Sustainable Communities Plan for Coastal Georgia

Environmental Planning Studio

College of Environment + Design

UGA

Spring 2014

Part One.

Survey of Existing Conditions

March 2014

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SITE VISITS & INTERVIEWS

Over a period of three days, February 6–8, 2014, the planning studio visited the five-county study area in Coastal Georgia, and the team met with planning agency staff and other county and municipal officers to gain first-hand insight into the conditions, issues, and opportunities there. The following list outlines the meeting schedule across the study area:

Coastal Regional Commission
Lupita McClenning, Director of Planning and Government Services

Coastal Georgia Historical Society
Mimi Rogers, Curator

Bryan County
Ray Pitman, County Administrator

Camden County
John Peterson, Director of Planning and Development

Glynn County
William M. Weeks, City Manager, City of Brunswick
Arnie Glaeser, Planning and Development Manager, City of Brunswick
Mathew Hill, Executive Director, Brunswick Downtown Development Authority

Liberty County
Jeff Ricketson, AICP, Executive Director, Liberty Consolidated Planning Commission
Joey Brown, County Administrator
Billy Edwards, City Manager, City of Hinesville

McIntosh County
Brett Cook, County Manager
Wally Orrel, Executive Director, Industrial Development Authority

DEFINITION OF STUDY AREA
(Prepared by: Jimmy Adams)

The study area consists of a portion of the 10-county CRC Region. The five counties that establish the study area include Bryan, Camden, Glynn, Liberty, and McIntosh counties. These counties combine for a total area of approximately 2,999 square miles and are illustrated on Map 1. A more detailed review of the study area reveals that the land area within the five-county region is approximately 2,446 square miles and water bodies cover approximately 553 square miles. Bryan County is the only county in the study area that does not have direct coastal access and also does not have any barrier islands. The City of Savannah, in Chatham County, is located approximately 12 miles north of the identified study area boundary, and the City of Jacksonville, Florida, is located approximately 27 miles south of the study area boundary.

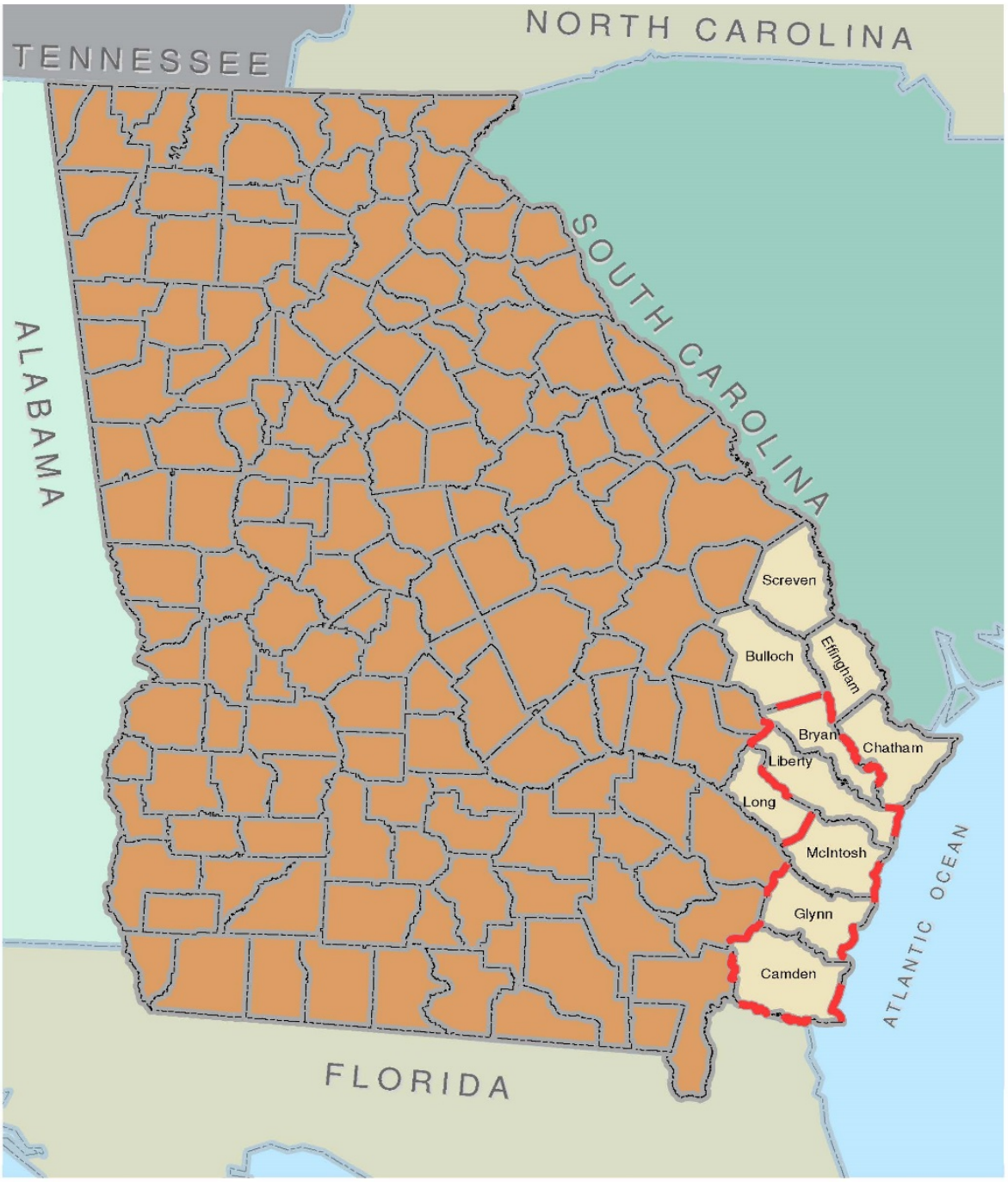
The region being examined is characterized primarily by low-density development, scattered along the east coast of Georgia. There are 14 cities within the study area that provide more urban opportunities; however, the remaining unincorporated portions of the study area are largely rural in character. Two military bases provide the region with employment opportunities and significantly affect the demographic characteristics of the study area. The bases also necessitate additional residential development, particularly for those who desire to reside off of the base. The study area's municipalities and military bases are illustrated on Map 2, and a snapshot of the study area data is provided in Table 1.

Table 1: Study Area Summary Data

County	Area (sq. miles)	Land (sq. miles)	Water (sq. miles)	2000 Population	2012 Estimated Population	Annual % Growth	County Seat
Bryan	454.49	441.71	12.78	23,417	32,214	2.6%	Pembroke
Camden	782.52	629.91	152.61	43,664	51,402	1.5%	Woodbine
Glynn	585.17	422.37	162.80	67,568	81,022	1.7%	Brunswick
Liberty	602.52	519.05	83.47	61,610	65,471	0.3%	Hinesville
McIntosh	574.53	433.45	141.08	10,847	13,839	2.8%	Darien
Total:	**2,999.23**	**2,446.49**	**552.74**	**207,106**	**243,948**	**1.8%**	

Source: U.S. Census Bureau: State and County QuickFacts.

Map 1: Project Vicinity

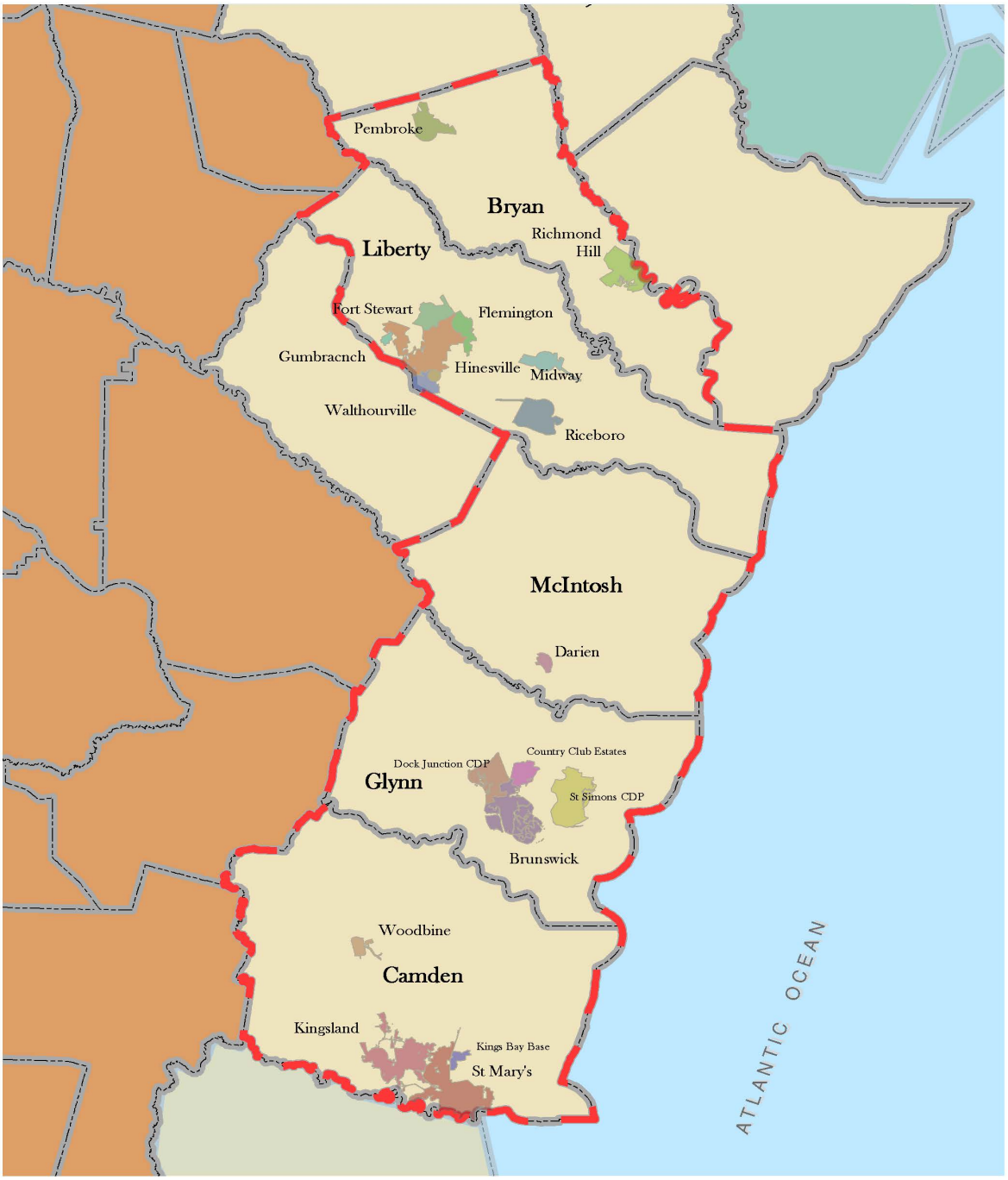


Legend

- Study Area
- Coastal Regional Commission
- Surrounding GA Counties

Miles
0 25 50 75

Map 2: Municipalities



Legend

Study Area

Miles

0 5 10 15

HISTORICAL BACKGROUND

Formative Landscape Events
(Prepared by: Kelly Howard)

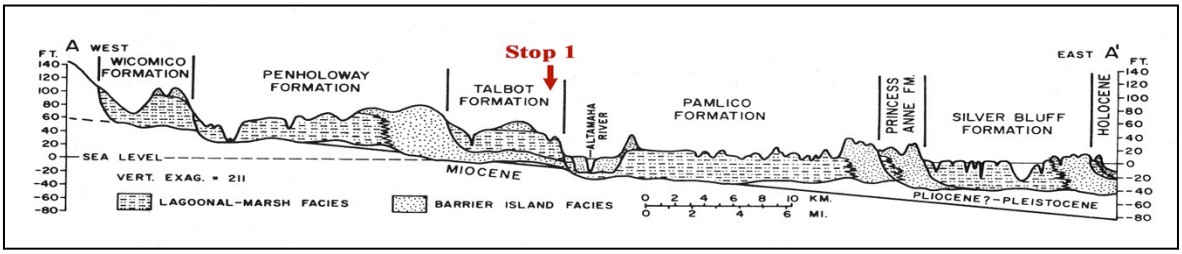
Fall line separating Coastal Plain from Piedmont Plateau.

Georgia's coast is in the physiographic region known as the Coastal Plain province. Although the youngest of Georgia's provinces, the Coastal Plain occupies more than half of the state's land surface (Henry, 2013). The formation of the Coastal Plain—with its bluffs, marshes, and barrier islands—is a result of the convergence of natural forces.

Sixty million years ago, much of Georgia was underwater, and its shoreline was much farther inland. Towards the end of the Cretaceous Era, 65 to 70 million years ago, a global rise in sea level marked Georgia's oldest shoreline at the present-day Fall Line that spans middle Georgia from Columbus to Macon to Augusta (Lenz, 2002). The Fall Line separates the Coastal Plain province from the Piedmont Plateau province to its north. Sediments such as clays and sands were carried down from the Blue Ridge and Piedmont Plateau provinces and deposited at the Fall Line, forming the original shoreline (Johnson et al., 1974). Millions of years of subsequent Piedmont surface erosion provided additional sediment to the Cretaceous shoreline until the Coastal Plain built out and up to its present extent (Henry, 2013).

During the Cenozoic Era, 63 million years ago, Ice Age glaciations produced a 400-foot drop in sea level, placing Georgia's shoreline 95 miles east of its current position. The receding sea deposited sediments that formed the Lower Coastal Plain. The Lower Coastal Plain's physiographic region begins at the present-day shoreline and runs inland for 60 miles. During the Pleistocene Epoch that began 2 million years ago, the repeated freezing and thawing of the polar ice caps raised and lowered sea levels, which formed successive shorelines that appear as a series of inland sand ridges today.

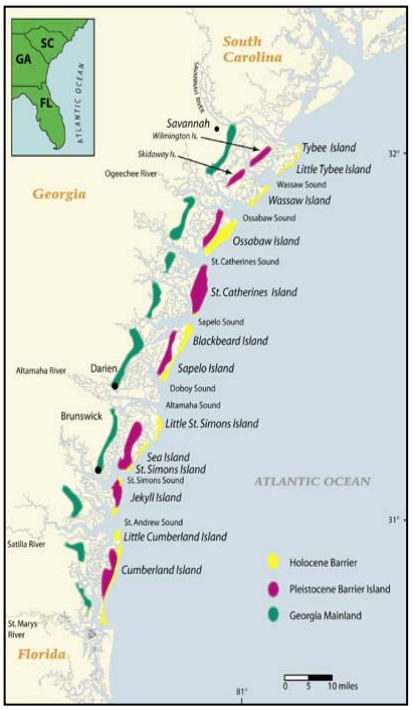
Where the Atlantic meets the Lower Coastal Plain of Georgia, there are shorelines (or terraces) and offshore islands known as the Barrier Island Sequence (Seabrook, 2006a). These islands form a shoreline complex of two ages, one being an older shoreline formed during the Pleistocene epoch and a newer shoreline formed during the current Holocene epoch. At present, the coastal mainland is made up of two of these former barrier island/back-barrier shorelines: the Pamlico shoreline complex and the Princess Anne. A former Pleistocene shoreline, known as the Silver Bluff formation, makes up part of the present-day barrier island complexes (Thomas et al., 2013).



Cross-section of Pleistocene and Holocene sediments of Coastal Georgia (Johnson et al., 1974).

The older and innermost set of islands was formed during the Pleistocene epoch 35,000 to 40,000 years ago before the last great ice age. These islands include St. Simons, Sapelo, and Skidaway. The

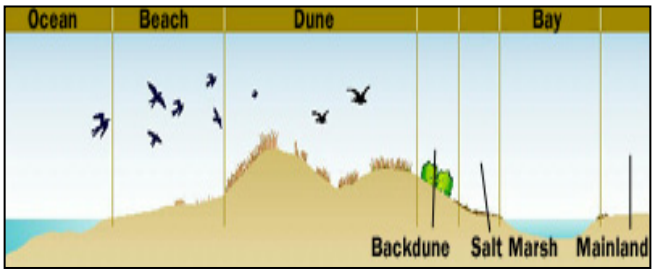
newer and outermost set of islands was formed during the Holocene epoch 4,000 to 5,000 years ago. These islands include Blackbeard, Little St. Simons, Ossabaw, Sea Island, Tybee, and Wassaw (Johnson et al., 1974). Composed of dune and beach-ridge sands, the barrier islands were shaped—and continue to be shaped—by wind, waves, currents, tides, and gradual sea level rise (Seabrook, 2006a).



Barrier islands of Georgia.

Marsh islands within the back-barrier area are believed to be relics of former shorelines formed 18,000 years ago during the Pleistocene epoch (Seabrook, 2006b). Ice age glaciation that formed these primordial shorelines were later followed by glacial melting and sea level rise, which caused water to pool (in the form of lagoons) behind the primordial shorelines (Johnson et al., 1974). Marsh formation most likely occurred sometime after the Princess Anne shoreline but before the Silver Bluff shoreline. It is also possible that they were parts of the Princess Anne and/or Silver Bluff shorelines that have since been separated by erosion from these larger features (Thomas et al., 2013). The perfect conditions of barrier islands to the east and rivers to the west have resulted in the large expanse of marshes that covers the Lower Coastal Plain.

Georgia's coast is unique in that the older set of barrier islands have not become integrated into the mainland. The gradual slope of the Coastal Plain and continental shelf, coupled with the high tidal range of 6 to 9 feet, creates the rare condition of tidal water completely surrounding both the older and newer sets of barrier islands (Johnson et al., 1974).



Transect of coastal features.

English Settlement and Military Conflict
(Prepared by: James Bradley)

When you examine the initial settlement in many regions in America, you can usually follow the money. People will migrate to an area for economic opportunity or an abundance of natural resources that can be sustained for survival or a perceived overall better quality of life. Coastal

Georgia is not one of these places. Established by James E. Oglethorpe, Georgia's first governor, in 1732 as a colony to handle ex-convicts that would otherwise be recycled to the streets of London, the Georgia Colony became strategically important militarily (Gannett, 1905). It was the land between South Carolina and Spanish-controlled Florida.

James E. Oglethorpe established the colony of Georgia in 1732.

Upon arrival to the new colony, early English settlers made land agreements with the native peoples of the Creek tribe (Blaney, n.d.). The Creek eldership and Oglethorpe exchanged generous gifts and made land agreements (Blaney, n.d.). Although some of the Creek tribe members resented the settlers, the relations between the two groups were generally good. Though not well documented, the efforts of Christian missionaries in 1566 through 1680 are likely partially responsible for this positive relationship (Blaney, n.d.). This is positivity reflected in the anglicized names of many of the area's islands, such as Jekyll Island.

Oglethorpe's regiment established Fort Frederica around 1736 to provide a defense against an attack from the Spanish in Florida (Cashin, 2013). In 1742, the Spanish unsuccessfully attacked the fortress in the Battle of Bloody Marsh (Cashin, 2013). Oglethorpe's regiment eventually left the fort after the invasion attempt, opening the door to other countries laying claim to it. This military exit and unstable provincial ownership contributed to the low population density of the area.

Model of Ft. Frederica, St. Simon's Island, GA, circa 1736.

During the American Revolutionary War, British forces faced a stalemate with the northern colonies, so they decided to try a new strategy in the south. In 1778, they victoriously led a siege in

Savannah and overwhelmed General Robert Howe's defenders (Clark, 1980). They occupied the city until 1782. This occupation served as the southern flank of the British forces until the end of the war (Cashin, 2013).

The coastal lands of Georgia were affected by war again in 1864 during the American Civil War, when Union Army General William T. Sherman led a march to the sea. He burned everything in his path, reaping devastating destruction. As part of Sherman's campaign, the Union Army took Fort McAlister and used it to house prisoners during the conflict. The earthwork fortress, which was designed primarily to defend Savannah from naval attacks, was easily overwhelmed by Sherman's ground attack (Miles, 2002).

The region continues to host military forces today, including Fort Stewart, Kings Bay Submarine Base, and Hunter Army Airfield.

DEMOGRAPHICS
(Prepared by: Jimmy Adams)

Population growth patterns, household characteristics, employment patterns, and business concentrations are key factors in gauging the strengths and current conditions of the study area. This section discusses the following conditions and provides key demographic data for the five-county region being examined:

- Population and Household Growth
    - Household Characteristics
    - Household Income
- Housing
- Employment Patterns
    - Businesses by Industry
    - Employment by Industry

Population and Household Growth

In 2012, an estimated 243,948 residents were living in the study area. Based on 2000–2010 annual growth rates for each county, the 2014 population is projected to be 250,952 residents. The 2007 Georgia Coastal Comprehensive Plan Assessment further indicates that the region will grow approximately 11% by the year 2020 and an additional 8% by 2030. Using the 11% and 8% growth patterns, respectively, for the years 2024 and 2034, Table 2 shows that the population of the study area is projected to be 300,841 by 2034.

Table 2: Population Projections

County	Year 2000 Population	Year 2010 Population	Annual Growth Rate (2000 to 2010)	Estimated Year 2012 Population	Projected Year 2014 Population	Projected Year 2034 Population
Bryan	23,417	30,233	2.59	32,214	34,322	-
Camden	43,664	50,513	1.47	51,402	52,311	-
Glynn	67,568	79,626	1.66	81,022	82,438	-
Liberty	61,610	63,453	0.30	65,471	67,556	-
McIntosh	10,847	14,333	2.83%	13,839	14,325	-
Region Total:	**207,106**	**238,158**	**-**	**243,948**	**250,952**	**300,841**

Source: U.S. Census Bureau: State and County QuickFacts.

According to the 2000 Census, there were 73,587 households in the study area, which increased to 88,685 by the year 2010, an average projected growth rate of 2.29% in the number of households. The rate of growth for households is somewhat consistent with the population growth rate, indicating that average household size has not varied over the 10-year period. The number of households and accompanying growth rates for each of the five counties within the study area are summarized in Table 3.

Table 3: Households from the Years 2000 to 2010

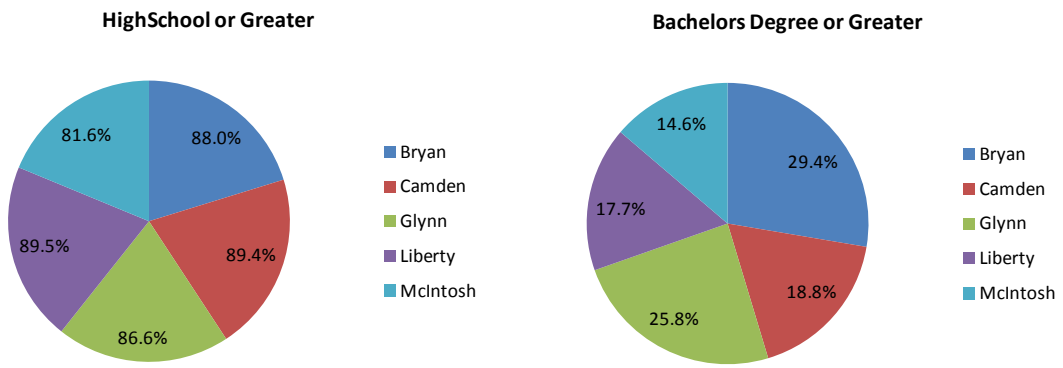
County	Year 2000 Households	Year 2010 Households	Annual Growth Rate (2000 to 2010)
Bryan	8,089	10,738	2.87%
Camden	14,705	18,047	2.07%
Glynn	27,208	31,774	1.56%
Liberty	19,383	22,155	1.35%
McIntosh	4,202	5,971	3.58%
Region Total:	**73,587**	**88,685**	**2.29%**

Source: U.S. Census Bureau

Household Characteristics

The average household in the five-county study area has 2.69 people, which is consistent with the 2.70 people per household across the State of Georgia. In terms of educational attainment for residents over the age of 25 within the five-county region, the largest proportion (87%) has some college experience or an associate's degree. This is slightly higher than the corresponding figure for the State of Georgia (84.4%). The percentage of residents who have attained a bachelor's degree or higher (21.3%) is slightly lower than for the State of Georgia (27.8%). Graph 1 shows the educational attainment for each of the five counties.

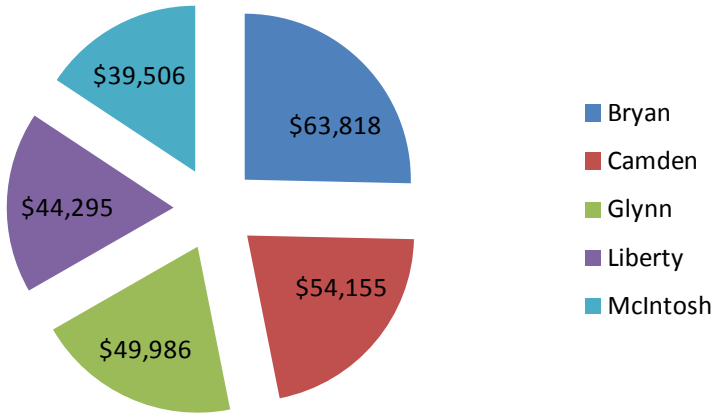
Graph 1: Educational Attainment



Source: U.S. Census Bureau: State and County QuickFacts.

The average household income for the five-county study area is $50,352, which is slightly higher than that of the State of Georgia ($49,604). Each county's average household income differs, as illustrated in Graph 2.

Graph 2: Median Household Income, 2008–2012



Source: U.S. Census Bureau, 2008–2012

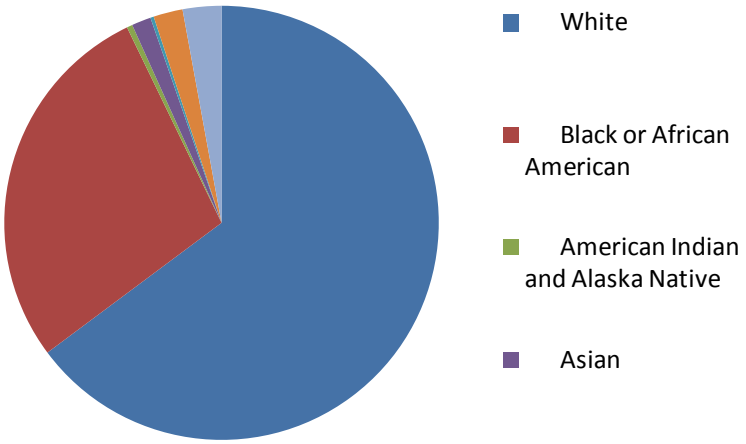
Household Units

Based on U.S. Census data for the year 2010 and Census estimates for the year 2012, the five-county region appears to have added additional housing units. For the year 2010, there were 109,623 housing units within the study area. This total is estimated to have increased by 1,545 housing units in the year 2012, for a total of 111,168 housing units. This increase in housing units for the five-county region results in an approximate annual growth rate of 0.01%.

Race Characteristics

The U. S. Census data estimates for the year 2010 indicate that the study area is predominately "white." There are 154,326 persons classified as white from a total population of 238,158 persons within the study area. Only 598 people were classified as "Native Hawaiian or other," the category with the fewest residents. Graph 3 illustrates the race characteristics within the study area.

Graph 3: Race Characteristics



Source: U.S. Census Bureau: State and County QuickFacts.

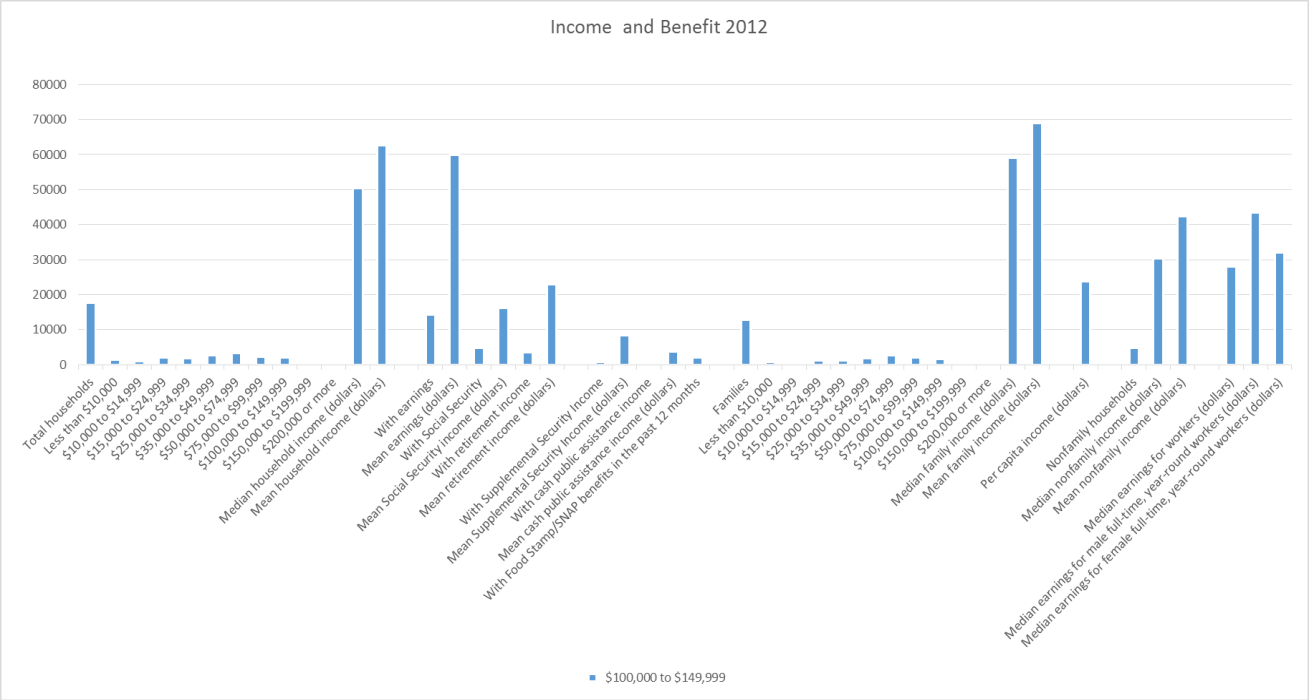
ECONOMIC PROFILE
(Prepared by: Jelani Linder)

To understand the issues and opportunities that exist in the study area, data on economic indicators were gathered. This section presents the following conditions and demographic data representing the five-county region being examined:

- Income and benefits

- Employment Status
- Class of workers
- Number of business establishments
- Work commute

Graph 4: Income and Benefits 2012



Income and Benefits

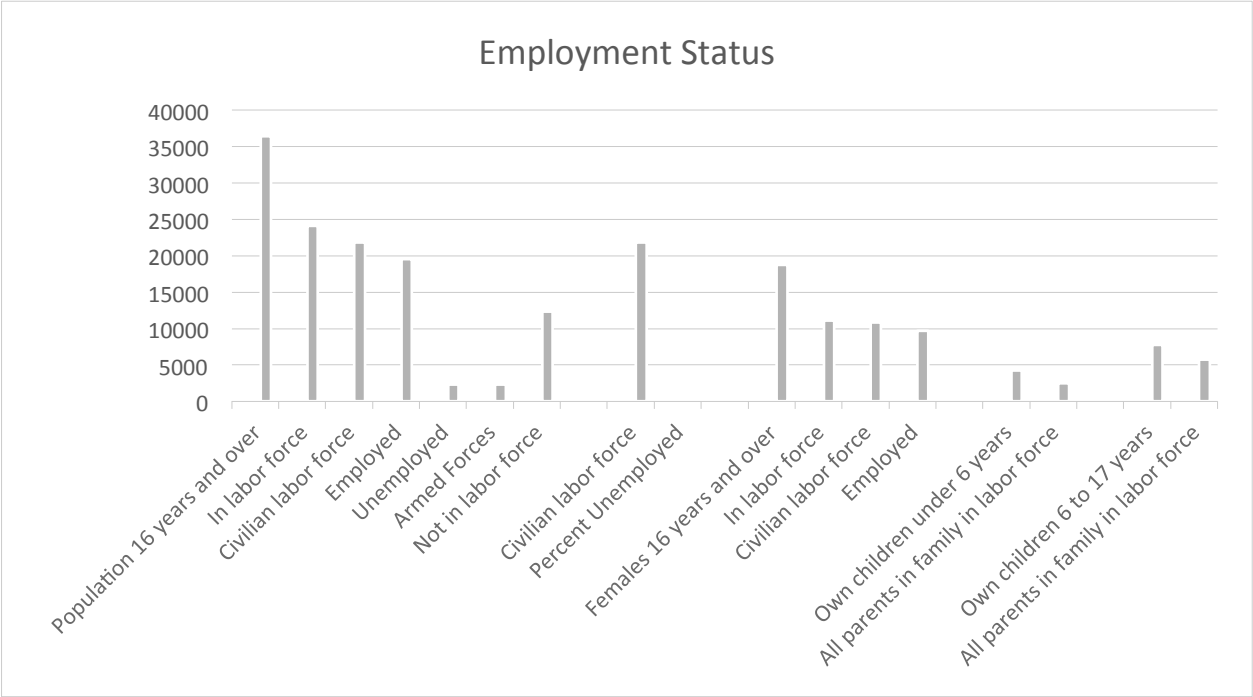
The median household income for the five-county study area is $50,352. The mean household income is higher, $62,618. However, the average *per capita* income in the study area is only $23,768. Interestingly, households with an average income of $50,000 to $74,999 make up the largest portion of the five-county study area, while households with an average income of $200,000 or more make up the smallest portion. Bryan County has the highest mean household and family income ($75,997 and $83, 867, respectively). McIntosh has the lowest mean household and family income ($52,480 and $55,724, respectively).

The average social security income is $16,250. McIntosh has the highest average social security income at $17,061, and Bryan County has the lowest at $15,535.

The mean retirement income is $22,994. Glynn County has the highest retirement income at $6,180, and McIntosh County has the lowest retirement income at $17,438.

The average public assistance funds received is $8,504. McIntosh County has the highest average public assistance funding at $8,054, and Bryan County has the lowest at $1,708. These findings are summarized in Graph 4.

Graph 5: Employment Status



Employment Status

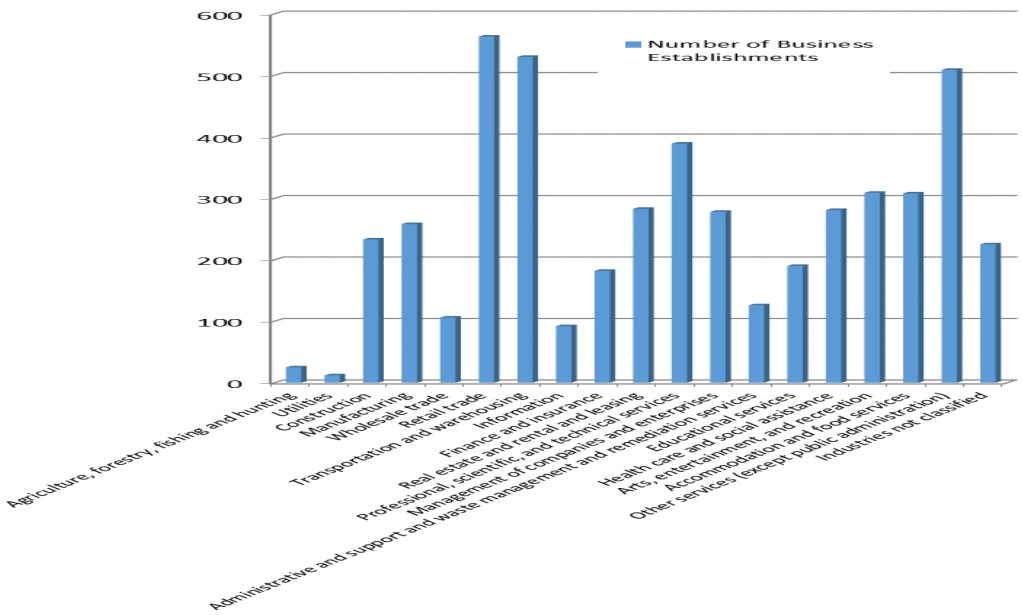
The population of residents age 16 and over in the five-county study area is 36,426. Of this population, 24,094 people are considered to be part of the labor force. Among those, 21,814 people are in the civilian workforce. Approximately 19,505 people are employed, 2,309 are unemployed, 2,279 people are in the armed forces, and 12,331 people are not in the labor force. Graph 5 illustrates these findings.

Graph 6: Class of Workers

Class of Workers

The civilian population in the five-county study area numbers 19,505. Among civilians, there are 13,644 private wage and salary workers, 4,825 governmental workers, 1,001 self-employed persons, and 34 unpaid family workers. Graph 6 illustrates the data.

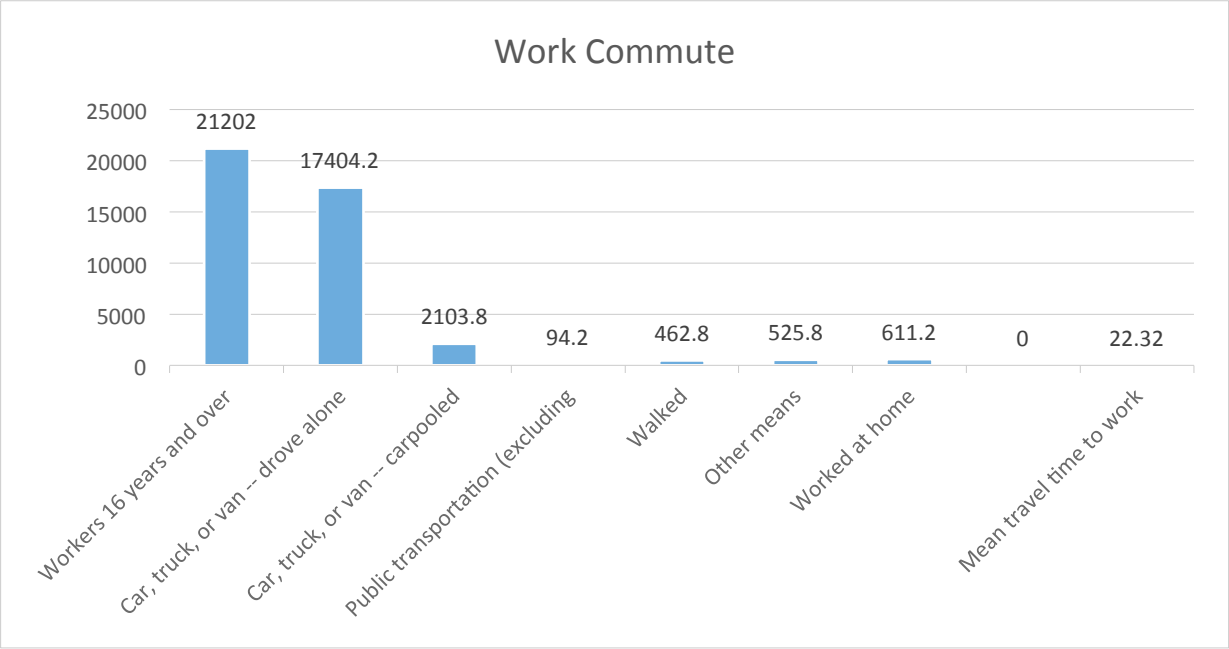
Graph 7: Number of Business Establishments



Number of Business Establishments

The largest industry in the study area is retail trade, and the smallest industry is utilities. There are 4,904 establishments in the region with a total of 19 NAICS codes. Industries include the following: agriculture, forestry, fishing and hunting, utilities, construction, manufacturing, wholesale trade, retail trade, transportation and warehousing, information, finance and insurance, real estate and rental and leasing, professional, scientific, and technical services, management of companies and enterprises administrative and support and waste management and remediation services, educational services, health care and social assistance, arts, entertainment, and recreation, accommodation and food services. Graph 7 shows the count of businesses within industries.

Graph 8: Work Commute



Work Commute

The average work commute for people living in the five-county study area is 22.32 minutes. Approximately 17,404 of the people that commute to work drive alone, 2,103 carpool, 94 people use public transportation, 462 people walk to work, 525 people use other means of transportation, and 611 people work from home. This form of "induced traffic" is a result of the development patterns that principally were created for automotive mobility (Duany et al., 2000). Graph 8 illustrates the means of transportation that workers utilize to commute to work in the study area.

NATURAL AND HISTORIC RESOURCES
(Prepared by: Kelly Howard)

There is a wealth of natural resources—ecological, economic, and recreational—for the inhabitants and visitors of the Coastal Georgia Region.

Sand dunes of Georgia's barrier islands.

The climate of the Coastal Region is classified as subtropical. Moderate temperatures and rainfall amounts create a humid environment ripe for tropical storm development. However, because of the barrier island complex and the contour of the eastern shoreline,

the region is less prone to hurricanes than many other coastal regions (GA DCA, 2005).

The geology and topography of the Coastal Region is distinguished by its sequence of barrier islands and expansive marshes. Fluctuations in sea level during the ice ages created a series of shorelines and barrier islands that appear today as sand ridges. More than half of the barrier islands are publicly owned and, except for Jekyll Island in Glynn County, none of the publicly owned islands are accessible by car from the mainland. These pristine islands are relatively undisturbed and serve as refuge for many species of wildlife (GA DCA, 2005).

Marshes are characteristic of Coastal Georgia.

The Coastal Region terrain is flat with a gradual incline moving inland. Most of the land area lies within the Federal Emergency Management Agency (FEMA) 100-year floodplain and as such is subject to building and development restrictions. The desire of many to live close to coastal waters is currently at odds with the need to protect and reduce development in these flood-prone and environmentally sensitive areas (GA DCA, 2005).

Sea turtles nest in the GA barrier islands.

Soil conditions in the Coastal Region are generally considered unsuitable for development because of poor drainage. Septic tanks often function poorly because of soil conditions or the seasonally high water table. Improperly installed and poorly maintained septic systems pose a threat to both ground and surface water in the region. Possible water contamination is an ongoing issue in the Coastal Region (GA DCA, 2005).

Development in the Coastal Region will most likely have a significant impact on the existing plant and animal habitat. Although the region has abundant marsh, estuarine, riverine, and maritime forest habitat that houses numerous plant and animal species, some of these species are considered by state and federal experts to be threatened or endangered. Inappropriate land uses and human activity are not heavily regulated, and there are few local measures to protect these resources. Sea turtles, for example, regularly come to Coastal Georgia to nest and are one of a handful of species protected by state and federal legislation (GA DCA, 2005).

Historic sites dot the area.

Historic resources of the Coastal Region are also plentiful, even though many are not given official "historic" status. Homes, churches, cemeteries, forts, plantations, and tabby ruins are found across the study area. These historic resources include natural sites that have cultural significance, such as Sapelo Island, St. Catherine's Island, Cumberland Island, and the state park, national park, and wildlife refuges dotting the terrain (GA DCA, 2005).

The allure of natural and historic beauty that abounds in the region draws thousands of recreational visitors to the area each year. Boating, fishing, bird watching, sun bathing, and site-

seeing are just a few of the tourist attractions in Coastal Georgia. Tourism is a significant part of the coastal economy. However, with increased visitors comes increased impact to the region's water supply and ecologically sensitive areas (GA DCA, 2005).

COMMUNITY FACILITIES
(Prepared by: Ashley Crain)

Education

Schools in the Coastal Region of Georgia are overcrowded due to the amount of growth the region has seen (GA DCA, 2005). Several institutes of higher education are located within the region: Armstrong Atlantic State University, College of Coastal Georgia, Georgia Southern University, Savannah College of Art and Design, College of Coastal Georgia, and Savannah State University (CRC, 2014 Economic). The Coastal Region is being well served by these institutions; however, there are still needs in certain communities, such as McIntosh County, for greater accessibility to the programs and services that these institutions provide. The need for more educational infrastructure and resources within the region will continue to grow as the population increases. The use of satellite campuses and online programs offers opportunity for areas where infrastructure is inadequate (GA DCA, 2005).

During the site visit to the Coastal Region, it was clear that many municipalities and county governments were anticipating institutions of higher education to be economic drivers. Liberty County, for example, is preparing for a new Armstrong Atlantic campus that will bring 4,000 students to the area. The City of Brunswick is also considering ways to attract students from the Coastal College of Georgia to the downtown.

Health Care

The region does not have a designated hospital or health center. However, Southeast Georgia Health System is a not-for-profit healthcare system that has campuses in Brunswick and St. Mary's (Camden Campus). They also have offices in St. Simon's Island, Brantley, and Darien. These facilities offer special services in senior care, cancer care, orthopedics, and spine care (SE GA Health System, 2014), This healthcare system works with different institutes of higher education, such as the radiology department at the College of Coastal Georgia, and serves the community's health care needs. The Coastal Regional Commission also facilitates special services for the aging population in the region, which is expected to be a growing demographic and an important planning area for the future of the Coastal Region (CRC, 2014 Economic).

Recreation

The Coastal Region houses many state and federal parks as well as historic sites. Overall, the existing facilities meet the needs of the region. There are current recreational projects and plans to develop recreational opportunities in the region, such as the Statewide Bicycle Pan, the Coastal Georgia Trail, and the Wiregrass Trail. These plans bring local governments and private interest groups together for a common goal. Additionally, miles of beaches along Coastal Georgia provide both passive and active recreational assets. It is important to note that there are limited

recreational opportunities for people with mental and physical challenges as well as the aging population (GA DCA, 2005).

Transportation

PORTS

There are two ports within Georgia's Coastal Region. The Port of Brunswick and the Port of Savannah act as major economic drivers for the region. Being both sizeable and stable, these ports offer high-paying jobs as well a serving businesses and industries throughout the region. This region is home to many manufacturing and distribution companies, so having easy accessibility to the ports helps these industries. While these ports are of great importance to the economic stability of the region, the required dredging to keep them in usable form raises concerns about environmental consequences (CRC, 2014 Economic).

INTRACOASTAL WATERWAY

The Atlantic Intracoastal Waterway serves as a water route and connector to the Atlantic Ocean for recreational and commercial uses (GA DCA, 2005).

MAJOR INTERSTATES

Both Interstate 16 and Interstate 95 are located in the Coastal Region of Georgia. Interstate 95 (I-95) has the most impact on the region as a whole. I-95 encompasses a total of 1,917 miles from Florida to Maine. Of these, 112 miles are located in Georgia. Many economic opportunities for the communities in the region run along this interstate, as it is traveled daily by many. I-95 acts as the major north-south corridor for the region, and I-16 acts as the major east-west corridor to the region. I-16 runs from Chatham County to Bibb County, with access to Interstate 75. This access is important because of the economic and political importance between Atlanta and the Coastal Region (GA DCA, 2005). An important minor north-south corridor that pre-dates I-95 is Highway 17, which connects coastal communities.

AIRPORTS

The Savannah–Hilton Head International Airport is the region's largest airport and is served by major carriers such as Delta and United. Brunswick is also home to an airport, Glynco Airport, which offers service to Atlanta and is served by Atlantic Southeast Airlines (GA DCA, 2005). On the south end of the study area, Camden County residents can readily access the international airport in nearby Jacksonville, Florida.

RAILWAYS

The region is served by three major rail providers: CSX (Seaboard Coastline), Norfolk Southern, and Georgia Central Railroads. Liberty, Bryan, Glynn, and Camden Counties all have access to freight rail, but McIntosh County does not. The railways in the Coastal Region have close relationships to the region's ports and military bases, aiding economic growth in the region (GA DCA, 2005).

REGIONAL COMMISSION PLANS AND PLANNING
(Prepared by: Holly Alderman)

Since 1964, the Coastal Regional Commission of Georgia (CRC) has provided comprehensive and specialized planning services in transportation, water resources, and historic preservation for 10 counties in the Coastal Georgia region, including Bryan, Bulloch, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Screven counties (CRC GA, 2014 Home). It is a state-mandated body, funded by member dues. The Commission is also contracted by DHS to operate the Area Agency on Aging, which provides home and community-based services to seniors, those with disabilities, and their caregivers. The Commission is currently developing an Area Plan for Senior Services. The CRC facilities in Darien can host training sessions (e.g., AICP certification), and there is space for business "incubator" projects.

The literature on urban-region planning is clear that such agencies often have finite lifespans because of limited budgets and political power (Foreman, 2008). The longevity of this commission suggests that despite these handicaps, it is adept at providing regional thinking and planning in a meaningful way.

The CRC adopted the "Regional Plan of Coastal Georgia" in January 2012 (CRC GA, 2010). The plan establishes a "sustainable and environmentally-friendly" vision for the region, identifies regional issues and opportunities, and outlines an implementation and evaluation program to guide regional growth in ways that benefit coastal governments and residents. Counties in the region elect to establish Memoranda of Understanding with the CRC and adopt the plan. It was noted that neither the school board nor emergency management agencies participated in the regional plan. Compliance at the local level is monitored through a series of performance measures that ultimately impact grant eligibility, which serves as incentive to compliance. Other studies that the CRC has completed address transportation issues such as bike-pedestrian planning and safe routes to school, as well as urban forestry, coastal storm water (low impact development), community health, and green infrastructure. Currently, the CRC is interested in broadband planning for Coastal Georgia communities.

Several conditions and issues were highlighted during the February 6 site visit with the CRC Planning Director that are of particular note.

- Funding and political support for regional strategies and solutions for sustainable growth is a constant challenge. For example, the Transportation Investment Act of 2010 established transportation priorities but failed to garner public support. This is consistent with the literature on regional planning that a basic problem of regional councils is limited interests, power, and time of participants, all or most of whom are elected officials who are primarily loyal to their own jurisdictions (Knapp, 2011).
- LOST and SPLOST programs in individual municipalities across the region are actively supporting some development initiatives that are compatible with regional goals. For example, the City of Brunswick has a LOST project for additional parks.

- CRC collected Light Detecting and Ranging (LIDAR) data for the region in 2010.
- CRC has GIS data for all the counties in our study area except for Bryan. These range from road (provided by DOT), flood, soil, hydrology, parcel, census, land use, and school data, among others.
- CRC developed land-use maps for the region in 2010.
- Form-based code is applicable in coastal Georgia.
- There are demonstrations across the region of sustainable planning and development. For example, the City of Kingsland and the City of Brunswick have identified parcels for mixed-use development. Additionally, Garden City (Chatham Co.) received a Coastal Incentive Grant to create a "resilient community plan" in response to local threats such as sea level rise.
- Public engagement is encouraged and practiced in many planning efforts. For example, the City of Hinesville participates in an annual retreat with representatives from Ft. Stuart, Chamber of Commerce, Liberty County and other stakeholders to identify issues and goals in the county. Likewise, the City of Brunswick convenes a "neighborhood planning assembly" to addresses issues at a smaller scale.

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APPENDIX 1: Data Tables, Economic Profile

EMPLOYMENT STATUS	Bryan	Camden	Glynn	Liberty	McIntosh	Region Average
Population 16 years and over	22,713	38,564	62,538	46,874	11,441	36426
In labor force	15,802	25,735	40,165	32,546	6,223	24094.2
Civilian labor force	14,853	22,084	40,099	25,815	6,223	21814.8
Employed	13,512	19,848	35,871	22,741	5,556	19505.6
Unemployed	1,341	2,236	4,228	3,074	667	2309.2
Armed Forces	949	3,651	66	6,731	0	2279.4
Not in labor force	6,911	12,829	22,373	14,328	5,218	12331.8
Civilian labor force	14,853	22,084	40,099	25,815	6,223	21814.8
Percent Unemployed	(X)	(X)	(X)	(X)	(X)	
Females 16 years and over	11,702	18,931	33,318	23,836	6,071	18771.6
In labor force	7,238	11,132	19,691	14,220	3,046	11065.4
Civilian labor force	7,191	10,988	19,691	13,457	3,046	10874.6
Employed	6,462	9,726	17,806	11,533	2,787	9662.8
Own children under 6 years	2,682	4,566	5,579	7,490	847	4232.8
All parents in family in labor force	1,554	2,431	3,898	3,794	661	2467.6
Own children 6 to 17 years	5,990	8,193	12,071	10,886	1,734	7774.8
All parents in family in labor force	4,412	6,260	9,496	7,258	1,251	5735.4

INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)	Bryan	Camden	Glynn	Liberty	McIntosh	Region Average
Total households	10,952	18,152	31,137	22,991	5,086	17663.6
Less than $10,000	612	1,401	2,469	2,007	457	1389.2
$10,000 to $14,999	426	1,111	1,901	1,208	340	997.2
$15,000 to $24,999	990	1,813	3,651	2,615	731	1960
$25,000 to $34,999	807	1,381	3,329	3,193	653	1872.6
$35,000 to $49,999	1,538	2,649	4,222	3,810	860	2615.8
$50,000 to $74,999	1,999	4,289	5,274	4,724	841	3425.4
$75,000 to $99,999	1,856	2,810	3,798	2,650	711	2365
$100,000 to $149,999	1,760	2,021	3,964	1,839	399	1996.6
$150,000 to $199,999	590	412	1,281	610	47	588
$200,000 or more	374	265	1,248	335	47	453.8
Median household income (dollars)	63,818	54,155	49,986	44,295	39,506	50352
Mean household income (dollars)	75,997	61,002	68,786	54,828	52,480	62618.6
With earnings	9,183	14,987	23,834	19,827	3,507	14267.6
Mean earnings (dollars)	73,401	58,514	64,778	51,652	50,628	59794.6
With Social Security	2,541	4,450	10,662	3,811	2,263	4745.4
Mean Social Security income (dollars)	15,535	16,134	16,979	15,545	17,061	16250.8
With retirement income	2,056	4,109	6,180	4,217	1,598	3632
Mean retirement income (dollars)	24,651	23,523	28,093	21,269	17,438	22994.8
With Supplemental Security Income	339	503	1,582	782	307	702.6
Mean Supplemental Security Income (dollars)	9,212	9,032	8,575	7,919	6,986	8344.8
With cash public assistance income	75	386	484	236	70	250.2
Mean cash public assistance income (dollars)	1,708	2,376	3,045	3,397	8,054	3716
With Food Stamp/SNAP benefits in the past 12 months	1,023	1,980	4,140	2,649	697	2097.8
Families	8,471	13,478	21,342	17,228	3,460	12795.8
Less than $10,000	301	938	1,256	1,330	147	794.4
$10,000 to $14,999	179	410	911	570	144	442.8
$15,000 to $24,999	599	1,075	2,252	1,873	532	1266.2
$25,000 to $34,999	537	938	1,695	2,227	302	1139.8
$35,000 to $49,999	1,092	1,742	2,817	2,804	639	1818.8
$50,000 to $74,999	1,671	3,563	3,725	3,692	755	2681.2
$75,000 to $99,999	1,631	2,518	3,054	2,316	565	2016.8
$100,000 to $149,999	1,583	1,685	3,406	1,593	314	1716.2
$150,000 to $199,999	565	383	1,094	552	47	528.2
$200,000 or more	313	226	1,132	271	15	391.4
Median family income (dollars)	73,197	62,137	61,880	48,316	49,430	58992
Mean family income (dollars)	83,867	67,505	78,465	58,869	55,724	68886
Per capita income (dollars)	27,511	22,797	27,446	20,326	20,764	23768.8

Nonfamily households	2,481	4,674	9,795	5,763	1,626	4867.8
Median nonfamily income (dollars)	30,986	30,348	30,935	32,740	26,364	30274.6
Mean nonfamily income (dollars)	45,870	39,069	44,844	40,435	41,966	42436.8
Median earnings for workers (dollars)	32,999	29,471	28,164	28,378	21,457	28093.8
Median earnings for male full-time, year-round workers (dollars)	55,172	41,205	45,066	37,563	38,409	43483
Median earnings for female full-time, year-round workers (dollars)	35,713	30,703	32,291	31,767	29,256	31946

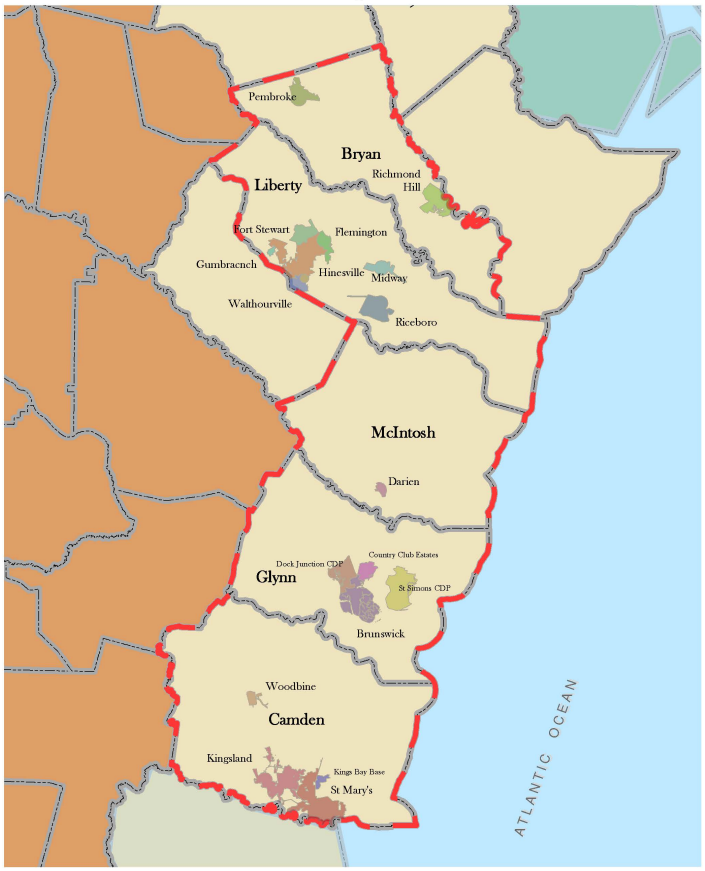
COMMUTING TO WORK	Bryan	Camden	Glynn	Liberty	McIntosh	Region Average
Workers 16 years and over	14,187	22,896	35,007	28,592	5,328	21202
Car, truck, or van -- drove alone	11,646	19,295	28,598	23,343	4,139	17404.2
Car, truck, or van -- carpooled	1,475	2,249	3,721	2,408	666	2103.8
Public transportation (excluding taxicab)	10	91	198	95	77	94.2
Walked	148	379	495	1,184	108	462.8
Other means	467	301	844	956	61	525.8
Worked at home	441	581	1,151	606	277	611.2
						0
Mean travel time to work (minutes)	27.8	21.5	19.5	20.0	22.8	22.32

Source: U.S. Census Bureau, 2010 County Business Patterns.
Source: U.S. Census Bureau, 2008-2012 American Community Survey

5-County Survey of Existing Conditions

(Bryan, Camden, Glynn, Liberty, McIntosh)

Coastal Georgia, USA



Legend
Study Area

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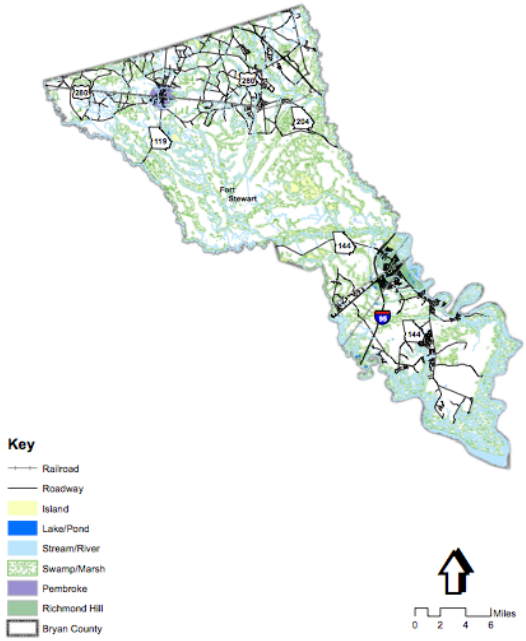
List of Authors

Jelani Linder prepared the survey of Bryan County.
Holly Alderman prepared the survey of Camden County.
Kelly Howard prepared the survey of Glynn County.
Ashley Crain prepared the survey of McIntosh County.
James Bradley prepared the survey of Liberty County.

BRYAN COUNTY

Introduction

Bryan County is located in the Georgia Costal Region. It is surrounded by the following counties: Effingham County (North), Chatham County (Northeast), Liberty County (South), Evans County (West), and Bulloch County (Northwest). The county has an area of 454.5 square miles. Bryan County is separated into two parts, North and South Bryan County, due to the location of Fort Stewart in the middle of County. The County is part of the Savannah Metropolitan Statistical Area.



Map of Bryan County.

Bryan County was created December 19th, 1793 as an act of the General Assembly. The County was named after Jonathan Bryan, who lived from 1708-1793. Jonathan Bryan was born in South Carolina, but had strong ties with Georgia since the arrival of the first settlers in 1733. Bryan became famous for his support of colonist rights in Georgia. During Bryan County's development, the following land transfers occurred to form the current Bryan County: in 1794, a portion of Effingham County was transferred to Bryan County; in 1796, a portion of Bryan County was used to create Bulloch County; and in 1847, a portion of Bryan County was transferred to Chatham County.

Guale Indians inhabited Bryan County prior to Spanish settlement.

Fort McAllister Civil War installation was located in South Bryan County. This military installation which was captured by General Sherman now serves as Fort McAllister National Park. The county seat which is currently in the city of Pembroke was not always the location of the county seat. In 1755, the county seat was established in the town of Hardwick. The General Assembly designated that a courthouse be established in 1797, two miles from the Ogeechee River at a place called the Cross Roads. In 1901, the county seat was moved to Clyde where a courthouse was built. In 1937, with the installation of Fort Stewart, the General Assembly designated the city of Pembroke to be the county seat.

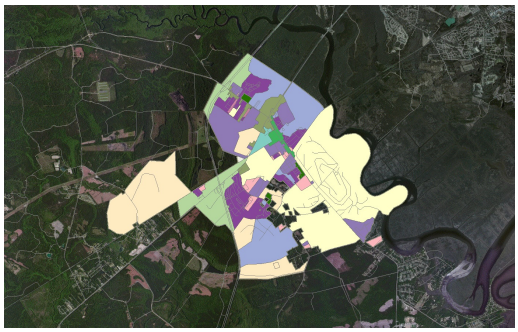
There are two cities in Pembroke, Richmond Hills in south Bryan and The City of Pembroke in north Bryan. The city of Pembroke was named after Judge Pembroke Williams, who was a prominent resident during the late 1800s. During the early days of Pembroke, it was known as a railroad hub for naval supplies and farm produce. Pembroke demographics are as follows:

- Population of Bryan County: 29,648
- Population of Pembroke: 2,499 (note says 2006 projection)
- Median Age: 31.8 years
- Median Income: $33,281
- Population Density: 63 people / square mile.

Prior to the 1500s, the Guale people inhabited the shores of the Ogeechee River, but during the late 1500s, Spanish exploration marked the beginning of change to this area. In the mid 1800s Bryan County became famous for its rice plantations, but after the Civil War and the destruction Fort McAllister the area experienced a down turn from the years of 1865 to 1925. In 1925, Henry Ford built a winter estate on Steling Bluff, a former plantation along the Ogeechee River. Ford's establishment of winter retreat brought about a revitalization of the area. Ford also established a school, built churches, trade schools, and homes for his 600 employees. The farms that Ford established transformed the rice fields into farms that produced iceberg lettuce and soybeans. In 1941, the area was named Richmond Hills.

<u>Issues & Opportunities</u>

The following list is based on interviews with Bryan County, Ray Pitman, County Administrator and staff. 2.6.2014



Zoning map, Richmond Hills, Bryan County.

1. Communication of emergency response
2. Storm water management and water treatment along southern Bryan County
    a. ICPR and SWIM storm water models used
3. Lack of participation on more dense lots
    a. Government sees value of density, but the community does not
    b. Government would like to educate the public more about density
4. Fort Stewart contributes to county economy
5. Working on being good neighbors with Fort Stewart
    a. They are increasing their boundaries, which minimizes how far the county can develop north of Richmond Hills
6. Looking to increase rooftops to enable more retail growth in county

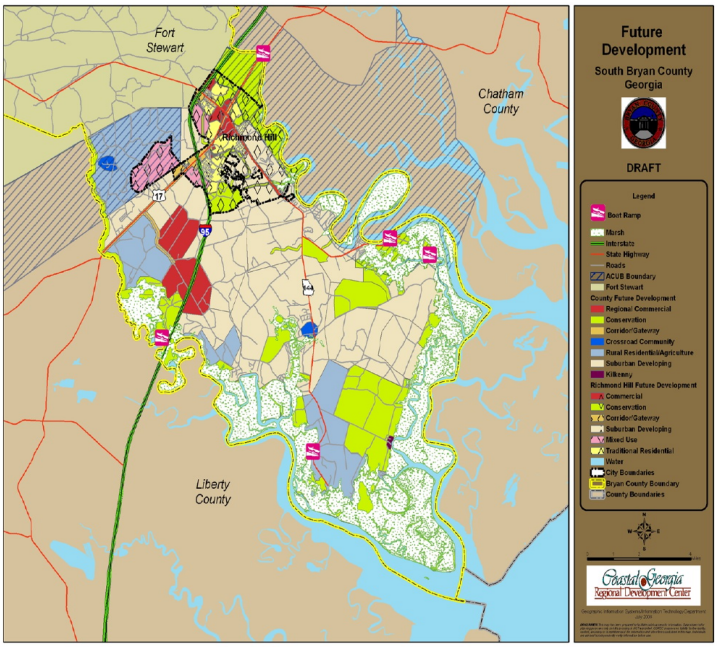
Plans and Planning

The following list conveys, in brief, the vision set forth by Bryan County and the cities of Pembroke and Richmond Hill to guide future development, per the Joint Comprehensive Plan.

1. Vision: To preserve and protect Bryan County's natural, cultural and historic resources, while promoting these amenities for tourism, recreational use and public enjoyment.
    a. Description/Location: Natural features and view sheds—coastal areas, marshlands, rivers, floodplains, wetlands, watersheds, wildlife management areas, barrier

islands, etc.—as well as other environmentally sensitive areas located throughout the County. Also areas designated as conservation lands, "in perpetuity."

2. Vision: To enhance mobility while creating an inviting and aesthetically pleasing entrance to Bryan County; where sense of place is balanced with economic opportunity and vitality.
    a. Description/Location: Areas of developed or undeveloped land adjacent to major thoroughfares—Interstates 16 and 95; U.S. Highways 17 and 280; Georgia Highways 67, 80, 144 and 204—that provide access to the County. This includes Exit numbers 87 and 90 on I-95 as well as Exit 143 on I-16.
3. Vision: To maintain the character of Bryan County's crossroads communities as development pressures increase, protecting these commercial enclaves while promoting opportunities for heritage tourism.
    a. Description/Location: Crossroad communities are located throughout the County, including Black Creek, Blichton, Dixie Daniel, Ellabell, Groover Hill, Groveland, Keller and Lanier. Primarily, these are commercial activity areas located at the intersection of highways with buildings in the center surrounded by open spaces. Some of these communities are in need of redevelopment.
4. Vision: To preserve the traditional character of this fishing village and its historic heritage along Georgia's coast; maintaining rural quality of life while promoting appropriate economic sustainability.
    a. Description/Location: Located in the southern end of Bryan County, Kilkenny is a unique vestige of a bygone era in coastal Georgia. A traditional fish camp and campground, the property has direct access to the Intracoastal Waterway. Future development is limited due to conservation land and the wildlife management areas surrounding Kilkenny. A historic home, built in 1837, is also located in this area.
5. Vision: To promote diversified economic and employment opportunities for Bryan County residents; to improve quality of life and strengthen the County's economic independence.
    a. Description/Location: Areas along major commercial/transportation corridors, such as the Interstate Centre along I-16 and Belfast Siding Road on I-95. Developed and undeveloped land on either side of these high traffic volume arterials. Varying lot sizes and densities, multi-story a mid-rise buildings; commercial, light industrial and distribution uses.
6. Vision: To preserve and protect the County's remaining rural character; to accommodate limited residential development with consideration to local practices of agriculture and forestry.
    a. Description/Location: Areas of undeveloped land likely to face development pressures for low density residential development. Typically, these areas have low pedestrian orientation and accessibility, large lot sizes, open space, and a high degree of building separation. These areas are also frequently used for agricultural, timber and forestry purposes.
7. Vision: To encourage livable communities where residential and commercial uses coexist; to maintain a level of density that is both appropriate and desired in unincorporated Bryan County.
    a. Description/Location: Areas where growth pressures result in typical types of suburban residential development. These areas are likely to be characterized by low pedestrian orientation, low traffic volumes and larger open spaces for recreation and outdoor use.



Future development map, South Bryan County.

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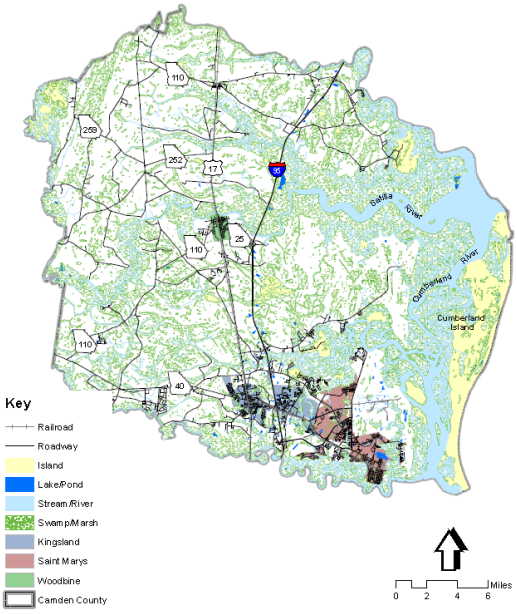
CAMDEN COUNTY

Introduction

Camden County is the southernmost county in the five-county study area on the Georgia coast, bordering Florida. The county encompasses three incorporated cities, Woodbine (county seat), St. Marys, and Kingsland. It also includes unincorporated Dover Bluff, White Oak, and Waverly communities. Kingsland and St. Marys are classic "main street" cities, committed to historic preservation and downtown revitalization (GA DCA, 2013).



Map of Camden County.

The land is drained by three major rivers, the St. Marys at the southern border, Satilla, and Altamaha at the northern border, creating three "peninsulas" along the eastern seaboard. There is a large barrier island, Cumberland, to the east. The county is transected by two major roadways, I-95 and HWY 17. To the west of these corridors, the interior of the county is characterized by poorly drained flatwoods, while the eastern areas are characterized by very poorly drained saltwater marshes and estuaries (USDA, 1977).

The county boasts a rich and diverse history. It was founded in 1777 by English settlers. The location had previously been occupied by French traders, Spanish missionaries, as well as native Creek and Timucuan Tribes (Kissinger, 2003). Over hundreds of years of continuous habitation here, the economy, transportation, and built environment have centered around natural resources. For example, the rivers have been used for transportation, the marshes and coast have been sources of aquaculture, while the wetlands and sandy areas have been used to cultivate products such as rice, cotton, corn and timber (Kissinger, 2003).

Public pier. St. Marys, Camden County, GA.

The large agricultural plantations have long since passed, but the local economy is still defined by its natural traits. Timber continues to be produced for export, and the seafood industry remains. The primary tourist attraction is Cumberland Island National Shoreline, accessible by ferry from St. Marys. Major employers include King's Bay Naval Base, local government, and a handful of large retailers (e.g. Wal-Mart, Publix).

The following table represents existing land uses in Camden County (Coastal GA RDC, 2013).

Land Use Categories	Acres	Percent
Residential	17,241	4.53
Commercial	475	0.12
Public/Institutional	10,050	2.64
Industrial	4,464	1.17
Parks/Recreation/Conservation	90,303	23.75
Agriculture/Forest	251,208	66.07
Transportation/Communication/Utilities	5,589	1.47
Undeveloped/Vacant	891	0.23
Total	**380,221**	**100**

Source: Existing Land Use Map, Camden County. 2007.

Current residents number approximately 50,513, and the population is expected to grow by 1.47% annually (US Census Bureau, 2010). Accordingly, the number of households, 18,047, is expected to increase 2.07% (US Census Bureau, 2010). The average household income in Camden County is $54,155 (US Census Bureau, 2010). Nearly 90% of residents over age 25 have attained high school or greater education, and approximately 20% have attained a bachelors degree or greater (US Census Bureau, 2010).

Issues & Opportunities

A site visit to Kingsland and St. Marys was conducted on February 7, 2014. A 3-member team met with John Peterson, Planning Director, at his office in Kingsland. The office of Planning and Development is organized under the County Board of Commissioners, and it handles zoning, code enforcement, building inspections, and business licensing. The County Commissioners also oversee the Joint Development Authority charged with promoting economic development and job creation.

Cumberland Island Visitor Center.
St. Marys, Camden County, GA.

As of 2013, the county was not part of a metropolitan statistical area (GA DCA, 2013). Given the population now exceeds 50k and is expected to grow, the question emerges as to the likelihood Camden County will be included in the nearby Brunswick/Glynn County MPO, which could bring more transportation investments

to the area and foster regional thinking and greater public engagement in transportation planning (Knapp, 2011).

The following is an inventory of existing conditions in Camden County organized under ten issues that emerged during the site visit. Given the limitations of the visit and project timeline, this is not an exhaustive list; nonetheless, it captures an "outsider's" perspective of the County as it is experienced in-person, through interviews, and through data collected from the County website and other on-line sources.

1. **Place Markers**
   - Cumberland Island National Shoreline
   - Character of historic cities, however no established historic districts or preservation commission in the County (Coastal GA RDC, 2013).
   - Green space (e.g., parks, Camden Preserve)
   - Public amphitheater, performing arts center
   - Abundance of cultural resources (e.g. midden on Grove Island)
   - Mix of colonial and Spanish mission design aesthetics (no design guidelines)
   - St. Marys Express offers themed excursions in partnership with St. Marys Little Theater, and "Theater By the Trax" utilizes the depot for special arts programs (St. Marys RR, 2014).

Public park, amphitheater. St. Marys.

2. **Natural Resources**
   - Cumberland Island National Shoreline.
   - Crooked River State Park
   - North Florida aquifer
   - Camden Preserve on river
   - DNR overlay for endangered species (e.g. sea turtles, long leaf pine)
   - Timber (biomass), agriculture, aquaculture
   - Wet areas not suited for urban development have good potential for parks and recreation, hardwood forests, and habitat for wildlife (USDA, 1977)

Extensive marshes in Camden County.

3. **Health**
   - General lack of walkability between residential, retail, employment centers.
   - The only sidewalks in the unincorporated County are within residential developments (Coastal GA RDC, 2013).
   - Attrition of agricultural land to developers.
   - Bike lane included in Colerain Road Bypass project.
   - The county has a general hospital and general nursing home.

4. Economic Development

- Heavily dependent on Kings Bay naval base for jobs (threat of contracting brigades).
- Less local economic development has occurred than was anticipated with the establishment of the naval base (the base contains housing, food, and retail opportunities that do not generate tax funding for the host community)
- Proximity to Jacksonville, FL (30 min. commute) benefits the County in terms of employment opportunities for its residents as well as access to the Jacksonville International Airport and cultural events and attractions.
- Cumberland Island attracts 40,000 visitors annually to Camden County and to St. Marys where they catch the ferry. However, the island is a national shoreline that cannot be developed for other uses that might benefit the local economy.
- Most of the county is not well suited for urban development because of tidal and stream flooding, and/or wetness in soils with clay. In general, soil with best potential for cultivated crops also have best potential for urban development. These include areas of fine sand, sand, dunes, and areas where the water table is at a greater depth (USDA, 1977)
- The impending FEMA flood insurance tax hike is not perceived as a threat.
- Kingsland hosts the College of Coastal Georgia-Camden Center. A local high school also serves as a trade school. The County is seeking funds for Altamaha Tech branch campus.
- "Labor ready" workforce may not be a fit for the "knowledge economy"
- The county has no general fund debt, short or long term (Camden Co., 2013).
- The LOST and SPLOST collections are down one-third from five years ago. These sales taxes have begun to hold steady at a flat collection rate and are no longer trending downward (Camden Co., 2013).
- Proposed use of grey field for space port project (ties with Kings Bay); possible growth in military service contractors
- Tourism economy fluctuates

St. Marys Railroad depot partners with "Theater by the Trax". Camden County, GA.

Historic St. Marys maritime village.

5. Housing

- Housing types are predominantly single-family with some multi-family, as well as subsidized housing.
- Some historic housing, neighborhoods, and parks (not all registered).

- Only small, residential developments (10 lots) allowed in areas not serviced by water-sewer service.
- For planned developments, developer can propose density.
- Existing senior center.
- Affordable single-family housing off of the naval base is scarce. Trend toward naval employees preference for rural, low-density residential housing (mobile home) in the county.
- Home sales mostly flat, and construction is almost non-existent (Camden Co., 2013).
- Mandated property value freeze enacted in 2006 for tax purposes (Camden Co., 2013).

Historic Spencer House in St. Marys serves as an inn.

6. Water & Sewer

- No water or sewer service in county, only in cities. Developers who can provide water-sewer can develop rural areas.
- Water quantity has limited daily draw (North FL aquifer)
- Water quality unstable (saltwater intrusion, aging/inadequate storm water infrastructure)
- Low areas on evacuation route(s) susceptible to flooding.

Evacuation route susceptible to flooding.

7. Demographics

- Population expected to grow 63% across the county, with the fastest growing city being Kingsland, followed by St. Marys and Woodbine (Coastal GA RDC, 2006).
- There is a young, transient population of naval base employees.
- There is racial and ethnic diversity in the communities, with historical discord and economic divides.
- Approximately 90% of the population achieve a high school diploma, and half of those will go on to post-secondary schools. 20% hold a bachelor or higher degree.

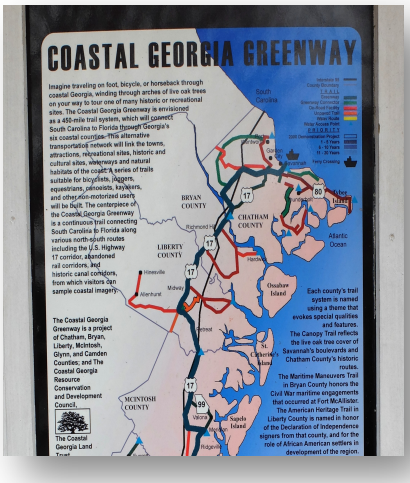
8. Public Awareness

- Planning staff engage with Chamber of Commerce and Development Authority.
- Camden Partnership provides information on economic impact of naval base.
- Officials desire to increase awareness of economic impact of different planning scenarios.
- Planning documents posted on county website.
- Coastal Georgia Greenway plan map posted at Gilman Memorial Waterfront Park, St. Marys.

9. Transportation

- Dominant mode is the automobile.

- No existing transit system. However, the Coastal Regional Coaches program services the county by demand-response at affordable fares (Coastal Regional Coaches, 2014).
- Interest in bikeways. Plan to participate in Coastal Greenway project.
- Colerain Road Bypass project will connect the high school with the naval base, will improve evacuation route, and will include bike lane (SPLOST).
- There are a few areas of traffic congestion that persist because of a lack of support/funding for improvements.
- The St. Marys Railroad services the naval base and has connectivity to main CSX lines (Camden JDA, 2014). Some existing line has in part been divested to land developers.
- General airport serves county; international airport in nearby Jacksonville, FL.



Camden County plans to participate in Coastal Greenway project.

10. Planning & Policy

- Unified County Code, Land Use Maps
- Limited participation in regional planning and programs. This is consistent with the literature on regional planning, that a basic problem of regional councils is limited interests, power, and time of participants, all or most of whom are elected officials with primary loyalties to and duties in their own jurisdictions (Knapp, 2011).
- Bicycle and Pedestrian Plan, 2005, identifies issues and opportunities for safe routes to school, additional sidewalks and shared use paths (e.g. rail corridors), roadway projects, as well as regulation and design guidance (Coastal GA RDC, 2005)
- Joint Comprehensive Plan ("Community Agenda"), 2007-2027, includes the vision, issues and opportunities for the county and its municipalities, with an implementation program, developed through a public process (Coastal GA RDC, 2006)

- Greenprint Model developed in 2008, identifying opportunities for land conservation, restoration and resource protection, new park creation and trail development (The Trust, 2008)
- Camden/Kings Bay Joint Land Use Study underway that will assist in formulating a smart growth plan to guide future development with emphasis on planning for land uses in the vicinity of the base that are sustainable and compatible with the military mission. The community and the military will study planning issues in an open forum. The final results of this study are expected by March 2014 (Camden Co., 2013).
- No ordinance or overlay districts to regulate aesthetics of development in highly visible areas, and no development guidebook (Coastal GA RDC, 2013)
- Mixed use development allowed. One mixed-use zoned development site in St. Marys currently on market (site of former paper mill) (Camden JDA, 2014).

Conclusion

Camden County is rich in history and has a distinct coastal setting that informs much of area's character and development. A majority of land use is in agriculture, forestry, parks, recreation, and conservation, with relatively little residential, institutional or industrial development. The population is expected to continue a pattern of growth over the next decade, and much of it will not be home grown. The issues that face the county and its municipalities span a range of conditions, as identified above from the site visit.

While "sustainable communities" seems to be a trajectory established by the regional plan to encourage maximization of existing infrastructure and forward-thinking capital improvements that support transit-oriented and mixed-use development, at the local level the application is quite different. For example, Camden County is focused on outsourcing and shared services (even for Planning & Zoning!), and developing a strong contingency fund—these are low-risk, almost survival-mode activities, rather than visionary steps toward smart growth.

Based on the initial survey of existing conditions in the 5-county study area including Camden County, perhaps the approach to follow is what Foreman calls a land-mosaic or puzzle-pieces plan, in which planning solutions are developed for small to mid-size areas that fit together to form the whole region (Foreman, 2008). This approach could equip the communities that are poised for sustainable growth with the concept(s) that they can "personalize" and put into motion, and perhaps yield momentum for the larger, regional sustainability goals.

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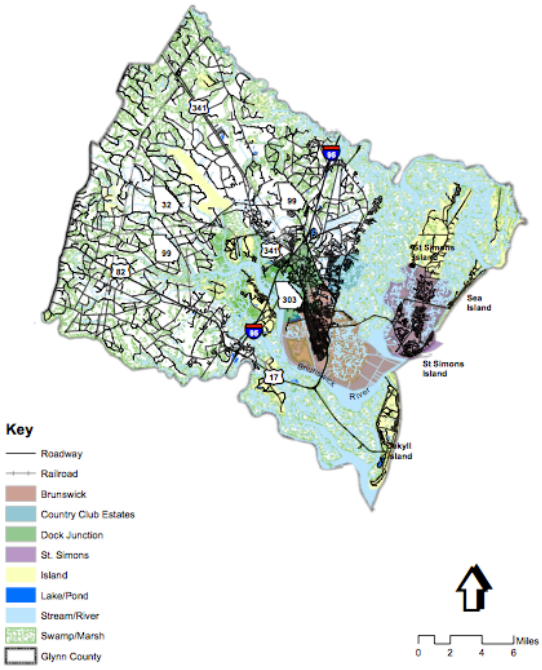
GLYNN COUNTY

Introduction

Glynn County is one of the southern counties within the Coastal Regional Commission of Georgia. It is bordered on the north by McIntosh County and Camden County to the south. To the west and northwest, Glynn shares a border with Brantley and Wayne counties (both of which were excluded from our study area.

The only incorporated city in Glynn County is the City of Brunswick. The county encompasses three signature coastal islands: Jekyll Island, Sea Island and St. Simons. The western portion of the county is primarily flatwoods that serves as timber resources while the eastern portions are a combination of saltwater marshes and tributaries. The county was founded on February 5, 1777, and named after John Glynn, a member of the British House of Commons (Gannett, 1905). Glynn County is one of the 8-original counties in Georgia (Gannett, 1905) and was occupied by the Indians of the Lower Creek Tribe (Cooksey, 2005).



Map of Glynn County.

Military has played a large role in Glynn County population. James Oglethorpe's regiment established Fort Frederica in about 1736, to provide a defense against an attack from the Spanish in Florida (Cooksey, 2005). In 1742, the Spanish unsuccessfully attacked the fortress in the Battle of Bloody Marsh (Cooksey, 2005). Oglethorpe's regiment would leave the fort after the invasion attempt which opened the door to other countries laying claim to its ownership. This military exit and unstable provincial ownership were contributing factors to the low population. Glynn County was sparsely populated before the American Revolutionary War and even those inhabitants fled the area during the conflict. Even though, many of these Revolutionary War veterans reestablished homesteads after the war, military again played a role in the declining population of the region (Cooksey, 2005). One likely unintended consequence of the sparse population, is that Glynn County was largely spared of William Sherman's march to the sea where other coastal Georgia cities were damaged by fire (Miles, 2002).

Fort Frederica

Glynn County still maintains a modestly low populated today compared to its coastal neighboring cities of Jacksonville, Florida, Savannah, Georgia, and Charleston, South Carolina. The population

trend has definitely had an effect on its land use and development patterns. Much of the county is developed in an urban sprawling pattern as much of the agricultural land ownerships convert to residential uses. Furthermore, the City of Brunswick which was established in the middle of the 19th century when development patterns were largely traditional and not oriented for automotive transport.

As with all communities, Glynn County future is largely dependent upon its economics. The county has to find ways to reinvent itself in the highly competitive market place of coastal cities but yet keep its proud history of its residents and maintain a stewardship over its natural coastal resources. The county's primary economic engines are tourism and roll-on/roll-off (ro-ro) port traffic.

Glynn County Courthouse

Sidney Lanier Bridge

Issues & Opportunities

Under the leadership of Professor Ron Thomas, FAICP, a site visit to Glynn County and Brunswick was conducted on February 7-9, 2014. A 3-member team conducted an interview survey meeting with unincorporated Glynn County and a 6-member team conducted an interview survey with the City of Brunswick.

The meeting with unincorporated Glynn County was conducted with Glynn County staff: Alan Ours, County Administrator and David Hanley, RLA, Community Development Director. The following issues and opportunities were identified:

- Economy is still struggling to find its way. They indicated that there are jobs but they are mostly below living wage standards. Economics is the primary focus of planning and administration staff.

- There appears to be opportunities countywide to create great new places. Many of the places that are in Glynn County appear to be in the city or barrier islands. Many of these places were established over 100-years ago. Newer developments are more suburban in nature, lack traditional design or architectural elements, and otherwise do not provide residents or visitors with an experience.

- Crime problems are ongoing. It seems as if young men are getting into trouble and they cannot get gainful employment because they have a criminal history. Thus perpetuating the criminal mischief.

- Expansion of the university is a possibility but the concentration of crime appears to be a major hindrance to expansion. This expansion could bring a younger group of residents to the area and much needed economic stimulus.

- History of consolidation with City of Brunswick was discussed. There have been two attempts and both failed. Glynn County is still open to it. Glynn County believe that it could be successful if Brunswick, kept their law enforcement and planning/zoning components. It appears from preliminary survey that the Glynn County would support this reformation but the City of Brunswick believes their interests would be misrepresented as is perceived in the current commission district alignment.

- Federal Law enforcement Training Center is a major economic engine. Its presence in the county is an excellent community asset to add to the regions strong military roots.

- Although Interstate I-95 goes through Glynn County, it isn't viewed as big of an asset as surrounding counties.

Brunswick, Georgia

The meeting with the City of Brunswick was conducted with City staff: William M. Weeks, City Manager, City of Brunswick, Arnie Glaeser, Planning and Development Manager, City of Brunswick, and Mathew Hill, Executive Director, Brunswick Downtown Development Authority. The following issues and opportunities were identified:

- Biggest issue was financing. They've had to make cuts to staff, projects and city investment in general. Public funding efforts haven't passed referendum.

- Opportunities for public/private and inter-governmental partnerships

- Expansion of the college into downtown is desired but hindered by crime and logistically getting students from the campus to downtown.

- Abundance of space downtown. Currently a liability but an opportunity.

- Discussed consolidation but misrepresentation is major restriction. They have explored this option twice and currently isn't being considered.

- Main economic engine is tourism. Particularly tourism surrounding people visiting Sea Island, St. Simon's and Jekyll Islands.

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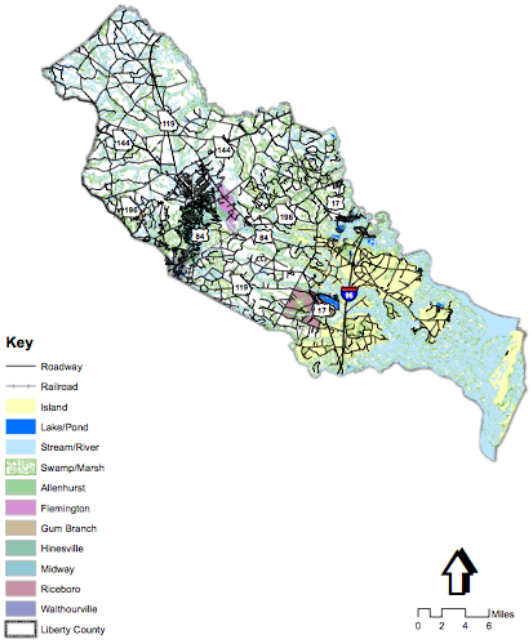
LIBERTY COUNTY

Introduction

Liberty County is located along the coast of Georgia. It is occupied by seven cities: Allenhurst, Flemington, Gun Branch, Hinesville, Midway, Riceboro, and Walthourville. In 1777, Liberty County was established and was one of the seven counties that were created from the original colonial parishes (Walker, 2004). At this time the county consisted of three parishes: Saint John, Saint Andrew, and Saint James. In 1799, Glynn County was enlarged using land from Liberty County. In 1793 and 1920 McIntosh County and Long County, respectively, were created using land from Liberty (Liberty Online, 2014).



Map of Liberty County.

The first elected governor of Liberty County was Lyman Hall, in 1783. During his time in office he was an advocate of public schools and helped charter the University of Georgia. He and Button Gwinnett, who was from St. Catherine's Island (of Liberty County) were signers of the Declaration of Independence (Walker, 2004).

Prior to the Civil War, cotton and rice plantations inhabited Liberty County. After the war, timber and turpentine industries replaced these plantations. These industries are still a large part of the economic base today (Walker, 2004).

St. Catherines Island is located in Liberty County-and is one of the eight barrier islands along the coast of Georgia. While several of the barrier islands have been developed, St. Catherines remains undeveloped. This is a privately owned island that is nearly eleven miles long. The island is managed by the St. Catherines Island Foundation and is designated as a National Historic Landmark due to its rich history (Seabrook, 2006).

Fort Stewart was built in 1940 as an antiaircraft training facility. This military base is the home of the Army's Third Infantry Division and has had a large economic role within the county since it was built. Being the largest military installation east of the Mississippi River, Fort Stewart encompasses nearly 280,000 acres of land and is encompasses by several different counties. Being only 40 miles southwest of Savannah, deployment can be rapid and easily accessed by interstate roadways and rail line (Pascoe, 2004). Between Fort Stewart and Hunter Army Airfield (Chatham County), over 20,000 active duty personnel are supported and 28,600 of their family members. Acting as a major economic developer for Liberty County and surrounding counties, 3,200 civilian workers are employed between the two military bases. Military bases bring expansion and economic growth to the surrounding regions. An increase in people means an increase in the need for housing, infrastructure, and schools. With this increase comes new jobs and more economic activity within these communities (Liberty, 2014). A joint land use study (JLUS) was created in 2005 for these

bases. This is a cooperative land use planning initiative between the U.S. Army and the surrounding municipalities. The objectives of this study were to encourage cooperative land use planning between military installations and the surrounding community and to seek ways to reduce the operational impacts of military installations on adjacent land. The plan consists of compatibility options and specific actions to be taken. The JLUS is a document that is created and maintained in order to preserve a good relationship between the military bases and the areas in which they are placed (Liberty Consolidated PC, 2014).

Land Use	Acreage	Percent
Residential	18,855	5.74%
Commercial	2,952	0.90%
Industrial	4,186	1.27%
Public/institutional	119,319	36.29%
Transportation/communication/utilities	480	0.15%
Park/recreation	352	0.11%
Dunes/marshlands/conservation areas	51,526	15.67%
Agriculture/forestry/undeveloped/vacant	131,098	39.87%
Total	**328,768**	**100%**

Source: LCPC Community Assessment Volume 1.

Issues and Opportunities:

A site visit to Liberty County and the City of Hinesville was conducted on February 7, 2014. Jimmy Adams, Holly Alderman, and Ashley Crain met with Jeff Ricketson of Liberty Consolidated Planning Commission and Billy Edwards, the City Manager of Hinesville. Vicki Davis with the Hinesville Downtown Development Authority also aided in the visit by giving us data.

- The seven cities that make up Liberty County are consolidated with the county
- Updates to the comprehensive plan are being started are required to be updated every year.
- The new comprehensive plan for the county will promote adherence to the Coastal Georgia Regional Plan.
- Fort Stewart acts as a huge economic base with over a billion dollar payroll per year
- Major employers: Fort Stewart, SNF (chemical company), Interstate Paper (paper company)
- Large industrial park, there is room for more industry to come in: this kind of development is wanted by the county

- Community wide annual retreat- Liberty County-wide Workshop: brings together key players in the county and municipalities in order to serve residents more efficiently
- Three initiatives/projects chosen to be implanted for the following year at the community workshop
- Purple Pipes, sustainable reuse water project, created from community workshop
- Easy access to I-95, beneficial for the residents that commute out of county for work
- Close proximity to ports and has rail system in place. This is beneficial for Fort Stewart as a means of deployment and package transportation.
- Aging population: Senior tax credit project
- Growth within county started in 1975 due to the installation of Fort Stewart. Noticeable growth has continued dramatically over the last ten years and projections show continued growth for the future
- There is not currently a county-wide sewer service offered, only by the individual cities
- Conservation lands: much of the area is covered in wetlands, this is a weakness for growth in those areas but a strength for the environment as a whole
- HAMPO: bus transit system for the City of Hinesville. Some people see program as a failure, others do not. Used by residents but routes have been cut down due to the amount of users.
- Needs/wants different types of businesses. More diversity in retail and restaurants establishments are wanted from the public
- Armstrong Atlantic State University is opening a campus in the Hinesville and will accommodate 4,000 students. This will also bring in more jobs and further economic strength within the county
- Quality affordable housing is needed

Plans and Planning:

Liberty County is a great example of a well-developed and maintained planning organization. This is apparent throughout the county and the City of Hinesville. The consolidation of county and city for planning purposes is surely the reason for this. The annual community wide workshop along with the creation of the LCPC allow for the municipalities and county workers to work together in order to serve the people of Liberty County best.

<u>The LCPC – Liberty Consolidated Planning Commission</u>

The Mission: *"To encourage and guide the local governments and the citizens within Liberty County in the creation, maintenance, and implementation of a shared, visionary, realistic, and feasible comprehensive plan which will provide all of our citizens and local governments with a holistic blueprint for our future growth and economic development that preserves and protects our natural resources while it ensures and enhances the quality of life for all of our citizens."*

The Liberty Consolidated Planning Commission was created in 2004 as one of the three projects that was chosen during the annual Liberty Countywide Workshop. This is a retreat style workshop that is attended by city and county government officials along with community members. Each year three projects are chosen for the following year. The goal of the LCPC is to both develop and maintain a comprehensive plan for the county and the communities in which it encompasses. Based on policy, goals and objectives are defined that guide the comprehensive planning process. Monthly meetings are held that are open to the public in order to have continued input and forward moving growth for the communities (Liberty Consolidated PC, 2014).

Liberty Regional Water Resources Council
The mission: *"To provide the forum for the cooperative planning and provision of water, wastewater and stormwater services for all local governments in Liberty County."*

The Liberty Regional Water Resources Council was born in 2009 out of the Liberty County-wide Workshop, as well. This organization was created to promote county-wide collaboration on providing sufficient quantity and quality of future public water supply to support future growth in the county (Liberty Consolidated PC, 2014). One project that has from this council is the Purple Pipe project. This is a project that is focused around reusing potable water. Due to saltwater intrusion, which occurs when freshwater is withdrawn from groundwater faster than it can be replenished, Liberty County has a limited daily withdraw amount from the aquifer. The purple pipes that name this project, hold reclaimed water which reduces the use of the water taken from the aquifer and also reduces the discharges to surface waters. This water is not drinkable but can be used for irrigation, aesthetic water bodies, environmental restoration and wetland creation, groundwater recharge and also industrial use. This is high-quality reclaimed water that is produced from treating domestic wastewater (Smith, 2011). This project has been implemented within Liberty County, however it is not county wide. The pipes run through Hinesville and into Fort Stewart at this time. Interstate Paper, a paper company located within the county uses 12 billion gallons of water a day. At this point the pipes do not reach to the paper plant, this is an opportunity for the LCPC and the Water Resources Council to continue the sustainable growth project (Liberty Consolidated PC, 2014).

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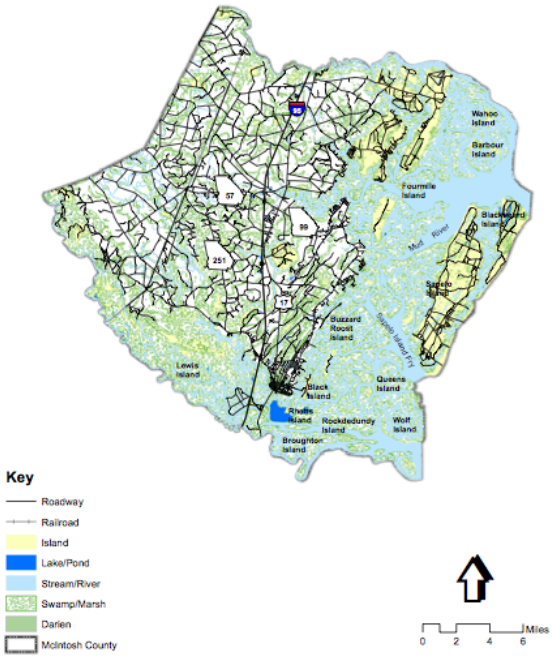
MCINTOSH COUNTY

Introduction

McIntosh County borders Georgia on its eastern lower coastal region, nestled between Liberty and Glynn Counties. It is part of the Brunswick, Georgia, Metropolitan Statistical Area which encompasses all of McIntosh, Glynn, and Brantley counties. It has seven unincorporated communities: Crescent, Eulonia, Townsend, and Valona, Shellman Bluff, Jones, and Cox. The county seat is Darien.



Map of McIntosh County.

McIntosh County is defined by the South Newport River to the north and the Altamaha River to the south. At the northern end of the county, Interstate 95 and U.S.17 enter at the middle of the county and cross the Altamaha River channels near Darien at the southern end.

McIntosh County is fronted by three barrier islands to the east: Blackbeard, a national wildlife refuge; Sapelo, a wildlife refuge and research reserve; and Wolf, a national wildlife refuge that is predominately tidal marsh. You need to charter a boat to visit Blackbeard Island. You can reach Sapelo by a ferry that carries tourists twice a week to the island. Wolf Island National Wildlife Refuge can be viewed from the water by private boat or charter. Harris Neck National Wildlife Refuge, located on the mainland, is very accessible and is excellent for bird watchers and naturalists.

McIntosh County offers the greatest diversity of attractions and the least foot traffic of any county on the Georgia coast. The county features several commercial fishing villages, three wildlife refuges, one marine sanctuary, numerous coastal restaurants, two historic forts, several antebellum rice plantations, and the Altamaha River. Because it is a little off the beaten path, McIntosh County still retains the flavor of the "good old days" on the Georgia coast, but this may be changing as development comes to the county.

Issues and Opportunities

The following section conveys existing conditions in McIntosh County as experienced during the site visit in February 2014.

1. The Built Environment
   - There is an abundance of areas with positive character such as Historic Downtown Darien
   - Spotty development patterns such as commercial buildings in and around historic areas have impacted the character of the city of Darien and the

surrounding communities
- Inconsistent use of building materials detract from the area's historic feel (design guidelines and sense of place)
- Primary corridors such Hwy 17 and Hwy 99 show serious blight and discourage windshield tourists
- Dilapidated storefronts, vacant buildings, and street and road disrepair along North Avenue running through Darien create a negative image of the community
- Signage on the outskirts of Darien and the surrounding communities don't invite passersby

2. History and Trends
   - McIntosh County has a rich history and many historical sites
   - There is a strong desire among residents in McIntosh County to preserve the traditions and heritage of the area
   - Not enough is being done by the local government to promote, protect, and preserve the historical integrity of the area
   - Residents are concerned that current "spot zoning" development patterns are negatively impacting the unique characteristics of the area
   - Rural sprawl is getting worse

3. Community Vitality
   - The community has a unique spirit with many citizens who are willing to participate in making it better. This needs to be celebrated and built upon.
   - Local government needs to focus on promoting the area's plentiful assets in order to protect its image
   - Vacant commercial areas impact people's perception of the area, and the County must carefully consider the right kinds of businesses to attract in order to restore vitality

4. Regional image and Identity
   - McIntosh County's economy is closely tied to the traditional occupations through its fishing and timber industries
   - The area's natural beauty and ecological assets create a distinctive atmosphere that defines it as a special coastal area
   - The county's proximity to Fort Stewart Army base in Liberty County and Kings Bay naval Submarine station in Camden County contribute to its Regional identity
   - The County lacks effective marketing, both internally and externally, to spread the word about what the County offers to existing or potential residents and businesses

5. Neighborhoods
   - A tree ordinance has been passed
   - Sidewalks are being built to connect neighborhoods and citizens to business
   - The area is an affordable place to live due to its competitive housing prices and low tax rate compared to surrounding counties like Chatham, Bryan, and Liberty
   - Communities in McIntosh County are tight-knit with many citizens that want to improve it

6. Resource Conservation and Heritage Preservation
   - There is an abundance of natural resources contributing to sense of place, open space, and regional identity
   - There is a strong desire among citizens to protect the natural beauty of the area
   - McIntosh County has a unique and rich cultural history which attracts tourists
   - There is an absence of designated historic districts
   - Sites of historic and cultural significance are not protected by ordinance and are vulnerable to incompatible development

7. Economic Development
   - The county is situated near and has access to two large ports and three interstate highways
   - There is on-going coordinated effort between the county and Coastal Georgia Community College to provide workforce training and development
   - A large industrial complex has been built to attract and house major industries
   - An Outlet Mall provides shopping and job opportunities
   - There county lacks a diverse job base
   - The lack of a skilled work force is a deterrent to attracting major industry
   - The county's traditional industry of shrimping and commercial fishing is currently recovering from significant economic decline
   - The county is willing to sacrifice some of its natural resources in order to attract major industries
   - Many business owners live elsewhere and are not invested in the community

8. Transportation
   - The county is easy to navigate and traffic congestion is minimal
   - Traffic flows efficiently on the existing roadways
   - Roads are generally well-maintained and designed to manage traffic flow
   - There is an adequate public transportation system
   - Sidewalks exist in the city of Darien and plans are in place to construct more

- The city has a bike path plan in place
- Providing public transportation to the areas of rural sprawl is expensive and problematic

9. Community Services
   - The county has many acres of natural open space that are protected by the state as well as permanent conservation provided by the Federal government
   - Local colleges provide opportunities for continuing education
   - There are excellent services for senior citizens provided by the region

10. Governmental Relations
    - Development pressures have provided an increased need for the county to think regionally, especially in issues such as land use, transportation, and housing
    - McIntosh County is part of the Regional Comprehensive Plan and related Short Term Work Program
    - The county participates in the Georgia Department of Economic Development's regional tourism partnership
    - The county participates in regional economic development and regional environmental organizations and initiatives, especially regarding water quality and quantity issues
    - There are limited financial resources to provide the services necessary for an increased population

<u>Sources</u>

McIntosh County Partial Comprehensive Plan Update {Grant Services & Consulting, Inc.)
Stakeholders: Brett Cook, City and County Manager; Wally Orrell, Industrial Development Authority
U.S. Census 2010

APPENDIX 1: DATA BY COUNTY

BRYAN COUNTY

Geography
Bryan County 454 square miles,
Richmond Hill 14.58 square miles
Pembroke 8 square miles
Elevation 14'
Interstate 95 1.3
Interstate 16 13.7
US Coastal Highway 170

Land/Water Area
Richmond Hill 130.3 square miles (land area)
Pembroke 141.2 square miles (land area)
Richmond Hill 0.2 square miles (water area)
Pembroke 0.3 square miles (water area)

POPULATION
Metropolitan County in 2010? YES
Total number, 2010 Census 30,233

DEMOGRAPHIC PROFILE
BRYAN CO. GEORGIA TOTAL Avg. Co. in GA

- Persons per square mile, 2010 Census 69.3
- Rank of population density, 1=highest (1-159) 75 -- --
- % Urban, 2010 47.7
- % Rural, 2010 52.3
- Rate of natural increase per 1000 pop., 2010-2011 8.6
- Rate of net migration per 1000 pop., 2010-2011 23.0
- Total number, 2011 Census Estimate 31,377
- % Black alone 15.2
- % White alone 80.0
- % other races alone 2.3
- % Hispanic/Latino 5.2
- % Age 65 and over 9.6
- Median age, Total 35.1
- Total, 2015 projection (GA OPB, 2012 series) 33,510
- Total, 2030 projection (GA OPB, 2012 series) 44,465
- Total civilian veterans, 2012 estimate 2,720

ECONOMICS

- Deposits of all FDIC Insured Institutions, 2011 $380,118,000
- Bankruptcy filings per 1,000 population, 2011 6.1
- Gross tax digest 40% value of assessed property, 2011 $1,306,076
- Taxes levied, 2010 $31,429,965
- Millage rate, county-wide, 2011 23.687 -- 27.881
- Total lottery sales, FY2012 $13,526,540
- Per capita lottery sales $431 $391 $452
- Median household income, 2010 model-based estimate $65,478
- Persons below poverty level, 2010 model-based estimate 3,560
- % of all persons 11.8
- % of children 0-17
- Per capita income, 2010 $39,394
- Total personal income, 2010 $1,197,226,000
- Transfer receipts, 2010 $177,146,000
- Transfer receipts as a % of total personal income 14.8
- Per capita transfer receipts $5,829

LABOR

- Civilian labor force, 2011 15,459
- Average annual unemployment rate 8.3
- Average # of business establishments, 2011 633
- Average monthly employment 5,834]
- Average weekly wage, all industries $585
- Resident workers age 16+, 2006-2010 13,962 4,241,387 26675.4
- % of residents working outside of county 70.4 41.3 45.8
- % or residents driving alone to work 80.8 78.7 79.5
- % of residents working at home 3.9 4.5 3.3

Distance to Major Cities:

- Savannah (13 miles)
- Macon (167 miles)
- Atlanta (250 miles)
- Hilton Head, South Carolina (59 miles)
- Charelston, South Carolina (121 miles)
- Jacksonville, Florida (120 miles)
-

Savannah Port Authority

- Port Authority (20.3 miles)

Air Transportation

- Savannah/Hilton Head International
    - 17.3 miles
    - Runway Length 9351 x 150ft/2850 x 46m (longest)
    - Runway Surface Grooved Concrete

- Hinesville Airport
    - 36.6 miles
    - Runway Length 3698 x 75
    - Runway Surface Paved

Military Installations

- Ft. Stewart 25 miles
- Hunter Army Airfield 13.7 miles

Climate

- Average Annual Temperature 78 degrees
- January Average High 60, Low 38
- July Average High 92, Low 72
- Annual Rainfall 49.58"
- Annual Snowfall None
- Prevailing Wind Direction NW

Government

- Richmond Hill Mayor and City Council
- Pembroke Mayor and City Council
- Bryan County Board of Commisioners

Medical Hospitals

- Memorial Helath University (Savannah)
    - 530 beds, Tertiary Care, Level 1 Trauma
- St. Joseph's Hospital (Savannah)
    - 350 beds
- Candler Hospital (Savannah)
    - 331 beds

Schools

- Education (Primary-High School)
    - Lanier Primary
    - Bryan County Elementary
    - Bryan County Middle School
    - Bryan County High School
    - Richmond Hill Primary School
    - Richmond Hill Elementary School
    - Richmond Hill Middle School
    - George Washington Carver Elementary
- Montessori School
    - The Ford Company
- Colleges & Universities within 25 miles
    - Savannah College of Art & Design
    - Savannah State University
    - Armstrong Atlantic State University

- Savannah Technical College
- Brewton-Parker College
- Strayer University
- University of Phoenix
- Georgia Southern University (60 miles)

Attractions and Mueseums

- Fort McAllister Stae Park
- Richmond Hill Historical Museum
- J.F. Gregory Park
- Historical Moments
- Tour of Homes

Recreational Facilities

- Ft. McAllister State Park
- Richmond Hill Recreation Center
- Richmond Hill Teen Center
- Pembroke Community Center
- J.F. Gregory Park
- D. Henderson Memorial Park
- YMCA
- Richmond Hill Area Tennis Association

CAMDEN COUNTY

Historical highlights:

1500s	Spanish mission/fort on Cumberland Is.
1777	county founded (Woodbine, County seat)
1792	St. Mary's established on abandoned Timucuan Tribal village
1802-66	Dungeness Plantation on Cumberland Is.
1812	St. Mary's captured by British (War of 1812)
1861-65	St. Mary's waterfront destroyed by Union gunboats in Civil War, town and churches burned
1877	Free land offered to settlers
1881-1972	Carnegie Plantation on Cumberland Is.
1972	Cumberland Is. National Seashore established
1978	Kings Bay Naval base established (1980 – becomes submarine base), 16k acres w/ 4k acres of wetland

State Region: Coastal, super region #12

Economy:

-Industries: government, hospitality, arts, health care, professional/admin, IT, logistics, retail, wholesale, manufacturing, construction
-products: timber, paper, turpentine, fishing, cotton, tobacco, fertilizer, chemicals
-Naval base: Kings Bay
-opportunity to expand military contractors and R&D companies in Camden Co. related to the naval base
-Private companies with 100+ employees: Express Scripts, Lockheed, Wal-Mart, Winn Dixie, Publix
-Total tax: 7% (state 4, local 3)
-Employment
  -18,272 employed (2011); 1971 unemployed
  -employment growth 29%, unemployment rate 3.6%
  -8.5% goods; 57.9% services; 33.5% gov't
  -avg. weekly wage $744-67
  -median household income: 49,230 (2010) - $53,009 ($27,019 per capita)
  -families below poverty level: 12.6%

Natural resources:

-58% forested
-168.8 sq mi of water
-produce 13M tons of biomass (timber)
-draws primarily from ground water (north Florida aquifer), public supply twice as much as domestic and commercial supply combined (130 gal/day/capita)
-major rivers: Little Satilla, Big Satilla, Crooked River, Cumberland River, St. Mary's River, Little St. Mary's River
-Cumberland Island Natural Shoreline

Population and Demographics:

-50,513 (2011), an increase of 16% from previous census
  -expected pop growth of 54-63% by 2030
-Ages
  -0-19: 29%
  -20-39: 30.6%
  -40-59: 25.7%
  -60 up: 14.3%
-Education
  -89.1% high school graduates
  -82.4% HS graduates with college prep endorsement (36.5% HOPE eligible, 44% go on to post secondary school)
  -20.4% bachelor or higher degree
  -10.9% less than high school education (of persons over age 25)
-Work Ready Certification: 41% of workforce
-avg. household size: 2.71 persons (mainly married couples, married couples w/ children)
-avg. family size: 3.17

Environment:

-St. Mary's, Satilla, and Cumberland-St. Simons watersheds
-St. Mary's and Satilla River basins
-high to average groundwater pollution susceptibility

Land use (613 sq mi of land):

-Residential:
  -construction in 2011 was all single-family
  -density/sq mi: 35.3
  -housing 65-35% split between owner- and renter-occupied
  -avg. mortgage $1259, rent $789
  -median home value $149,410-161,900
  -millage rate: 26.95 (2011)
-Agricultural: <5% of land
-Commercial:
-Institutional:

Recreation, open space, green infrastructure:

-Camden county recreation center
-Cumberland Island National Seashore

Transportation:

-major corridor: I-95
-rail
-75% work in county of residence
-85% drive to work alone; less than 1% use public transport
-55% commute <20 min.; 45% commute >20 min.

-daily vehicle miles traveled: 2,175,000
-68.5% occupied housing units have 2+ vehicles

County facilities/Infrastructure:
-12 schools, 100% achieving Adequate Yearly Progress
-College branch campuses: College of Coastal Georgia (Brenau, Troy, Valdosta State, and Waycross College offer distance education)
-Altamaha Technical College, Okefenokee Technical College
-served by Three Rivers Regional Library System
-one general hospital w/ 40 bed capacity (777 people/physician)
-one general nursing home w/ 78 bed capacity
-13 licensed day care centers
-one general aviation airport

Cultural resources:
-performing arts center, museums, art galleries
-historic architecture (no historic district)
-native American archaeological site(s)

SPLOST projects in the works:
-Colerain Road (Kingsland Bypass) Hurricane Evacuation Rt. and Economic Corridor, $750,000

Special notes:
-Region 12 crosses 5 senate districts and 2 congressional districts

Planning and other stakeholders:
-Dept. of Planning & Development
    -Mary Hoover (912)729-5603, mhoover@co.camden.ga.us
    -John Peterson (912)729-5603, jpeterson@co.camden.ga.us
-Planning Commission
-Joint Development Authority (assist businesses locate and expand in the county)
-The Camden Partnership (advocate, support, and strengthen military missions)
-Camden County Chamber of Commerce
-Coastal Regional Commission
-Southeast GA Joint Development Authority

<u>Sources</u>

4. UGA Cooperative Extension, Carl Vincent Institute of Government. The Georgia County Guide. 2013
5. Digital Library of Georgia
6. Georgia Archives, University System of Georgia

LIBERTY COUNTY

Economy:

- Industries: government, hospitality, health care, professional, industry
- Military Base: Fort Stewart
- Employment grew 78% from 1990-2007
- 71% of residents are in the workforce
- Economic resources: LCDA (Liberty County Development Authority), two post-secondary schools: Armstrong Atlantic and Savannah Technical College
- Three largest employers: Fort Stewart, SNF, Interstate Paper
- Per capita income (2010): $26,911
- Average annual unemployment rate (2011): 9.7%
- Average weekly wage (2011): $707
- Percentage of residents working outside county (2006-2011): 24.3%

Natural Resources:

- Dunes/marshlands/conservation: 15.67%
- Agriculture/undeveloped/vacant: 39.87%
- Annual rainfall: 50inches
- St. Catherine's Island: 14,000 acres of island owned by private foundation for research T
- Total square miles (2010): 602.5

Population and Demographics:

- Population: 65,451
  - White: 29,881
  - Black or African American: 26,805
  - American Indian: 358
  - Asian: 1,247
  - Native Hawaiian: 392
  - Some other Race: 1,810
  - Two or More races: 2,960
- High school completion % (2011): 67.3%
- Bachelor's degree and higher holders (2006-2010): 16.3%
- Housing unit density per square mile (2011): 55.8
- Number of households (2012): 22,991
- Annual growth rate: 1.35%
- Vacant housing, % total housing units (2010): 17.1%
- Mobile homes, % of total housing units (2010): 19.7%

Environment:

- County does not have natural resource inventory.
- Wetlands, marshlands, and floodplains have been identified using GIS
- County does have a tree preservation ordinance
- County does have three replanting ordinances for developed areas.

- Climate: subtropical/moderate
- Annual rainfall: 50 inches
- No surface water supply or river corridor
- Dependent on water from wells and upper FL aquifer
- Limited groundwater recharge areas

McINTOSH COUNTY

	McIntosh	Rank	Median	Georgia
Agriculture –				
Total farm gate value of production ($000), 2011	$6,624	151	$51,737	$12,953,313
Courts & Crime –				
Arrests per 100,000 population, 2011	980.9	102	$823.6	1,084.5
Economics –				
Per capita income, 20110	$22,346	148	$27,931	$34,747
Education – County Public Schools				
High school completion %, class of 2011	76.9%	36	71.1%	67.5%
Percentage of population (age 25+) with a bachelor's degree or higher 2006-2010	12.9%	85	13.3%	27.2%
Government –				
Countywide millage rate, CY 2011	27.6	77	28.1	28.2
Percentage of registered voters voting in 2012 General Election	70.8%	16	72.2%	72.2%
Health –				
General hospitals, 2011			1	147
Ratio of persons to total number of Physicians, 2010	7,166.5	138	1,230.0	488.5
Housing & Households –				
Housing unit density per sq. mile, 2011	22.7	60	29.2	71.3
Vacant housing, % of total housing, 2006-2010	10.8	34	13.8	12.3
Mobile homes, % of total housing, 2006-2010	39.2	124	23.3	9.9
Labor –				
Avg annual unemployment rate, 2011 10.7	13	10.6	9.8	
Average weekly wage, 2011	$538	121	$590	$867

Percentage of residents working outside of county, 2006-2010	67.9%	144	46.5%	41.3%
Natural Resources –				
Total square miles, 2010	285.6	18	346.7	59,425.2
Population –				
Total population, 2011	27,921	63	22,567	9,815,210
Public Assistance –				
Transfer receipts, % of total personal Income, 2010	24.8%	55	28.2%	17.8%
Transportation –				
Total highway mileage, 2011	348.57	65	606.70	119,442.13
Vital Statistics –				
Unwed mothers, rate per 100 live births, 2010	53.6	117	45.8	41.5
Teen pregnancy rate, 2001-2010	32.6	47	38.3	34.2