyball courts, archery ranges, swimming pools, and golf courses are not included in the MPSR, although there is clear demand for these activities in the county. In addition, the demand for canoeing areas will likely grow with more local options.

Volleyball is a popular beach sport for adults and children, and may enhance many of the beachfront activity points throughout most of the year. Complexes of 2 to 4 courts are proposed for: Buccaneer State Park, Coleman Avenue, Washington Street Beach, and the downtown Bay St. Louis waterfront. Maintenance is minimal, and local businesses may provide support for this activity.

An archery range may be a popular draw for visitors and residents passionate about bowhunting. The Kiln Ballfields may have adequate space for 4 to 6 targets, and a location in this area would be desirable.

Swimming pools are an attraction for many people who choose to swim regularly for fitness. Many residents of Hancock County commute to Harrison County to swim. Although private development and club pools exist in Hancock County, no public pool is available. A training pool of 50m is desirable in a central location; an enclosed space would allow use of the pool year-round. A nominal fee could be charged. Swim lessons, leagues, and summer children's programs could be offered. Clustering this facility with other recreational activities would lower administration and maintenance costs, and therefore, the location is proposed adjacent to the Soccerplex, in conjunction with proposed tennis and basketball facilities. An additional outdoor pool is recommended at the proposed Riverside Community Park.

Although Hancock County is home to an award-winning golf course in The Bridges at Casino Magic, no public course is available. An Audubon-certified course is proposed at the Riverfront Community Park, adjacent to McLeod Park along the Jourdan River.



Toolbox: Outdoor Recreation Space

Level of Service Standards and Summary

Existing Level of Service Calculations illustrate the need for new parks in Hancock County. The Level of Service is measured in park land area acres/1,000 residents. The preceding pages have established the facility needs for the resident population, but this calculation determines the amount of park land required to accommodate specific facilities as well as unprogrammed open land for recreation activities.

National standards may be useful as a measure. National groups suggest that 10 acres of open space/1,000 residents may be desirable.

Park Area by Classification

Plazas:	1.9 acres
Neighborhood Parks:	78.57 acres
Community Parks:	33.28 acres
Sports Complexes:	43.1 acres
Regional Parks:	726 acres
Total:	882.85 acres ÷ 42,967 residents

= Total Level of Service: 20.57 acres/1,000 residents*

This is a strong level of service, and reflects an interest in improving the quality of life within the county. However, it does not adequately calculate the number of seasonal property owners (approximately 2,380 according to the 2000 census,) or the 3,000,000 visitors that stop in Hancock County each year (Hancock County Welcome Center data.) With growth projections of an additional 16,115 residents by 2015, it is critical to factor in these numbers when calculating the true Level of Service.

*School and Private Recreational areas are not included due to limited public access.

HANCOCK
COUNTY

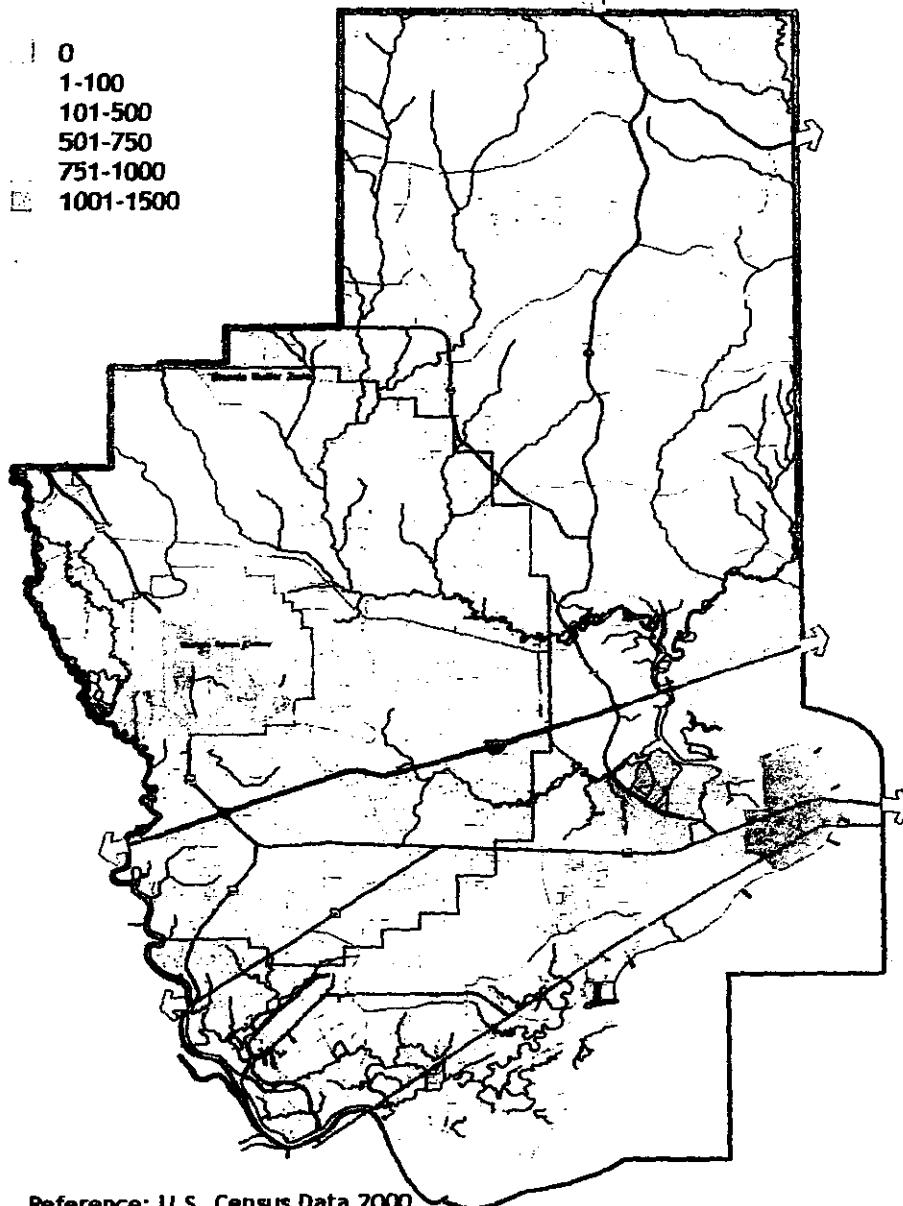
GREENWAYS

Toolbox: Outdoor Recreation Space

Level of Service Standards and Summary: Population Density

Population per Square Mile

- 0
- 1-100
- 101-500
- 501-750
- 751-1000
- 1001-1500



Reference: U.S. Census Data 2000



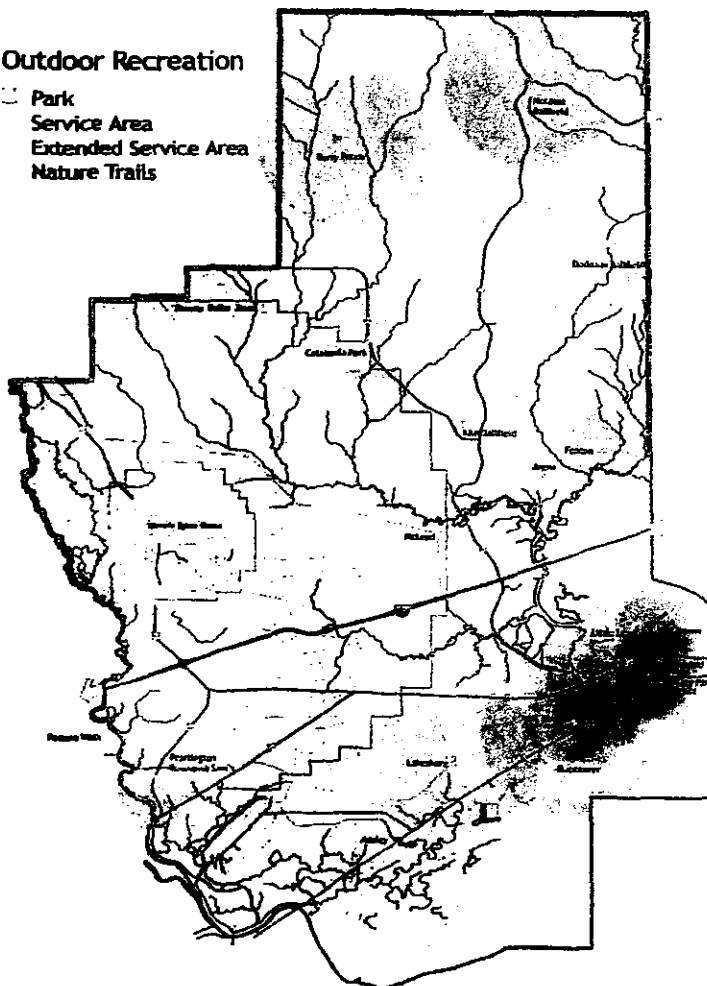
Toolbox: Outdoor Recreation Space

Service Area Map and Recommendations

Location is critical for park use. If a park is convenient to home or business, has appropriate facilities for sports or relaxation, and offers a pleasant view and is safe and well-maintained, then it will be used by the local population. The map below indicates the park service areas available to the public, highlighting the gaps in service throughout the county area.

Outdoor Recreation

- ☐ Park
- ☐ Service Area
- ☐ Extended Service Area
- ☐ Nature Trails



Darker shaded areas indicate adequate service based on park classification type. Lighter shaded areas indicate facilities for a specific sport such as baseball or soccer, which may draw participants from a 3-6 mile radius.

It appears that most of the unshaded area of the map occurs within the uninhabited Stennis Space Center buffer zone.



Population growth statistics indicate rapid growth in the northern part of the county and along Highway 43 and 603. At least four additional parks and playgrounds are needed to serve families in that area. The general locations for proposed parks, as well as proposed improvements to facilities at existing parks, are illustrated.

Although gaps in service exist in the Ansley and Pearlington areas, these neighborhoods are also served by natural walking trails in the Mississippi Department of Marine Resources Coastal Preserves.





Toolbox: Outdoor Recreation Space

Proposed Parks: Neighborhood Parks

Neighborhood Park at Highway 603 at Orphan Creek

This park will act as a node at the intersection of a neighborhood park, a stream buffer, and the end of a shared use trail along Highway 603.

Ownership/ Acquisition: 5 to 10 acres land required plus stream buffer

Construction: trailhead terminus with bridge for Hwy 603 shared use trail, playground, picnic area, pavilion, BBQ, stream buffer zone and access, climbing wall, multi-use court, treehouse, restrooms, and open space

5 parking spaces

Maintenance: Hancock County Parks and Recreation

Neighborhood Park at Catahoula Creek

This park will include the intersection of a neighborhood park and a stream buffer.

Ownership/ Acquisition: 5 to 10 acres land required

Construction: playground, picnic area, pavilion, stream buffer zone and access, multi-use court, treehouse, restrooms

5 parking spaces

Maintenance: Hancock County Parks and Recreation

Gateway Park at Bayou LaCroix at Highway 603

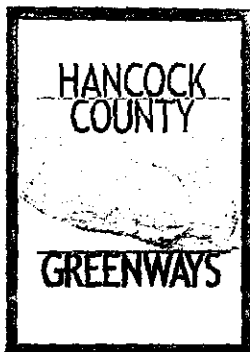
This park occurs at the intersection of a gateway marker, blueway, stream buffer, a neighborhood park and a shared use trail along Highway 603.

Ownership/ Acquisition: 5 to 10 acres land required

Construction: trailhead, streamside boardwalk and canoe dock for blueway trails, gateway marker, boardwalk and canoe dock, playground, picnic area, pavilion, stream buffer zone, restrooms

10 parking spaces

Maintenance: Hancock County Parks and Recreation



Toolbox: Outdoor Recreation Space

Proposed Parks: Neighborhood Parks

Kiln Library

The Hancock County Library Foundation proposes two recreation offerings at the newest library. A 1/4 mile walking track on the south side of the library would also have a playground on the 3 acre lot given by the Foundation to the county. Planned greenspace, lighting, seating, and exercise stations would complement the active areas.

A 4 acre site to the north of the library is also owned by the Foundation, and is slated for a nature trail and educational area. A planned boardwalk and trail through the bayhead swamp would include interpretive information.

Both of these recreation projects would be able to utilize existing facilities and infrastructure at the library for parking and service.



Toolbox: Outdoor Recreation Space

Proposed Parks: Regional Park

Riverfront Community Park

In order to provide more recreational options for local residents as well as regional visitors, development of a community park adjacent to McLeod Park is needed. The popularity of McLeod is growing; in 1990 there were 107,370 users, and in 2003 there were 133,334 users. To create a public venue for golf, tennis, and swimming adjacent to the Jourdan River will serve a wide population at this central point in the county. Public recreational facilities offer access to facilities to a wide population at reasonable cost.

The Audubon Cooperative Sanctuary Program for Golf Courses encourages recreational facilities to enhance native habitats for wildlife within the open spaces of the golf course. Audubon Society guidelines are as follows:

- Enhance the natural beauty of the golf course
- Reduce water use and the need for expensive chemical applications
- Educate golf course employees about habitat management and BMPs
- Provide on-going technical information and support
- Result in financial savings on course maintenance

Ownership/ Acquisition: although 70+ acres of adjacent land is owned by Hancock County, FAA regulations limit development. Park site may require acquisition.

Construction: Audubon-certified 18-hole golf course
clubhouse with pro shop and changing rooms

2 to 4 tennis courts

swimming pool (seasonal, outdoor)

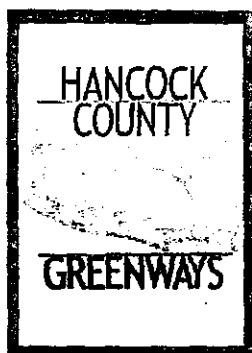
playground and picnic area pavilion

125' stream buffer zone and connecting nature trail to McLeod

25-40 parking spaces

Maintenance: Hancock County Parks and Recreation. Will require permanent staff for maintenance, pro shop, and pool.

Stewardship: The golf course will follow Audubon guidelines including low-usage irrigation and native plantings, minimum fertilizer use, and restoration of appropriate native biodiversity.



Toolbox: Outdoor Recreation Space

Proposed Improvements to Existing Parks

There are a number of sports fields in Hancock County that serve a specific segment of the population due to their concentration on one form of recreation. To improve their level of service for the neighborhoods and enhance their standing as community parks, it is important to provide additional play areas, walking tracks, restrooms, picnic pavilions, and special features to complement the existing ballfields. Because these facilities are currently publicly owned and maintained, development costs are reduced.

Kiln Ballfield

- playground
- archery range
- climbing wall
- multi-use court
- soccer goals

Hancock County Arena

- playground
- picnic pavilions
- walking track
- fountain/outdoor arts
- native landscaping

Scott Demboski Soccerplex

- playground near Civic Center
- expanded Farmer's Market and community garden
- walking track
- and with additional land acquisition: indoor/outdoor 50m swimming pool
- 6 to 10 tennis courts
- 4 to 8 basketball courts



Rebuilding Bay St. Louis



A Place Apart

Allison Anderson
Jeff Barnes
Bill Dennis
Bruce Donnelly
Geoff Dyer

Tom Howorth
Michael Mehaffy
Michael Reeves
Belinda Stewart

Acknowledgements:

The Design Team;

Allison Anderson *Unabridged Architecture , Bay St. Louis, MS*
Jeff Barnes *Dale abd Associates Architects, Jackson, MS*
Bill Dennis *B. Dennis Town & Building Design, Providence, RI*
Bruce Donnelly *Urban Planner, Shaker Heights, OH*
Geoff Dyer *Civic Design Group, Calgary, Alberta Canada*
Tom Howorth *Howorth & Associates Architects, Oxford, MS*
Michael Mehaffy *Prince’s Foundation, London, England*
Michael Reeves *Architect, Bay St. Louis, MS*
Belinda Stewart *Belinda Stewart Architects, Eupora, MS*

SPECIAL THANKS TO:

Mayor Eddie Favre *Mayor, City of Bay St. Louis*
Charles B. Benvenuti, *Governor’s Commission, Bay St. Louis*
Tish Williams *Hancock County Chamber of Commerce*
Gwen Impson *The Arts Hancock County*
Eean McNaughton, *E. Eean McNaughton Architects New Orleans, LA*
Charles Gray *Director Hancock County Historical Society*
David Woodburn *Hancock County Library System*
Ronald Magee *Center Operations Stennis Space Center*

and many, many more - the great people of Bay St. Louis!

and to all our colleagues at the charrette and the members of the Governor’s Commission.

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St. Stanislaus

Washington & Beach

Washington & Old Spanish

Main & Old Spanish

Felicity & Dunbar

East Gateway US 90

West Gateway US 90

Affordable Housing

Infill Housing

Infill Housing 2

Architecture

SmartCode

Next Steps



Introduction

Governor Barbour, faced with the need to respond to the fury of Katrina, responded as many political leaders do - he appointed a commission. However, this Commission is one that is charged with creating an action plan. The following report is the plan for Bay St. Louis that was produced during seven days in October with the help and input of many people. Many more people could not participate, because they were scattered far from home, they had lost their home, and are still dealing with basic issues of shelter and rebuilding. This document can continue to be informed by every citizens’ input whenever and however they can give it - it should be a living plan.

When everything has to be done at once, it is hard to decide where to start. We looked at the history of your town, the unique physical characteristics, the problems and opportunities, and began to develop a series of strategies to manage the process of rebuilding. First among these strategies is the concept of neighborhood. Bay St. Louis has strong neighborhoods: they can be used to make decisions about growth and development that are in keeping with the character of the town. Other neighborhoods can be strengthened with more vibrant centers. Infill of housing can occur without having to do high rise condos. This can all be make clear through the adoption of a SmartCode that gives people what they would like to see.

The other major organizing strategy is an open space network. By defining a long term plan, energizing the Land Trust, encouraging pedestrian pathways to larger greenways, citizens can more easily connect to the beauty around them, as well as their neighbors.

There are certain to be errors of fact, and maybe of judgement, in this document; for that we take responsibility and ask your indulgence. For this is now in your hands to do with it what you wish. We will be returning to help as needed - we hope we have been of some help and provided some vision that gives you hope for the future.

We are honored and humbled to have the chance to work with you.

Thank you *The Design Team*



WHAT WE HEARD YOU SAY:



- Keep the small-town character, the architectural heritage, and the natural beauty. Build on the arts character. Provide for growth without destroying what makes Bay Saint Louis so liveable.



- Make the town more appealing and safer for bicycles, walking and recreation.



- Rebuild the great architectural heritage in a more hurricane-resistant form.



- Make the gateways and HWY 90 corridor more inviting and more compatible with the character of the town.

DESIGN PROCESS (CHARRETTE)

1. LISTEN
2. DRAW
3. LISTEN SOME MORE
4. DRAW A LOT MORE
5. MAKE PRESENTATION
6. LISTEN AGAIN
5. MAKE REPORT
6. CONTINUE UNTIL IT IS RIGHT *and*

IMPLEMENTED!!



The Charrette (a term meaning intense design session) was a group of 100 New Urbanists from all over the world paired with local professionals and officials. The Bay St. Louis team consisted of nine people, along with the resources for transportation, environment, etc.

The first day was for briefing, with a helicopter view of the coast and meeting with local representatives.

The second day was for touring the town and talking with locals as well as meeting the Mayor.

The next five days involved design solution, gathering information, showing designs to local representatives and modifying solutions, and presenting a vision with specific steps.



Bay St. Louis

1 November 2005

Bill Dennis

bill@bdennis.com





LOST TO CAMILLE

LOST TO KATRINA

History

French explorers, led by Pierre le Moyne d’Iberville and his brother Jean Baptiste le Moyne Bienville, came to claim the Gulf Coast area for King Louis XIV in April, 1699. d’Iberville, finding the calm, beautiful bay too shallow for his ships, decided to locate his settlement in what is currently Ocean Springs.

Bienville returned four months later on August 25, 1699, to set his foot on the land and name the bay in memory of Louis XI of France, crusader and saint. Bay St. Louis had become a French possession.

This tiny jewel in the crown of the new world French colonies was originally inhabited by members of the strongest Indian tribe in Mississippi, the Choctaws. d’Iberville placed a few families with a sergeant and 15 men at Chicapoula, on the Bay of St. Louis, in December of 1699. (Chicapoula is Choctaw for “bad grass” describing the rockachaws or burrs commonly found in the landscape.)

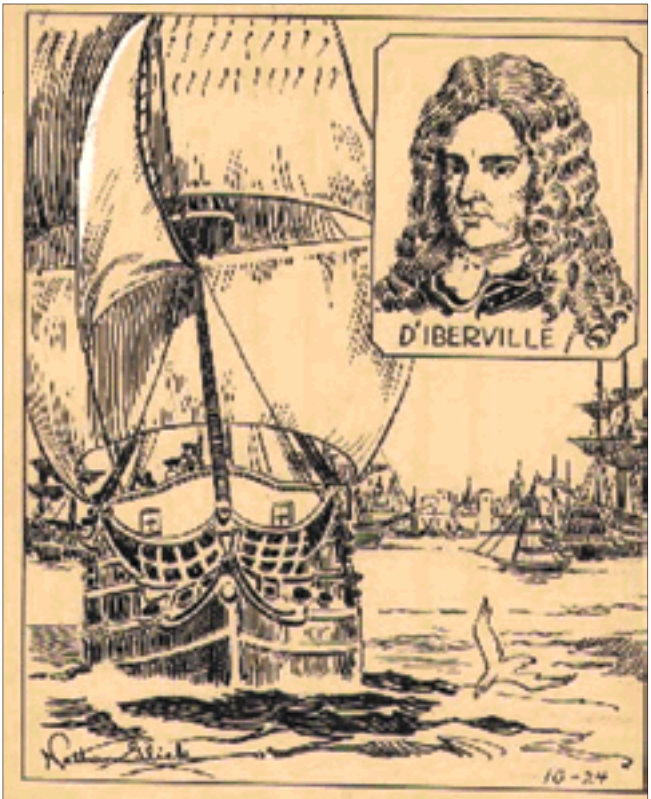
In 1763, the settlement was given to Britain following the French and Indian War. At the close of the American Revolution in 1793, the land was passed to Spain. Seven years later, Spain secretly ceded the area to Napoleon but retained actual possession of the territory. French and Spanish land grants opened the doors for development. Philip and John B. Saucier are recorded as the first residents of Bay St. Louis. This land later passed to Marshall and Joseph Nicaise. The heart of the present City of Bay St. Louis was granted to Madame Charlo in 1781.

The most important Spanish land grant was given to Thomas Shields in 1790, who began cultivation in 1800. This grant on the shore of Bay St. Louis was called Shieldsborough. On January 11, 1811, the flag of the United States was raised on the shores of Bay St. Louis, and in 1812, the area officially became part of the Mississippi Territory. Statehood came in 1817 and Bay St. Louis developed as a favored “resort” of Natchez planters and New Orleans aristocrats.

The charter of incorporation was adopted by the state legislature on April 21, 1818, making Shieldsborough the oldest established community on the Gulf Coast. The town became the county seat in 1860. Public opinion demanded that the name of the town be returned to Bay St. Louis, and the city of that name was incorporated by legislature on February 24, 1882.

Chicapoula, Shieldsborough, Bay St. Louis -- the name may have changed, but the personality of the area has remained. People know how to relax leisurely and make an art of enjoying life.

Information from web site of the city of Bay St. Louis



Bay St. Louis

History/Analysis

1 November 2005

Bill Dennis

bill@bdennis.com

“There is no reason to repeat bad history.”

Eleanor Holmes Norton

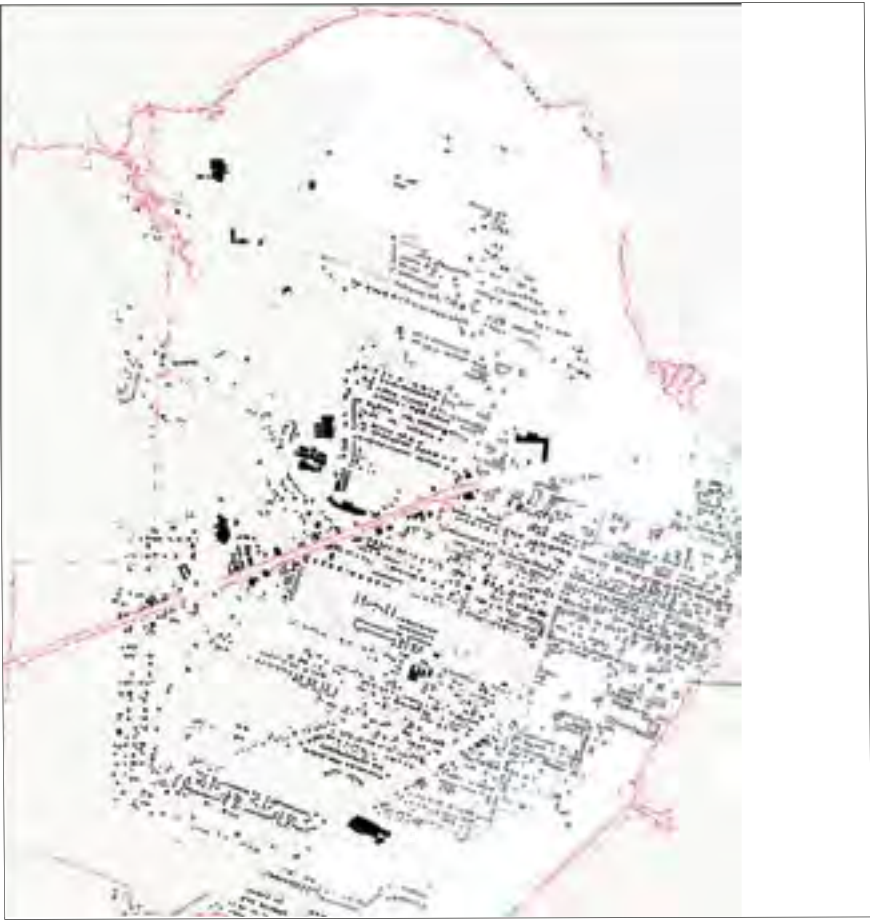
“The storm of the century” - that was Camille in 1969. The devastation was vast, but people of the town built back. This centuries’ storm is hopefully one for the millennium, but in any case, the people of Bay St. Louis will build back - better, stronger, with a renewed respect for both the past and nature.

History is long; our contribution to the place where we live is short, but can be very significant. It is the children and grandchildren of the residents who will carry on the stories and traditions that come from the past and are being renewed everyday.

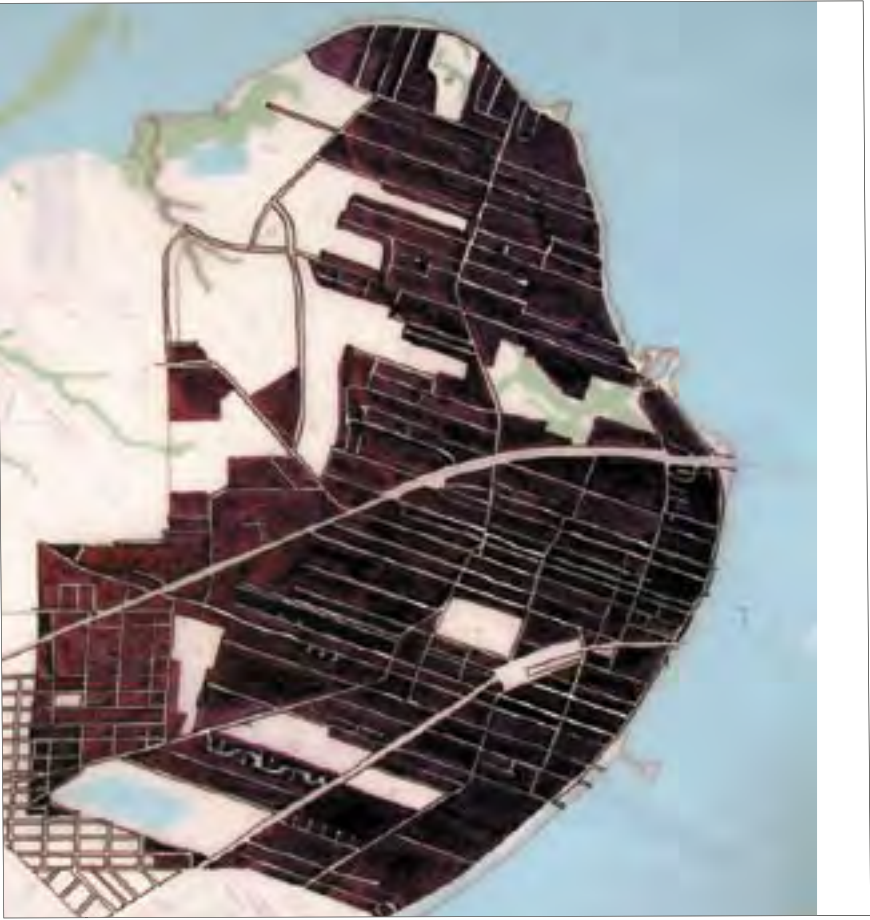




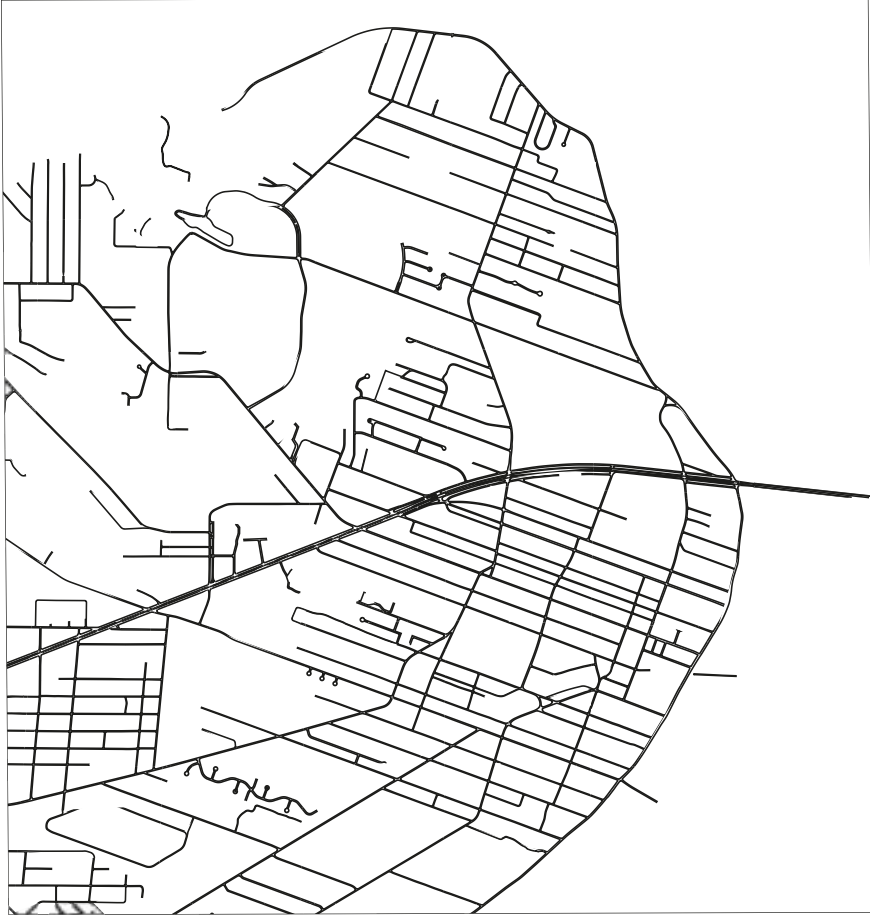
Building Footprint Figure/Ground Plan - Pre -Katrina



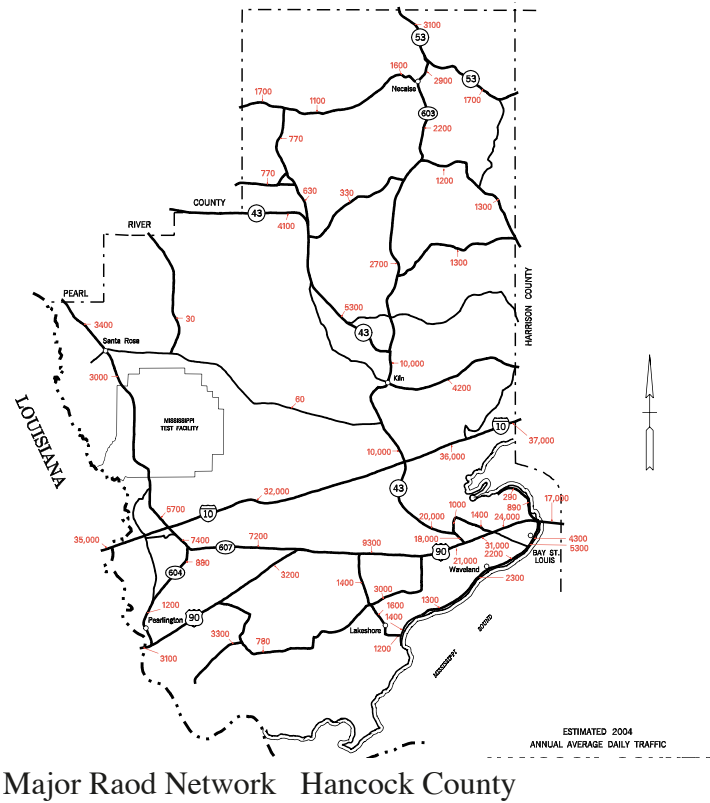
Building Footprint Figure/Ground Plan - Post -Katrina



Block Pattern Figure/Ground Plan



Street Pattern Plan



Major Raod Network Hancock County

Devastation of Bay St. Louis and the Culf Coast was at the scale that rarely happens - London in 1666, Dresden, Hiroshima. What remains where there are not buildings is the underlying pattern of streets and blocks, allowing for immediate reconstruction. By looking at the diagrams to the left, it is clear that this pattern is unique and incomplete. Starting with the French arpades system (192' x 2600' lots) the orientation and length of the block emphasizes the connection to the water. But walking against the grain of the blocks is difficult and probably contributes to unnecessary car trips.

Also, the pattern of streets shows quite a few dead end streets, contributing to lack of connection between neighborhoods and congestion on the few main roads.

The major road network map above for Hancock County emphasizes the importance of US 90 and the connection north to I 10 - additional ways a travelling east/west and north should be considered.



Bay St. Louis

Researcher: _____

Ground Type
☒ Analytical
☐ Practical

Timing
☐ Immediate
☐ Medium Term
☐ Long Term

Urban Scale
☒ Street, Block, Building
☐ Neighborhood, District, Corridor
☐ Region

Implementation Through
☒ Design
☒ Policy
☐ Management

Analysis 1
Study Year: _____
1 November 2005
Bill Dennis
Phone: 601/222-1111
bill@bdennis.com
www.bdennis.com

Housing Type
☐ Temporary
☐ Mobile
☐ Medium
☐ Permanent
☐ Green Plan
☐ Custom
☐ Other

Map Scale: _____

Streets and blocks remain to guide the rebuilding





Overall Plan of Potential Open Space Trust



Natural open space, shaped parks, shaded playgrounds, central plazas

Open space is the connective tissue of our built environment. Bay St. Louis has the chance to formalize a pattern that already exists - continuous green and open space between and through all of the neighborhoods of the town. The diagram at left shows areas, both public and private, not built upon (or limited building). As previously built areas are rebuilt, these underutilized lands could be added to the Land Trust to be held for future generations.

In combination with the grid of the neighborhoods, the open space creates a rural/urban weave that allows citizens to either walk to the center of the neighborhood, or walk in and to nature. The cross-block pathways are fundamental to this pattern.

Within the open space, there are many types of parks, playgrounds, fields, plazas as well as civic uses. The best use of these spaces is to simply ramble along.



Bay St. Louis

Project Title:

ORIGINATION TYPE
☒ Analytical
☒ Practical

TIME
☒ Immediate
☒ Medium Term
☐ Long Term

URBAN SCALE
☒ Street Block Building
☒ Neighborhood District Consider
☐ Regional

IMPLEMENTATION THROUGH
☒ Design
☒ Policy
☐ Management

OPEN SPACE

Issued for:

1 November 2005

By:

Bill Dennis

(Name of author or person who created)

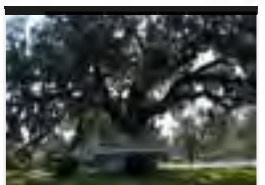
bill@dennis.com

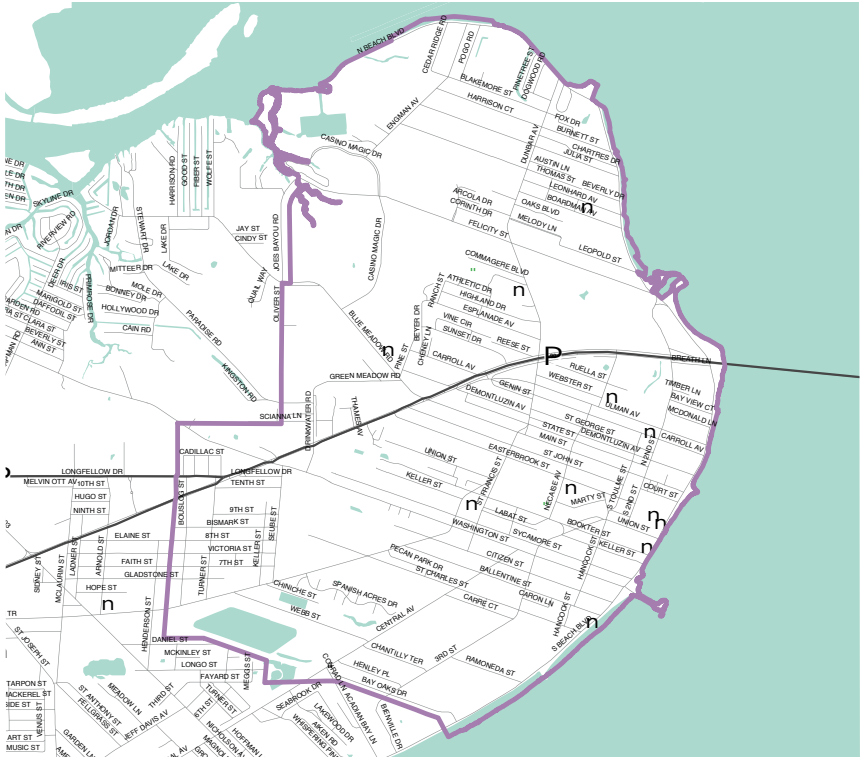
(Email address)

HOUSING TYPE
☐ Temporary
☐ Mobile
☐ Medium
☐ Permanent
☐ Single-Family
☐ Multi-Family
☐ Commercial

MARKING:

Open space is essential for the well-being of the town.

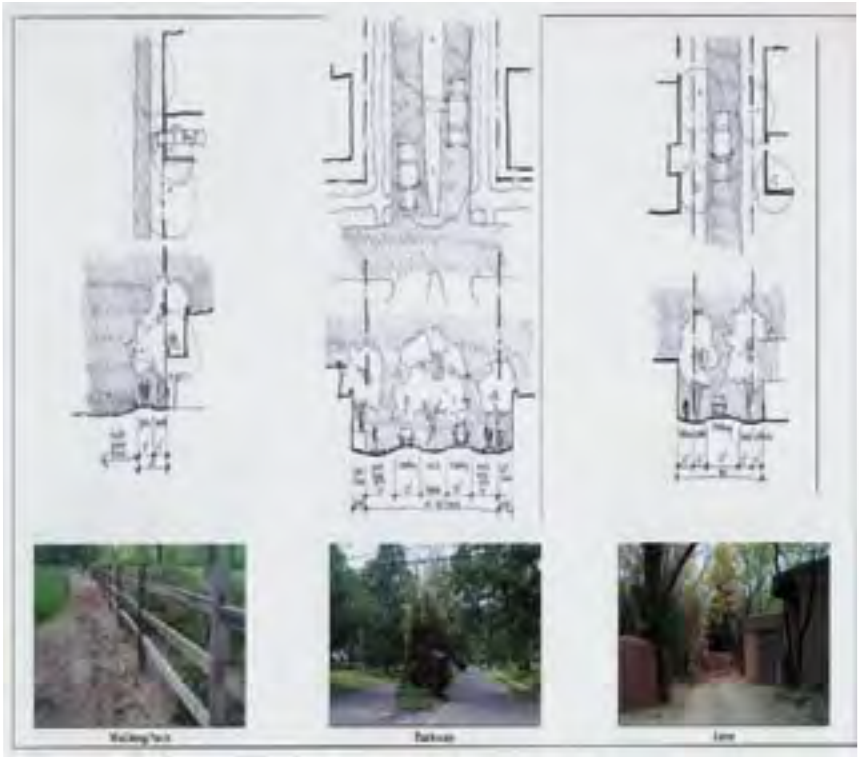




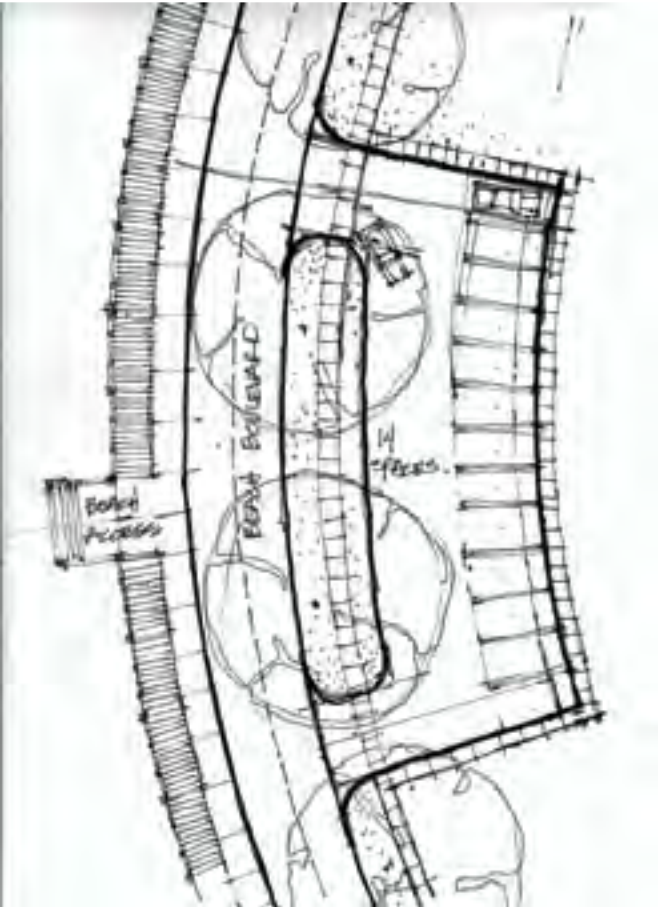
Streets, utilities, parking and parks are systems



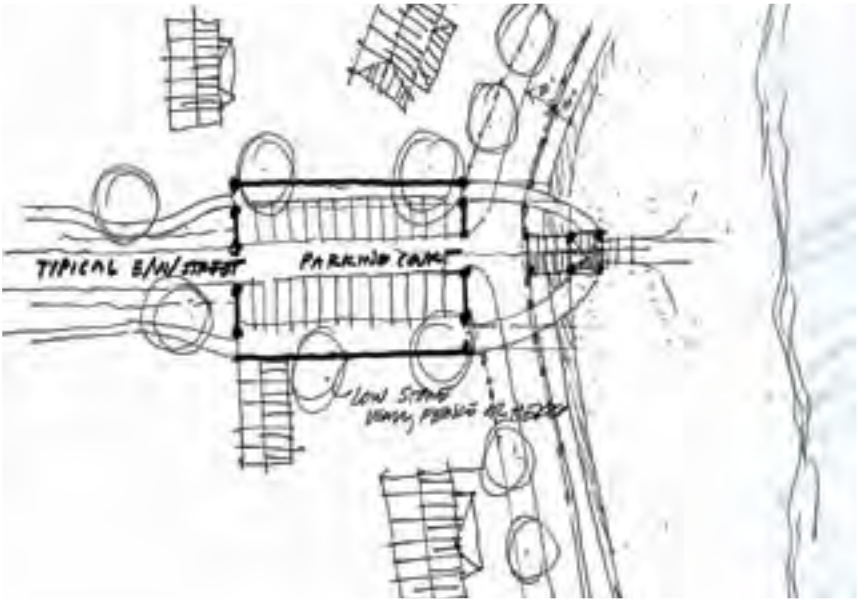
Rebuilt utilities should be located underground



Street sections go from boulevards to paths



Parking along the beach



Parking Court perpendicular to the beach

Parking along Beach Boulevard has been an issue in the summer; suggestions have been made to make Beach wider to allow parallel parking. Another approach would be to have parking courts at each perpendicular street to Beach, lined with low stone walls, wood fences or hedges and a pavilion on the beach side. To the left is a parking court recessed into the slope to the west of Beach.

Movement of people, cars, water, sewage, electricity, dogs, and other items makes up the category of infrastructure. All of these things must be conveyed in a safe and economical manner, but for the health of the community, they should be interesting and beautiful as well (unless they are invisible). Bodies at rest must be accommodated as well - people in benches, cars in parking courts, water in lagoons.

Rebuilding the devastation is a project of priorities - clean water, electricity, safe roads all are needed immediately, but should be done in a way that doesn't undermine the potential growth of Bay St. Louis as it reconstructs its future.



Bay St. Louis

Phase of Plan:

CIRCULATING TYPE

- ☒ Analytical
- ☒ Preliminary

TRACING

- ☒ Immediate
- ☒ Medium Term
- ☒ Long Term

URBAN SCALE:

- ☒ Street, Block, Building
- ☒ Neighborhood, District, Corridor
- ☒ Region

IMPLEMENTATION THROUGH:

- ☒ Design
- ☒ Policy
- ☒ Management

DATE:

1 November 2005

BY:

Bill Dennis

Phone: 601/233-1111

bill@bdennis.com

601/233-1111

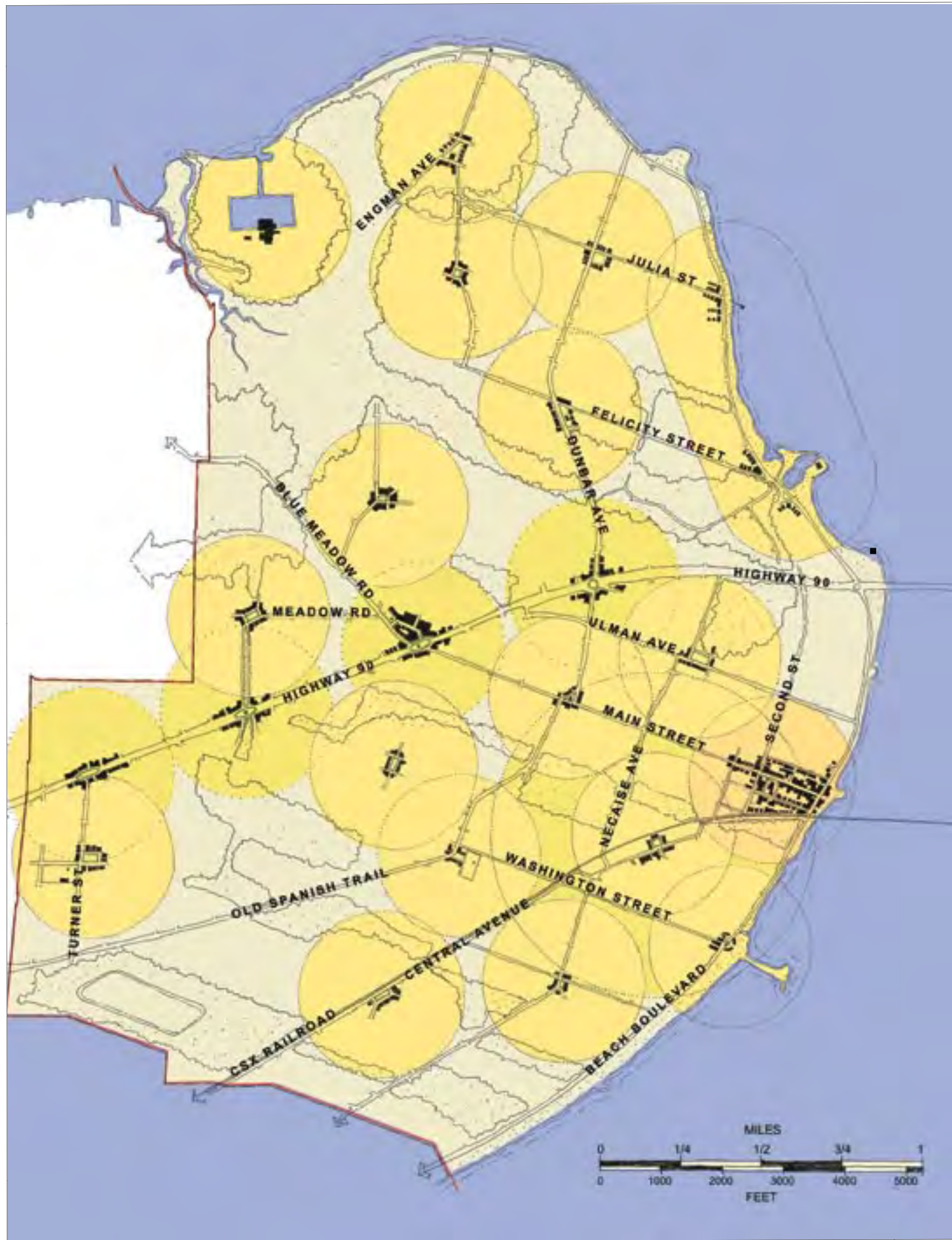
HOUSING TYPE:

- ☒ Temporary
- ☒ Mobile
- ☒ Medium
- ☒ Permanent
- ☒ Single-Family
- ☒ Multi-Family
- ☒ Other

ANALYSIS:

Infrastructure includes roads, utilities, parks and parking





Overall Plan of Neighborhoods, Districts and Corridors



The downtown Neighborhood / District with 5 minute walk

Bay St. Louis

Neighborhood

DRAINAGE TYPE
☒ Analytical
☒ Precinct

TOWNSHIP
☒ Immediate
☒ Medium Term
☒ Long Term

URBAN SCALE
☒ Street, Block, Building
☒ Neighborhood, District, Corridor
☒ Region

IMPLEMENTATION THROUGH
☒ Design
☒ Policy
☒ Management

Neighborhoods

DRAFTED BY
 1 November 2005
 FOR
 Bill Dennis
 (See address in address block)
 bill@bdennis.com
 (937) 444-4444

HOUSING TYPE
☒ Temporary
☒ Medium
☒ Medium
☒ Permanent
☒ High Plan
☒ Custom
☒ Commercial

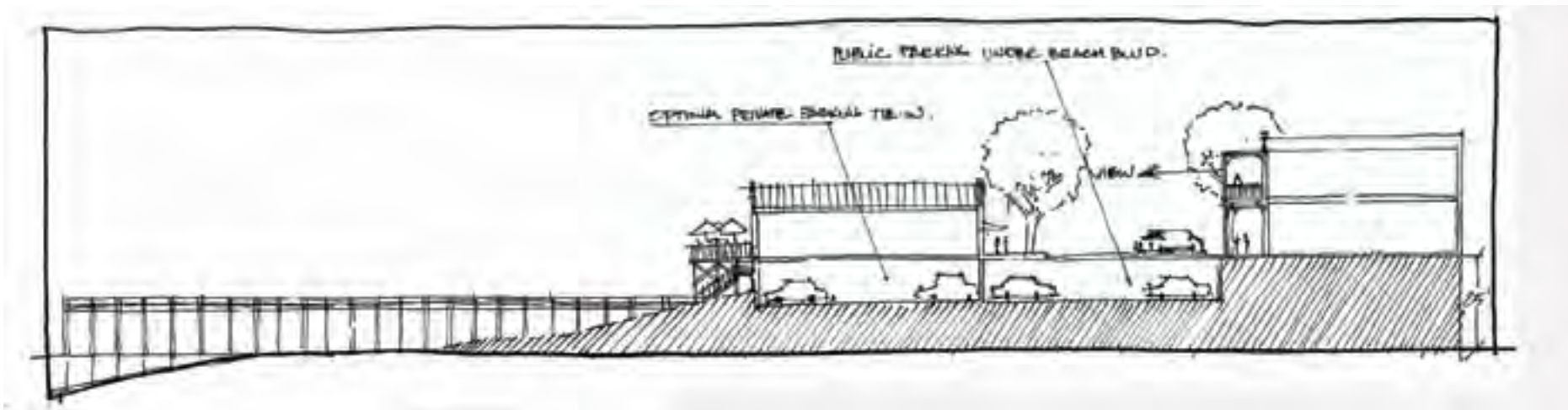
NARRATIVE
 Neighborhoods, districts and corridors are the basic building blocks of Bay St. Louis

Neighborhoods, Districts and Corridors make up the primary components of a town. Bay St. Louis has been fortunate in its past to have many strong neighborhoods. With the rebuilding comes the opportunity to strengthen existing neighborhoods, establish new neighborhood centers, form districts around institutions like the Hospital, and use the local and regional corridors to link the neighborhoods together in a way that encourages interdependence and a fuller, richer identity as a town.

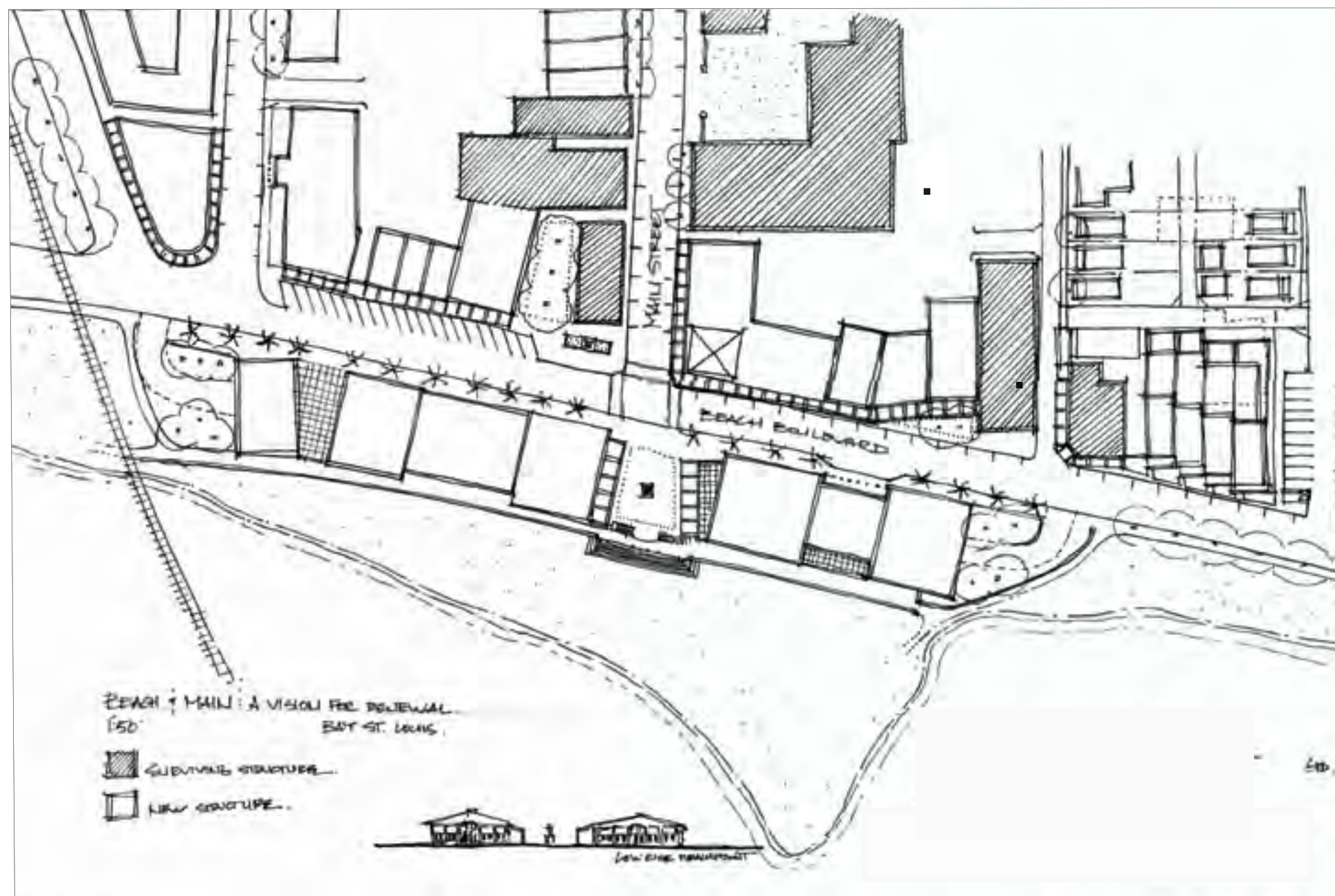
The neighborhood unit is based on the 1/4 mile, 5 minute walk from the center to the edge; it contains a mix of uses and housing types and incomes; it encourages walking and biking; it provides for basic needs and civic expression within a reasonable distance; and finally it connects with a complex network of streets, sidewalks and paths, to other neighborhoods and to a long walk in nature.

This structure forms the basis of the Transect and Smart Code that helps in rebuilding neighborhoods.





Section of Rebuilt Waterfront



Plan of Rebuilt Waterfront



Historic Main & Beach

Main Street at the Waterfront has served as the living room for Bay St. Louis for generations. Second Saturday for the Arts and the Crusin' the Coast are just two events that demonstrate the power of Main Street as a special place that many easily enjoyed. The goal of the rebuilding is to restore buildings still standing, rebuild buildings that were contributing, and create new buildings that can add to the life of the place. Arcades and awnings should be encouraged on the south and west facing sides of buildings, and walkways to the beach should occur at the ends of streets.

Parking can help or hurt a town center. The approach here is the idea of a park Once Strategy - create several types of parking - from 'teaser' diagonal parking, group parking in the rear, and parking under the rebuilt Beach Boulevard (see upper left). Parking for new development on the beach side would be connected to the public parking.

One block away from Main and Beach would be a new road along the railroad tracks to connect to the Depot District.



Bay St. Louis

Project Title:

CRUISED TYPE
☒ Analytical
☐ Practical

TRIMING
☒ Immediate
☒ Medium Term
☐ Long Term

URBAN SCALE
☒ Street, Block, Building
☒ Neighborhood, District, Corridor
☐ Regional

IMPLEMENTATION THROUGH
☒ Design
☒ Policy
☐ Management

Main Street 1

Client:

1 November 2005

City:

Bill Dennis

How involved in process (client):

bill@bdennis.com

Organization:

HOLDING TYPE
☐ Temporary
☐ Mobile
☐ Medium
☐ Permanent
☐ Quick Plan
☐ Custom
☐ Other

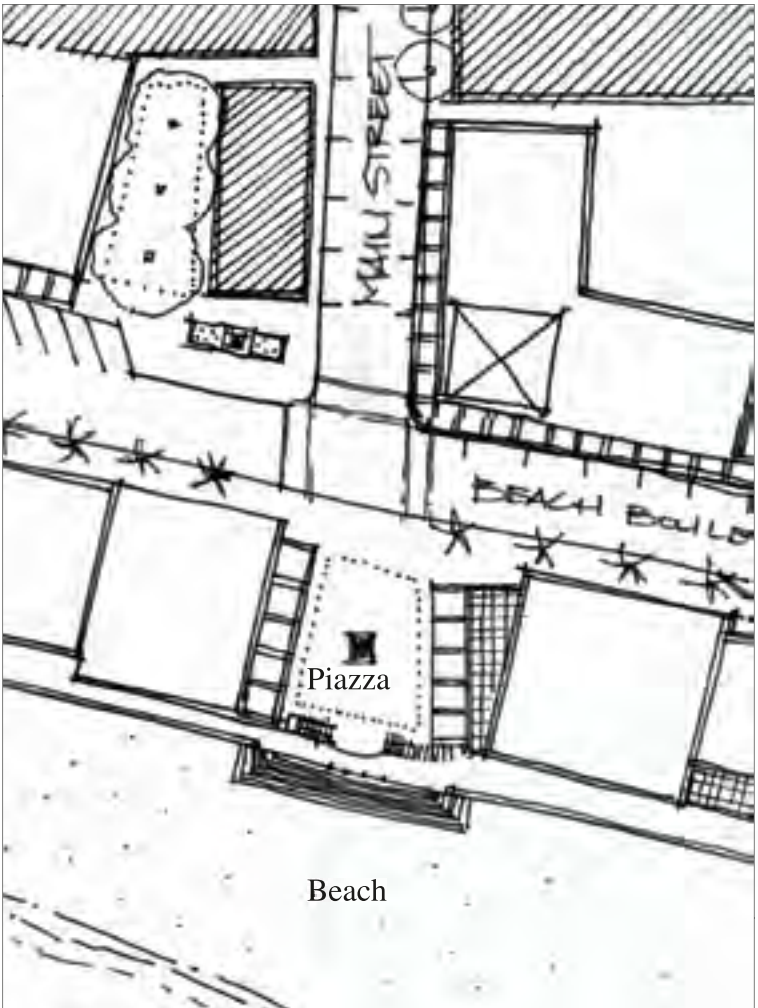
MANUALITY:

Main Street is the heart of Bay St. Louis





View of Rebuilt Waterfront



Main & Beach Piazza

The Piazza at Main & Beach is an important gathering spot for the town and the new businesses that will flank this space. While currently privately owned, exchange with other city property, quick permitting, and long term municipal bonding for parking are strategies to create this space to benefit all parties.

And parties are exactly what will happen here, not just for Bay St. Louis, but for all of the coast, creating in physical form the spirit of the people who live here.

The arcaded section on the beach side is the outside of the lower level parking, with seasonal carts operating from the arches. A new Pavilion on the pier can be used for special events and is visible from Main Street, floating over the water. The whole new edge, with varied buildings of no more than 50' height, becomes the calling card for the town from people on the Bay and coming west across the US 90 Bridge.



Bay St. Louis

March 2005

DISCUSSION TYPE
☒ Analytical
☐ Precedent

TIMING
☒ Immediate
☒ Medium Term
☐ Long Term

URBAN SCALE
☒ Drive, Blocks, Building
☒ Neighborhood, District, Corridor
☐ Region

IMPLEMENTATION THROUGH
☒ Design
☐ Policy
☐ Management

Main Street 2

March 2005

1 November 2005

Bill Dennis

Bill Dennis is a landscape architect.

bill@bdennis.com

Copyright 2005

HOUSING TYPE
☐ Temporary
☐ Mobile
☐ Medium
☐ Permanent
☐ Single-Family
☐ Multi-Family
☐ Other

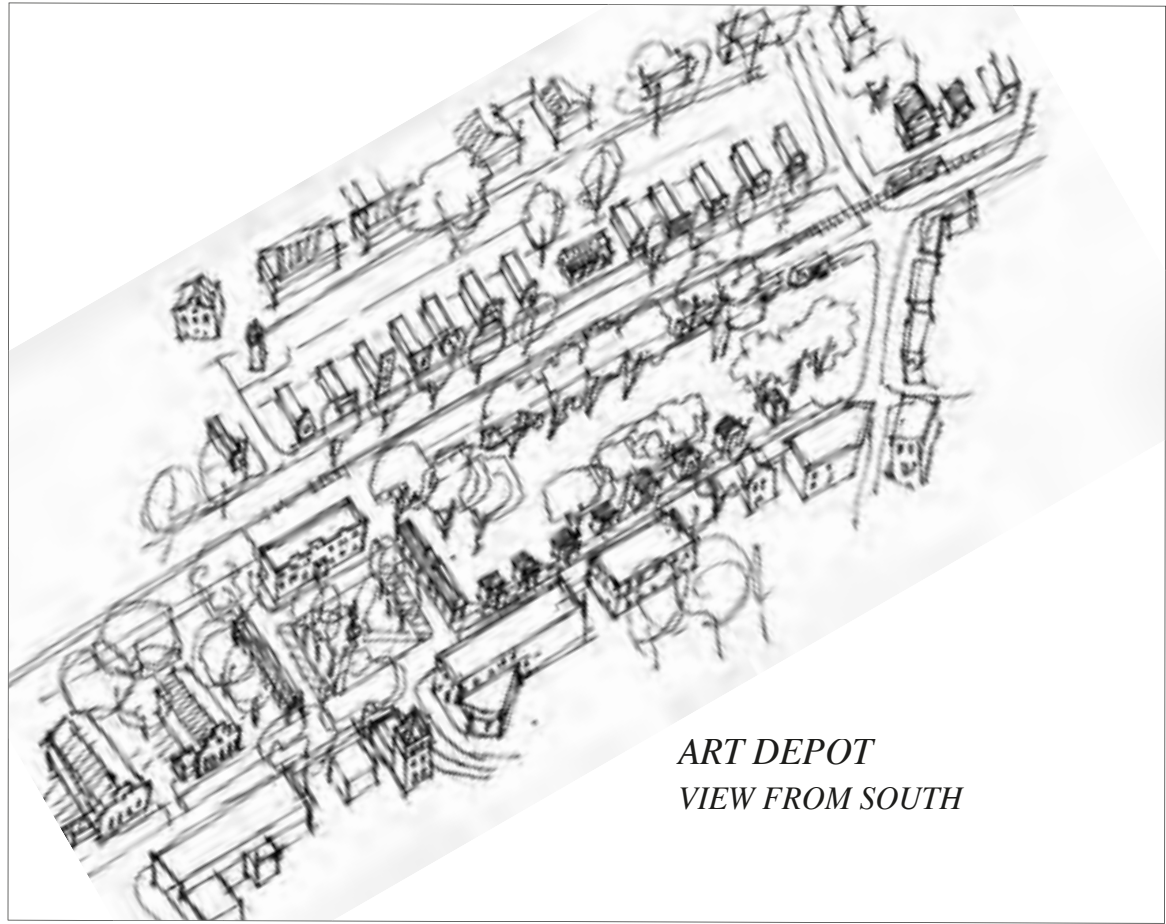
MANIFESTO

Shaping the 'Living Room' of Bay St. Louis





ART DEPOT PLAN



ART DEPOT
VIEW FROM SOUTH



Temporary FEMA housing for artists can be located north of the tracks, enlivened by artsy facades facing the depot, built by the creative types out of any material, shape and color.



Freight train cars with translucent roofs can be located on a temporary siding for use as studio space for displaced artists. Equipment (kilns, welding equipment, etc.) can be shared by residents. Ramps to a wooden walkway increase accessibility and allow display of art.



Small, brightly colored kiosks create temporary galleries for the artists and dealers. In addition, open metal-roofed pavilions, flanking a formal Depot Square, can be used by artists, farmers and others on weekends or special events.



Depot Square

The Art Depot is a possible location to reconstitute the arts community while rebuilding of galleries, studios, and living spaces occur on Main Street and elsewhere. It is intended to be an immediate, and temporary, action to give artists a focus to rally around. It is also intended to link to the Main Street with a new street and walkways to strengthen the primacy of the Main Street District as well as linking north to the new Lumberyard Studios.

Additional loft gallery space could be built to the west of the Depot Square with simple industrial building enlivened by elegant facades. More cafes and housing are possible to the south.



Bay St. Louis

DESIGNED TYPE
☒ Analytical
☒ Practical

TIMING
☒ Immediate
☒ Medium Term
☒ Long Term

URBAN SCALE
☒ Drive, Blocks, Building
☒ Neighborhood, District, Corridor
☒ Region

IMPLEMENTATION THROUGH
☒ Design
☒ Policy
☒ Management

OPEN SPACE

1 November 2005

Bill Dennis

bill@bdennis.com

HOUSING TYPE
☒ Temporary
☒ Medium
☒ Permanent
☒ Single-Family
☒ Multi-Family
☒ Commercial

NARRATIVE

Immediate support for the Arts Community for both short and long term





Rebuilt compatible Front Elevation



Plan of St Stanislaus Campus



Historic St Stanislaus

The Campus of St. Stanislaus has been a pivotal institution in the life of the community for many years. While many buildings survived with various degrees of damage, now is the time to make long term decisions while responding to short-term needs. Many campus within towns are responding to growth issues by carefully infilling and reaching out to the community, allowing resources to be shared. The primary charge of educating and enlightening young men and women finds expression in connection to the community, for both service and culture.

The Depot District to the north is one opportunity to create another student art area to the south of the square. Internal courts on the campus and a rebuilt front help connect the institution to the cloister tradition, the source of scholarship in dark times.



Bay St. Louis

Project Title

CIRCUMST TYPE

☒ Analytical

☒ Practical

TIME

☒ Immediate

☒ Medium Term

☒ Long Term

URBAN SCALE

☒ Street, Block, Building

☒ Neighborhood, District, Corridor

☒ Region

IMPLEMENTATION THROUGH

☒ Design

☒ Policy

☒ Management

St. Stanislaus

Client

1 November 2005

For

Bill Dennis

Phone: 601/233-1111 (ext. 1111)

bill@bdennis.com

Copyright

HOUSING TYPE

☒ Temporary

☒ Mobile

☒ Modular

☒ Permanent

☒ Green Plan

☒ Custom

☒ Other

MANIFESTO

Educational institutions benefit the whole community.





Overall Plan of Main / Old Spanish Trail Neighborhood



New Courtyard housing along new Parkway / Open Space

Main and Old Spanish Trail is the center of a vibrant, artsy community. The long blocks are made charming by the narrow pavement, live oak trees and modest but colorful housing. The slight jog at Main and Old Spanish Trail make for a renewed neighborhood center, building on the existing business with additional mixed-use buildings allowed. Potential exists for the creation of a small crescent of green north on Old Spanish Trail and a much larger parkway connected to St. Stanislaus playing fields to the south.

For exchanging land to make the parkway, higher density courtyard housing could be allowed along this green finger, helping to give oversight to bikepaths and walkways. Small walkways traverse the long blocks, linking small parks and tot lots.



Bay St. Louis

March 2005

GROUND TYPE
 — Analytical
 X Proximal

TIME
 — Immediate
 X Medium Term
 — Long Term

URBAN SCALE
 — Drive, Block, Building
 X Neighborhood, District, Corridor
 — Region

IMPLEMENTATION THROUGH
 X Design
 — Policy
 — Management

Main & Old Spanish

March 2005

1 November 2005

Bill Dennis

Phone: 601/333-1111

bill@bdennis.com

www.bdennis.com

HOUSING TYPE
 — Temporary
 — Mobile
 — Medium
 — Permanent
 — Green Plan
 — Green
 — Other

MAINTENANCE

Making a stronger center for a funky, fun neighborhood.





Overall Plan of Felicity / Dunbar Neighborhood



New Corner store and housing at Felicity & Dunbar

Felicity / Dunbar Neighborhood is a more recent development with a more rural character. Houses are set in pine and oak woods, with some up on piers, and the block pattern is interrupted by cul-de-sacs. While dead end streets provide privacy, they limit choices for movement around the neighborhood and require more car trips. Adding the possibility of corner store retail with some live/work units provides a focus and access to daily goods.. Pathways threaded through blocks overcome lack of accessibility to parks and playfields.

Small parks in internal blocks provide tot lots and greens for small scale infill.



Bay St. Louis

Phase 1a

GROUND TYPE
☒ Analytical
☒ Physical

TIME
☒ Immediate
☒ Medium Term
☐ Long Term

URBAN SCALE
☒ Drive, Block, Building
☒ Neighborhood, District, Corridor
☐ Region

IMPLEMENTATION THROUGH
☒ Design
☒ Policy
☐ Management

Felicity / Dunbar

1 November 2005

Bill Dennis

bill@bdennis.com

Copyright

HOUSING TYPE
☐ Temporary
☐ Mobile
☐ Medium
☐ Permanent
☐ Green Plan
☐ Green
☐ Other

MANIFESTO

Neighborhood of less density still can have a center.

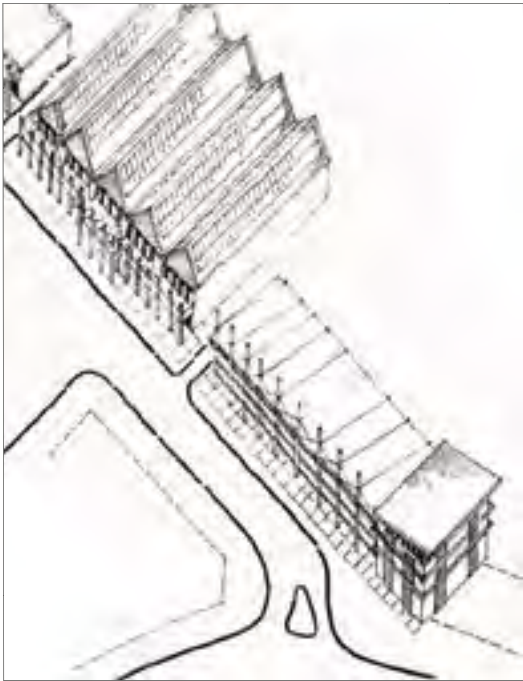




GATEWAY ALONG US 90 EAST



“Front Door “ US 90 & Main



Business Center

This design by Allison Anderson takes a previously vacant strip center and creates a business incubator. The solar panels, shaded walkways and other energy devices illustrate a possible future for re-using old centers.



East Gateway

US 90 is presently a state highway more appropriate for suburban development. To maximize both economic and social value, it should be reconfigured as a boulevard with various shaped roundabouts replacing inefficient signalized intersections. The roundabouts will provide places for sculpture and signage calling attention to the unique character of Bay St. Louis and encouraging passersby to loop into the historic town to stroll a bit. New mixed-use buildings defining the boulevard would give a more appropriate ‘face’ of the town and act as centers for neighborhood near US 90.



Bay St. Louis

Plan of Year

ORGANIC TYPE
☒ Analytical
☐ Practical

TIMING
☒ Immediate
☒ Medium Term
☒ Long Term

URBAN SCALE
☒ Town, Block, Building
☒ Neighborhood, District, Corridor
☐ Region

IMPLEMENTATION THROUGH
☒ Design
☒ Policy
☐ Management

East Gateway 90

Design Year

1 November 2005

For

Bill Dennis

Done at request of the client

bill@bdennis.com

Project Name

HOUSING TYPE
☐ Temporary
☐ Mobile
☐ Medium
☐ Permanent
☐ Single-Family
☐ Duplex
☐ Condo

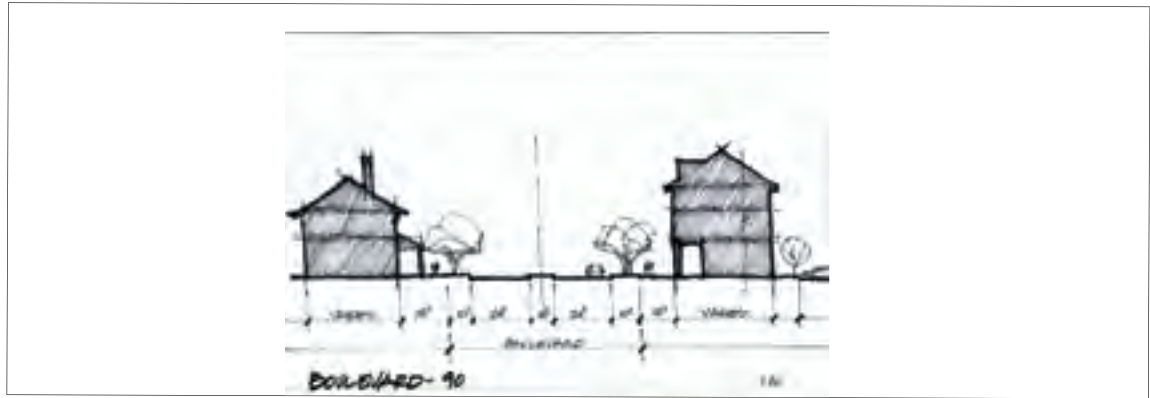
MARKETING

Using the regional corridor to economically revive Bay St Louis by embracing its character





GATEWAY ALONG US 90 WEST



Boulevard Sections



Boulevard Trees

This historic photo shows the Beach Boulevard when it had Live Oak trees lining both sides of the road and pathways. The new US 90 Boulevard, while larger, would begin to have this character and multiple ways of transporting oneself.



Hospital Gateway

West US 90 is the beginning of Bay St Louis from that direction, and yet there is no distinction from the car-dominated land-use that comes before it. The boulevard section and roundabouts, planted with multiple rows of Live Oak trees, lend an opportunity to restore the town to its roots (literally). All of these elements, beside creating aesthetic pleasure, will act to slow down traffic, but allow greater flow, making the experience better for both the walker and the driver.

The present Hancock Memorial Hospital is suggested as an anchor for a district of medical and other office, as well as various types of housing, including senior and assisted living. The emphasis on health would support retail uses for sports and outdoor supplies and could connect with the green space network.



Bay St. Louis

Place or Time

CIRCULATORY TYPE
☒ Analytical
☐ Processual

TIME
☒ Immediate
☐ Medium Term
☐ Long Term

URBAN SCALE
☒ Street, Block, Building
☐ Neighborhood, District, Corridor
☐ Region

IMPLEMENTATION THROUGH
☒ Design
☐ Policy
☐ Management

West Gateway 90

DATE

1 November 2005

BY

Bill Dennis

HOW ATTACHED TO EXISTING CONDITIONS

bill@bdennis.com

PROJECT

HOUSING TYPE
☐ Temporary
☐ Mobile
☐ Medium
☐ Permanent
☐ Green Plan
☐ Custom
☐ Other

MANIFESTO

Developing clear neighborhood and district centers along the corridor





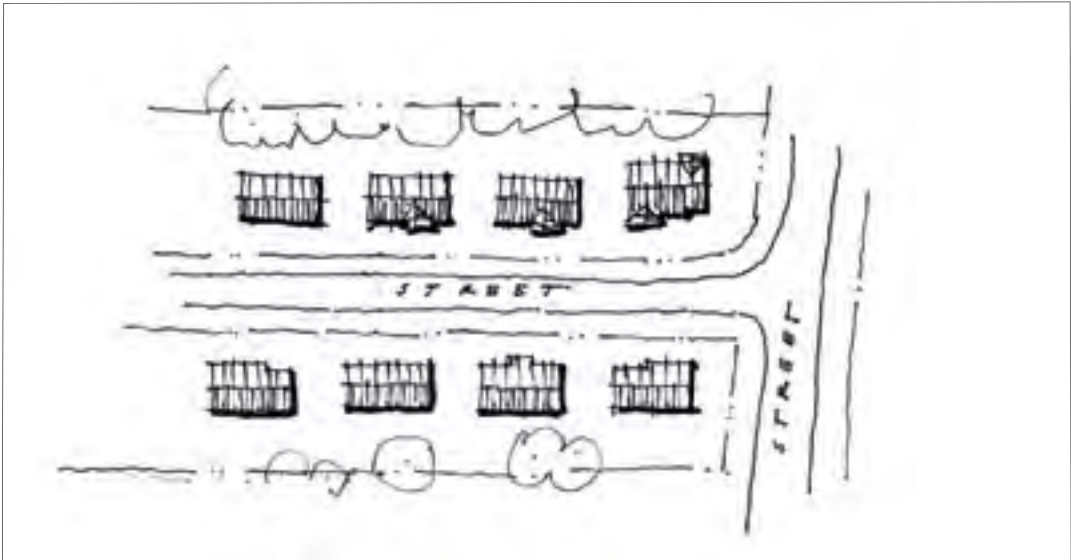
HUD Housing - Pre -Katrina



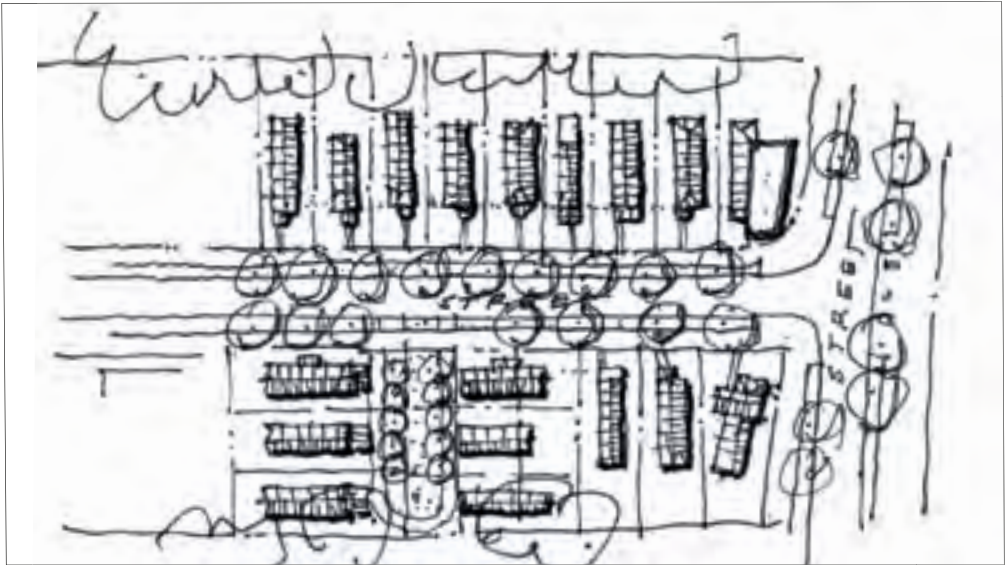
Sketch of Potential HUD & FEMA Housing - Post -Katrina



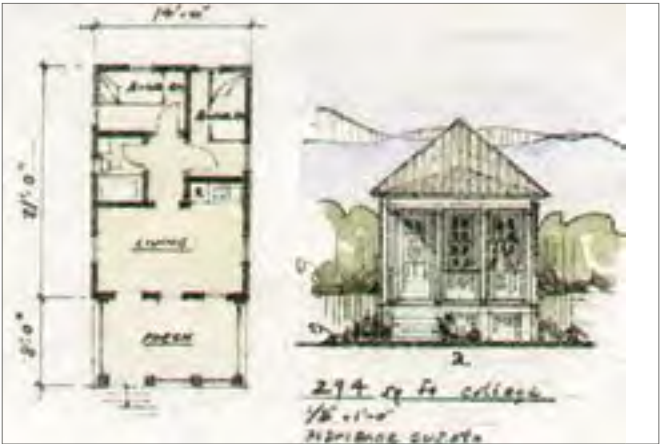
Transition to Permanence



Plan of HUD Housing - Pre -Katrina



Plan of Potential HUD & FEMA Housing - Post -Katrina



Affordable Emergency Housing

Affordability of homes is a serious issue for all residents of Bay St. Louis as they re-build; those in subsidized housing face even greater obstacles. In October, HUD housing was bulldozed, leaving a site for housing but unclear plans for what's next. Temporary trailers and manufactured housing can be used, but it needs to be paced in a way that supports community, and a permanent, sustaining neighborhood over time. Residents who lived there should be brought back for social support, and community services and retail should be located at significant intersections. Tot lots, street trees, community gardens and pedestrian trails are all part of this infrastructure to provide an opportunity for those of us with the least resources.



Bay St. Louis

Project Title: _____

Grounds Type:
☒ Analytical
☐ Practical

Timing:
☒ Immediate
☒ Medium Term
☐ Long Term

Urban Scale:
☒ Street, Block, Building
☒ Neighborhood, District, Corridor
☐ Regional

Implementation Through:
☒ Design
☒ Policy
☐ Management

Affordability

Client: _____

Date: 1 November 2005

By: Bill Dennis

Phone: (601) 755-1111

Email: bill@bdennis.com

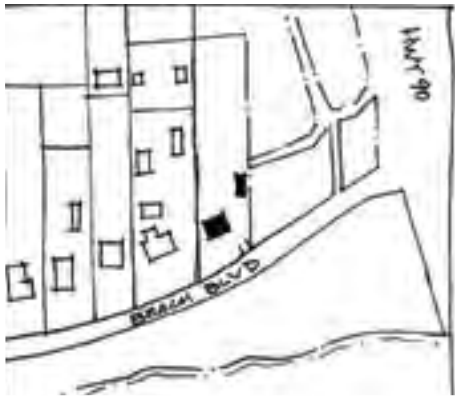
Organization: _____

Housing Type:
☒ Temporary
☒ Mobile
☒ Modular
☐ Permanent
☐ Quick Plan
☐ Custom
☐ Other

Remarks: _____

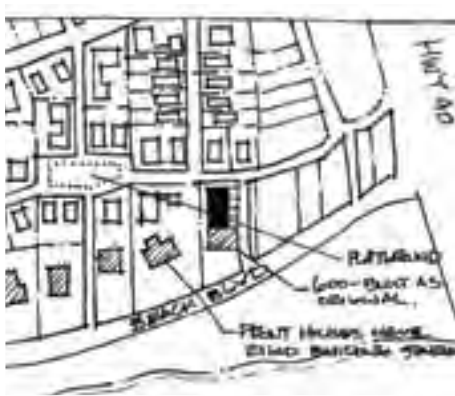
Every citizen has a right to dignified housing.





Infill of Beach Boulevard

The plan to the left shows the pre-katrina location of the Murray house along Beach Boulevard. To the right shows an approach for infill that allows the house to be rebuilt, using funds from adding units to the rear of the house. This will help forestall the pressure for taller condominiums on the Beach Boulevard and restoring the rythm of the house forms, the traditional materials, and the varied ornament that is of this place.



View of Reconstructed Murry/Thompson House with additional units to the rear



Former Historic Murray / Thompson House

The traditional houses of Bay St Louis and along Beach Boulevard in particular, contributed much to the character, history, and family ties to the town. Their loss is particularly dear, but will be compounded if what is put back is not up to the standard of what existed before. Highrise condos, midrise hotels and mega-mansions will all erase permanantly the memory of the uniqueness of this boulevard.

Therefore, it is proposed that the form (height, width and depth) of the previous homes be codified, with any additional density to happen to the rear of these homes; that materials, colors and details from Bay St. Louis' history form the basis of the rebuilding; and that a faithful reconstruction of any historic structure receive historic tax credits. Other styles of architecture should be allowed, but within a narrow window of form and material.



Bay St. Louis

Project Title: _____

Grounds Type:
☒ Analytical
☐ Physical

Timing:
☒ Immediate
☐ Medium Term
☐ Long Term

Urban Scale:
☒ Street, Block, Building
☐ Neighborhood, District, Corridor
☐ Regional

Implementation Through:
☒ Design
☒ Policy
☐ Management

Infill Housing

Client: _____

Date: 1 November 2005

By: Bill Dennis

How to contact the author (optional):
 bill@bdennis.com

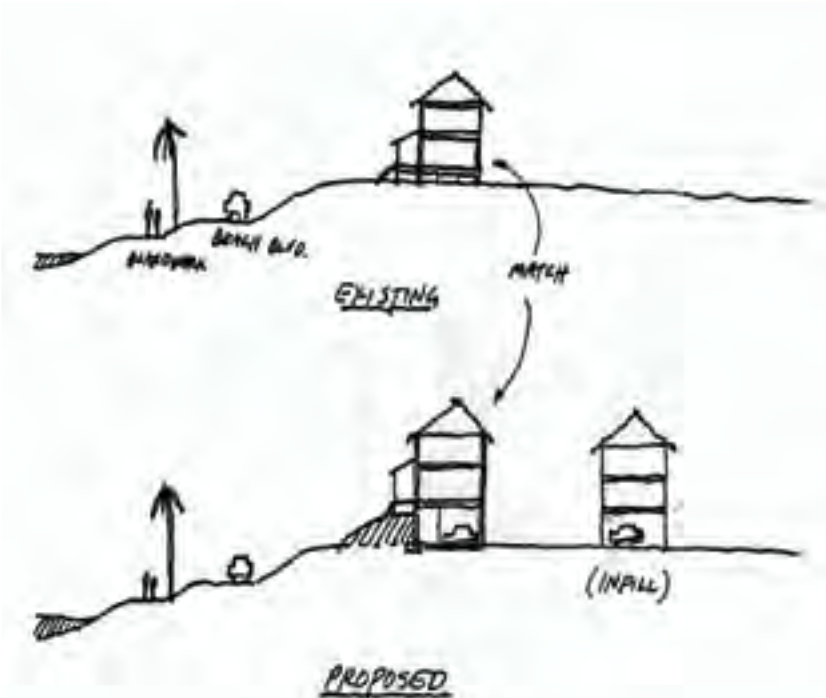
Housing Type:
☐ Temporary
☒ Mobile
☒ Midrise
☒ Parkland
☒ Green Plan
☐ Custom
☐ Other

MANIFESTO:
 Rebuilding the 'walls' of the town to restore the public 'rooms'





Cottage Court to rear of rebuilt Wagner House



Raising houses with fill

While new FEMA regulations are not final, it is clear that for normal insurance purposes, the first floor of buildings will have to be raised from what it was. In the A zones, this can be achieved by adding fill in the front of the house (up to 8 feet) and rebuilding the historic house at that level. Behind would be at the previous grade with areas for parking and storage. This should be accomplished without disturbing existing oaks.

Long Blocks and Lots, legacy of the French survey unit called arpades, leave odd bits of land on many lots that can be used for certain types of infill. This ‘Mother and Daughters’ approach of raised cottages to the left is one such typology. Others might be courtyard housing, townhouses, granny flats, and mansion houses with multiple units.

All of these are important strategies to hold at bay the simplistic density and value increase that high rise buildings represent. Owners of houses lost in Bay St. Louis will be hard pressed to build back the homes they enjoyed unless there is a way to fund the additional costs of new, hurricane resistant construction. Added density on linear lots provides that opportunity to remake the community in its own image.



Bay St. Louis

Project Title: _____

Discussed Type:
☒ Analytical
☒ Practical

Timing:
☒ Immediate
☒ Medium Term
☐ Long Term

Urban Scale:
☒ Street, Block, Building
☐ Neighborhood, District, Corridor
☐ Regional

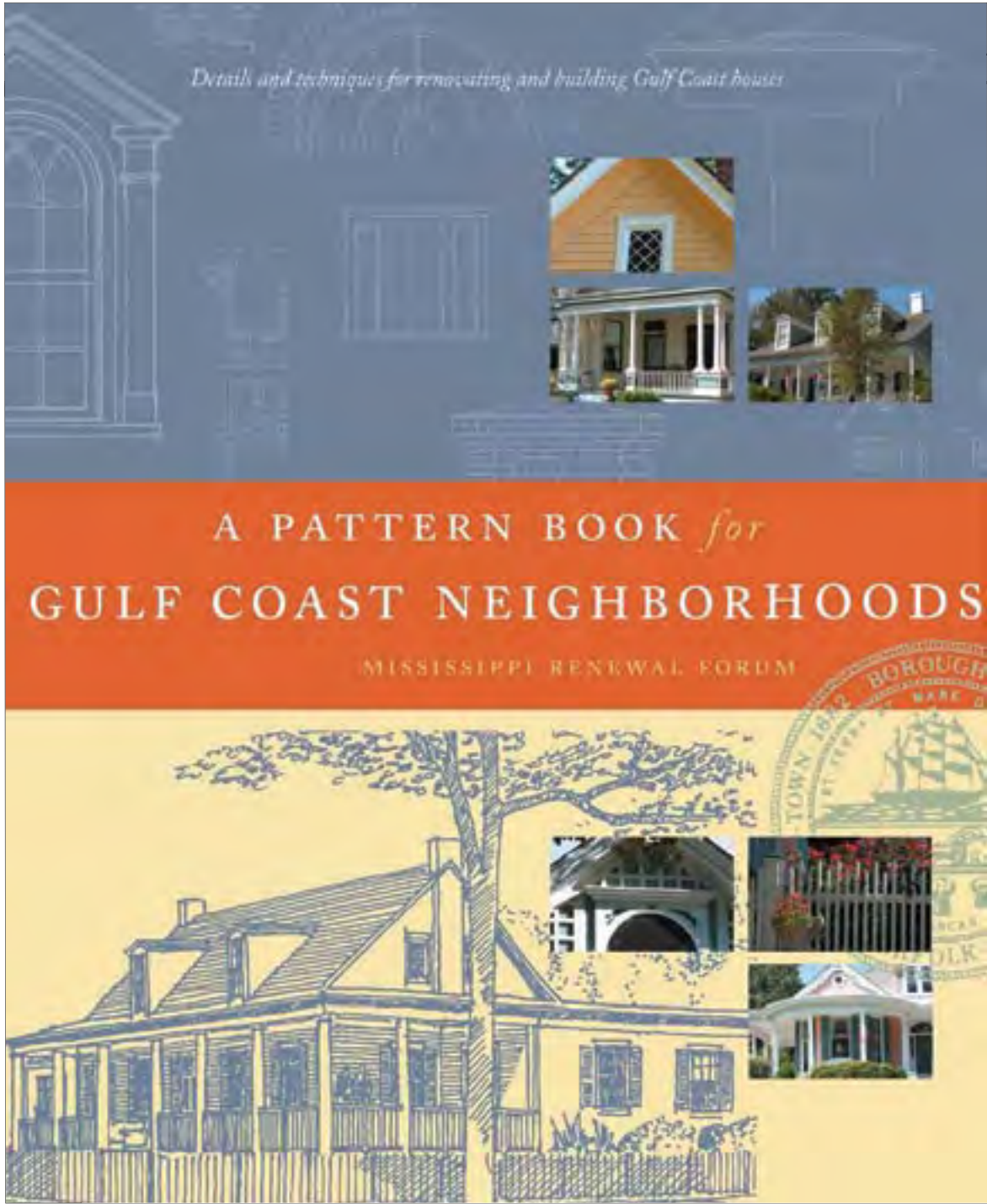
Implementation Through:
☒ Design
☒ Policy
☐ Management

Infill Housing 2
 Study No. _____
 1 November 2005
 Bill Dennis
 (Email address for project contact)
 bill@bdennis.com
 (Phone number) _____

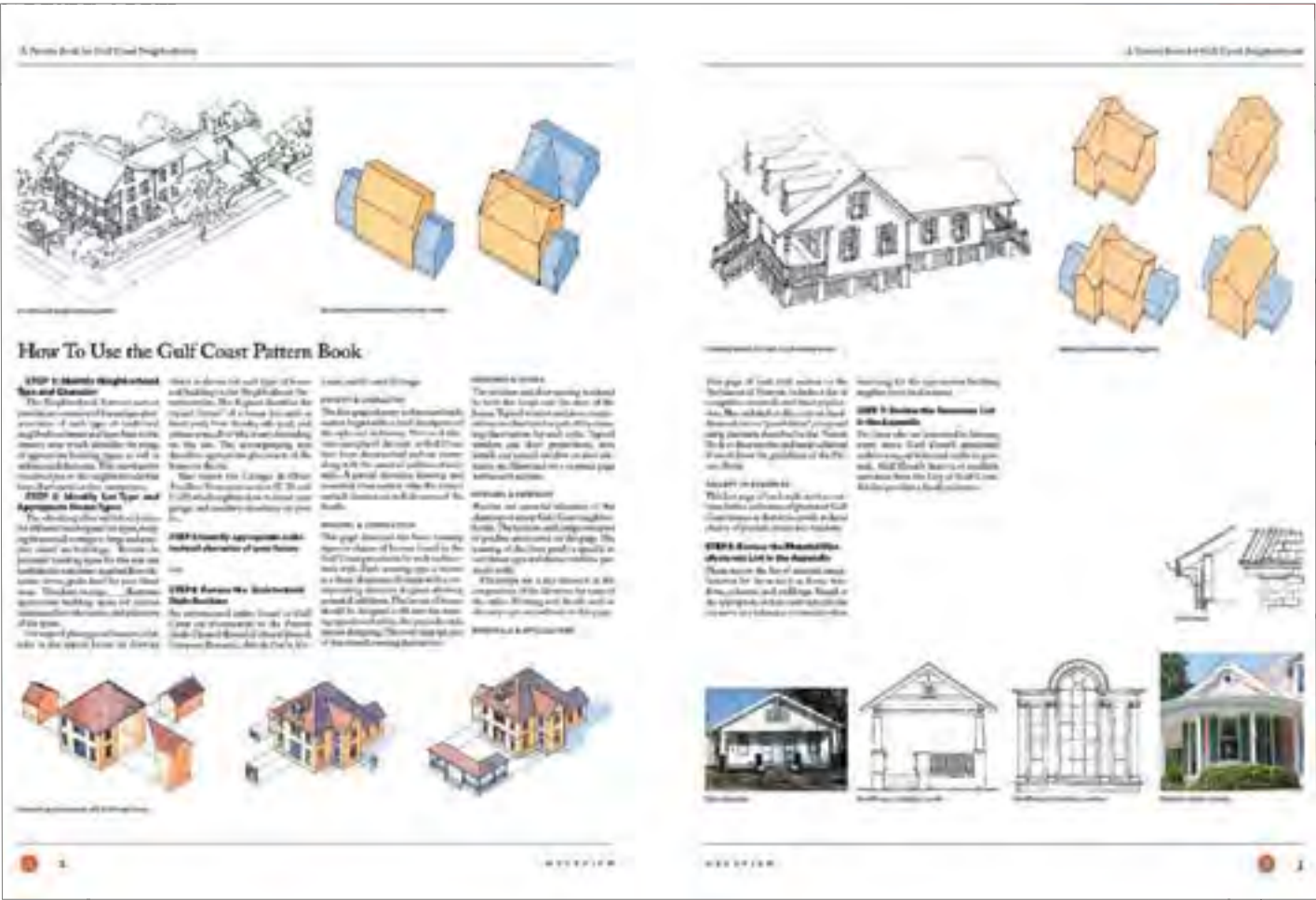
Housing Type:
☐ Temporary
☒ Mobile
☒ Medium
☒ Permanent
☒ Quick Plan
☐ Custom
☐ Other

Remarks:
 Appropriate added density can help rebuild the Bay St. Louis that is remembered





Pattern Book - shows how to do Traditional houses well



Explains clearly massing, siting, details, colors and more



Modern architecture is permissible.

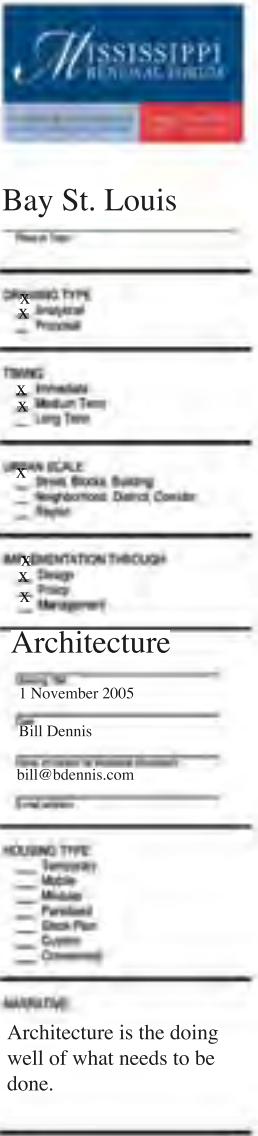


But people can also rebuild their memories.

Architecture is half form, half treatment. The Smart-Code establishes the appropriate form for various buildings, defining the street. The clothes of a building (treatment) give it style. This can be of a modern expression as long as materials and techniques appropriate to this region and specific place are used.

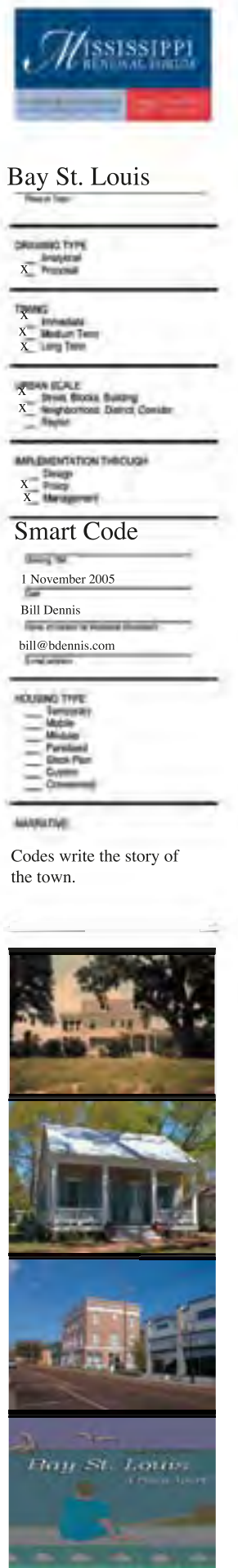
However, the majority of new housing anywhere is typically some form of traditional architecture (often poorly designed). The danger is to not build back well. Pattern books can help give guidance for planners, architects, builders and citizens who wish to draw from the rich history of Bay St. Louis. There is certainly room for much invention within these traditions, appropriate to an Artist's community.

Some houses of remarkable character and history may be reconstructed; this is not only possible but is to be encouraged.



SMARTCODE	TABLE 14 SUMMARY OF IKANSECI ZONES
-----------	------------------------------------

Form Based Codes like the SmartCode are tools for making neighborhoods and towns in the manner that people would LIKE to see. One-size-fits-all codes of the past 50 years were concerned about prohibition and the separation of uses. Using that type of code, Bay St. Louis would be illegal. Form-based codes use an idea called the Transect, a range of urbanism from natural through rural to suburban to neighborhood and town center. Every zone is calibrated for the particular town and neighborhood, and encourages streets, blocks and buildings to be assembled in a way that adds up to special character of Bay St. Louis. Development becomes something that is positive, because it is based on the DNA of the place.



DESIGN ACTIONS

- **Rebuild** and enhance the downtown, Old Town and beachfront areas, with attractive new civic spaces and amenities.
- **Create** a network of walkable streets and greenspaces that ties together existing centers.
- **Rebuild** the existing historic beachfront homes in a more hurricane-resistant form, and build additional homes behind them.
- **Create** a new “front door” by reconfiguring the Hwy 90 approach, and adding a new civic space.

POLICY ACTIONS

- **Change** zoning and coding to build desirable new features, to enhance local character, and to enhance economic vitality.
- **Create** a new “Rebuilding Resource Center” that will distribute design, construction and finance information including historic construction information.
- **Develop** a long-term affordable housing strategy.

MANAGEMENT ACTIONS

- **Place** emergency shelter in the actual locations where residents will return, and in configurations suitable for the future
- **Provide** awards and funds to modest projects that add to the character of the street or public space.



*We look forward to returning to your wonderful town
with our families and friends
and eating a shrimp po-boy,
drinking beer on the pier,
buying some art
and having a great time with the quirky
and charming
people of Bay St. Louis.*

*It really is the people that make a community what it is,
as much as we hate to admit this as architects.*

*You were extremely fortunate to have a physical setting that
supported and encouraged your unique character,*

*and we sincerely believe that you will be able to
regenerate the vessel
that contained your ambitions and dreams
and share freely it with your children and the world.*



Bay St. Louis

NEXT STEPS

1 November 2005

Bill Dennis

bill@bdennis.com

