The Future of Bayou la Batre: Creating a Better Community through Planning and Design

Community Planning Synthesis

By Mac Martin Community Planning Auburn University

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Introduction

Over the course of the United States' 232 year existence, many small towns have declined or disappeared for a variety of reasons (Daniels et al. 2007). For small coastal communities like Bayou la Batre, Alabama, those reasons include being struck by a natural disaster or falling prey to a weak economy. Economic forces such as the importation of foreign seafood are driving the local seafood industry out of business, presenting substantial challenges to the coastal community at the onset of the 21st century (Gaillard 2007). Then, on August 29, 2005, Hurricane Katrina slammed into the Gulf Coast of Alabama, Mississippi, and Louisiana, pushing a storm surge of 14 feet into the small town of Bayou la Batre and further crippling an already struggling community (ULI 2006).

Conversations with local residents and business owners of Bayou la Batre suggest that there is a general impression that the city is at a crossroads. After Hurricane Katrina and the importation of foreign seafood dealt the small coastal community devastating blows, opinions appear divided as to how the city should address issues such as a shrinking economy and declining population. Some feel more support of the primary and secondary economic sectors, in particular the fishing and shipbuilding industries is key to the revitalization of the city. Others advocate rebuilding the city in such a way as to draw a steady stream of tourists, new residents, and commerce into the local economy.

The city of Bayou la Batre has managed to survive the natural disasters and economic hardships endured by so many coastal fishing communities. However, it faces an uncertain future. Given the heightened vulnerability of small coastal towns like Bayou la Batre, with its combined susceptibility to natural disaster and low economic wealth,

they have a great need for planning energies to develop a stable future for the town (Morrow 1999, Gaillard 2007). Unfortunately, small towns lack the resources much larger cities have for planning and limited precedent and published studies exist concerning small town planning for communities like Bayou la Batre (Runyan 2006).

Sustainability is defined by the World Commission on Environment and Development (WCED) as development that "meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (1987, 43). This definition has application at the local community scale and serves as a model for addressing community needs with regard to the local economy, the environment, equity, and livability (Berke et. al. 2006). Community planning serves as a method by which the community can address such needs through gaining an understanding of its current state and developing a course of action to meet common goals (Daniels et. al. 2007).

With leadership, vision, and commitment from citizens, government officials, and business leaders, as well as services provided by not-for-profit and university programs such as the Mobile Bay National Estuary Program and the Auburn University

Community Planning Program respectively, Bayou la Batre's future could be a bright one. It will take a coalition of individuals from across a spectrum of differing values to come together and seek to achieve common goals that will help shape a sustainable future for the community. Such goals for a sustainable community would include achieving a stable and growing economy by attracting new and diverse businesses to the area, encouraging the development of a diverse housing stock, designing a community that will attract new residents to Bayou la Batre, meeting the needs of and improving the quality of

life for all citizens currently living in the municipality, and conserving the rich natural and cultural environment indigenous to the coastal community.

The purpose of this project is to create a vision and local area plan for a sustainable community. Drafting of a local area plan fostering sustainability should address the issues of economy, environment, equity, and livability (Berke et. al 2006). This plan will take place on a community-wide scale and seeks to promote the development of neighborhoods and commercial districts, protect the waterfront industry that serves as the foundation of the community, foster a diversification of the economy, and embrace the cultural and environmental assets of Bayou la Batre. This visual plan is meant to provide the local planning commission with a new vision for the future of Bayou la Batre. I seek to accomplish the goals of this project in a three step process: creating a community profile, engaging in visioning activities with the community through workshops, and synthesizing information gathered about the community and its citizens with knowledge and tools gained in the Auburn University Community Planning program to create a local area plan. The planning commission can then draft specifications that accomplish the aims of this plan and meet the needs of local residents.

One of the challenges I see occurring with this project is a disproportionate amount of academic planning literature focuses on planning issues in larger urban places as apposed to small towns. There are examples of small town plans that can be utilized in aiding the planning process in this project. However, in the majority of literature about urban planning and design, the case studies differ from that of a small maritime community like Bayou la Batre. This project serves as an opportunity to explore the

possibilities of applying some planning practices of larger urban places to a smaller town in order to achieve a community plan with sustainability as its primary goal.

Literature Review

According to Daniels et al., over 13,000 small towns with a population of 10,000 or less currently exist across the American landscape (2007). Daniels states that most American towns established through the 19th and early 20th century came about in order to "function as retail and service centers to surrounding farmers; to process and ship farm products, timber, and mineral; and to provide protection" (2007, xxvi). However, by the mid-to-late 20th century, the number of farms dwindled, manufacturing declined, and automobiles, airplanes, and trucks made people and goods more mobile, leading to the decline and disappearance of many small towns (2007). Over the same period of time, many other small towns have been consumed by urban sprawl, becoming bedroom communities (Kaplan 2004), then places with auto-oriented landscapes dominated by freeways, shopping centers, and office parks (Calthorpe and Fulton 2001).

According to Daniels, even after the Standard State Zoning Enabling Act of 1926 and the Standard City Planning Enabling Act of 1928 were published, comprehensive planning in small towns didn't take hold until the 1970's and 80's, when small communities either began to quickly grow as a result of fast paced urban sprawl or decline due to loss of manufacturing and agricultural jobs (2007). Until then, the closest action many small towns took toward planning was to present basic population and housing data in order to obtain grants awarded by the U.S. Department of Housing and Urban Development after 1952. Daniels continues that toward the end of the 20th century, small town planning began to be embraced as a powerful tool for addressing

various problems and challenges facing smaller communities across the nation using institutions such as regional planning commissions or regional councils of government, universities, and, when affordable, private planning firms (2007).

In his book *Redesigning Cities: Principles, Practice, Implementation*, Jonathan Barnett lists five main objectives that should be considered in drafting any city plan and design. These objectives include "community, livability, mobility, equity, and sustainability" (Barnett 2003, p. 4). With so many cities and towns currently plagued by "the weakening role of the neighbourhood in individual lives, commodification of public life and urban space, a waning public realm, and the propagation of nonplace edge-city phenomena," planners are looking for ways to remedy such ills and create communities that better meet the needs of the citizenry (Garde 2006, p. 34). For some communities these problems can be compounded by natural disasters and uncertainties in the economy. Additionally, with energy prices soaring and the U.S. dealing with a subprime mortgage crisis and limited loaning capacity of many banks, the need for more sustainable and livable communities that provide a variety of "economic and social opportunities" is prevalent (Goodman 2008; Hanan 2005, p.27).

The challenge for the small city of Bayou la Batre is creating a plan that will address the problems brought about by hurricanes and a troubled waterfront economy, leading the city to a more sustainable economy and greater quality of life for its citizens. Although Hurricane Katrina's effect on Bayou la Batre was not as extensive as experienced along portions of Mississippi's Gulf Coast, it was still damaging enough to cripple the local economy, destroy the water-treatment facilities, turn back would-be economic developers, and devastate the town's built environment (Gaillard 2007).

According to the Urban Land Institute (ULI), about 60 percent of all buildings in the community were severely damaged or destroyed by the storm and three quarters of the shrimping fleet were washed ashore (2006, 7). The ULI also estimates that the hurricane had an impact of \$200 million the on the seafood industry and drove away 500 to 600 residents (2006, 11).

Before Hurricane Katrina, the seafood industry, which makes up about 85 percent of the local economy, began to suffer mightily as the importation of foreign seafood replaced domestic supply (Gaillard 2007, 860). Globalization of the economy has created a system by which perishable products such as seafood can be ordered and shipped internationally, arriving ready and safe for consumption (Sassen 2002; Naylor et al. 2003). Because of the efficiency and lower prices of the global seafood market, the U.S. turned from its domestic supply and as of 2005, 80 percent of all seafood consumed comes from foreign nations (Consumer Reports 2005, 30). According to Jervis, over the last 20 years, the influx of shrimp imports from countries like Brazil and Thailand have driven down prices to less than \$1 per pound, a figure that is causing many to diversify their business or abandon the trade (2008, 4).

In addition to the devastation wrought by hurricanes and the depression of prices by imported foreign seafood, rising fuel and strict environmental regulations further diminish profits and the likelihood of survival of the Gulf Coast seafood industry (Jervis 2008; Gaillard 2007). Skoloff reports for the Associated Press that diesel prices of \$4.50 to \$5 a gallon reduce profits in the shrimping industry by as much as 50 percent; while charter fishermen see profits drop nearly 40 percent (2008). Also, even though insurance prices have eased due to an influx of insurance providers and government intervention

(Coy 2007), government regulations including bans on harvesting certain species, increased net mesh sizes, and restrictions on where fishing can take place create challenges for the coastal seafood industry that many operations cannot overcome (Sieder 1996).

Methodology

In creating an effective small town plan that will address the issues faced by Bayou la Batre, I must first gain an understanding of the community and its citizen's desires before drafting the plan. In order to retrieve the necessary data slices to answer the research question, I will conduct my research following a mixed-method strategy. According to Gaber and Gaber (1997), mixed-method research is a research strategy that allows planners to combine "quantitative methods with qualitative methods into a single research project" in order to gain a "more holistic understanding of the problems they are investigating" (95). This research method can be applied given the understanding that neither quantitative methods nor qualitative methods are superior to the other and that planner should adopt a "paradigm of choice" – meaning they consider that different situations call for different methods to derive a suitable explanation (1997; 98, 101). In the case of Bayou la Batre, an analysis of census data may produce a base line understanding of what population currently resides in the community, but by itself will not provide sufficient insight into the day to day dynamics and interactions within the community. Within this mixed method study, I will employ a "methodological triangulation" approach – using multiple methods to analyze the conditions of Bayou la Batre (Gaber and Gaber 2007, 136). The particular methodological design I will implement will be "between-method triangulation" – where I will use multiple tools, such as census data and field research, to retrieve multiple empirical data slices that triangulate toward one "big picture" image of the community's conditions (2007, 136-37).

The data collection and analysis portion of this project will be organized into a State of the Community Report. This report consists of two components: a community profile and public input (Berke et. al. 2006). Green et. al. (1989) categorize the advantages of mixed method research into five different frameworks: triangulation/convergence, development, complementarity, expansion, and initiation. For this project, I will implement complementarity and development frameworks with regard to the community profile and public workshops respectively in order to address the overarching research problem of producing a community vision and plan for Bayou la Batre.

According to Hammond (2005), complementarity is the "elaboration," enhancement, illustration and clarification of the results from one method with the results from the other" (249). I will use complementarity mixed methods to create a holistic view of the community in the community profile. According to Daniels et. al. (2007), the community profile provides a summary of "the physical, economic, and social" characteristics of the community, "an excellent introduction to the plan, and helps build interest of residents and non-residents in the rest of the plan" (67). This profile will pull from both primary data sources – data slices collected first-hand by the researcher – and secondary data sources – data slices gathered in previously published research. The profile will present data and information regarding geography and history, population and economy, environment, land use, and existing transportation and infrastructure systems. Given the time and financial constraints, much of the data provided in the community

profile – especially that pertaining to population and the economy – will be retrieved from secondary data sources like the Census. Gaber and Gaber (2007) advise that planners should search for existing useful data slices previously published in order to cut down on the expenditure of limited resources on new research whenever possible.

As mentioned before, census data alone cannot convey the entire picture of the complexities of the community. In addition, relying solely on secondary data sources can compromise the internal validity of the project – if the researcher made the correct observations based on the data (Gaber and Gaber 2007). Thus, I seek to validate and complement the data presented by the Census by producing primary data slices by means of qualitative methods in the form of field research and photographic research. The variables I seek to obtain in the area surveys and photographs include evidence of the community's strengths, weaknesses, threats, and opportunities as I see them. Such variables include information addressing the following questions:

- *What areas have recovered from the Hurricane Katrina and what areas are still in disrepair?
- *What portions of town are more prosperous and which are not?
- *What is the current condition of the downtown area?
- *Where do the towns various cultures reside?
- *Where are those individuals who were displaced by the storm relocating?
- *What industries are surviving and which are not?
- *What aspects/areas of the community are positive and should be exploited?

The methods of field research I will engage in include windshield surveys and site reconnaissance. Both approaches are part of a non-participant research strategy and are used to gain first-hand qualitative information about the community. A windshield survey is the act of gathering observations by traveling by automobile throughout the community to gain a macro perspective, while site reconnaissance is a method by which

the researcher studies the smaller details of the community by walking along corridors and through neighborhoods (Gaber and Gaber 2007). I intend to use these methods to familiarize myself with Bayou la Batre, noting significant impressions, trends, and divergent observations I see play out in the field. I will seek to protect myself from questions of internal validity by providing "thick descriptions" in a journal format of the empirical observations I make. Issues of external validity – the generalizability of the findings – are resolved by the understanding that no two communities or their respective situations are alike. The reliability of my findings will be questioned or confirmed when presented in the public participation workshops later in the planning process.

Next, I will engage in photographic research. I will conduct a mapping and survey form of photographic investigation. Mapping involves the use of aerial imagery to provide a birds-eye view of the study area, while survey photography captures a first hand, eye-level view of the research site (Gaber and Gaber 2007). High resolution aerial imagery of Bayou la Batre for the mapping investigation is provided by the Mobile County government and will provide the greater context for the survey images.

I will gather survey imagery first-hand when conducting field research. Before taking photos of the research site, I must consider the data slices I need to collect in the images, determine how the images will be taken, and develop a system of organizing the shots. Survey images will be taken in the form of medium and close-up shots in order to get high amounts of detail in the variable while still being able to relate them to the general context. These shot ranges are also considered to provide greater anonymity to individuals captured in the images, allowing for less obtrusiveness into the daily activities on the citizens of the community. In dealing with questions of internal validity, I will

research the needed variable before taking photos and attempt to take shots that accurately display the situation being observed in the field. I will attempt to combat threats to external validity by fully explaining the role the imagery play in addressing the research question. Coupled with the mapping imagery, both forms of photographic research will be used to further compliment data provided by the Census and written observations I make in the field research portion of the project. Once the implementation of these techniques help create a "big picture" view in the community profile, the resulting profile will then be used to help inform and shape the public discussions initiated in the visioning workshops – thus building a sequential framework into the research project.

The second step in this sequential process of acquiring information concerning the present state of the community is that of actively seeking input from the "stakeholders" of the plan; those that would "affect the plan or be affected by the plan" (Berke et. al. 2006, 275). Given the time constraints of this project, the core group of citizen participants I will work with throughout the visioning process will be the Planning Commission, although each workshop will be open to the public. Hanna (2000) demonstrates the necessary and informative interaction in the plan making process between the information provided in the community profile and the insight gained in citizen participation:

The relationship between participation and information centers on the nature of participation...Participation helps shape information development. Its influence is synergistic. Participation not only facilitates the additions to the planning process of new information and new interpretations of existing data; it also diffuses knowledge to those who may be peripheral players in the process...Preparing and analyzing data, interacting with non-agency players, and presenting information to the public can be transformative action – even though their impact may not be

explicit. Information is a key component of consensus building...The process of developing and agreeing on information is a critical part of embedding the influence of information on individual and institutional understanding...(401).

A popular method of extracting such information from the stakeholders includes holding planning workshops that are open to the public. The goal of these workshops is not only to provide a more holistic view of the community in conjunction with the census data, but to bring citizens, community leaders, and various local organizations together to begin serious discussion about creating a positive future for the community. Within the planning workshops, the participants will engage in the practice of visioning – a process by which citizens form a consensus regarding the current state of the community and craft a vision pertaining to their desires for the future condition of the community. Through the process of visioning, my goal is to get the stakeholders to collaborate with one another to discuss the community's current condition and issues to be addressed (Cuthill 2004).

I will hold a series of four workshops to work through the visioning process. The first workshop will focus on discussing the past, present and future of the city from each participant's point of view. In the introductory meeting, Daniels et al. (2007) suggest beginning the discussion by addressing two questions:

- Where have we been?
- Where are we now? (16).

Next, the topic of discussion will be for the citizen participants to begin setting desired goals for the community to attain over time (Berke et. al. 2006). Daniels et. al., (2007) suggest framing this discussion in the visioning process by asking the following questions:

- Where are we going?
- Where do we want to go?
- How do we get there? (16)

These questions really get at the heart of the visioning process and will be the foundation for the discussion in the first workshop. The goal of this step is for the citizens to craft their vision for the future development of the community and gain a better understanding of what it will take to attain that vision.

In the second workshop, we'll implement a SWOT analysis as a catalyst for further discussion to build upon the issues covered in the first workshop – asking the participants to analyze the community's *strengths*, *weaknesses*, *opportunities*, and *threats*. After we have a thorough list of issues from the SWOT analysis, we will then discuss how to take advantage of or address the issues brought forth. We will conclude the evening by forming a common vision for what the city of Bayou La Batre should work towards over the next 20 years.

After obtaining from the participants a better idea of their vision for the city's future, I will draft 3 scenarios from which the participants can study. I will present these scenarios in the third workshop and will facilitate a discussion about each. The result of this workshop will be for the participants to choose a scenario that they would like for me to study in greater detail and return with a refined future land use or zoning plan that reflects the participant's choice. The fourth workshop will be scheduled to present the refined plan and field questions, comments and concerns.

Findings

Community Profile

The focus of the planning practices exhibited in this project will primarily take place within the city limits of Bayou la Batre, although the surrounding areas will be considered in the visioning and plan drafting process.

Geography

The town of Bayou la Batre, Alabama is located on a bayou inlet near the Mississippi Sound shore in southern Mobile County. The town is located approximately 30 miles southwest of the city of Mobile, Alabama and 9 miles east of the Mississippi state line (figure 1).

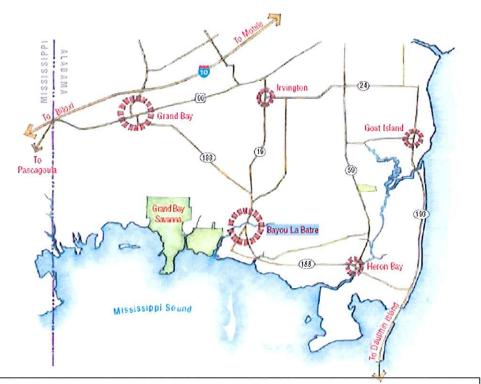


Figure 1. ULI (2007) map of Bayou la Batre and Surrounding Region.



Figure 2. Satellite Image of Bayou la Batre. Data Source: Google Earth 2008

The city is surrounded by undeveloped forests and swamp to the west and northeast, agricultural lands to the north and east, and by the Mississippi Sound to the south (figure 2). The majority of the landscape is extremely flat along the coast and in the main part of town to gently rolling in northern portions of the study area. The varies from sea level to about 15 ft from the mouth of the Bayou to intersection of Highway 188 and Padgett Switch Rd. The elevation in the study area increases to around 90 ft as far north as Four Mile Rd (figure 3). The terrain has a slope of less than 5% in all areas south of Padgett Switch Rd. and a few areas with a slope of 5%-10% to the north. Nowhere in the study area is there an appreciable slope greater than 10% (figure 4).

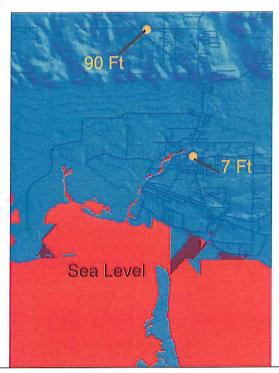


Figure 3. ALWRIC Elevation Relief Imagery. Elevation displayed at 5ft intervals. Accessed through Alabamaview.org

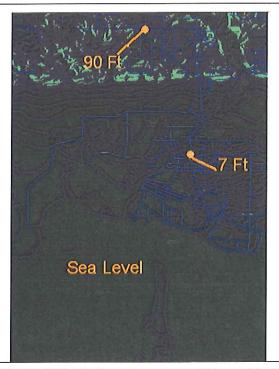


Figure 4. ALWRIC Slope Imagery. 5% to 10% Slopes in Green. Elevation displayed at 5ft intervals. Accessed through Alabamaview.org

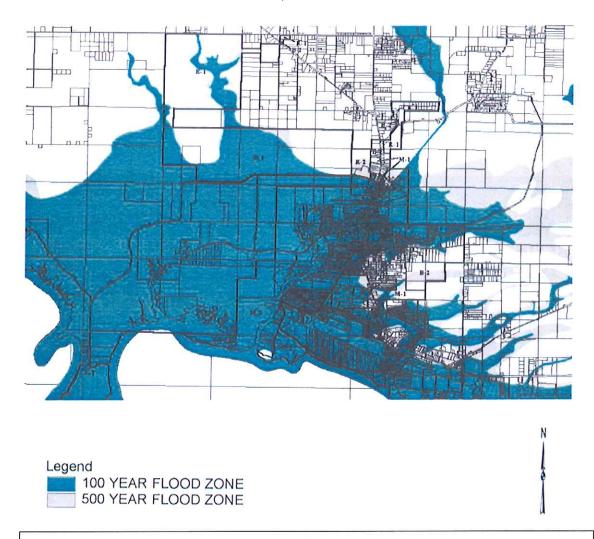
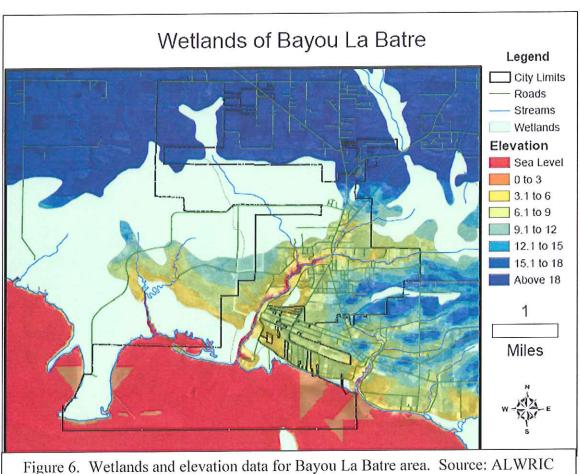


Figure 5. Flood Zones. City limits outlined in black. Source: South Alabama Regional Planning Commission

Since the city sits at a very low elevation along the coast, much of the city is susceptible to flooding associated with storm surge and heavy rains and lies within the 100-year floodplain (figure 5). According to a member of the Planning Commission, when the federal government drafts the revised flood maps in 2013, it is expected that they will enforce a new coastal minimum build height for new housing of 18 to 20 ft above sea-level. For this reason, redevelopment efforts should be directed to areas of higher elevation where developments will be safe from storm surge and more affordable to build.

The study area also includes numerous environmentally sensitive areas, including bayous, inlets, streams, swamps and wetlands, and bays. When these areas are digitized and mapped along with elevation data, it becomes apparent that the amount of space upon which to expand the city is quite limited – especially if redevelopment efforts are relegated to areas of higher elevation (figure 6). The areas of opportunity for new development that become apparent are to the southeast of downtown and to the north of town along the Hwy. 188, Bayou La Batre-Irvington Hwy., and Padgett Switch Rd. corridors.



The most prominent wetland feature in the area is the Grand Bay Savanna, a marshy grassland to the west of the city that stretches into Mississippi. This large wetland is home to animals such as alligators, deer, wild hogs, as well as numerous species of birds, insects, and plants. A large portion of the savanna (figure 7) along the Alabama coastline was recently acquired by the Alabama Forever Wild Land Trust, a subsidiary of the Alabama Department of Conservation and Natural Resources — preventing any development within the boundaries of the land trust, protecting the natural environment, and allowing for public access and recreation (Outdoor Alabama 2008).

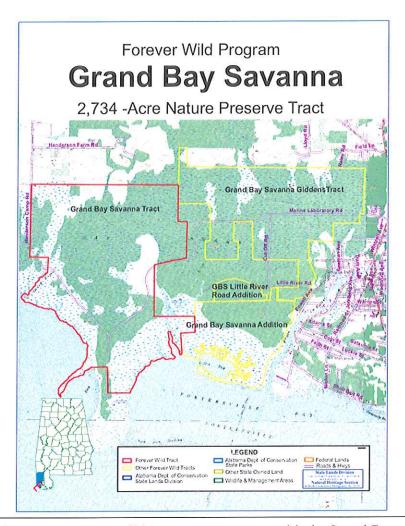


Figure 7. Forever Wild Program tract ownership in Grand Bay Savanna. Source: Alabama Department of Conservation and Natural Resources.

The climate of the study area is semi-tropical, with temperatures ranging from an average winter low of 43 degrees F to average summer high temperature of 91 degrees F. The area receives an average annual rainfall of 64 inches of rain, with rainfall occurring year-round (SARPC 2001).

Population and Economy

According to the U.S. Census, 2,313 people resided within Bayou la Batre's corporate limits in 2000, although that number is expected to have declined due to Hurricane Katrina. According to the 2000 Census, 52% of the population was White, while Asians and Blacks represented 33% and 10% respectively. In the age distribution of the population in 2000, males and females accounted for 50.11% and 49.89% respectively. The age distribution by sex of the city (figure 8) reveals that there are higher percentages of citizens under the age of 20 and between the ages of 40 and 55. One interesting characteristic revealed by the population pyramid is the drop in the number of citizens age 20 to 39, especially among women. This likely indicates the migration of college students and young professionals out of the city.

80 84 75-79 70-74 65-69 60-64 55~59 50-54 45-49 ■ Male Age ■ Female 40-44 35-39 30-34 25-29 20-24 15~19 10-14 5~9 0-4 2% 4% 2% 0% 6% 4%

Age Distribution by Sex for Bayou la Batre, 2000

Figure 8. Population Pyramid of Bayou la Batre. Data Source: U.S. Census

Percent of Population

Using U.S. census population data for the city of Bayou la Batre, I calculated two population projections through 2020. The first projection (figure 9) uses a simple linear equation (Yc=a+bX) devised from the observed population of each decennial census from 1960 to 2000, where Yc is the "calculated value for the dependent variable when the independent variable is equal to X...and a and b are fixed parameters" (Klosterman 1990; 9, 209). The linear curve predicts the population falling to 2,184 by 2010 and 2,112 by 2020. The second projection (figure 10) utilizes a logistical curve created by converting the equation $Yc^{-1} = c + ab^{-}x$ "to the linear form, $\log Yc^{-1} = \log a + (\log b)X$ " with an assumed upper limit (Klosterman 1990, 236). The logistic curve predicts similar results as the linear curve, with a population of 2,187 by 2010 and 2,122 by 2020. The projections are educated estimates in situations devoid of natural or man-made disaster.

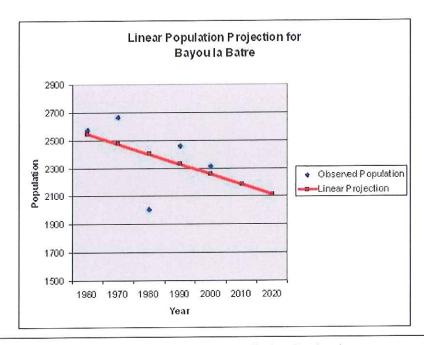
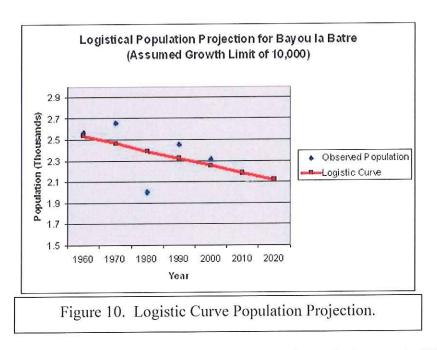


Figure 9. Linear Curve Population Projection.



Although these projections may capture the actual population trend of Bayou La Batre, the sporadic nature of the data make producing an accurate projection difficult. Given its geographical location, natural disasters, namely hurricanes, can be expected to disrupt population trends in Bayou La Batre. An example of this can be observed in the

population data from the 1980 census. The probable cause for the sharp decline in population is likely attributed to Hurricane Fredric (figure 11), which crossed Dauphin Island and made landfall near Bayou La Batre on September 13, 1979 with winds of up to 135 mph (NWS-Birmingham Internet Services Team 2009). I expect these projections to be altered in a similar fashion by circumstances related to the devastation caused by Hurricane Katrina.

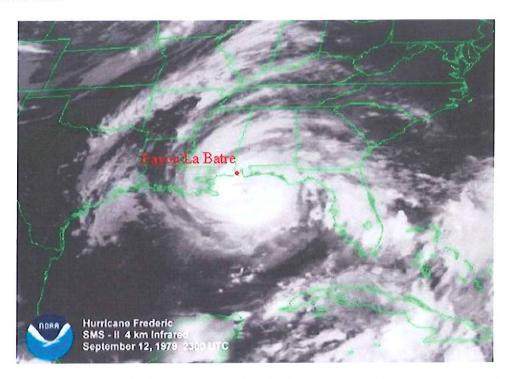


Figure 11. Hurricane Fredric the day before making landfall in Bayou La Batre. Source: NOAA 1979

The median household income in this community as reported in 1999 was \$24,580 (figure 12) – with 23% of all families in Bayou la Batre falling beneath the poverty line (U.S. Census 2008). This figure places the median family income of Bayou la Batre well below that of the county, state, and country (figure 13). The per capita income of Bayou la Batre as of 1999 was around \$10,000 (figure 10), with 28% of individuals residing in the city living beneath the poverty line (figure 14).



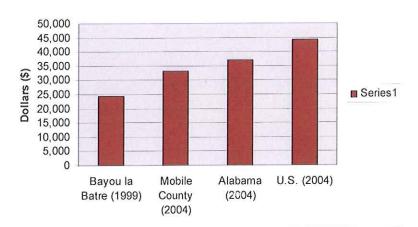


Figure 12. Local, County, State, U.S. Median Household Income. Source: U.S. Census

Per Capita Income (1999)

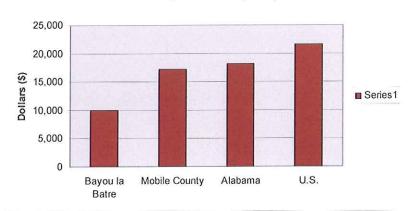


Figure 13. Local, County, State, U.S. Per Capita Income. Source: U.S. Census

Individuals Below Poverty Line

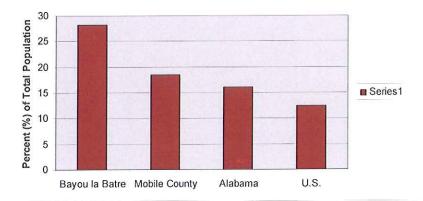


Figure 14. Local, County, State, U.S. Poverty. Source: U.S. Census

According to the economic census of 2002 (Table 1), the majority of individuals employed in Bayou la Batre work in the manufacturing sector, followed by wholesale trade and retail trade. The majority of these manufacturing jobs are a part of the growing shipbuilding industry in the city. The wholesale businesses in Bayou la Batre are largely seafood processors and distributors. According to the census, these wholesale operations account for the highest amount of trade, followed closely by the manufacturing industries.

Sector Number	2002 NAICS sector	Number of <u>establish-</u> ments	Sales, shipments, receipts (\$1,000)	Annual <u>payroll</u> (\$1,000)	Number of employees
31-33	Manufacturing	21	67,964	14,566	596
42	Wholesale trade	17	75,227	4,418	370
44-45	Retail trade	21	28,956	2,385	144
51	Information	1	N	D	а
53	Real estate & rental & leasing	3	D	D	а
54	Professional, scientific, & technical services	6	945	419	22
61	Educational services	1	D	D	а
62	Health care & social assistance	6	D	D	b
72	Accommodation & food services	5	2,699	685	77
81	Other services (except public administration)	3	3,875		28

D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals; N: Not available or not comparable; X: Not applicable

Table 1. Employment and trade. Source: 2002 Economic Census

Land Use and Transportation

Figure 15 shows the land use of Bayou la Batre as of the 2001 Comprehensive Plan. Much of the land surrounding the city is undeveloped. The main commercial and industrial developments are located along the waterfront, as well as state highway 188 – the town's main arterial. Residential land uses are evenly spread throughout the city, though most of the new housing being constructed in the area is on the north side of town or in neighboring unincorporated Irvington, where elevations are higher.

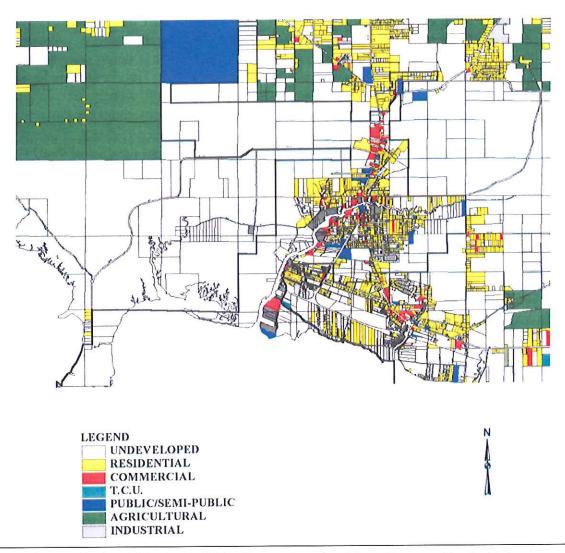


Figure 15. Land Use in the 2001 Comprehensive Plan. Source: South Alabama Regional Planning Commission

Transportation is Bayou la Bayou is relegated to private automobile, freight trucks, and water transport that can navigate the Bayou's channel. There is no public transportation in Bayou la Batre apart from bus service provided by the MPO. There are currently only two roads classified as arterials (Highway 188 and Bayou la Batre - Irvington Highway) and five connectors (figure 16). The connector Shell Belt Road follows the Bayou and serves the waterfront industries. Another connector, Padgett Switch Road, connects to Highway 188 at the northern entrance to town and treks north past an airstrip to U.S. Highway 90 in the community of Theodore.

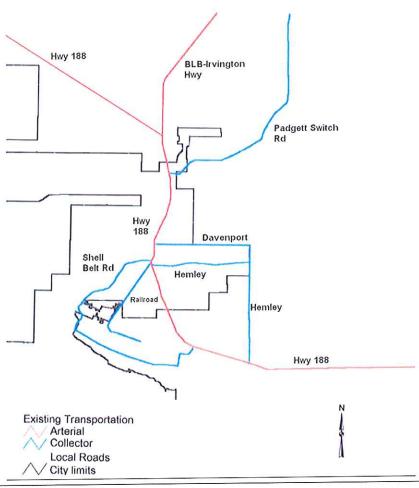


Figure 16. Transportation. Source: South Alabama Regional Planning Commission

Field Observations

As mentioned in the methodology section, I conducted a survey and photographic investigation of the study area. The qualitative data gathered in the field is meant to enhance the data obtained from secondary sources and create a better overall picture of the study area so as to enter the workshop phase of the project more informed on the community. I recorded my qualitative analysis in the field by dividing the community into sectors (figure 17). The sectors include the Grand Bay Savanna, unincorporated Coden, the neighborhood on the southern side of incorporated Bayou la Batre (South Bayou Neighborhood), the Working Waterfront area along the Bayou, Downtown, the neighborhood immediately north of the Bayou (North Bayou Neighborhood), the North Wintzell Commercial District (Hwy 188), the area along Padgett Switch Road, and areas to the north and west of the city (North Bayou la Batre – South Irvington). Within these sectors, I collected photographic and descriptive data that best describes the area with regard to physical conditions. With these data, I can gain a better understanding of the forces at work within each small area and draw more informed conclusions about the town as a whole.

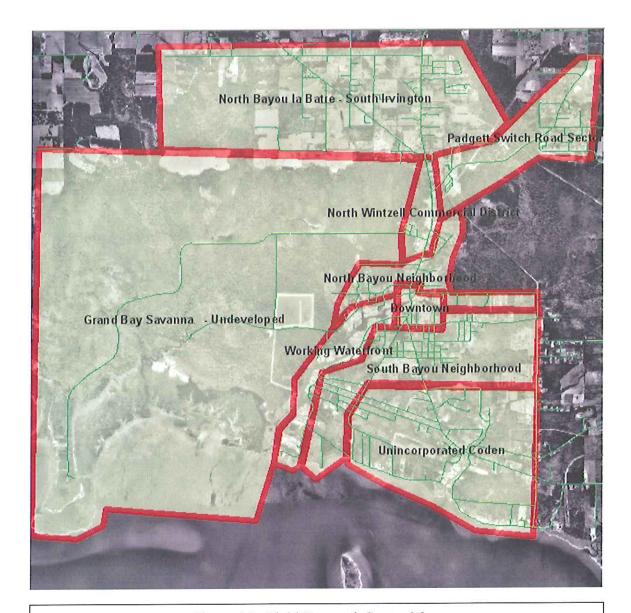


Figure 17. Field Research Sector Map

Grand Bay Savanna



Figure 18. Grand Bay Savanna looking east from Marine Lab Rd.



Figure 19. Inland scene of Grand Bay Savanna looking south along Marine Lab Rd.

The savanna is accessible by Marine Lab Rd., a winding dirt road that intersects with Hwy 188 on the northern end of town. Much of the property along the road is owned by Forever Wild. The road dead-ends on a sparsely wooded peninsula that is surrounded by marsh grassland. From the peninsula you can see the Mississippi Sound and the mouth of Bayou la Batre beyond the chest-high grass to the east.

There are numerous inlets and bayous in the savanna between the peninsula and Bayou la Batre, including the Little River. The undeveloped savanna runs as far east as the western shore and mouth of Bayou la Batre. To the west, you can see the shoreline all the way to the Chevron refinery in Pascagoula, MS about 10 miles away.

As you move back inland, the forest thickens with increased numbers of pine trees and various kinds of underbrush. The dirt road crosses numerous slow moving streams. One stream crossing is a man-made cement ford. There is a lot of standing water in the grassland, in the scraggily pine forest, and along the edges of the road. The only sounds you hear are those of the wind, birds, and the industries of nearby Bayou la Batre.

Unincorporated Coden



Figure 20. Abandoned housing condemned after Hurricane Katrina at the corner of Railroad St. and Midway St.

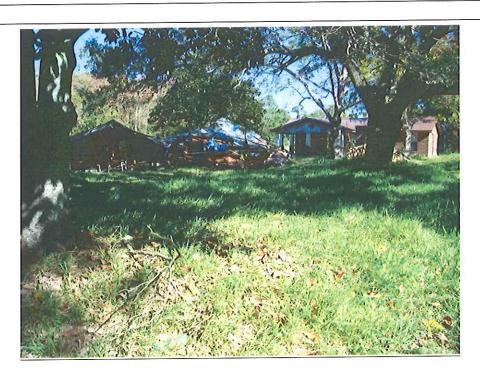


Figure 21. Houses destroyed and damaged by Hurricane Katrina along Midway St.

Three years after Katrina, there are still abandoned, condemned structures. Families are still living in campers and FEMA trailers. Many lots remain completely empty except for the overgrown brush. The situation seems the worst along Midway Ave., where it is common to see abandoned houses in groups of three or four. Dispersed among the homes are seafood processing plants – several of which remain closed since the storm.

To the east, the western shore Bayou Coden provides a home for several ship building firms. Across the bayou, there are several historic homes lining Coden Belt Road and Riva St. The northernmost waters of the bayou are located in a neighborhood of moderate housing in which each parcel has waterfront access. Adjacent to the Bayou is a small commercial district. However, only two businesses remain open.

South Bayou Neighborhood



Figure 22. Destroyed and re-built housing along the Mississippi Sound shoreline.



Figure 23. House elevated after Hurricane Katrina

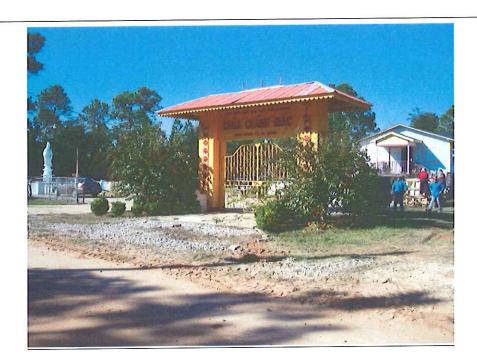


Figure 24. Temple located on Adams St.

This sector includes all residential areas on the south side of the community that are within the corporate limits of Bayou la Batre. This neighborhood runs from Shell Belt Road on the Bayou, along the north-south oriented Railroad St., across Highway 188, to the east end of the east-west oriented Hemely St. along the southern shore of the Bayou. This neighborhood contains Alba Middle School and its associated ball-fields. This neighborhood seems to harbor a great amount of ethnic diversity. While in the field, I observed Whites, African-Americans, Asian-Americans, and Latinos residing here. On the corner of Adams St and Railroad St., there is a Buddhist temple. Not far to the north on Railroad St., there is an Asian market.

Much of the housing in this neighborhood remains intact, although there are many abandoned structures. Still, this area has fared better than those outside the corporate limits. Several of the houses in this neighborhood are being elevated. The city has a

policy in place that provides funding to have houses elevated on cinder block pilings provided they meet certain structural prerequisites.

The portion of the neighborhood along the Mississippi Sound shore fared the worst. However, even though this area suffered the brunt of the storm surge, it is also the place where most of the new housing construction is occurring. The news houses being built are higher and larger than their predecessors.

Working Waterfront



Figure 25. Shipyard and wetland area on Shell Belt Rd. near the mouth of Bayou la Batre

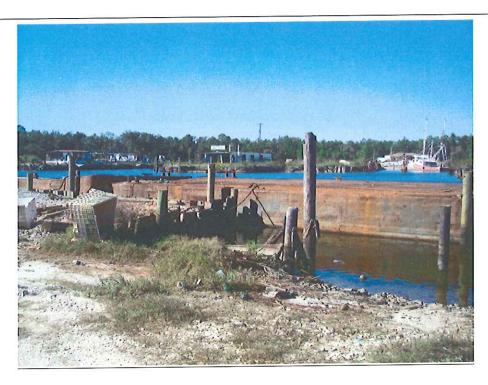


Figure 26. Abandoned waterfront once occupied by seafood processors



Figure 27. Busy shipyards along Shell Belt Rd. at midday

The working waterfront lies on both sides of the Bayou – along Shell Belt Road on the east and Little River Road on the western shore. Along Shell Belt Rd., the shipbuilding industry is in full vigor. There is a constant rumble from the industries and employee parking spills over to the other side of the street. There are several places along the road where the string of industries is interrupted by wetlands and small streams. One wetland takes up the entire space between Shell Belt Rd., Railroad St., Adams St., and Warner St.

Whereas the shipbuilding industry is booming, the seafood industry is experiencing a sharp decline. Evidence of this is displayed along both sides of the Bayou, where many (if not most) of the seafood processing plants have closed down.

There are also numerous repossessed shrimping vessels that are docked along the shore –

some with weeds 6ft tall growing on them. Remnants of these unsuccessful businesses decay on the water's edge, polluting the waters of the Bayou.

Located on the eastern side of the mouth of the bayou, Lightning Point is a small hill that rises above the surrounding wetlands and the Mississippi Sound shoreline. There is a large parking area on the point, though most of the land adjacent to it is privately owned. The state dock of Bayou la Batre is located at Lightning Point. This is a location the Urban Land Institute recommended developing into resort and condominium district with private water access.

<u>Downtown</u>

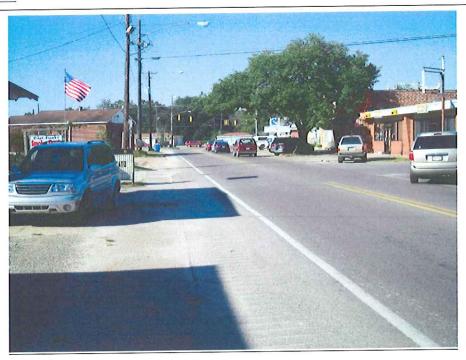


Figure 28. Downtown scene looking north along Hwy. 188 south of intersection with Railroad St. and Shell Belt Rd.

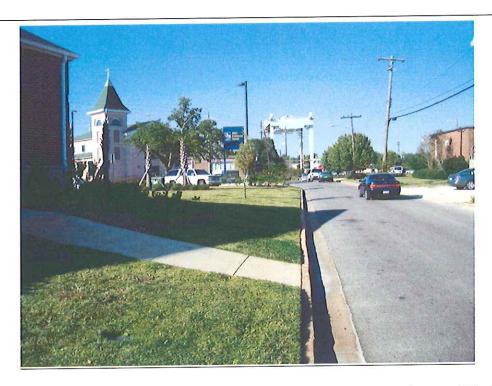


Figure 29. Downtown scene looking north along Tapia St. toward Hwy. 188, the drawbridge, and the Catholic church



Figure 30. View from Shell Belt Rd. looking east toward the intersection with Hwy. 188. Open property on both sides (waterfront to the right).



Figure 31. View toward the south from Hwy 188 across the bayou from the heart of downtown

The downtown area of Bayou la Batre is one that still has a couple of businesses operating. However, it is clear that more used to be here. A handful of businesses, a Catholic Church, and City Hall remain along Highway 188 south of the draw bridge. These businesses include a pharmacy, RBC Bank, the "Headstart Center," a gas station, a billiard room, and two small restaurants. The downtown area isn't very friendly for pedestrians and doesn't have any accommodations for bicycle use.

At the intersection of Shell Belt Rd., Highway 188, and Railroad St., there is a large open area where businesses used to be located prior to Katrina. There is also a large open parcel across Shell Belt Rd. and behind the church that connects to the waterfront. If there are to be redevelopments in the downtown area, this is one location that has plenty of potential. There are also two large vacant waterfront lots located on either side of Highway 188 on the north side of the Bayou. For sale signs designate the lots as future sites for commercial development. The large vacant lots just north of the bridge are accompanied by a Mexican restaurant and a used car lot.

North Bayou Neighborhood



Figure 32. View toward the north at the intersection of Hwy 188 and Little River Rd. just south of the Baptist church

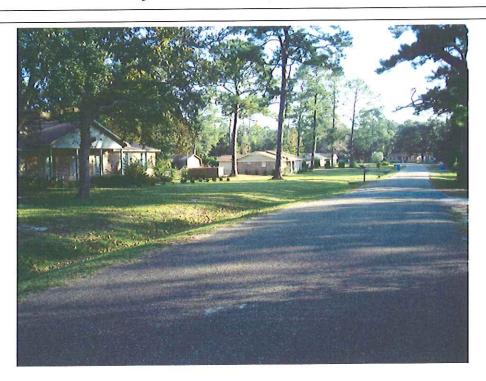


Figure 33. Neighborhood along Center St.

This neighborhood appears to have weathered Katrina much better than the neighborhoods south of the Bayou. Not only is it further from the Mississippi Sound, but the homes located here appear to be largely those of middle-class families, another contrast from the neighborhoods to the south. There were nice automobiles, and in many cases, personal boats parked in front of the homes. There were only one or two homes in this sector that remained uninhabited. The rest appeared refurbished and occupied. The entire neighborhood also boasts a nice tree canopy.

The largest homes in this neighborhood are located along Little River Rd. and Davenport St. Many of the homes along Davenport St. are new, large, elevated on pilings, and have waterfront access along the eastern portion of the bayou or dredged inlets along the bayou. Davenport St. crosses a near-stagnant stream that flows from the north and provides water access to properties between Hwy 188 and Simonson St.

North Wintzell Commercial District



Figure 34. View north along Hwy 188 near the strip mall and chain restaurants



Figure 35. Large multi-family apartment complex on Marine Lab / University Rd. near strip mall and Hwy 188.

This sector follows N. Wintzell Ave. (Highway 188 north of downtown) and is the location of most of the commercial activity in Bayou la Batre. Such activity includes a strip mall with a grocery store, pharmacy, billiard room, and clothing store; fast food restaurants; the town's one motel; hardware and electrical supply stores; real estate offices; and gas stations. Most of this sector is built in automobile dependent fashion with large parking lots in front of the businesses, no sidewalks, and drive-throughs at most of the restaurants. This sector also includes the most multi-family housing of any sector with two large complexes on Marine Lab Road, between the strip mall and the undeveloped marshlands along the western edge of town.

Padgett Switch Road Sector



Figure 36. Community center and ball fields

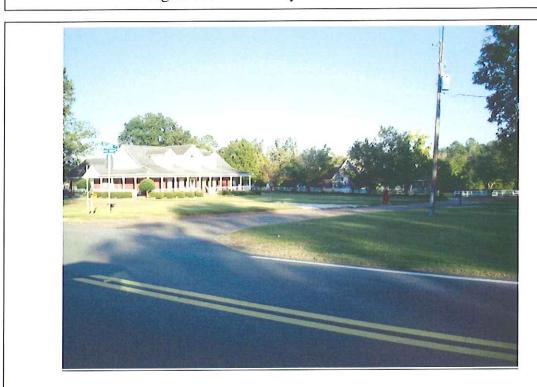


Figure 37. New housing at higher elevations north of town

Padgett Switch Road is home to higher elevations and higher income housing.

Many of the houses along this road appear to be relatively new and more expensive than the other neighborhoods – except for the one trailer park just outside the corporate limits.

The community center, new library, and new ballpark are located here as well as a large Methodist church, medical clinic, and retirement home.

Further north along Padgett Switch Rd., there is an industrial park with two large vacant buildings that were once textile mills. Both buildings remain in fair shape and look as though they could house a new industry without too much investment. With the new four-lane connector highway from Interstate 10 projected to pass nearby, this industrial park could see a revival.

North Bayou la Batre - South Irvington

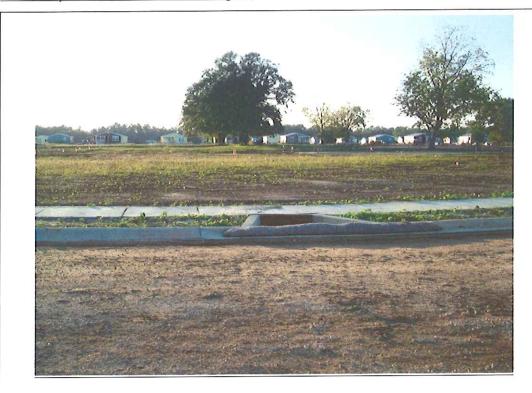


Figure 38. "Safe Harbor" neighborhood being constructed along Hwy 188



Figure 39. Street scene in "Safe Harbor" neighborhood



Figure 40. View toward the east from the dead-end of Hurricane Blvd near the schools

It was in this sector that I stumbled across a most interesting find. Located about 4 miles north of downtown along Highway 188 is an enormous housing development. There is a large sign at the entrance displaying the name of the community, "Safe Harbor," and its largest financier, FEMA. I spoke with a contractor on the site and representatives of the Bayou la Batre Office of Housing Recovery and learned that the housing is meant for those families who lost their homes in Katrina. The site has an elevation of about 70ft. All of the homes are pre-manufactured, brought in by truck, and are placed on cinder block foundations. Variety in housing choices includes five colors, two styles of porches, and alternating orientation of the porches. I measured the houses to be about 20ft by 40ft in size. Construction of the community was still taking place and

it appeared as though there will be about 100 homes on a site of about 60 acres. Apart from this development, others have a similar form to those on Padgett Switch Rd.

Also within this sector, there are two new schools – an elementary school and the new Alma Bryant High School. Both are located along Hurricane Blvd. which intersects with Highway 188 and Four Mile Rd. on the east end and dead-ends immediately to the west of the schools. Besides the schools, only four or five houses are located along the road. Located far away from any other homes, nearly everyone who attends the two schools must travel by car or bus.

Visioning Workshops

The community profile is by no means exhaustive – a full profile of the city is included in the current comprehensive plan. However, it achieves the goal of painting a holistic picture of the community – attaching physical and socioeconomic spatial imagery to quantitative data gathered from secondary sources. It has provided a great amount of knowledge of the community, allowing me to proceed with facilitating the visioning workshops.

Workshop 1 - January 26, 2009 5:00PM Bayou La Batre City Hall

The first workshop began with an introduction of the project, the project investigators, the source of funding, and how I was introduced to the idea of creating a future land use plan for Bayou La Batre through my experience with the city in a previous research project with the Mississippi-Alabama Sea Grant Consortium. After a quick introduction to the visioning process, the Planning Commission and I began the discussion of pinpointing the current state of the city. We started by looking at the community profile I put together in order to re-introduce ourselves to the city in its entirety. Once we concluded the city's profile, we discussed a series of questions meant to bring out the participants thoughts and ideas about their own personal memories, the profile they had just seen, and where they believe the city should go in future years.

The question "Where have we been?" sparked a lot of conversation about the way the city used to be according to each member of the Commission. The discussion brought out many images of Bayou La Batre's past that were remembered with great fondness. Such scenes included images of being able to walk to most of the necessary services in life like the grocery store, work and school. Other scenes spoke of a vibrant

waterfront and downtown area complete with its own fountain and grocery store across from the Catholic Church. One member of the Commission recalled being able to walk from his home to the high school, then to the local soda fountain downtown in the afternoon.

Stories with fond memories such as these were often countered by the realities brought forth by the "Where are we now?" topic. Most of the participants expressed sorrow that the city that once held many qualities they cherished had seen a decline of those qualities as the two-edged sword of economic change and natural disaster took their toll on the waterfront city. The consensus of the participants regarding the current state of the city was that Bayou La Batre is in need of rejuvenation. The city is losing population, especially among young adults, and seems to be struggling to recover from Hurricane Katrina and the decline of the seafood industry. The discussion of the question "Where are we going?" set forth a dismal picture according to the participants "if we continue do things the way we've been doing them." There was a general consensus that change is needed in the approach to city building the city takes in the future.

However, the participants stated that they still believe the Bayou holds a lot of promise, pointing to the resiliency of the people who have lived there their entire lives through good times and bad, as well as the geographical location of the city. Questions like "Where do we want to go?" and "How do we get there?" generated a discussion of optimism that caused the group to dig down and think critically about an altered course for the city. According to the participants, that altered course would need to include attracting new types of industries and populations to diversify the economy, rebuilt communities and neighborhoods, and generate a stronger secondary sector economy.

Workshop 2 – January 27, 2009 5:00PM Bayou La Batre City Hall

We began the second workshop where the first left off – with a greater sense of the city's state over time and what the participants wanted to see occur there in the future. To dive deeper into this dialogue of the city's current conditions and future prospects, we engaged in a SWOT analysis, dissecting the city's strengths, weaknesses, opportunities and threats. The following lists are the result of that discussion.

Strengths

- * The city is located close to the Gulf of Mexico and on a waterfront
- * A strong sense of community exists in the city a characteristic magnified by the difficult times the city is experiencing.
- * The community has retained a unique and diverse cultural heritage.
- * There is a large publicly owned wetland habitat adjacent to the city.
- * The deep shipping channel in the Bayou allows for possibility of future waterfront industry.
- * The city is located in one of the fastest growing mid-sized metropolitan economies in the nation.
- * Two new schools are located within the city.
- * The city is in an excellent position to receive many types of funding.

Weaknesses

- * There isn't enough diversity in the economy, forcing the city to ride the apparent rollercoaster that is the waterfront economy with its highs and lows
- * The city's young people leave for education and employment opportunities elsewhere and rarely come back.
- * The high poverty rate of the city limit choices and opportunities.

- * Many homes remain improperly elevated in the flood zone especially on the south side of town.
- * Many waterfront properties are abandoned generating water pollution, lowering the visual appeal of the town, and restricting property values.
- * Dispersion of land uses and automobile-dominated built environment discourages walking and bicycle usage as alternative travel means.
- * New schools are located far from residential areas.
- * There are still abandoned, condemned structures remaining from Hurricane Katrina.
- * Numerous cases were families are living in poor housing conditions.

Opportunities

- * Construction of a four-lane highway connector between Bayou la Batre and Interstate 10 will substantially increase the city's connectivity with the rest of the Mobile metropolitan area. This should provide new economic opportunities to the city.
- * If developed into an attraction by the Alabama Forever Wild Program, the Grand Bay Savanna could draw tourists and nature enthusiasts to the city.
- * Vacant properties in the downtown area along the waterfront and adjacent to major intersections provide an opportunity for new development that could revitalize the core of town.
- * A zoning code that focuses more on urban form than land use could provide for greater opportunities for mixed use developments, which could help in revitalizing downtown.
- * The "Safe Harbor" community will allow many families an opportunity to move to better housing at a higher elevation. This new community also offers the opportunity to create a new, well designed node of development.
- * Empty parcels left as a result of Hurricane Katrina's devastation offer many opportunities for infill development such as new housing built to withstand flooding and hurricanes.
- *Many people who left the city want to come back if it is redeveloped properly.

Threats

- * Most of the city is in the floodplain.
- * Because the city receives insurance from the federal government, it is bound by FEMA regulations. There remains the constant threat of losing that insurance if the city remains filled with substandard structures in flood and storm surge velocity zones.
- *New FEMA flood maps aren't scheduled to be completed for the area until 2013, leaving uncertainty in how and where the city should channel its redevelopment efforts.
- *With large numbers of people still living in poor housing conditions close to the shore and within flood zones, another natural disaster would cause substantial harm to the community and it's residents.
- * Lower income families moving to new neighborhoods like "Safe Harbor" must have access to automobiles to travel the distances between them and life necessities.
- *Observed lack of communication between business owners, residents, and government officials (local, regional, state) diminish the city's realization of opportunities.
- *Observed friction between Bayou la Batre and surrounding communities further diminishes possibility of capitalizing on opportunities.

After listing the results of the SWOT analysis, we turned our attention to developing a general vision that encompassed a desired outlook shared by the members of the Planning Commission. I set out constructing a statement from the final comments given by the Planning Commission before we adjourned for the evening. The statement is as follows:

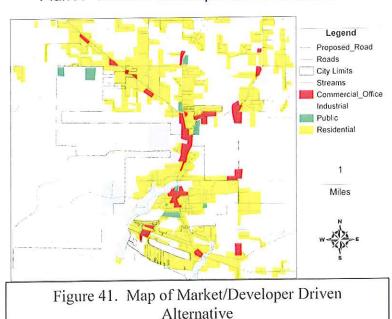
The city of Bayou La Batre, a city of 2,300 residents located along a small inlet on the shores of the Mississippi Sound, is a city that has dealt great adversity in the form of economic downturn and natural disaster. However, it is a city of resilient and unified citizens. The vision set forth by the Planning Commission for the next 20 years for the city is to see it approximately double in population. To achieve this growth, the city will have to take an innovative approach to development and urban design, diversify the economic base that serves as the foundation of the city, protect environmentally sensitive areas for future generations, and seek opportunities to more closely integrate itself into one of the fastest growing mid-sized metro areas in the country.

Workshop 3 - February 10, 2009 5PM Bayou La Batre City Hall

After obtaining from the participants a list of the city's strengths, weaknesses, opportunities and threats and upon construction a general vision statement for the future of the city, I set out to draft three different scenarios from which the Planning Commission could choose an alternative to be further explored as a possible means of meeting the goals of the vision statement.

Plan A - Market / Developer Driven Alternative (figure 41)

The first alternative for future development painted a picture of what the city would look like if there where no significant changes in policy. This was a market/developer driven alternative that follows the current method of increasing the city's size by annexing new property and avoiding adding any density measurements to current zoning practices. The result was a city that stretched out over large amounts of land while retaining a fragmented pattern of extremely low-density development.



Plan A - Market / Developer Driven Alternative

The Planning Commission rejected the first alternative. They saw it as an alternative that too closely resembled the status quo and would not be able to provide for a sustainable future. This policy route, with annexation as the main method of population growth, would be a difficult route to take to attain the population goals of the Planning Commission's vision reach and would likely stretch city services too thin. In addition, following the current zoning ordinance of the city, there were no protections given to wetlands or other environmentally sensitive areas.

Plan B – Updated Policy Alternative (figure 42)

The second plan offered a few additions to the city's current zoning ordinance. This update included setting a base density level for infill and new developments, protection for wetlands, and a pedestrian and bicycle network. The first two additions by their nature constricted the amount of new land required by the city to grow and meet the population goal of approximately 4,600. I calculated that the current density of Bayou La Batre is roughly 1.38 Dwelling Units per Acre (DUPA). In order to increase density and thus reduce the amount of annexation needed, I set the density bar for new developments to 2 DUPA and infill developments to add 2 DUPA to existing conditions at those locations.

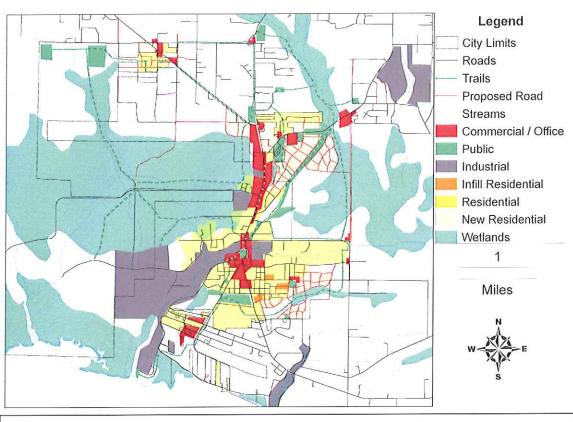
In order to map how much and where new and infill growth should take place, I needed to calculate the acreage required to house the new population. According to the census, the current average household size for Bayou La Batre is 3. The goal to add another 2,300 people means that another 767 families would need to move to the Bayou based on the average household size. With new growth and infill additions requiring a DUPA average of 2, a total of 383 acres will be needed for development.

The locations of infill and new development are contingent on ideal elevations, areas not included in the wetlands inventory, and areas out of the velocity zones that are prone to higher levels of storm surge in the event of a hurricane (reference elevation, wetlands and flood zone maps in community profile section). Areas most favorable for development under these conditions are located around and to the east of the intersection of Padgett Switch Rd. and N. Wintzell Blvd. in the northern portion of the city, to the southeast of downtown Bayou La Batre, and the "Safe Harbor" area close to Alma Bryant High School.

The aforementioned areas of development with their DUPA and acreage values refer strictly to residential development. The second alternative still followed the Euclidean, use-based zoning practices currently used by the city. Areas of commercial and industrial development were placed at locations were the zoning either already exists for those uses or are speculatively placed at potential nodes of development associated with a highly trafficked areas. No math was involved in the determination of the amount of new land consumed by these uses in this stage of the planning process.

The second alternative was viewed more favorably by the Planning Commission. They liked the idea of constricting the lateral movement of the city while being able to use most of the current zoning ordinance. They also like the idea of doing more to preserve the rich environmental assets of the area and possibility attracting eco-tourists to the city. The system of pedestrian and bicycle pathways throughout the city also proved to be popular. However, the second alternative didn't address the expressed need for more mixed-use type developments and, according to one commissioner, still required

too much annexation. With this conclusion, the Planning Commission wanted to see the third alternative.



Plan B - Updated Policy Alternative

Figure 42. Map of Updated Policy Alternative

Plan C – Smart Code Alternative

The Smart Code is a form-based method of zoning rather than the traditional use-based form of zoning. Because it is less concerned with specific uses of a parcel than it is with the design and layout of the building and parcel, Smart Code encourages a level of mixture in uses that is difficult to attain through traditional Euclidean style zoning. The form-based zoning also encourages a higher level of density in some zones while

discouraging development of any kind in others, creating a clear delineation between the city and surrounding rural areas.

Smart Code's zones area divided into regional (figure 43) and local scales (figure 44). The regional scale zones are more suggestive in nature and are meant to provide a broad view of the shape that development should take in the city and it's environs. The regional scale includes the following zones:

- *O-1: Preserved Open Sector Areas already set aside for preservation.
- *O-2: Reserved Open Sector Areas that are not preserved but should be.
- *G-1: Restricted Growth Sector Areas that have value in being open but low-density development can still occur.
- *G-2: Controlled Growth Sector Areas where some development can occur due to proximity to major thoroughfare.
- *G-3: Intended Growth Sector Areas that are focal points of new development.
- *G-4: Infill Growth Sector Areas where reinvestment in an already developed environment is encouraged.
- *SD: Special Districts Areas that by their nature do not conform to Smart Code.

The local scale zones have the specific design guidelines associated with Smart Code. Considering the scope of this project, I focused on the suggested Dwelling Units per Acre (DUPA) figures to determine how much land was needed for each zone in order to produce a future land-use map that met the population goal set in the previous workshop. The local scale includes the following zones with descriptions and DUPA measurements set in the Smart Code template:

- *T1: Preserved / Natural No development allowed unless by variance. 0 DUPA
- *T2: Rural Sparse development. Enough land to cultivate. Automobile takes precedence over pedestrian. DUPA >2, preferably less than 1 DUPA.

- *T3: Sub-Urban Mainly single family detached residential. Pedestrian takes precedence over automobile. Minimum DUPA of 2.
- *T4: General Urban Mixed-use. Higher density. Minimum DUPA of 4.
- *T5: Urban Center Highest density with a mixture of uses. All buildings built to ROW with max height of 5 floors. Minimum DUPA of 6.
- *SD: Special Districts Areas that by their nature do not conform to Smart Code.

Using these discriptions and DUPA figures, I drafted plans for Bayou La Batre at both scales. For the regional scale zones, I used the following method for determining the extend of the zones:

- *O-1: Areas purchased by Alabama's Forever Wild Program for preservation.
- *O-2: Areas of sizeable wetlands and floodways.
- *G-1: Areas that consist largely of farmland or forests or locations that lie in velocity zones and floodplains.
- *G-2: Areas with proximity to major thoroughfare.
- *G-3: Areas of higher elevation that are safe from storm surge or flooding concerns and are in close proximity to a major thoroughfare.
- *G-4: Areas where reinvestment in an already developed environment should take place.
- *SD: Indicates industrial / noxious uses at the regional scale.

The areas indentified for "proposed annexation" were derived from the making of the local scale map.

Regional Scale Plan - Bayou La Batre

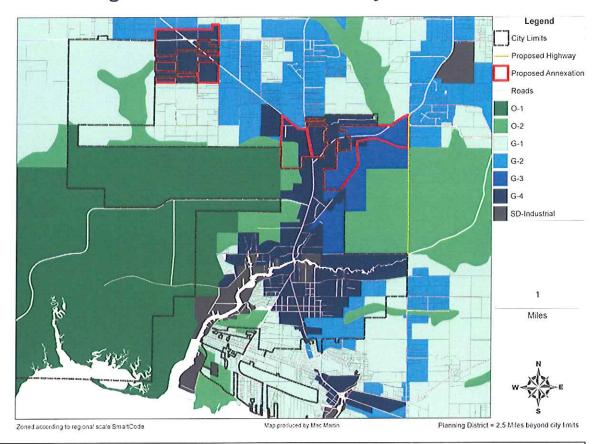


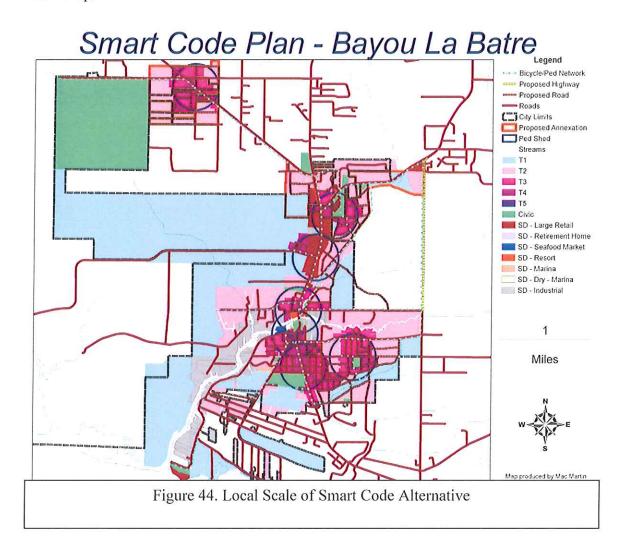
Figure 43. Regional Scale of Smart Code Alternative

As mentioned earlier, I used the suggested minimum DUPA figures listed in the Smart Code template to determine the amount of acreage needed for zones T3-T5. Since the minimum value of T2 is flexible, I used that zone to house the remaining population after T3-T5 totals were set. It is also important to note that since this style of zoning requires a new zoning ordinance, the existing population is included in the calculations for the zone sizes. As with "Plan B", the average houshold size in Bayou La Batre is approximately 3. The following includes discriptions of each zone at the local scale:

*T2: Population: 546. Number of households: 181. Total acreage: 1187 – 6.5 acres per dwelling unit.

*T1: No development allowed unless by variance. Population: 0

- *T3: Population: 2402. Number of households: Approx. 801. Total acreage: Approx. 400. DUPA: 2
- *T4: Population: 1561. Number of households: Approx. 520. Total acreage: Approx. 130. DUPA: 4
- *T5: Population: 115. Number of households: Approx. 38. Total acreage: Approx. 6.4. DUPA: 6
 - -Total Population: 4624
 - -Total amount of developed land: Approx. 2514 acres.
- *SD: Special Districts Areas that by their nature do not conform to Smart Code.
- **Locations and characteristics of the Special Districts were discussed during the fourth workshop.



Smart Code is a land use design that focuses on the development of walkable communities – places were many of the essential functions and services in life are within walking distance. The accepted maximum distance people are willing to walk adopted by Smart Code is a quarter of a mile from a node of activity. The circular area created by this radius is referred to as a "pedestrian shed". Pedestrian sheds are usually centered on a node of high activity of a civic space. Development within these pedestrian sheds is densest near the center, gradually becoming less dense towards the periphery. 5 of the pedestrian sheds I developed for this project are centered on busy intersections and 2 are centered on existing parks. All of the pedestrian sheds are connected by the pedestrian and bicycle path system first proposed in "Plan B". The downtown pedestrian shed, located just south of the waterfront on highway 188 is the only pedestrian shed with T5 development.

After presenting the three scenarios, I gave the Planning Commission two weeks to decide which option they wanted to pursue. In concluding the third workshop, I left all materials and maps for the Planning Commission to study and designated a representative of the Commission that I would stay in contact with. After two weeks, the representative contacted me and said the Planning Commission had unanimously selected the Smart Code alternative.

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I returned for the fourth workshop to find a crowd of citizens interested in the proceedings in the visioning process I was conducting with the Planning Commission.

The fourth workshop was scheduled to refine the Smart Code plan. However, with so many new participants, the workshop largely consisted of educating the general public on

Smart Code and the plan I had developed for the city. However, I did cover the special Districts in greater detail with the Planning Commission.

The following is a list of characteristics of the Special Districts:

- *SD Large retail: Areas of large stores and warehouses that were built to accommodate the automobile culture. This zone covers much of N. Wintzell Blvd. (Hwy 188) and includes a possible location of a new chain grocery store.
- *SD Retirement Home: Five floor building housing a retirement home off of Padgett Switch Rd.
- *SD Seafood Market: A proposed seafood market along the waterfront within the downtown pedestrian shed. The site currently has a large abandoned building that once housed a seafood processing plant. According to the Planning Commission, there is a developer that is looking to convert the building into a seafood market.
- *SD Resort: Locations favorable for large hotel / resort type development. Sites are located on either side of N. Wintzell Blvd. just north of the bridge and on the shore of the Mississippi Sound on a elevated piece of property called Lightning Point. All three sites are vacant and two are for sale.
- *SD Marina: Proposed location of a marina on an inlet about halfway up Bayou La Batre (water body). This location lies just to the north of a large wetland area. The city is considering dredging this small inlet to create a safe harbor for boats during storms.
- *SD Dry Marina: A storage facility and slip for recreational boats that is in the process of being approved for construction. It will be located between the proposed seafood market and the Catholic Church downtown.
- *SD Industrial: Indicates industrial / noxious uses. Most of the working waterfront that forms the foundation of the economy is left intact in this plan. Areas of potential industrial development include a cooperative industrial park to the west of the Bayou and new industries locating in two abandoned textile mills the north of town along Padgett Switch Rd.

Conclusion

In concluding the final workshop, I offered to return for a fifth time to cover any problems they had with the Smart Code plan. When asked if they had any concerns with the plan thus far, the Planning Commission stated that they liked what they saw and where perhaps without the depth of knowledge of the intricacies of Smart Code to add any fresh scrutiny. It was their determination that before the Planning Commission pursues the plan any further, they wanted to know if the City Council, the ultimate authority for the adoption of any new zoning ordinance, would be interested in Smart Code. They suggested I use a fifth trip to the Bayou to present the Smart Code future land-use plan to the Mayor and City Council. My presentation to the Mayor and City Council took place on May 28th. The City decided at that time to investigate the plausability of adapting SmartCode to Bayou La Batre.

This project offered me a unique opportunity to enter into a situation where a city was in need of planning energies dedicated to meeting its needs. The combination of the decline in the Gulf Coast seafood industry and the devastation caused by Hurricane Katrina has made circumstances very difficult for the waterfront city. With the funding granted to me by the Mobile Bay National Estuary Program, I was able to conduct in-the-field research, create a community profile, facilitate visioning workshops with the Planning Commission and citizen participants, and draft a future land-use plan that meet the needs expressed by the workshop participants.

Building a community profile, although not exhaustive one, allowed me to immerse myself with information about the city and the local setting. Knowledge gained through this step of the sequential planning process gave me a better understanding of the

history and the present state of the city. This foundation of knowledge then aided in my facilitating the workshops and engaging several stakeholders and concerned organizations outside of the organized workshop setting.

Feedback from those involved in the visioning workshops indicate that this was the first time many at the table had ever been offered a chance to critically think about the Bayou's present state and have serious a discussion about the future of the city.

Comments from several participants indicated that in the past, especially immediately following Hurricane Katrina, planners and academics rushed through the area, took a quick glance at the shape the city was in and dispelled a few recommendations before leaving town — many spending no more than a couple of days in the city. This project involved dedicating an entire year to studying and addressing the situation of the city of Bayou La Batre.

The result of this effort is a Smart Code future land use plan that met the approval of the Planning Commission, Mayor and City Council for further consideration as a viable means of rejuvenating the city. In addition, the project initiated collaboration among a coalition including the City of Bayou La Batre, the Mobile Bay National Estuary Program, and the Community Planning Program at Auburn University. It is with this collaboration in mind that I recommend a continuation of the working relationships begun in this first year of work into a second year of study. Though I will be unable to continue with the project due to my recent employment with the City of Athens, the Community Planning Program has several well qualified students ready to take on the task. I recommend that funds set aside by the Mobile Bay National Estuary Program and the City of Bayou La Batre for another year of planning efforts be used to fund the

education and the work of other students in the Community Planning Program at Auburn University. Through another year of funding, these Community Planning students would assist the City with adapting SmartCode to their specific context. This experience would afford the students the same opportunity the project gave me – the chance to gain experience in the field of Planning, help fund graduate level education and become more competitive in the job market.

Bibliography

- "Alabama's Forever Wild Program." <u>Outdoor Alabama</u>. 2008. Alabama Department of Conservation and Natural Resources. 5 Dec. 2008
 http://www.outdooralabama.com/public-lands/statelands/foreverwild/.
- Barnett, Jonathan. <u>Redesigning Cities: Principles, Practice, Implementation</u>. New York: Planners P, 2003.
- Berke, Philip R., David R. Godschalk, and Daniel A. Rodriguez. <u>Urban Land Use Planning</u>. New York: University of Illinois P, 2006.
- Calthorpe, Peter, William Fulton, and Robert Fishman. <u>The Regional City: New</u> Urbanism and the End of Sprawl. New York: Shearwater Books, 2001.
- City of Bayou la Batre Comprehensive Plan. South Alabama Regional Planning Commission. Mobile, AL: SARPC, 2001. Adopted March 7, 2001.
- Consumers Union of the United States, Inc. "Seafood: Farmed vs. Wild." Rep.No. 70. <u>Consumer Reports.</u> Washington D.C. 2005.
- Coy, Peter, Adam Aston, and Emily Thornton. "Hurricane Ahead, But Lower Insurance." Business Week 14 May 2007: 68-69.
- Cuthill, Michael. "Community Visioning: Facilitating Informed Citizen Participation in Local Area Planning on the Gold Coast." <u>Urban Policy and Research</u> 22 (2004): 427-45.
- Daniels, Thomas L., John W. Keller, and Mark B. Lapping. <u>Small Town Planning Handbook, Third Edition</u>. New York: American Planning Association, 2007.
- Gaber, John, and Sharon Gaber. <u>Qualitative Analysis for Planning and Policy</u>. New York: Planners P, 2007.
- Gaber, John, and Sharon L. Gaber. "Utilizing Mixed Method Research Designs in Planning: The Case of 14th Street, New York City." <u>Planning Education and Research</u> 17 (1997): 95-103.
- Gaillard, Frye. "After the Storms: Tradition and Change in Bayou La Batre." <u>Journal of</u> American History December (2007): 856-62.
- Garde, Ajay. "Designing and Developing New Urbanist Projects in the United States: Insights and Implications." Journal of Urban Design 11 (2006): 33-54.

- Goodman, Peter S. "Worried Banks Sharply Reduce Business Loans." New York Times. 28 July 2008. 29 July 2008

 http://www.nytimes.com/2008/07/28/business/economy/28credit.html?r=1&em&ex=1217476800&en=68a53e01dfd0f5fa&ei=5087%0a&oref=slogin.
- Greene, Jennifer C., Valerie J. Caracelli, and W. F. Graham. "Toward a conceptual framework for mixed method evaluation designs." <u>Educational Evaluation and Policy Analysis</u> 11 (1989): 255–274.
- Hammond, Cathie. "The Wider Benefits of Adult Learning: An Illustration of the Advantages of Multi-method Research." <u>Intercational Journal of Social Research Methodology</u>. 8 (2005): 239–255
- Hanan, Kevin S. "Planning for Sustainability." <u>Journal of the American Planning Association</u> 71 (2005): 27-40.
- Hanna, Kevin S. "The Paradox of Participation and the Hidden Role of Information." <u>Journal of the American Planning Association</u> 66 (2000): 398-410.
- Jervis, Rick. "Shrimper Struggle for Survival." USA Today 11 Aug. 2008: 4.
- Kaplan, Dave H., Steven Holloway, and James O. Wheeler. <u>Urban Geography</u>. New York: Wiley, 2003.
- Klosterman, Richard E. <u>Community Analysis and Planning Techniques</u>. New York: Rowman & Littlefield, Incorporated, 1990.
- Morrow, Betty H. "Identifying and Mapping Community Vulnerability." <u>Disasters</u> 23 (1999): 1-18.
- NWS-Birmingham Internet Services Team. "NOAA's National Weather Service Birmingham, Alabama." National Weather Service Southern Region homepage. 10 Apr. 2009 http://www.srh.noaa.gov/bmx/significant_events/climate/top10.php.
- Naylor, Rosamond L., Josh Eagle, and Whitney L. Smith. "A Global Industry with Local Impacts: Salmon Aquaculture in the Pacific Northwest." <u>Environment</u> 45 (2003): 18-39.
- Our Common Future. World Commission on Environment and Development (WCED). Oxford, England: Oxford UP, 1987.
- Runyen, Rodney C. "Small Business in the Face of Crisis: Identifying Barriers to Recovery from a Natural Disaster." <u>Journal of Contingencies and Crisis Management</u> 14 (2006): 12-26.

- Sassen, Saskia. Cities in a World Economy. In <u>Readings in Urban Theory</u>, ed. Susan Fainstein, and Scott Campbell. 32-56 Grand Rapids: Blackwell Limited, 2002.
- Sieder, Jill J. "Struggling to Stay Afloat." <u>U.S. News and World Report</u> 5 Aug. 1996: 50-51.
- Skoloff, Brian. "High Fuel Costs Hurting Charter, Commercial Fishing." <u>Waterfront News</u>. July 2008. 29 Aug. 2008 http://www.waterfront-news.us/08/07/html/news_feature.htm.
- Urban Land Institute Advisory Services Panel. <u>Bayou la Batre, Alabama: A Strategy for Rebuilding</u>. Urban Land Institute. Washington D.C. 2007.
- U.S. Census Bureau. 2008. 21 Sept. 2008 http://www.census.gov.