

BARNWELL COUNTY

2021 - 2031 Comprehensive Plan



Prepared by **Lower Savannah Council of Governments**
on behalf of the
Barnwell County Planning Commission



STATE OF SOUTH CAROLINA)
)
COUNTY OF BARNWELL)

ORDINANCE # 2021-1-373

**AN ORDINANCE ADOPTING A COMPREHENSIVE PLAN FOR
BARNWELL COUNTY, SOUTH CAROLINA, PURSUANT TO THE
SOUTH CAROLINA LOCAL GOVERNMENT COMPREHENSIVE
PLANNING ENABLING ACT OF 1994**

BE IT ORDAINED BY THE COUNTY COUNCIL OF BARNWELL COUNTY,
SOUTH CAROLINA:

Section 1. Authority and Adoption. The Barnwell County Comprehensive Plan is adopted upon the recommendation of the Barnwell County Planning Commission after Public Hearing pursuant to the authority granted in the South Carolina Local Government Comprehensive Planning Enabling Act of 1994, S.C. Code §6-29-310, et seq., and incorporated by reference in the Code of Ordinances of Barnwell County.

Section 2. Purposes. The purpose of the Comprehensive Plan is to guide land development in accordance with existing and future needs and to promote the public health, safety, morals, convenience, order, appearance, prosperity, and general welfare of the community, and all those purposes set forth in S. C. Code §6-29-310, et seq.

Section 3. Title. This Ordinance may be cited as "Barnwell County Comprehensive Plan, 2020."

Section 4. Jurisdiction. The provisions of this Ordinance shall apply to all land and improvements within the unincorporated limits of Barnwell County, South Carolina.

Section 5. Effective Date and Repeal. The provisions of this Ordinance shall be effective on January 12, 2021, and all Ordinances and text amendments adopted prior to that date are hereby repealed as of the effective date hereof.



ATTESTED:

Elaine S. Ferguson, Clerk to Council

APPROVED as to Form and Content

J.D. Mosteller, County Attorney

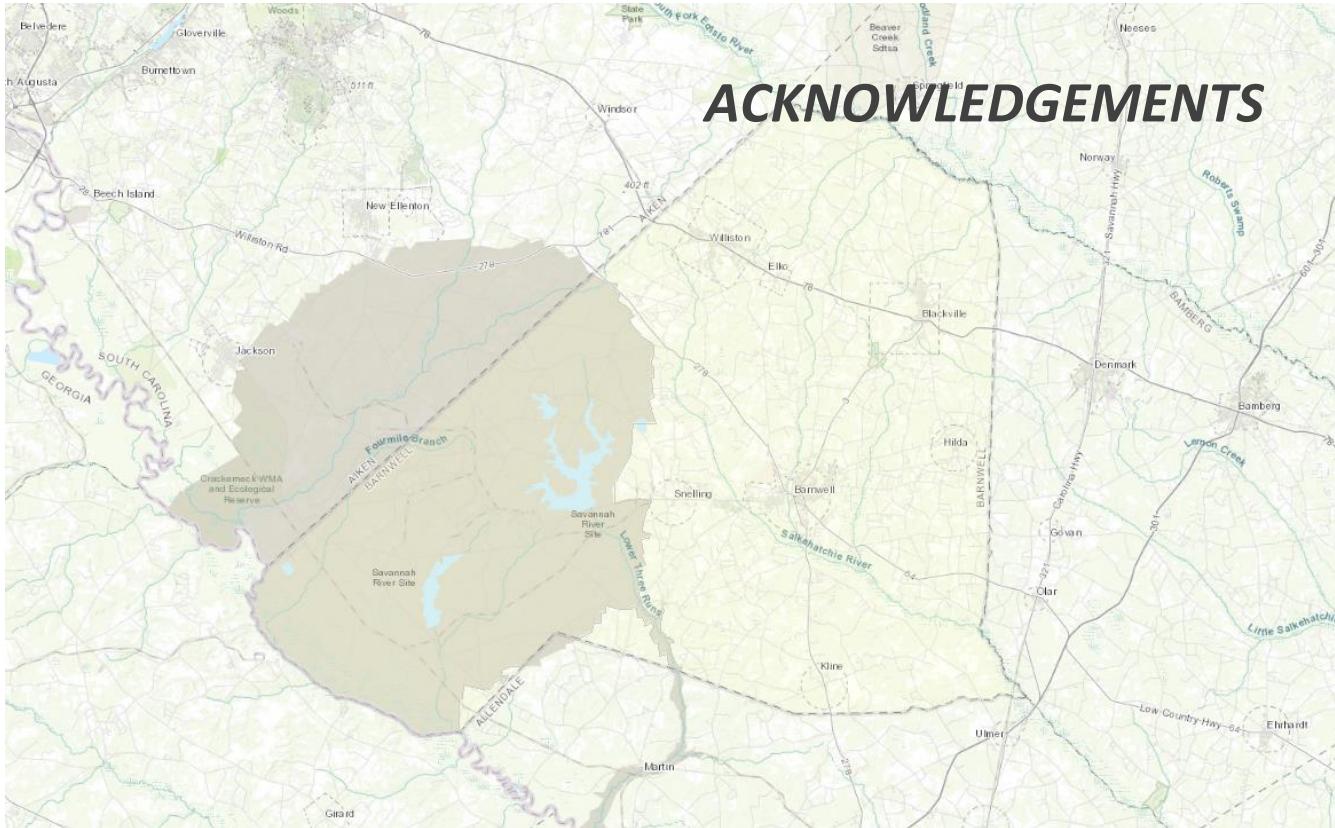
BARNWELL COUNTY COUNCIL

BY: Harold Buckmon, Council Chairman

First Reading: October 13, 2020
Second Reading: November 10, 2020
Third Reading: January 12, 2021
Public Hearing: January 12, 2021

BARNWELL COUNTY

2021-2031 Comprehensive Plan



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Introduction

Overview

The Barnwell County 2021 *Comprehensive Plan* is the future vision for preservation and development in Barnwell County for the next 10 years. This plan establishes strategies for the County to pursue to maintain and enhance its quality and uniqueness with a focus on strategies that the County government can directly influence and achieve.

The comprehensive planning process identified a series of overarching themes that serve as the primary guidance for the recommended strategies and implementation initiatives. These themes include:

1. The major policies and directions of the 2007 Comprehensive Plan and the land use review are still largely valid and accurate. All future updates and reviews should stay the course and build upon previous Comprehensive Plans.
2. The broad nature of comprehensive planning is important for a successful future, however, there are areas in the County where more detailed land use studies and planning will be necessary.
3. The County is only one of many stakeholders in the region that can influence the preservation of resources, form of development, and provision of services and infrastructure. It is vitally important that the County recognize its ability to manage its destiny and establish working relationships and/or formal agreements with other jurisdictions and agencies that contribute to the quality of life.
4. A thoughtful commitment to balance social, economic and environmental considerations is essential to achieve the objectives set forth in this plan.

The integration of these basic areas of concern into all development processes with broad public participation in decision making is important for achieving sustainable development in Barnwell County.

Purpose and Intent

The following purpose and intent statement defines the broad role of the Comprehensive Plan.

The Barnwell County 2021 *Comprehensive Plan* will guide public decision-making affecting the quality of life in Barnwell County through the year 2031. This plan identifies the County's vision for the future. The vision articulates the essential components of the quality of life in Barnwell County as identified by the County, and serves as the standard for the *Comprehensive Plan*. The various elements of the plan are designed to accomplish this vision by defining goals for the future regarding the pattern, quality, and intensity of land uses, the provision of public facilities and services, economic development, availability of housing, and

preservation of natural and cultural resources. The plan also establishes strategies or actions and implementation tools to enable the County to achieve the vision set out in the plan. The components of the plan focus on real actions the County can achieve given the appropriate time and resources. The strategies of the plan elements are tied together in a comprehensive manner and are executed through both the land use and priority investment strategies.

Comprehensive Plan Elements

- *Chapter 1 Population Element* is the assessment and inventory of population and demographic data to establish existing conditions, forecasts for planning purposes, and strategies to stay apprised of the continually changing needs and preferences of the population.
- *Chapter 2 Economic Development Element* is the overview of the economic environment and strategies to influence employment and business growth in the County to support the population.
- *Chapter 3 Natural Resources Element* is the recognition of the diverse natural assets in the County and additional strategies beyond those in the Land Use Element to protect and preserve these features.
- *Chapter 4 Historic and Cultural Resources Element* is the recognition of the diverse historical and cultural assets in the County and additional strategies beyond those in the Land Use Element to protect and preserve these features.
- *Chapter 5 Community Facilities Element* is the inventory and status of the various facilities serving the population of the County, and strategies to ensure continued quality services in the future.
- *Chapter 6 Housing Element* is the assessment of housing conditions and needs in the County and strategies to ensure adequate and affordable housing supply is available in the future.
- *Chapter 7 Land Use Element* is the history of land use development and strategies to shape the future of the County landscape and geographic distribution of preservation and development. This element includes strategies for location, quality, and quantity of land uses.
- *Chapter 8 Transportation Element* is the overview of transportation data and efforts in the County and region as well as a list of necessary improvements to the road network. This Element includes, through reference, the strategies and information in the 2017-2022 State Transportation Improvement Program (STIP), as well as those strategies identified in the Lower Savannah Council of Governments (LSCOG) Long Range Transportation Plan (LRTP).
- *Chapter 9 Priority Investment Element* is the element that prioritizes the investment of County resources into the various strategies of the Plan and lists the major initiatives the County should undertake in pursuit of the Plan strategies/recommendations.

Planning Background

In 1994, the County was granted the authority to prepare and maintain a Comprehensive Plan through the South Carolina Government Comprehensive Planning Enabling Act (S.C. Code Title 6, Chapter 29). The Act consolidated formerly separate legislative acts regarding the local authority to create Comprehensive Plans. Chapter 29 has since been updated to include additional sections regarding educational requirements for local planning officials, vested rights, and the Federal Defense Facilities Utilization Integrity Protection Act. In 2007, the General Assembly enacted The South Carolina Priority Investment Act thereby amending sections of the Comprehensive Planning Enabling Act to require local jurisdictions to include separate transportation and priority investment elements in their plans and enhancing the requirements for the housing element of plans and zoning codes.

Planning in Barnwell County

The Comprehensive Plan is adopted by County Council as an ordinance. Before adoption, the Planning Commission must make a recommendation by resolution and County Council must hold a public hearing, giving the public a minimum of 30 days public notice of the hearing. The Plan must be reviewed once at least every five years to determine if changes are needed which require additions or amendments. The Plan must be updated at least every 10 years.

The County's Role and Other Players

The County has the primary role in the preparation of the Comprehensive Plan. The implementation of the Plan lies with County Council, the Planning Commission, the *Zoning and Land Development Regulations Ordinance*, and other County departments. The Priority Investment and Land Use Elements are the pivotal components, tying together the various recommendations into a form that the County can and should implement.

The County must focus on coordination and agreements with other agencies to implement the Plan. While this Plan outlines a vision for the future, it is necessary to also recognize the importance of the other agencies outside the direct control of the County.

Chapter One: Population

The Population Element of the Comprehensive Plan relates to the number and characteristics of the people residing in Barnwell County, South Carolina. Included in this section of the report is data provided by the United States Census Bureau, as well as the Bureau's American Community Survey (ACS) on population counts, trends and other selected characteristics of the County population. Projections were included, where available, using U.S. Census figures and information provided by the South Carolina Office of Revenue and Fiscal Affairs. This information is intended to help shape future land use growth and development and to identify future service needs of the population which can be addressed through the Comprehensive Plan.

A. BACKGROUND AND INVENTORY OF EXISTING CONDITIONS

The data presented in Table 1.1 depicts the changes in growth for the seven municipalities within Barnwell County. Barnwell County's population has declined steadily since the year 2000, and recent population figures show a continuation of this trend. In 2018, there were an estimated 21,112 people residing in Barnwell County. This represents a 6.7 percent decrease in population over the 2010 Census total of 22,621.

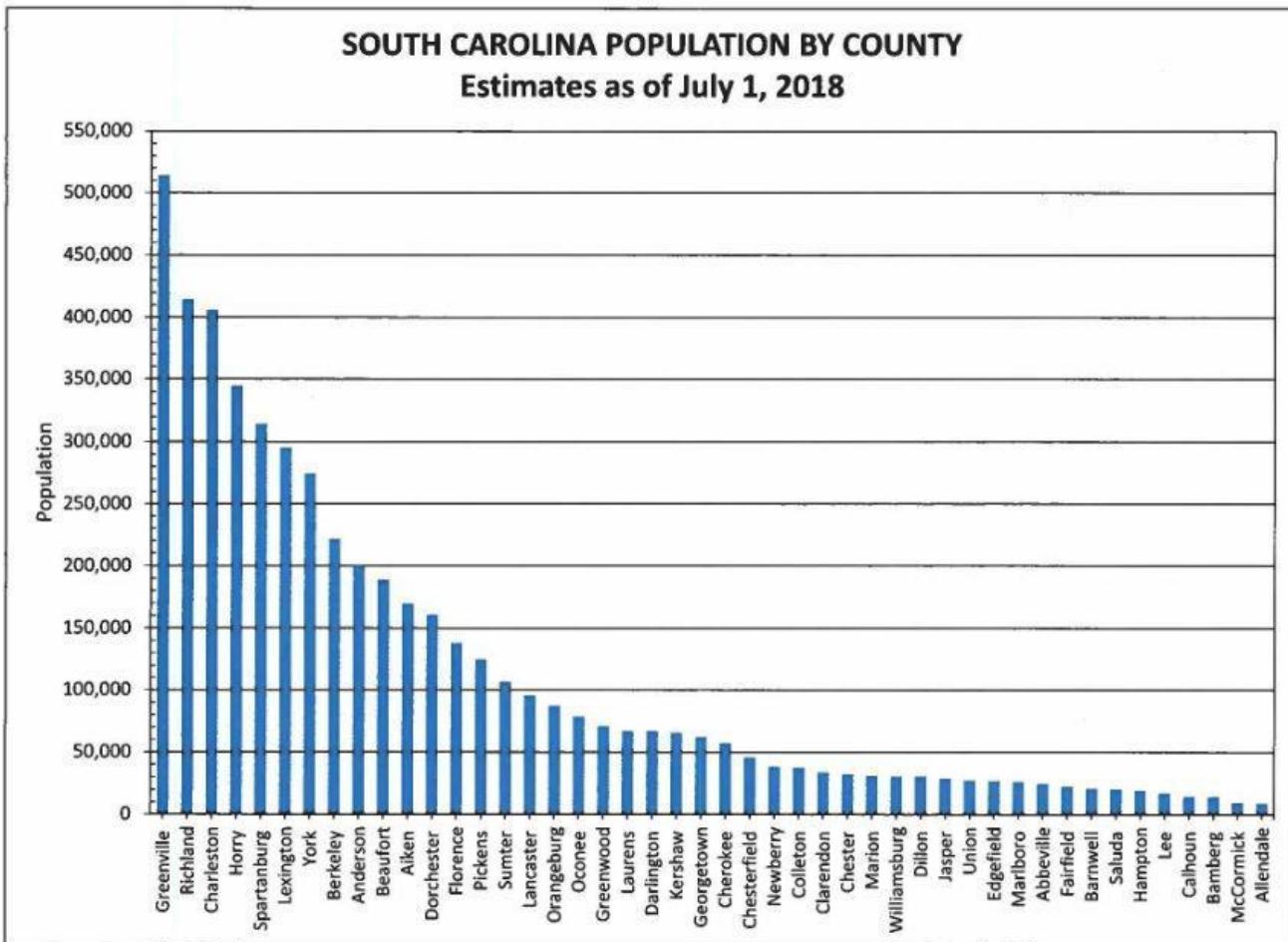
Table 1.1: Population for County Incorporated Places, 2000- 2018			
Municipality	2000	2010	2018 (est.)
Barnwell	5,035	4,750	4,367
Blackville	2,973	2,406	2,217
Elko	212	193	180
Hilda	436	447	418
Kline	238	197	184
Snelling	246	274	259
Williston	3,307	3,139	2,932
County Total	23,478	22,621	21,112
% Change in County		-3.7%	-6.7%

Source: US Census Bureau

Key components of population change include births, deaths, and migration. The decline in Barnwell County's overall population may be in part attributed to socioeconomic factors,

specifically a decrease in the availability of job opportunities for higher skilled workers, along with a lack of access to post-secondary education. Additionally, population trends from 2000 to 2010 are attributed to the 2008 collapse of the housing market and associated economic crisis. The Economic Element of this plan will discuss this in more detail.

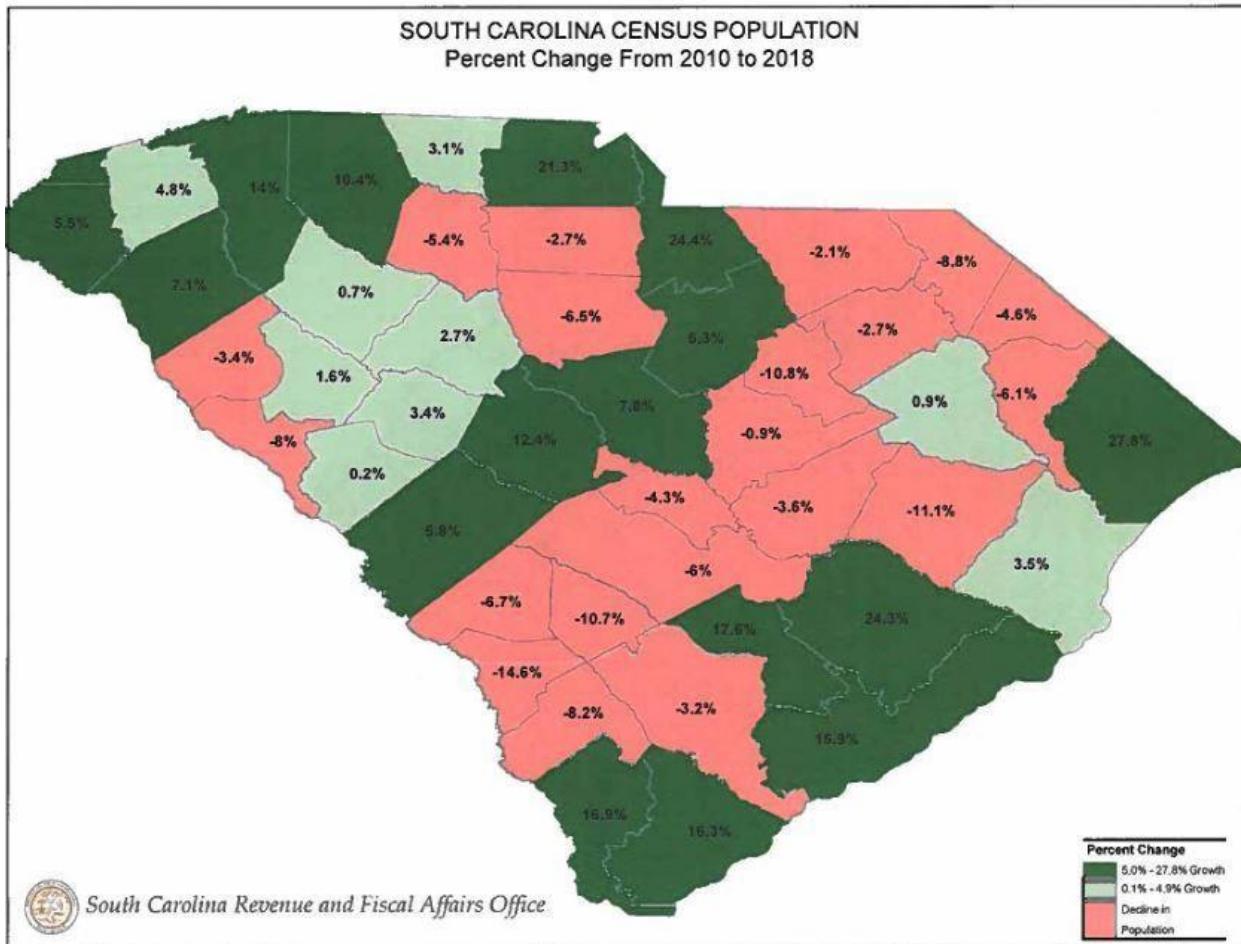
Figure 1.1: South Carolina Population by County



Source: SC Office of Revenue and Fiscal Affairs

Of the 46 counties in South Carolina, Barnwell County is the eighth smallest in terms of population, and is adjacent to five counties: Bamberg, Orangeburg, Allendale, Aiken, and Burke County in Georgia. The majority of these adjacent counties is also experiencing stagnant or declining population growth since 2000, as indicated in Figure 1.2, South Carolina Population Percent Change 2010-2018.

Figure 1.2: South Carolina Population Percent Change 2010-2018



Population Projection

According to the South Carolina Office of Revenue and Fiscal Affairs, population growth in South Carolina as a whole will likely be at low levels for at least the next few years. These projections were based on the assumption of a continuation of current economic trends from 2008-2010. The following table depicts population projections for Barnwell County through 2030.

Table 1.2: Barnwell County Population Projections 2000-2030						
	2000 Census	2010 Census	2015 Estimate	2020 Projection	2025 Projection	2030 Projection
Barnwell County	23,478	22,621	21,782	20,860	19,910	18,890

Source: US Census Bureau, SC Office of Revenue and Fiscal Affairs

Population Composition

Barnwell County's population, while showing some shifts and new trend lines, has generally experienced little change in racial composition since 2000. Over the 10-year period, the number of Black or African American residents increased slightly by about 0.25%. The white population showed a decrease of about 8.2%.

Table 1.2 shows the racial population trends in the County by total number and percentage of the total for 2000 and 2010.

Table 1.2: Barnwell County Population Characteristics, 2000- 2010				
Race	2000	% of Total	2010	% of Total
Black or African American	9,990	42.6%	10,015	44.3%
White	12,956	55.2%	11,899	52.6%
American Indian and Alaska Native	81	0.3%	85	0.4%
Asian	91	0.4%	126	0.6%
Native Hawaiian and Other Pacific Islander	8	0.0%	5	0.0%
Other	182	0.8%	160	0.7%
Two or more races	170	0.7%	331	1.5%
Total	23,478	100.00%	22,621	100.00%

Source: US Census Bureau

There were 327 people of Hispanic descent in Barnwell County in 2000, and 411 in 2010. The percentage was about 1.4% and 1.8%, respectively. For Census purposes, Hispanic is considered an ethnic group rather than a race. Hispanic persons are counted in one of the racial groups in the chart above. The Census Bureau's ACS estimates identify the County Hispanic population as 502 in 2017.

Age Distribution

Barnwell County's population is aging, as indicated in Table 1.3, Barnwell County Age Distribution. According to ACS estimates for 2017, the largest percent of persons in the County were between the ages 45 to 54. Between 2000 and 2010, all of the age groups beginning with 45 to 54 saw increases in population. To plan for an increasing population of older residents, the County should place a high priority on improving access to public transportation, affordable housing, and quality medical care. For those on a fixed income, access to these quality of life services will be key to accommodating these age groups.

Table 1.3: Barnwell County Age Distribution, 2000- 2017						
Age Group	2000	% of Total	2010	% of Total	2017 (est.)	% of Total
Under 5	1,674	7.1%	1,490	6.6%	1,440	6.6%
5 to 9	1,770	7.5%	1,613	7.1%	1,483	6.8%
10 to 14	2,001	8.5%	1,634	7.2%	1,508	6.9%
15 to 19	1,799	7.7%	1,704	7.5%	1,461	6.7%
20 to 24	1,406	6.0%	1,325	5.9%	1,510	6.9%
25 to 34	2,923	12.4%	2,537	11.2%	2,291	10.5%
35 to 44	3,629	15.5%	2,715	12%	2,465	11.3%
45 to 54	3,258	13.9%	3,413	15.1%	2,948	13.5%
55 to 59	1,178	5%	1,593	7%	1,683	7.7%
60 to 64	878	3.7%	1,424	6.3%	1,372	6.3%
65 to 74	1,626	6.9%	1,773	7.9%	2,223	10.2%
75 to 84	1,035	4.4%	1,038	4.6%	962	4.4%
85 and over	301	1.3%	362	1.6%	442	2.0%
Total	23,478	100%	22,621	100%	21,788	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Between 2000 and 2010, the 24 and younger age groups all decreased notably. A similar trend occurred between 2010 and 2017, with the exception of the 20 to 24 age group which was estimated to have increased by approximately 14%. Possible reasons for the decline in these age groups are that younger residents tend to have different lifestyle preferences, such as denser urban and suburban settings with opportunities for walkable communities and public transportation.

These trends described above signify that the County needs to strive to attract younger, family-oriented people to the area. The County should make every effort to increase the growth rate of the 18 to 44 year age groups in order to ensure that the County is able to retain the segment of the population most likely to be working and raising families. Barnwell County should identify new mechanisms (ex. social media outlets and innovative community workshops) to engage its younger population in the community planning process.

Gender

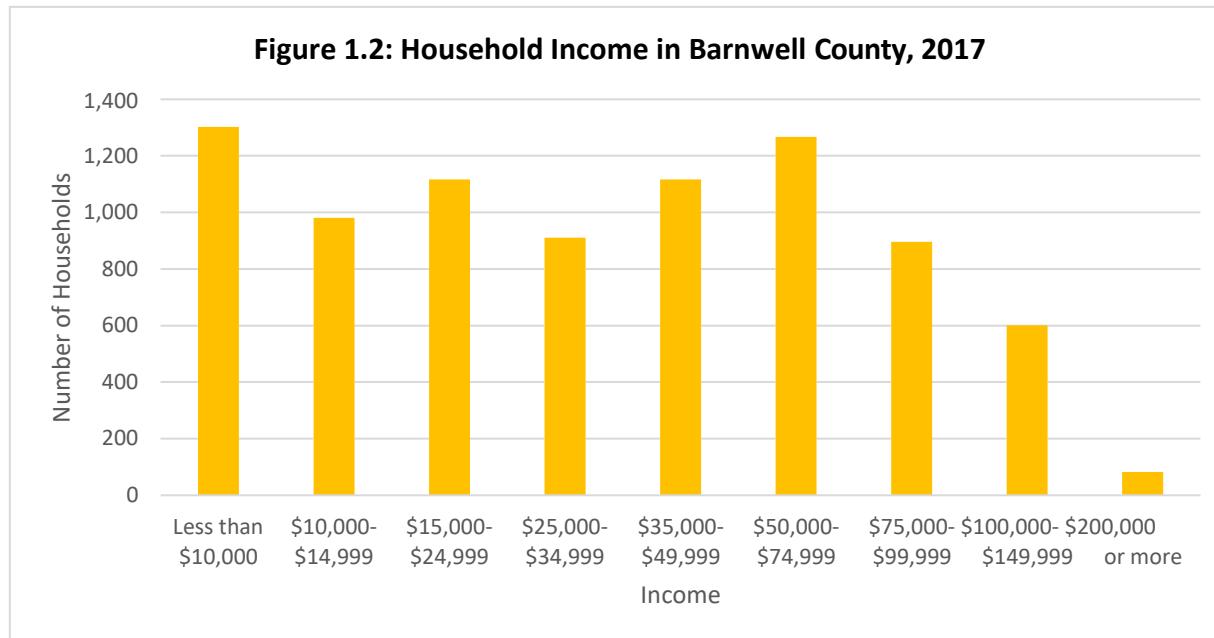
The gender ratio in Barnwell County remained relatively unchanged between 2000 and 2017. In 2017, females comprised approximately 52.4% of the population while males comprised 47.6%.

Table 1.4: Barnwell County Gender Composition, 2000- 2017						
	2000	Percent	2010	Percent	2017 (est)	Percent
Male	11,293	48.1%	10,809	47.8	10,369	47.6%
Female	12,185	51.9%	11,812	52.2	11,419	52.4%
County Total	23,478	100%	22,621	100%	21,788	100%

Source: 2013-2017 American Community Survey 5-Year Estimates

Income Levels

Approximately 27.1 percent of households had an income of less than \$15,000 in 2017. The median household income in Barnwell County in 2017 was \$34,035. Figure 1.2 on the following page shows the breakdown of household income in the county for the year 2017. Income and employment will be discussed in more detail in the Economic element of this plan.



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Household Size and Composition

A household is defined as a person or people living in the same residence. A family, on the other hand, takes into account the family or legal relationship of the residents in a household. While these terms are similar they should not be used inter-changeably.

In 2000, there were 9,021 households in Barnwell County, with the average size of 2.57. A slight decrease was seen in 2010 with a total of 8,937 households with an average size of 2.5. The 2010 Census reports that 6,055 households are families, with the average family size being 3.05. Of the total population in 2010, 34.0% had children under the age of 18 living with them, 41.8% were married couples living together, 20.8% had a female householder with no husband present, 32.2% were non-families, and 28.4% of all households were made up of individuals.

B. NEEDS AND GOALS

The inventory section of the Population Element focused attention on the current and historical demographics of Barnwell County. This evaluation of the County's population characteristics is an important part of the planning process because of the impact that population trends can play on demand for infrastructure, public services and the apparent health of the community.

Barnwell County is losing population. Youth are leaving the County for work and education opportunities, while the "Baby Boomer" generation is aging out and is not being replaced. This age group represents a highly productive (employable) population segment, and is viewed as one of the key indicators of a community's health. In order to retain and attract a socioeconomically diverse and growing population in an environmentally and fiscally sustainable manner, Barnwell

County will need to promote educational and employment opportunities, and community services with particular attention to low and moderate income residents.

Population Element Needs

Population Element needs include, but are not limited to, the following:

- Monitoring population and cultural shifts and national trends
- Developing policies to meet the needs of the County's population
- Encouraging diversity within communities

The primary goal of the Population Element is to focus on issues that will foster sustainable growth by promoting opportunities, community services and the quality of life. Efforts to increase growth in the county should offer opportunities that will increase diversity in the age, sex, race, and educational background and income level of the citizens.

C. IMPLEMENTATION STRATEGIES

This section of the Population Element offers suggested policies for implementation of the desired goals and objectives. The County should strive to improve its image as a pleasant community that is ideal for raising families, or as an ideal retirement community, in order to attract new growth.

Work to improve the population characteristics of Barnwell County should begin immediately and may proceed in a variety of different ways. The following policies are offered for consideration by County Council to implement the goals and objectives:

- 1.1 Monitor population growth trends and demographic shifts as indicators of population change and use this information to guide future updates to the Comprehensive Plan.
- 1.2 Place a high priority on projects and programs that generate and attract employment, improvements, or investments that are consistent with the policies of the Barnwell County Comprehensive Plan.
- 1.3 Expand upon the number of beautification projects such as litter pick-up, Adopt-A-Highway, signs, and lighting. These projects will improve the aesthetics of the County, increase community pride, and attract more visitors and development to Barnwell County, which will in turn focus on the County as a whole rather than as individual municipalities.
- 1.4 Support a diverse population through land development regulations which accommodate a range of housing, transportation, and employment opportunities.
- 1.5 Improve efforts to increase the availability of rental housing and provide incentives to

developers to build a wider variety of housing types such as retirement and assisted living housing.

- 1.6 Identify new mechanisms, such as social media outlets and innovative community workshops, to engage the County's younger population in the community planning process.
- 1.7 Review and support existing and new social service programs for seniors, especially in the lower economic levels. Services can include increased transit, activities and medical services through the Council on Aging or other organizations.
- 1.8 Recruit and retain young families who want the rural lifestyle with appropriate employment opportunities and community activities. Also, investigate opportunities to attract more family friendly businesses to the County, such as a bowling alley and a public pool.
- 1.9 Explore opportunities to attract and retain families with young children, such as youth athletic and outdoor recreation programs. Work to identify possible funding sources, such as grants, to create new programs.

Chapter Two: Economic

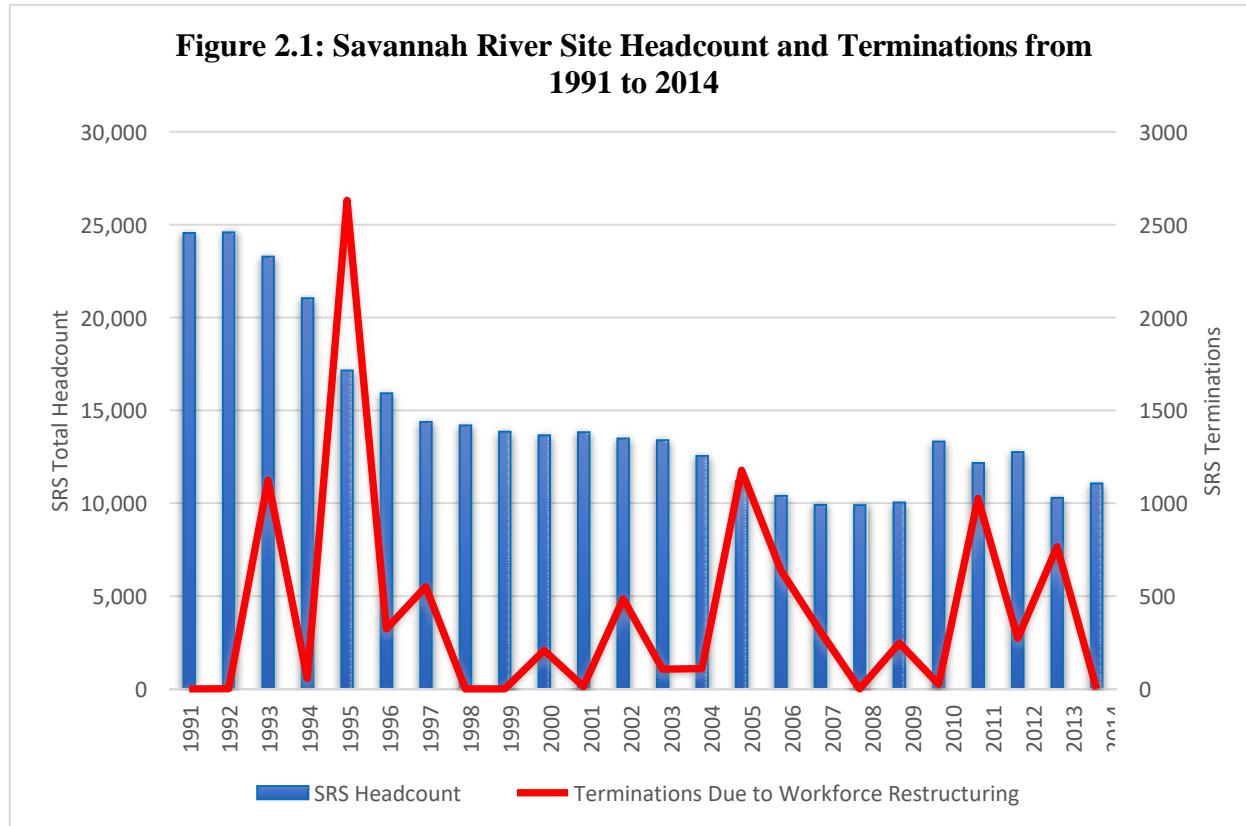
This chapter will focus on identifying and analyzing the major economic trends in Barnwell County as related to education, labor, industry, and income level; the county's immediate economic needs and future goals; and its implementation strategies to meet these needs and goals. Where appropriate, comparisons with other counties within the Lower Savannah region of South Carolina, including Aiken, Allendale, Bamberg, Calhoun, and Orangeburg Counties as well as national and state averages, are provided to give perspective on how Barnwell County stands relative to other areas.

A. BACKGROUND AND INVENTORY OF EXISTING CONDITIONS

Barnwell County is located along the Savannah River as it meanders across the Atlantic Coastal Plain from the fall line near Augusta, Georgia, to its mouth near Savannah, Georgia. Barnwell County borders Aiken County to the north and west, Orangeburg County to the northeast, Bamberg County to the east, Allendale County to the south, and Burke County to the southwest across the Savannah River in Georgia.

Since the early 1950s, Barnwell County's principal economic engine has been the Department of Energy's Savannah River Site (SRS, the Site) encompassing 310 square miles of land in Aiken, Allendale, and Barnwell Counties. SRS constitutes approximately 33.5% of the total land area of Barnwell County, which is a higher percentage of land used than by the Site than either Aiken or Allendale Counties. The primary function of SRS was to produce materials used in nuclear weapons, primarily tritium and plutonium-239. Not only has SRS been a key economic driver in Barnwell County for nearly 70 years, but it also has been vital to the economy of the Central Savannah River Area (CSRA) region as a whole since its construction in the early years of the Cold War. In 1990, as much as 71% of the total employment in Barnwell County could be attributed to the Savannah River Site. However, the downsizing and repurposing of the Site's mission in the early 1990s after the collapse of the Soviet Union has had a tremendous impact on Barnwell County's employment structure over the last three decades.

After maintaining a relatively stable workforce of between 8,000 to 10,000 employees throughout its operating history, by 1992 the SRS employee headcount peaked at 24,591. By 2008 during the Great Recession, the SRS headcount had decreased to 9,903 employees, an approximately 59.7% decline since the highpoint of the early 1990s as seen in Figure 2.1. By the end of 2017, workforce levels had rebounded to 11,626 permanent and temporary employees including those at both federal organizations and SRS contractors. Based on Fiscal Year 2019 Quarter 1 estimates from the Department of Energy's Savannah River Operations Office, approximately 6.1% of all SRS employees were Barnwell County residents, and 6.4% of all Barnwell County residents in the labor force work at the Savannah River Site.



Source: Department of Energy, Savannah River Site Operations Office

The following agencies and organizations play critical roles in Barnwell County's economic development:

- The Southern Carolina Alliance (SCA) is one of eight regional economic development alliances in South Carolina. It provides regional non-profit economic development services for Allendale, Bamberg, Barnwell, Beaufort, Colleton, Hampton, and Jasper Counties. The SCA is responsible for recruiting new industry to the region, marketing of the region to potential investors, and assisting local businesses to grow and succeed in the region. Southern Carolina Alliance manages the South Carolina Advanced Technology Park located near the Town of Snelling.
- The Barnwell County Economic Development Commission (EDC), located in SCA building, recruits new industry and provides local business assistance in the County. In recent years, Barnwell County EDC operates in conjunction with the Southern Carolina Alliance. Seven members comprise the board of the Barnwell County EDC: one appointed from the City of Barnwell; one from the Town of Blackville; one from the Town of Williston; and four from the County at-large.
- The Lower Savannah Council of Governments (LSCOG) is one of 10 councils of government in South Carolina, and it works with and on behalf of local governments to improve the quality of life for residents in the Lower Savannah Region, which includes the six counties of Allendale, Aiken, Bamberg, Barnwell, Calhoun, and Orangeburg. Created in 1967, it features a 40-member

Board of Directors derived of leaders in local government and business. Concerning economic development, it focuses on improving the Lower Savannah Region's overall economic competitiveness and job growth, administering federal and state economic development grants, and planning a Comprehensive Economic Development Strategy for the region.

- The Savannah River Site Community Reuse Organization (SRSCRO) was created in 1993 as the Savannah River Regional Diversification Initiative with the following goals: to diversify the region's economic development base, to create and retain high-value and long-term private sector jobs, and to transfer SRS technologies to new and existing firms for commercial application. SRSCRO's area of focus includes Aiken, Allendale, and Barnwell Counties in South Carolina and Richmond and Columbia Counties in Georgia. Its Board of Directors contains 11 members from South Carolina and 11 members from Georgia. Other organizations that have collaborated with SRSCRO's strategy include the Lower Savannah Council of Governments, Southern Carolina Alliance, Central Savannah River Area Regional Development Center, and the Economic Development Partnership.
- The South Carolina Department of Commerce serves the state of South Carolina and provides support at the County level throughout the corporate recruitment process. It offers initiatives designed to retain and expand manufacturing, corporate headquarters, research and development, and other significant business operations. The state offers financial incentives, which can include offsets to the state corporate income tax, grants, and cash rebates to underwrite some business project costs, and workforce-training programs designed to deliver a "turn-key" workforce at little to no cost to the employer.
- The Economic Development Administration is an agency of the United States Department of Commerce that provides grants and technical assistance to economically distressed communities in order to generate new employment, help retain existing jobs, and stimulate industrial and commercial growth through a variety of investment programs.
- The Southern Palmetto Regional Chamber is dedicated to helping the business community in Allendale and Barnwell Counties prosper and grow. The Chamber provides a variety of services, programs, and seminars to educate and promote a positive business climate.
- The Barnwell Development Association works to improve the City of Barnwell by promoting commercial activity, with a special focus on the downtown of the city. The organization assists the City of Barnwell with implementing plans and programs for community improvement.
- The Blackville Downtown Development Association Board brings together community leaders, citizens, and the business sector to promote economic growth in Blackville, promote beautification focusing on the heritage of Blackville, and enhance quality of life in the area.

Education

The data presented in this section is gathered from the 2013-2017 Census Bureau's American Community Survey Five-Year Estimates, the 2009-2013 Census Bureau's American Community Survey

Barnwell County Comprehensive Plan 2021-2031

(ACS) Five-Year Estimates, the 2000 Decennial Census, and the South Carolina Department of Education. The purpose of this section is to determine the status of Barnwell County's educational system in order to provide some general guidance on where improvements are needed and how these improvements will influence the County's economic situation. Table 2.1 shows the available data on the level of educational attainment for the citizens of Barnwell County and compares it to data collected from neighboring South Carolina counties and the state as a whole. Tables 2.1 and 2.2 demonstrate educational attainment for Barnwell County residents older than 25 years of age as compared to neighboring counties and the state as a whole.

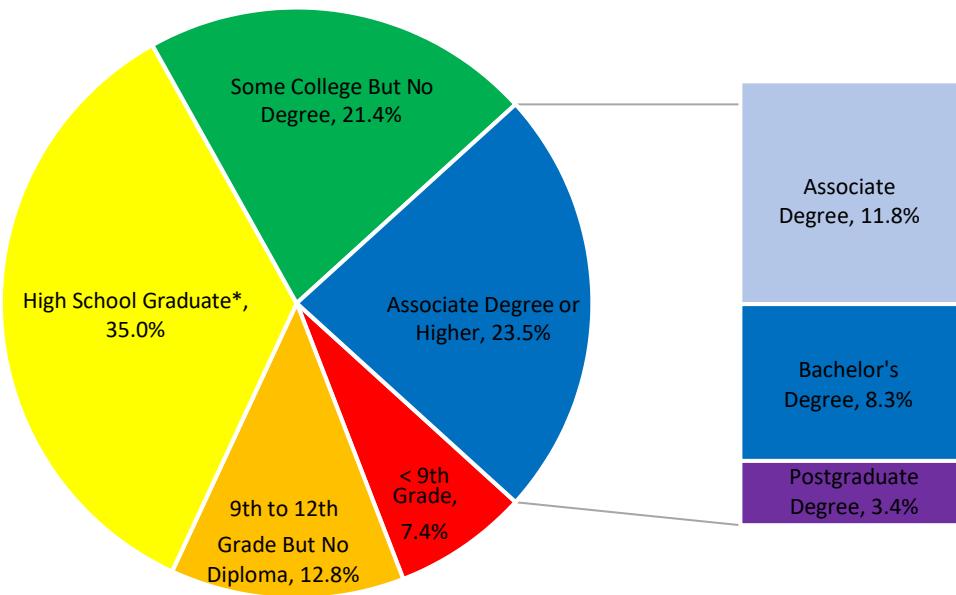
Table 2.1: Educational Attainment of Persons 25 Years of Age and Older in 2017						
	Barnwell County	Allendale County	Bamberg County	Aiken County	Orangeburg County	South Carolina
Total People 25 Years or Older	14,386	6,676	9,902	115,170	59,344	3,325,601
High School Graduate or Higher	79.8%	74.2%	78.9%	86.2%	84.1%	86.5%
Associate Degree or Higher	23.5%	17.2%	31.6%	33.8%	32.9%	36.3%
Bachelor's Degree or Higher	11.7%	9.4%	19.1%	25.9%	20.2%	27.0%
<i>*Includes High School Equivalency (e.g. GED)</i>						
<i>Source: 2013-2017 American Community Survey 5-Year Estimates</i>						

Table 2.2: Highest Level of Educational Attainment of Persons 25 Years of Age and Older in 2017						
	Barnwell County	Allendale County	Bamberg County	Aiken County	Orangeburg County	South Carolina
< 9th Grade	7.4%	11.1%	6.8%	4.8%	5.2%	4.5%
9th to 12th Grade But No Diploma	12.8%	14.7%	14.3%	9.0%	10.7%	9.0%
High School Graduate*	35.0%	40.1%	31.9%	31.7%	32.2%	29.4%
Some College But No Degree	21.4%	16.9%	15.5%	20.7%	19.1%	20.8%
Associate Degree	11.8%	7.8%	12.5%	7.9%	12.7%	9.3%
Bachelor's Degree	8.3%	6.8%	12.6%	16.4%	12.1%	17.2%
Postgraduate Degree	3.4%	2.6%	6.5%	9.5%	8.1%	9.8%
<i>*Includes High School Equivalency (e.g. GED)</i>						
<i>Source: 2013-2017 American Community Survey 5-Year Estimates</i>						

Evident in the comparison is that Barnwell County has a higher percentage of those 25 years of age and older that have not graduated high school (20.2%) than the state of South Carolina on average (13.5%) as

well as more populous surrounding counties such as Aiken (13.8%) and Orangeburg (15.9%). However, their percentage of residents over the age of 25 that has not graduated from high school is better than surrounding rural counties such as Allendale (25.8%) and Bamberg (21.1%). In a similar manner, Barnwell County's percentage of those 25 years and older with either an associate degree, bachelor's degree, or postgraduate degree (23.5%) is significantly lower than the percentage of either Aiken County (33.8%) or the state average (36.3%).

Figure 2.2: Highest Level of Educational Attainment for Barnwell County Residents 25 Years and Older in 2017



*Includes High School Equivalency (e.g. GED)

Source: 2013-2017 American Community Survey 5-Year Estimates

As shown in Figure 2.2, the 2013-2017 ACS indicates that 7.4% of citizens aged 25 years and older in Barnwell County attained less than a ninth grade education, down from 12% in the 2000 Census but slightly higher than the 6.9% of residents recorded in the 2009-2013 American Community Survey. Additionally, 12.8% of citizens in Barnwell County completed between nine and 12 years of education without receiving a diploma as their highest level of educational attainment. In South Carolina as a whole, only 9.5% of citizens achieved some form of high school as their highest form of educational attainment, and only 4.5% had less than a ninth grade education. Overall, Barnwell County's percentage of those 25 years and older having attained a high school diploma or equivalency remained relatively stable from 79.7% in 2013 to 79.8% in 2017, according to the respective ACS estimates. However, high school

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educational attainment has increased significantly since the 2000 Census when the percentage was only 67.5% of those 25 years and older having completed high school. The county needs to continue focusing on ways of increasing high school graduation rates by its youth as well as promoting the value of seeking post-secondary education.

The progress of students while attending Barnwell County schools can also indicate the potential for economic growth. Student scores obtained by standardized achievement testing such as SC READY and SCPASS indicate the challenges the County faces in developing its human capital. As seen in Table 2.3, the percentage of Barnwell County third and eighth grade English and Math students falling below state test score standards for SC READY in 2017 is higher than the state average. Within the Lower Savannah region, Barnwell County students perform better than other surrounding rural counties such as Allendale and Orangeburg but lag behind the scores of students in Aiken County.

Table 2.3: Percentage of Students below State SC READY Test Score Standards in 2017

Category	Third Grade English	Third Grade Math	Eighth Grade English	Eighth Grade Math
Barnwell County	73.8%	59.3%	77.3%	83.5%
Aiken County	58.7%	52.3%	67.2%	74.0%
Allendale County	85.7%	76.9%	84.3%	92.2%
Bamberg County	78.7%	64.7%	70.1%	68.5%
Orangeburg County	77.4%	65.8%	78.1%	89.2%
South Carolina	57.9%	47.4%	59.9%	65.5%

Source: South Carolina Department of Education, retrieved from Children's Trust of South Carolina

Additionally, as seen in Figures 2.3 through 2.6, this trend regarding Barnwell County's educational performance compared to the state and the region holds up when analyzing SCPASS scores from 2009 to 2014. On average, Barnwell County performs better than neighboring Allendale, Bamberg, and Orangeburg Counties but trails the performance of Aiken County and the state as a whole as related to the percentage of third graders scoring below SCPASS reading and math standards.

Figure 2.3: Third Graders below State Scoring Standards for SCPASS Reading

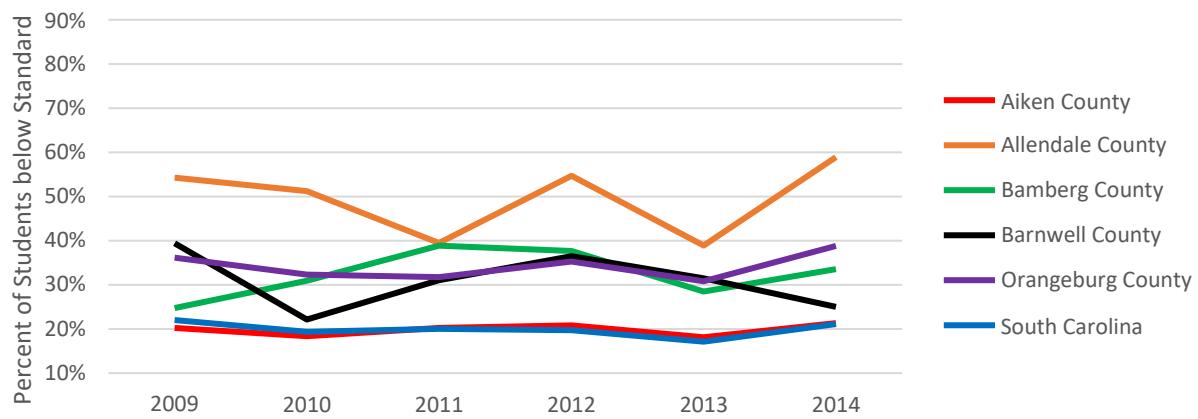


Figure 2.4: Third Graders below State Scoring Standards for SCPASS Math

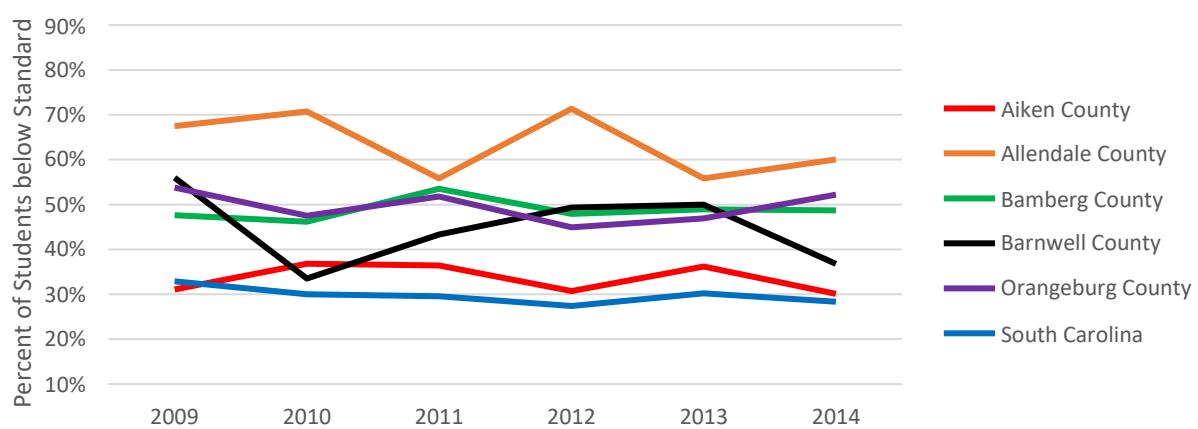


Figure 2.5: Eighth Graders below State Scoring Standards for SCPASS Reading

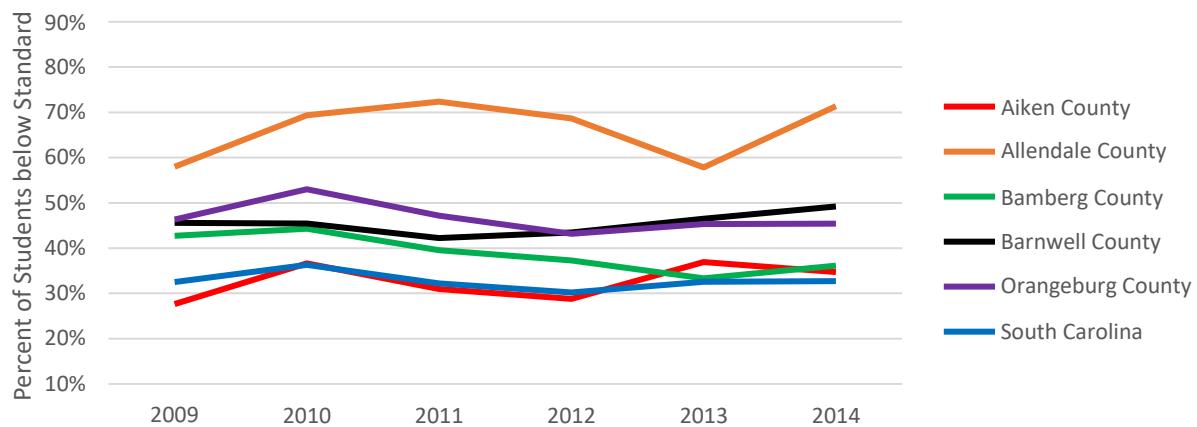
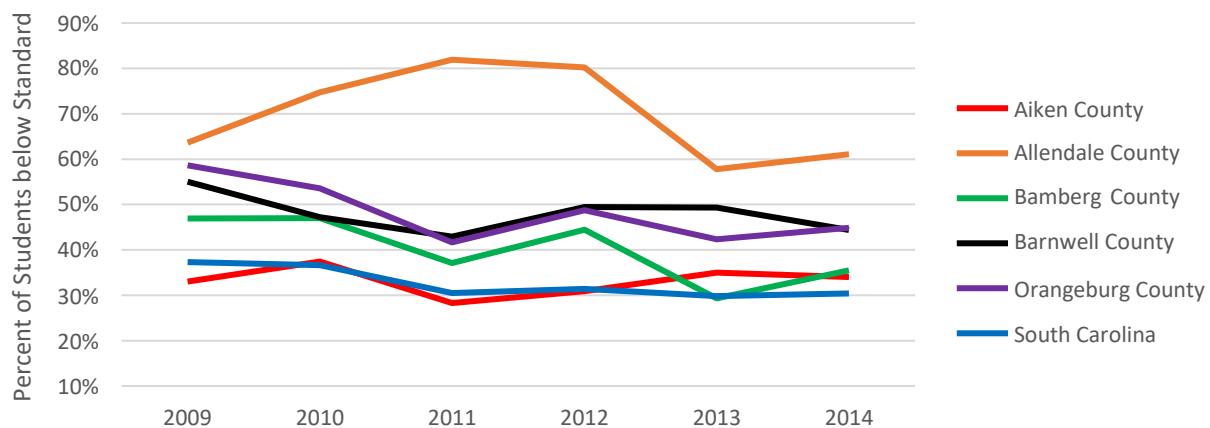


Figure 2.6: Eighth Graders below State Scoring Standards for SCPASS Math



Source: South Carolina Department of Education, retrieved from Children's Trust of South Carolina

These educational statistics indicate that generally Barnwell County is making progress toward improving education. Educational attainment is up substantially since 2000 with greater numbers of students completing high school and attending college. This factor alone may be the single greatest contributor to long-term economic prosperity in the County. However, if standardized testing is to be an indication of educational achievement and in turn future economic growth, there is still work that must be done to ensure that every child has the opportunity to finish high school prepared with the skillsets needed to excel in the 21st century economy.

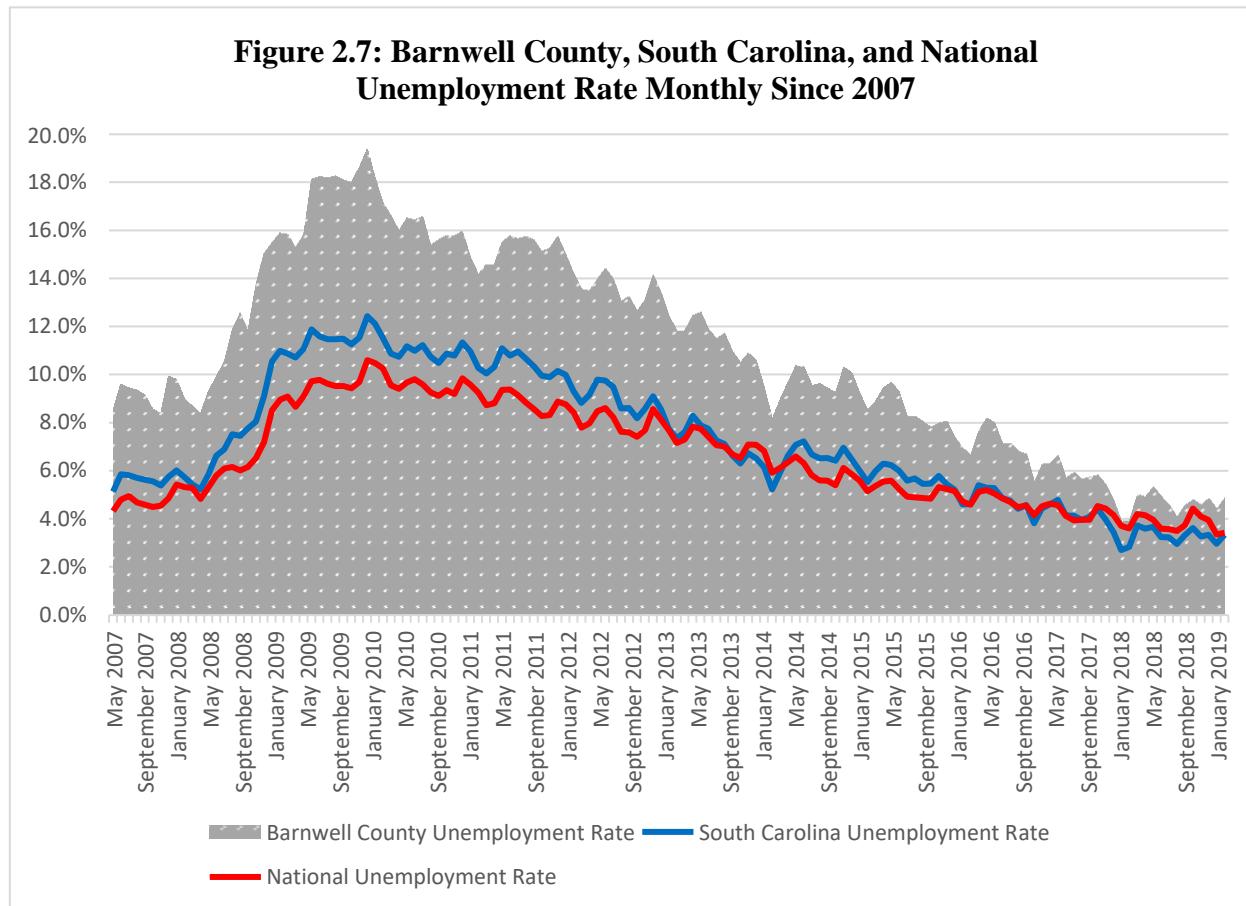
Labor and Industry

This section of the report analyzes the historical trends of labor and industry activity in Barnwell County. Much of the data utilized in this section was collected from the South Carolina Department of Employment and Workforce, the Bureau of Labor Statistics, and the Census Bureau's 2005-2009, 2009-2013, and 2013-2017 American Community Survey 5-Year Estimates.

Table 2.4 shows Barnwell County's labor force data from 2008 through 2018, and Figure 2.7 compares Barnwell County's unemployment rate with the state and national average from 2007 to 2019. Only those individuals who are involved in the labor force with current employment or through actively pursuing employment opportunities are included in these figures. They do not reflect the segment of the population that is no longer seeking employment opportunities.

Table 2.4: Barnwell County Labor Force Estimates between 2008 and 2018				
Year	Total Labor Force	Employed	Unemployed	Unemployment Rate
2008	8,815	7,854	961	10.9%
2009	8,997	7,456	1,541	17.1%
2010	9,489	7,913	1,576	16.6%
2011	9,203	7,802	1,401	15.2%
2012	8,959	7,716	1,243	13.9%
2013	8,716	7,660	1,056	12.1%
2014	8,645	7,806	839	9.7%
2015	8,371	7,617	754	9.0%
2016	8,063	7,466	597	7.4%
2017	7,999	7,517	482	6.0%
2018	8,343	7,944	399	4.8%

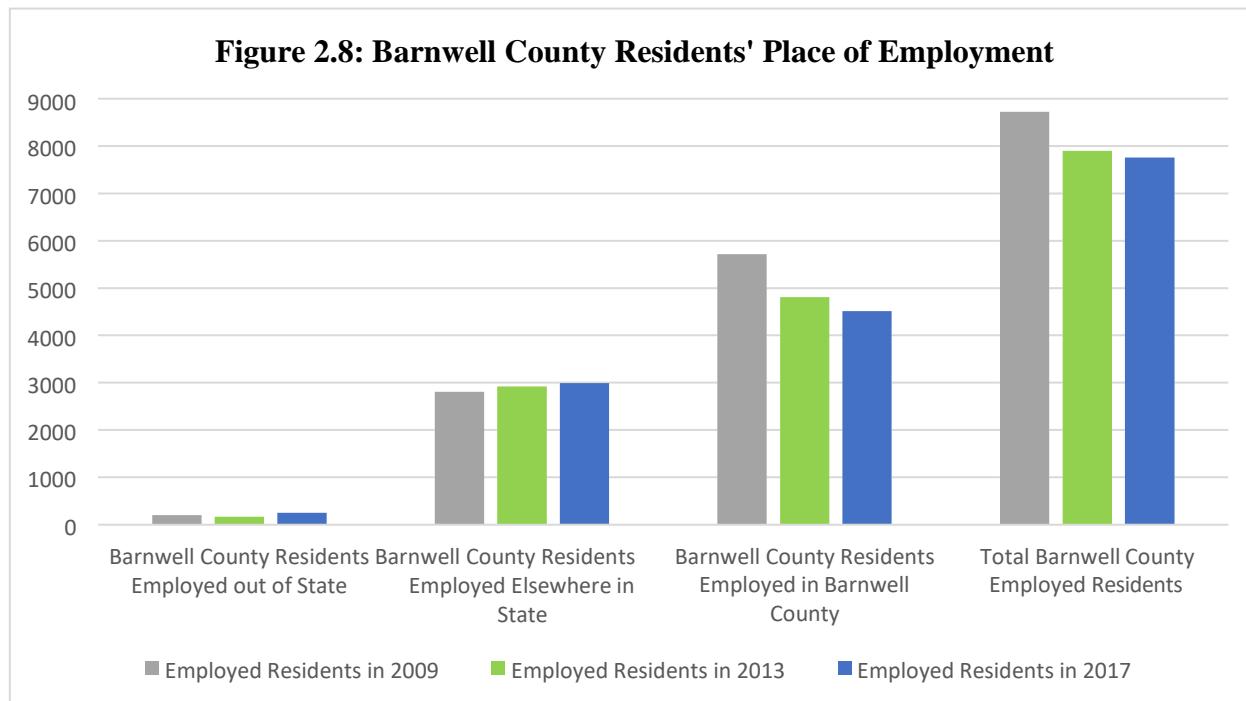
Source: SC Department of Employment and Workforce (SCDEW)



Source: Bureau of Labor Statistics, retrieved from Federal Reserve Bank of St. Louis (FRED)

The data displayed in Table 2.4 and Figure 2.7 demonstrate that the unemployment rate for Barnwell County has decreased overall in the last decade. After a brief national recession in 2001, Barnwell County had an average unemployment rate of 9.2% from January 2002 until December 2007. However, with the Great Recession beginning in December 2007, Barnwell County's unemployment rate ballooned by nearly double between December 2007 (9.9%) and June 2009 (18.1%). By January 2010 in the aftermath of the Great Recession, Barnwell County's unemployment rate had reached its peak of 19.4%, compared to the same month's high points of 12.4% and 10.6% for the state and the country respectively. The January 2010 rate of almost one out of five labor force participants being unemployed is the highest rate since at least 1990.

Throughout the 2010s, Barnwell County's unemployment rate began to decrease gradually, and since the beginning of 2018, Barnwell County's unemployment rate has nearly matched that of both the state and country. In May 2019, Barnwell County's unemployment rate was 4.9%, achieving a below five-percent unemployment rate for eight consecutive months. This compares to an unemployment rate in May 2019 of 3.3% for the state of South Carolina and 3.4% for the United States as a whole.



Source: 2005-2009, 2009-2013, and 2013-2017 American Community Survey 5-Year Estimates

Figure 2.8 reflects the commuting patterns of residents of Barnwell County to a place of employment. According to the ACS 5-Year Estimates for the last 14 years, between 2009 and 2017 the percentage of Barnwell County residents who worked in other South Carolina counties increased by 6.6% and the percentage who worked out of the state increased by 23.4%. The total number of employed residents in the County and the number of County residents who work within Barnwell County both demonstrated negative trends since 2009 with the County's overall labor force shrinking by 11.1% and the residents working within the County declining by nearly 21.0%. The decline of total Barnwell County residents in the workforce is due to an aging population that has reached retirement and due to the decreasing population rate within the county. Additionally, the downsizing over the past three decades and uncertainty regarding future operations at the Savannah River Site at least in part explain why the number of Barnwell County residents employed within the County has decreased while the number of residents employed elsewhere in the state has increased. This also could indicate that the County is a desirable place to live, since Barnwell County residents are increasingly willing to commute to jobs outside of the County. It is important to continue efforts to recruit and retain industries and businesses within the County to utilize the existing workforce.

Knowledge of the types of industry employing citizens in an area is as important as projections of population growth when attempting to understand the character of a community and plan for future changes. The growth or decline of certain industries can affect how much land should be dedicated to commercial or industrial uses and the type of educational resources needed in the area as well as provide

insight on where to focus future economic development initiatives and government services. Table 2.5 shows how the size of certain industries in the County changed between 2009 and 2017. The table demonstrates that nearly every industry suffered losses in its number of employees within the County with the exceptions of wholesale trade; information; educational services; health care; social assistance; and arts, entertainment, recreation and accommodation; and food services. Agriculture, forestry, fishing, hunting, and mining; construction; and manufacturing experienced the most significant losses in numbers of employees lost during this 12-year period decreasing by 42.6%, 26.9%, and 24.9% respectively. Retail trade (-15.1%); transportation, warehousing, and utilities (-13.7%); and public administration (-16.5%) all saw employment decreases during this period. The finance, insurance, real estate, rental, and leasing sector and the professional, scientific, management, administrative, and waste management services sector both recorded slight decreases in employment as well.

Table 2.5: Trends in Industry Employment in Barnwell County between 2009 and 2017				
Employing Industry	2009	2013	2017	Change
Agriculture, Forestry, Fishing, Hunting, and Mining	256	180	147	-42.6%
Construction	629	546	460	-26.9%
Manufacturing	2,256	1,822	1,694	-24.9%
Wholesale Trade	121	89	158	30.6%
Retail Trade	880	743	747	-15.1%
Transportation, Warehousing, and Utilities	693	594	598	-13.7%
Information	96	87	167	74.0%
Finance, Insurance, Real Estate, Rental, and Leasing	322	342	318	-1.2%
Professional, Scientific, Management, Administrative, and Waste Management Services	706	771	678	-4.0%
Educational Services, Health Care, and Social Assistance	1,544	1,715	1,674	8.4%
Arts, Entertainment, Recreation, Accommodation, and Food Services	411	370	508	23.6%
Other Services, except Public Administration	381	366	328	-13.9%
Public Administration	631	446	527	-16.5%

Source: 2005-2009, 2009-2013, and 2013-2017 American Community Survey 5-Year Estimates

In terms of the total number of employees involved in a certain industry, the sector with the greatest number in 2017 was manufacturing despite its declining level of employees over the past decade. However, the number of employees in the educational services, health care, and social assistance sector is fast approaching the number of manufacturing employees, and that sector could overtake manufacturing as the top employing industry within the county over the next decade.

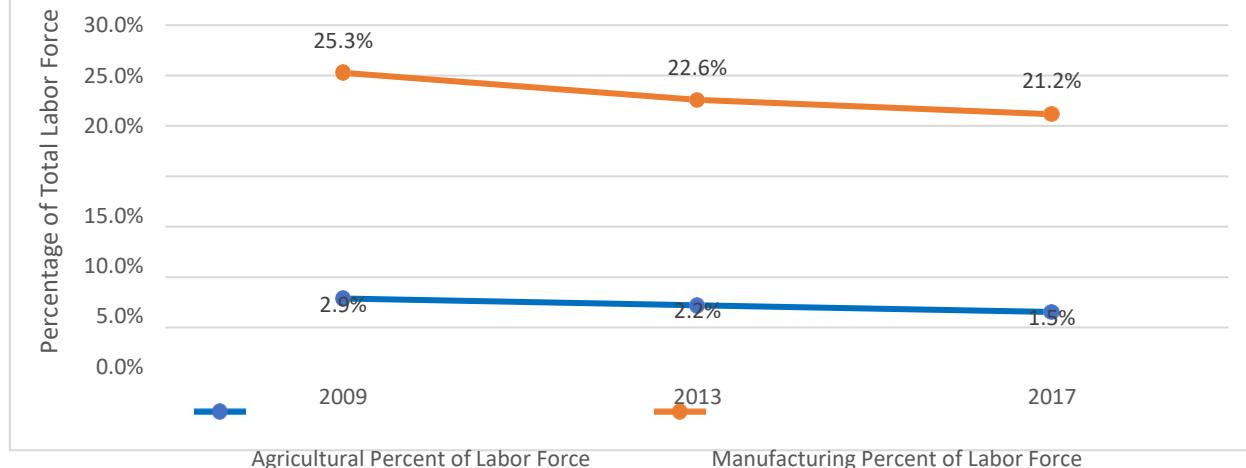
According to the South Carolina Department of Commerce and the South Carolina Department of Employment and Workforce, these were the largest private-sector manufacturers in Barnwell County in 2018 employing at least 50 people:

- American Zinc Recycling LLC – Formerly known as Horsehead Corporation, AZR is an industry leader in the production of zinc, zinc oxide, and zinc powder from recycled sources. Each year, AZR recycles thousands of tons of zinc containing electric arc furnace dust and secondary materials, batteries, nickel bearing waste, and other metals.
- Augusta Fiberglass Coatings, Inc. – Created in 1974 in Blackville, this manufacturing company produces custom-designed fiberglass tanks, duct, scrubbers, stack liners, stacks, and other equipment. Its facility lies on an over 300-acre site with more than 300,000 square feet of manufacturing space under its roof.
- Crane Merchandising Systems, Inc. – Crane Company, an American industrial products company based in Stamford, Connecticut, acquired Dixie-Narco Inc., and its plant in Williston in 2007. The plant, in operation since 1990, continues to design and manufacture a wide variety of vending machines as well as cashless vending systems and the technology integrated into these systems.
- Dayco Products, Inc. – An American parts supplier for construction, automotive, and industrial companies including General Motors and Caterpillar, Dayco's Williston operation conducts automotive parts research and development as well as manufactures belts, tensioners, pulleys, and hoses. This facility is closing.
- National Beverage Screen Printers Inc. (NBS) – Relocating to Williston in the early 1990s, NBS produces high-quality graphics and aftermarket parts for the vending, cooler, and fountain industry and has a customer base that includes Coca-Cola, Dr. Pepper Snapple Group, Cott Beverages, and PepsiCo.
- Cascades Tissue Group - Housed on an 86-acre property in Barnwell, Cascades operates a 300,000 square foot converting facility with two converting lines, a 115,000 square foot paper mill with one tissue paper machine and related processing equipment, a recycling and de-inking plant, and storage space for raw materials and finished goods.
- Swiss Krono SC LLC – Swiss Krono began operating in Lucerne, Switzerland in 1966 and opened the doors at its Barnwell County facility near Snelling in 2005. Swiss Krono specializes in the production of engineered wood products, and its Barnwell plant manufactures laminate flooring. In 2015, the Swiss Krono Group announced a \$230 million investment for the plant to build a high-density fiberboard mill.

The decline of the workforce within the manufacturing sector is not unique to Barnwell County, and technological advances and globally-linked supply chains have displaced semi-skilled manufacturing jobs around the developed world. New technologies have allowed for more automation of the manufacturing process, which has inevitably increased overall efficiency and reduced the amount of workforce needed by manufacturers to produce their goods. Furthermore, an increasingly globalized economy has led in

many instances to manufacturers moving operations away from the United States to other countries where labor costs are cheaper and governmental regulations are less stringent or even non-existent. These two factors are essential in understanding the decline of manufacturing jobs within the County. However, Barnwell County likely can remain a competitive place for more advanced manufacturing that requires skilled operators and technological expertise.

Figure 2.9: Percentage of Agriculture and Manufacturing Relative to Total Labor Force



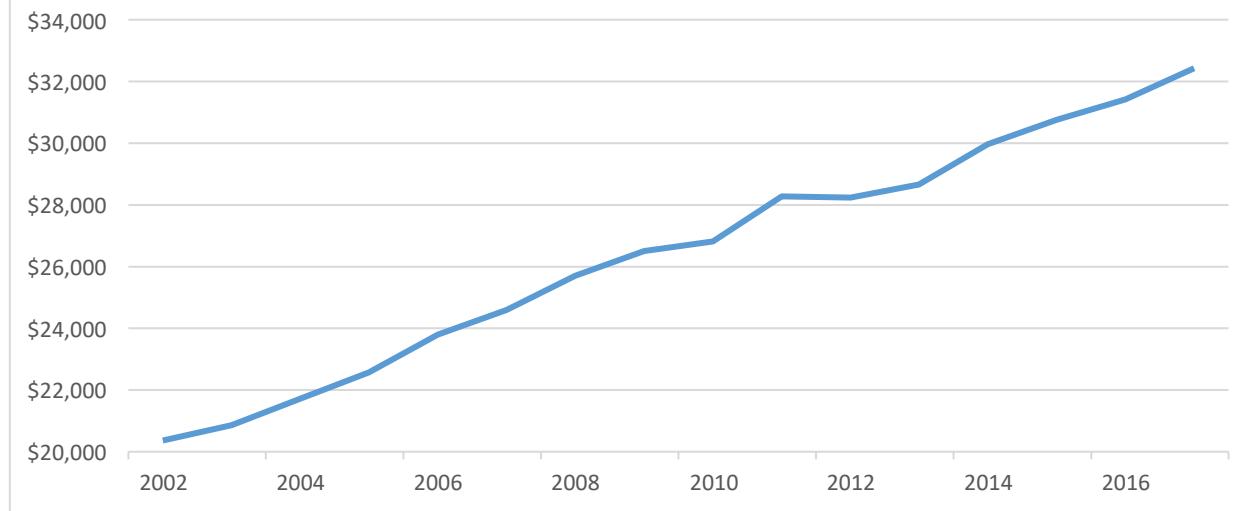
Source: 2005-2009, 2009-2013, and 2013-2017 American Community Survey 5-Year Estimates

As shown in Figure 2-9, Barnwell County's historical primary industries of manufacturing and agriculture have declined as a percentage of the total labor force over the past decade. Barnwell County needs to focus on ensuring that industry in the County better diversifies itself within other industries and that the County positions itself as an attractive place for high-paying service and information technology jobs as well as advanced manufacturing jobs. Additionally, considerable efforts need to be focused on ensuring that all labor force participants are educated and prepared with requisite training to be ready to excel within Barnwell County's existing and future industries.

Income Levels

This section of the report analyzes income activity in Barnwell County. The data utilized in this section is sourced from the Bureau of Economic Analysis and the Census Bureau. Measuring the average level of per capita personal income for Barnwell County is another indicator of the County's economic performance. According to the Bureau of Economic Analysis, per capita personal income increased from \$20,363 to \$32,428 between 2002 and 2017. These figures as demonstrated in Figure 2.9 reflect an increase in per capita income by 59.2% on average for Barnwell County residents during this 15-year period.

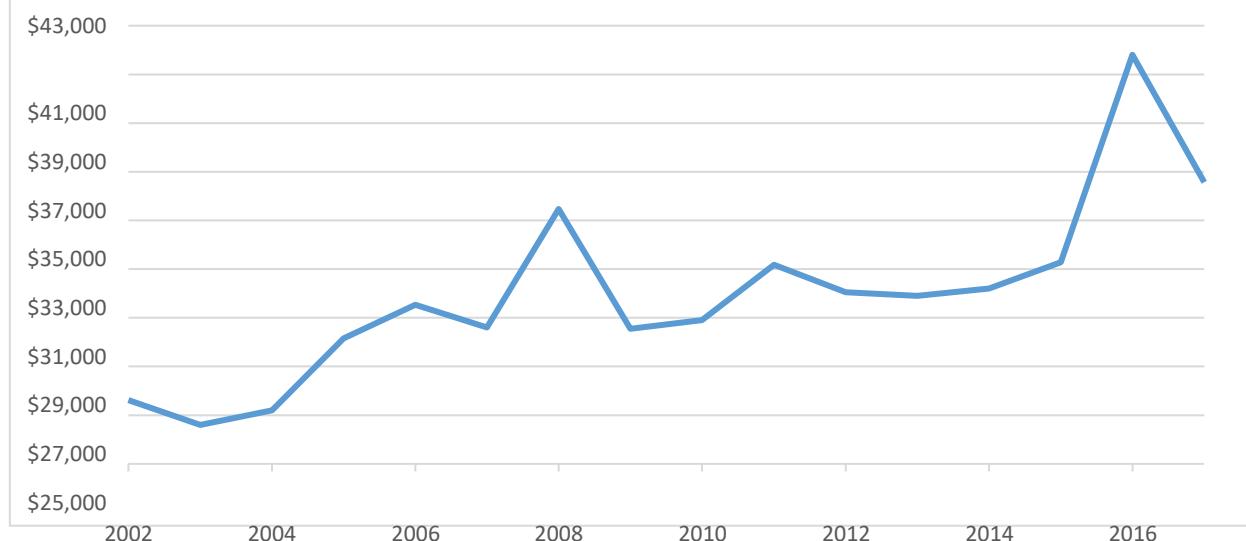
Figure 2.10: Barnwell County Per Capita Personal Income



Source: Bureau of Economic Analysis, retrieved from Federal Reserve Bank of St. Louis (FRED)

Similar to per capita personal income, median household income is another principal indicator in understanding the County's economic well-being. Median household income estimates increased from \$27,607 to \$36,568 between 2002 and 2017. As shown in Figure 2.10, this data suggests an increase of 32.5% in this 15-year period.

Figure 2.11: Barnwell County Median Household Income Estimate



Source: Census Bureau, retrieved from Federal Reserve Bank of St. Louis (FRED)

Table 2.6: Barnwell County and South Carolina Household and Family Income (in 2017 Inflation-Adjusted Dollars)								
	Barnwell County				South Carolina			
	Households	Percent	Families	Percent	Households	Percent	Families	Percent
Total households	8,426		5,581		1,871,307		238,361	
Less than \$10,000	1,302	15.5%	739	13.2%	153,170	8.2%	65,042	5.3%
\$10,000- \$14,999	981	11.6%	326	5.8%	108,638	5.8%	40,473	3.3%
\$15,000- \$24,999	1,117	13.3%	583	10.4%	214,556	11.5%	105,772	8.5%
\$25,000- \$34,999	911	10.8%	647	11.6%	210,196	11.2%	122,633	9.9%
\$35,000- \$49,999	1,117	13.3%	853	15.3%	268,161	14.3%	173,975	14.0%
\$50,000- \$74,999	1,267	15.0%	901	16.1%	342,557	18.3%	245,405	19.8%
\$75,000- \$99,999	896	10.6%	757	13.6%	220,018	11.8%	177,202	14.3%
\$100,000- \$149,999	601	7.1%	559	10.0%	214,939	11.5%	185,066	14.9%
\$150,000- \$199,999	152	1.8%	150	2.7%	72,559	3.9%	63,956	5.2%
\$200,000+	82	1.0%	66	1.2%	66,513	3.6%	58,837	4.8%
Median income (dollars)	\$34,035		\$45,394		\$48,781		\$60,643	

Source: 2013-2017 American Community Survey 5-Year Estimates

Table 2.6 breaks down household and family income levels for Barnwell County as reported in the 2013-2017 American Community Survey. The percentage of the population in each income bracket has also been calculated and compared to data collected and averaged from the entire state. The data displayed in Table 2.6 shows that Barnwell County has a higher percentage of households and families that fall into the three lowest income brackets than the state averages. Additionally, on a percentage basis, Barnwell County has fewer households and families in the highest three income brackets than the state averages. Median household income and family household income for the County is also significantly lower than the medians for the state. According to the 2013-2017 American Community Survey data, the median income for the entire state was \$48,781 for households and \$60,643 for families. Barnwell County in 2017 had a median household income of \$34,035 and a median family income of \$45,394, both nearly three-fourths that of the respective state averages.

	<i>County</i>	<i>Barnwell</i>	<i>Blackville</i>	<i>Elko</i>	<i>Hilda</i>	<i>Kline</i>	<i>Snelling</i>	<i>Williston</i>
Individuals below Poverty	27.0%	36.6%	43.5%	35.2%	24.9%	42.9%	20.9%	42.5%
Children (under 18 Years Old) below Poverty	42.8%	52.6%	73.9%	54.8%	43.1%	67.4%	12.2%	64.9%
Families below Poverty	22.5%	34.5%	41.4%	27.1%	21.2%	35.9%	11.6%	31.0%
Female Head of Household Families below Poverty	51.5%	65.5%	74.4%	13.6%	37.5%	33.3%	5.3%	52.0%

Source: 2013-2017 American Community Survey 5-Year Estimates

Shown above in Table 2.7 are the poverty level estimates for individuals, children, families, and female head of household families in Barnwell County and its seven municipalities. The levels of individuals below the poverty line for the municipalities in Barnwell County on average are higher than the poverty level for the County as a whole with the exception of the towns of Hilda and Snelling. Blackville, Kline, and Williston all had significantly higher levels of total individuals in poverty, children in poverty, and families in poverty than Barnwell County as a whole did, and Barnwell and Elko had moderate higher levels of poverty compared with the County. Only the town of Snelling had lower levels in all four categories – individuals below poverty, children below poverty, families below poverty, and female head of household families below poverty – than the County did. More than half of children in Barnwell, Blackville, Elko, Kline, and Williston are living in poverty as of the 2017 American Community Survey estimates. Similarly, more than half of female head of household families in the County, Barnwell city, Blackville, and Williston live in poverty. These trends indicate that on average individuals, children, and families are more affluent in the County than in the major population centers of the county. These poverty levels within the County and its municipalities are very concerning for the future economic development of Barnwell County.

B. NEEDS AND GOALS

The level of economic activity and new development in an area are the primary contributing factors to the level of growth and the amount of revenue available to a unit of government. With increased revenue, the government entity has the opportunity to enhance community services, which improve quality of life and in turn facilitate additional growth. The composition shift in the population of Barnwell County in part can be directly linked to a shift in the economy of South Carolina away from an agriculture base and toward a manufacturing-based economy. This trend lessens the emphasis on larger municipalities that have the necessary infrastructure to support a more industrialized economy.

- A primary goal of the Economic Element should be to promote the image of Barnwell County as an attractive, safe community and to attempt to attract industrial and commercial growth in the urbanized areas.
- Facilitate the development of housing opportunities attractive to a moderate and higher income population that is educated and skilled.
- Support programs that will help improve per capita and family incomes in the area.

C. IMPLEMENTATION STRATEGIES

Suggested policies for the implementation of these goals include:

2.1 Place a high priority on projects that will generate and attract private sector employment, improvements, or investments that are consistent with the policies of the Comprehensive Plan.

2.2 Strive to attract and retain clean, safe, and high-paying industries to the area.

2.3 Promote further development of the existing industrial areas in and near the industrial parks.

2.4 Establish and support a close working relationship with relevant economic developers and area education providers.

2.5 Continue to support and encourage infrastructure improvements, such as road improvements, that will improve the quality of life and attract new businesses and industries.

2.6 Support existing businesses and provide all feasible incentives for new businesses.

2.7 Market the County's recently established Opportunity Zone, which comprises the area to the south and west of the City of Barnwell, to private investors in order to facilitate the development of workforce, affordable housing, new infrastructure, and start-up businesses.

2.8 Continue to promote and support the improvement of local schools that will encourage a well-trained and diversified workforce, particularly in the higher technology fields.

2.9 Collaborate with and develop strategies for existing industries to ensure that Barnwell County's labor force is being adequately educated and trained to participate effectively in the local workforce, including a focus on the re-education of dislocated workers.

2.10 Encourage the development of service-based businesses to entice Barnwell County's existing workforce to reside in the County instead of commuting.

2.11 Continue to promote and support public transit programs and explore possibilities of expanding the transit network in the County.

2.12 Encourage the operation of small, independent businesses.

2.13 Encourage renovation and re-use of vacant industrial and commercial properties.

2.14 Foster public-private sector partnerships to provide community services.

2.15 Support the development of a technologically advanced communications infrastructure, such as fiber optic and other broadband lines, to attract telecommunication and other technologically dependent businesses to the area.

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2.16 Encourage tourism and professional visitors by promoting the County's assets and supporting facilities to accommodate visitors. Consider promoting the Barnwell County quality of life through national marketing campaigns.

Chapter 3: Natural Resources

Natural resources play a significant role in the character and quality of life in Barnwell County. As a requirement under the South Carolina State Planning Law, this element focuses on the many natural assets that are a part of the rural character of Barnwell County, including the benefits they bring, but also the challenges, risks and vulnerabilities the County faces. As a steward of natural resources, the County has a responsibility to coordinate with other jurisdictions and agencies to minimize the impacts of growth on the natural environment.

The landscape of Barnwell County is characterized by agricultural and forestlands, wetlands and extensive plant and animal habitats. Barnwell County has a significant presence of water sources primarily from the Edisto and Savannah Rivers. Both the Salkehatchie River and Little Salkehatchie River run through the County. These natural resources are especially beneficial for agriculture, industry, tourism, and recreation, and they also contribute to the physical beauty of the County.

The challenge Barnwell County faces is to strike a healthy balance between the benefits of development that agriculture and industry bring as well as the risks that come with them. Guidelines help minimize infrastructure-related sources of pollution, particularly stormwater run-off and sedimentation due to development activities and construction. These should include standards for controlling non-point source pollution and Best Management Practices for forestry, agriculture and construction activities, as well as surface water extraction from natural waterways.

A key component in protecting natural resources is the promotion of sustainable development practices and patterns. The concept of “sustainability” involves the ability of a community and society to meet the needs of the present population while ensuring that future generations have the same or better opportunities.

There are increasing concerns that, as a culture, we are using resources at a faster rate than we are replenishing them, and are creating communities that are not sustainable in the long run. Barnwell County seeks to progress in a manner that conserves natural resources and minimizes degradation of the natural environment.

Purpose and Intent

The purpose and intent of the Natural Resources Element is to: promote protection and enhancement of natural resources in the County; sustain natural environments, habitats, and wildlife for the general health, safety and welfare of current and future generations; promote sustainable development practices in conjunction with the other elements of this Plan; and protect and enhance the unique natural characteristics of the County that contribute to the County's identity and quality of life of its residents.

A. BACKGROUND AND INVENTORY OF EXISITNG CONDITIONS

Several federal and state agencies are responsible for the protection of natural resources including the Department of Natural Resources (DNR), the South Carolina Department of Health and Environmental Control (SCDHEC), the Environmental Protection Agency (EPA), and the U.S. Army Corps of Engineers (USACE). Other agencies, such as non-profits and local citizens groups, also are involved in the stewardship of the natural environment.

According to the US Census Bureau, Barnwell County encompasses a total of 557 square miles, of which, approximately 548 square miles is land and 8.9 square miles is water. The Savannah River Site (SRS) encompasses 33.5% of the total area of the County. The County is home to an abundant supply of natural resources and is mostly rural. Due to its rural environment and supply of natural resources, the County offers many outdoor recreation opportunities such as hiking, camping, hunting, fishing, canoeing, birding, and sports. The following is an inventory of these existing resources.

Climate

Climate is different from weather, as it describes the weather conditions prevailing in an area over a long period of time. Weather is the conditions of the atmosphere over a short period of time and can change from minute-to-minute and is usually described in terms of temperature, humidity, visibility, and wind.

Barnwell County's climate is characterized as a humid subtropical climate, typical of southeastern areas, and includes ample rainfall, mild winters and very hot summers. The annual average monthly temperature is 65 degrees, while the average daily maximum temperature is 75 degrees, with an average daily minimum temperature of 51 degrees.

The growing season in Barnwell County is 245 days, which accommodates a wide variety of crops. Droughts are not uncommon but generally do not last long enough to cause severe crop damage. The average yearly rainfall is approximately 46.2 inches. There are occasionally heavy rainfalls in the summer months due to tropical storms and hurricanes, but these occurrences are rare. On average, the County gets 102 days of precipitation per year. This includes rain, hail, sleet, or snow which falls to the ground, and needs to be at least .01 inches to be counted as precipitation.

July is the hottest month for Barnwell County with an average high temperature of 92.2°, which ranks it as warmer than most places in South Carolina. In Barnwell County, there are three comfortable months with high temperatures in the range of 70-85°. The most pleasant months of the year for Barnwell County are usually October, April and May.

Topography

Barnwell County is within the area designated by the US Soil Conservation Service as the Aiken Plateau, an upland plain with steep-sided valleys. The terrain is gently rolling in much of the County, yielding few impediments to urban or agricultural development. The County is characterized by low relief, with a few localized areas having wetlands, flatlands and steep hills. The northwestern and eastern parts of the County are the only areas with slopes over six percent. The average distance above sea level is approximately 90 feet.

Barnwell County contains what are commonly called “Carolina Bays” or “Sand Bays” which are circular depressions thought to be Aeolian features dating to the late glacial period, and which are scattered about the state. The primary species of tree in the area is the loblolly pine. Shortleaf pine, longleaf pine, slash pine and oak are also predominant in forested areas.

Water Resources

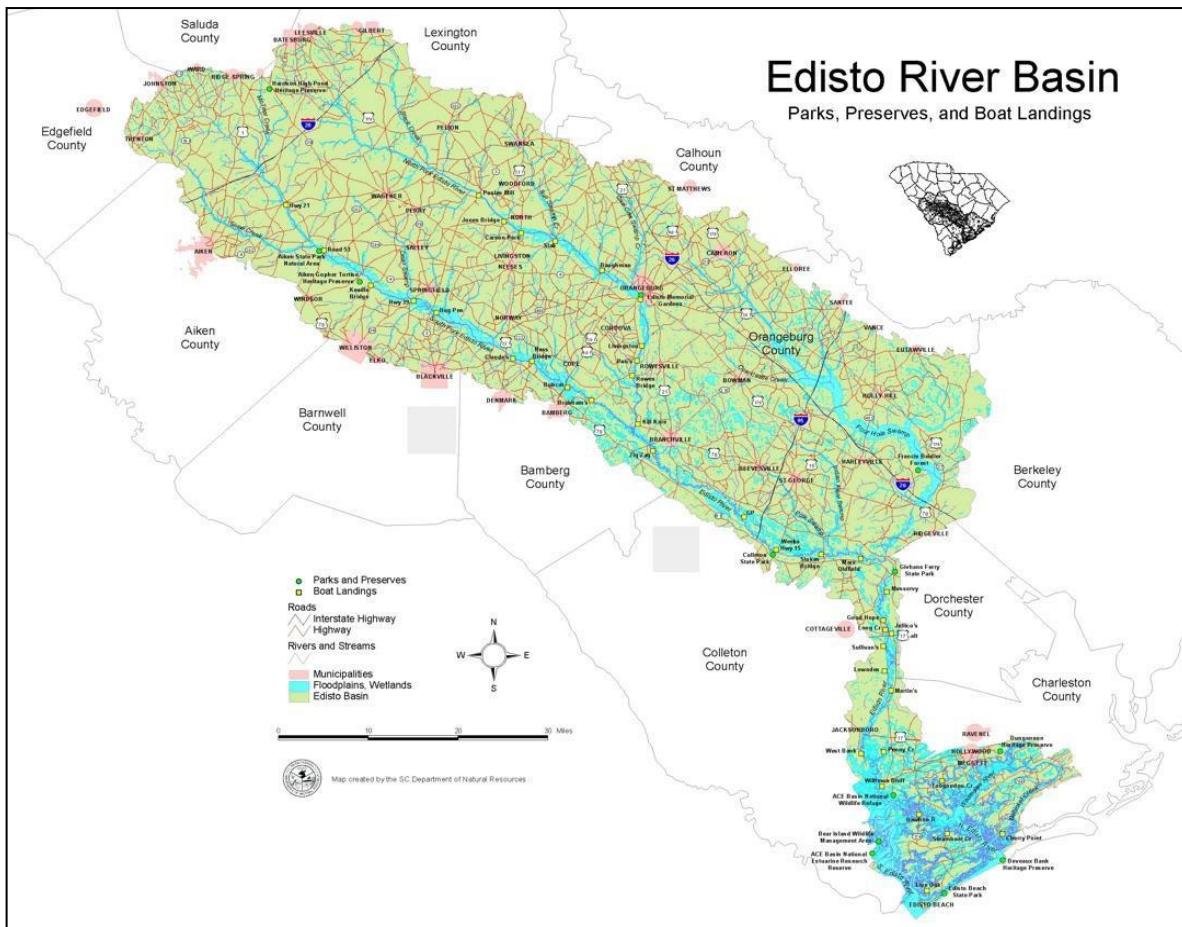
Barnwell County contains several important water resources. The Edisto River borders the north end of the county, and the Savannah River borders the south end. Both the Salkehatchie River and Little Salkehatchie River, which join to form the Combahee River, run through the County. Barnwell County lies within three river sub-basins: the Edisto River Sub-Basin (26.9%), the Combahee-Coosawhatchie River Sub-Basin (68.5%), and the Lower Savannah River Sub-Basin (4.6%). The water quality in these sub-basins is generally adequate for most water uses. These river basins provide excellent riparian, or stream-edge, habitats that consist of mostly forested wetlands. These wetlands provide support for wildlife habitats and improve the water quality of the County. Native animals include white-tailed deer, birds of prey, songbirds and wild turkey.

About half of Barnwell County lies on a principal aquifer with sufficient water for development needs, with the other half being a secondary aquifer with some flow restrictions. Water quality from the Tertiary Limestone aquifer systems in Barnwell County is generally suitable, as it is the most utilized aquifer in the area.

Edisto River Basin

The Edisto River Basin extends from the Carolina Sandhills to the tidelands at the Atlantic Ocean. The basin is a rich landscape which has attracted and supported people for thousands of years. Residents and visitors continue to enjoy the natural and cultural features and rural lifestyles of the Edisto Basin. The basin contains the longest free-flowing blackwater river in America, and encompasses 12 counties. Below is *Map 3.1: Edisto River Basin*.

Map 3.1: Edisto River Basin



Source: SC DNR

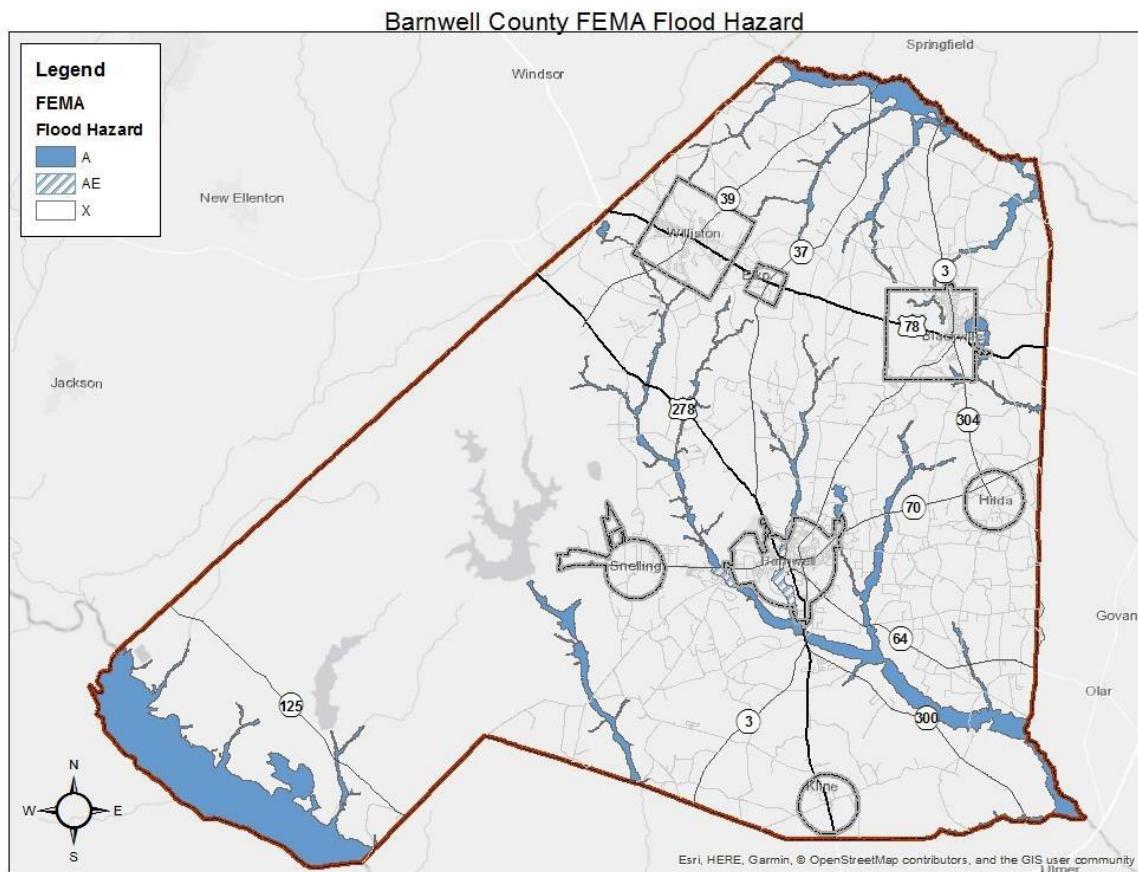
The basin supports a variety of recreational opportunities. These range from paddling the narrow, winding, tree-clogged upper reaches to motoring the Intracoastal Waterway and to sea kayaking the salt marshes. In between, one can find canoes, kayaks, small and large fishing boats, ski boats, and jet skis.

Floodplains

Floodplains are another important natural resource in Barnwell County. They perform vital natural functions such as temporary storage of floodwaters, moderation of peak flood flows, maintenance of water quality, groundwater recharge, the prevention of erosion, a habitat for diverse natural wildlife populations, and aesthetic quality. Flooding in the County is primarily due to intense thunderstorms and tropical storm events from the coastal area. The Federal Emergency Management Agency (FEMA) has determined areas subject to flooding in the County. The primary risks classifications used were the 1-percent-annual-chance flood event, the 2-

percent-annual-chance of flood, and areas of minimal flood risk. Depicted below is a floodplain map for Barnwell County.

Map 3.2: Barnwell County Flood Map



Source: ESRI, FEMA

Barnwell County's Flood Map shows two primary flood zones: Zone X and Zone A. The extent of these zones can be expressed by flood depth. Zone X is categorized in the moderate to low risk areas, and is described as the area determined to be outside the 500-year flood and protected by levee from the 100-year flood. Zone X for Barnwell County can be quantified as areas of 2-percent-annual-chance of flood, areas of 1-percent-annual-chance of flood with average flood depths of less than one foot, or with drainage areas less than one square mile. Zone A is categorized in the high-risk areas with a 1-percent-annual-chance of flooding.

Air Quality

Air quality is monitored and regulated by several agencies including the U.S. Environmental Protection Agency (EPA) and the SCDHEC Bureau of Air Quality (BAQ). The Clean Air Act, which was last amended in 1990, requires EPA to set National Ambient Air Quality Standards (NAAQS) for wide-spread pollutants from numerous and diverse sources considered harmful to public health and the environment.

The Clean Air Act established two types of national air quality standards. Primary standards set limits to protect public health, including the health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against visibility impairment and damage to animals, crops, vegetation, and buildings. EPA has set NAAQS for six principal pollutants, which are called “criteria” pollutants. The Clean Air Act requires EPA to review scientific information and standards for each pollutant every five years. In 2008, EPA set new standards for ozone pollution, called primary 8-hour ozone standards that reflect new scientific evidence regarding ozone and its effects on public health and the environment. The new standards set the ozone limit at a maximum of 0.075 parts per million.

The BAQ is responsible for the conservation and enhancement of air resources in South Carolina in accordance with regulations pursuant to the Pollution Control Act, the Asbestos Licensing Act, and the Clean Air Act. The EPA and the BAQ have implemented an air quality monitoring program throughout South Carolina that measures concentrations of major pollutants in the ambient air. The effectiveness of the State’s air quality program is measured in part by the rate of compliance with applicable statutes and regulations, and in part by the State’s attainment status for the NAAQS. Nonattainment of NAAQS has serious implications including:

- Public health impacts such as asthma and lung issues;
- New stringent air pollution control regulatory standards such as requirements to develop traffic restrictions to reduce nitrogen oxides and volatile organic compounds from automobiles, mandated use of low sulfur fuels, carpooling or busing requirements, and reduced driving days. Failure to comply with such regulations can result in withholding of federal highway construction funds; and
- Impacts to industry and economic development due to required air pollution controls resulting in increased costs for goods and/or reduced employment opportunities.

More information about air monitoring and the ambient air network monitoring plan can be found on SCDHEC’s website: www.scdhec.gov/HomeAndEnvironment/Air/AmbientAir/.

Soil Characteristics

The soils in the Barnwell area are of the Magnolia-Faceville-Ruston Soil Association, typical of the Carolina-Georgia Sandhills land resource area (as defined by the Soil Conservation Service) in which Barnwell County lies. The soils are sandy and underlain with sandy or loamy sediments and are mostly well to excessively drained. Ridge tops are broad and somewhat flat, with ridges breaking off into steeply sided slopes.

Barnwell County contains areas in which the soils can be classified as hydric. Hydric soils are not a type of soil but rather a characteristic that is a result of saturation, flooding or ponding for a time sufficient for the soil to develop anaerobic conditions in the top levels. The result of this saturation is instability for development, flooding, and drainage problems. Hydric characteristics are present in wetlands, however, a soil can be hydric and not have other wetland defining characteristics and therefore not federally regulated. Delineating the hydric areas in the County is essential for land use planning and natural resource conservation.

Agriculture

According to the 2012 Census of Agriculture conducted by the U.S. Department of Agriculture, top crops in Barnwell County include cotton, peanuts, corn for grain, and forage-land for hay. Top livestock categories include chickens, cattle, and calves. There are 397 farms in the County averaging 221 acres each.

Educational and Recreational

A recent study published in *Scientific Reports* found that people who spend time in nature had fewer health issues and greater life satisfaction. The results specifically found that people who spent at least 120 minutes per week in nature areas had significantly greater satisfaction in life and fewer health issues than those who spent little to no time in greenspace. Barnwell County has several sites that offer greenspace, such as parks and nature preserves, to area residents.

A significant site is Barnwell State Park which is located on approximately 307 acres off Highway 3 near Blackville. Barnwell State Park is one of 16 state parks built by the Civilian Conservation Corps during the Great Depression. It features campgrounds, walking trails, community buildings for special events, and picnic shelters for groups. Three small lakes within the park are popular spots for fishing crappie, bream, bass, and catfish. The park also recently opened a designated swimming area. The official site of Barnwell State Park lists the following as the “Top 5 Things to Do”:

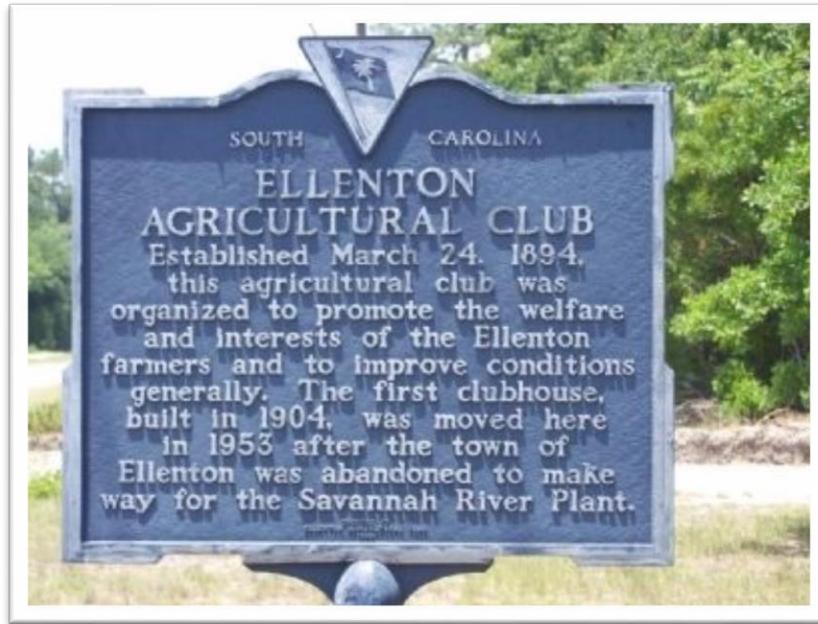
1. Spend an afternoon fishing from the bank and pier, or rent a fishing boat equipped with life vests and paddles.
2. Enjoy a picnic at one of the four picnic shelters or individual picnic tables throughout the park.
3. Take a walk along one of the two-mile trails. One goes around the 18-acre lower lake, and the other will take you through a diverse hardwood and pine forest.
4. Take the kids to the playground in the main picnic area and enjoy an afternoon of fun in the sun.
5. Grab a pair of binoculars and try to spot one of the many varieties of birds that live in the park.



There are several other sites in Barnwell County that are important in the field of education and the preservation of natural resources, or are of recreational value. Both the Nature Route and the Discovery Route of the South Carolina Heritage Corridor run through the County with the purpose of stimulating economic revitalization through heritage tourism. Located in the City of Barnwell is 135-acre Lake Edgar Brown, which is maintained by the state's Department of Natural Resources. The lake offers fishing, boat ramps, and a walking trail, and Canadian geese and domestic ducks are year-round residents. River access in the County can be found at South Fork Landing and Davis Boat Ramp (Edisto River), Ray's Crossing (Salkehatchie River), and Steel Creek Landing (Savannah River).

The Ellenton Agricultural Club, established in 1894, was created to improve farming conditions and promote the County's agrarian quality of life. The clubhouse was built in 1904 and moved to

SC Highway 64 on the west end of Barnwell in 1953 when the town of Ellenton was relocated by the Department of Defense. In Barnwell, the South Carolina Department of Natural Resources maintains a district office and a warm water fish hatchery. There are several public and private hunting areas throughout the County for the hunting of quail, deer, dove and wild turkey. Protection of these valuable resources is not only essential in preserving the ecological integrity of the County, but also promotes nature-based tourism and educational ideals.



The following is a list of public parks within Barnwell County:

Barnwell:

- Collins Park – open green space, garden, gazebo, park swings, and partially covered picnic area
- Lemon Park Sport Complex – various sports fields, playgrounds and press box.
- Jack Phillips Park – Picnic area
- Veterans Memorial Park – Lighted walking track and large open green space
- Darnell Park – open green space, play area, gazebo and picnic tables
- Fuller Park – basketball courts, disc golf course, picnic shelter and walking track
- Kilkenny Park –fishing accessible, picnic tables and grills

Blackville:

- Barnwell State Park – lodging, camping, fishing, hiking, birding, and community center
- Healing Springs – natural area and flowing artesian well

Snelling:

- Snelling Town Park – play equipment, walking track, open green space

Williston:

- Williston Park – playground and open green space
- Library Park – open green space and picnic tables

Animal Habitats

The County is mostly rural with plentiful areas for wildlife habitat. There are a number of threatened or endangered species in Barnwell County. The majority of these species are listed as either threatened or endangered due to the loss of natural habitat due to human impacts on their environment. The following is a list of some of the endangered animal and plant species in the county.

Table 3.1: List of At-Risk, Candidate, Endangered and Threatened Species, Barnwell County, 2019				
Category	Common Name / Status	Scientific Name	Survey Window / Time Period	Comments
Amphibian	Gopher frog (ARS)	<i>Lithobates capito</i>	Breeding: Oct-Mar	Call survey: Feb-Apr
Bird	American wood stork (T)	<i>Myceteria americana</i>	Feb 15-Sept 1	Nesting season
Bird	Red-cockaded woodpecker (E)	<i>Picoides borealis</i>	March 1-July 31	Nesting Season
Crustacean	n/a			
Fish	Atlantic sturgeon* (E)	<i>Acipenser oxyrinchus*</i>	March 1-May 30; Oct 1-Dec 15	Temperature dependant: 17-20 degrees Celsius
Fish	Blueback herring* (ARS)	<i>Alosa aestivalis*</i>	Mid-Jan-mid May	Peak: March-April
	Shortnose sturgeon* (E)	<i>Acipenser brevirostrum*</i>	February 1-April 30	Spawning migration
Insect	Monarch butterfly (ARS)	<i>Danaus plexippus</i>	August-December	Overwinter population departs: March- April
Mammal	Tri-colored bat (ARS)	<i>Perimyotis subflavus</i>	Year round	Found in mines/ caves in winter
Plant	Boykin's lobelia (ARS)	<i>Lobelia boykinii</i>	May-July/August	
Plant	Canby's dropwort (E)	<i>Oxypolis canbyi</i>	Mid-July-Sept	
Reptile	Gopher tortoise (C)	<i>Gopherus polyphemus</i>	April 1-October 31	Active period

Reptile	Southern hognose snake (ARS)	<i>Heterodon simus</i>	Most of the year	
Reptile	Spotted turtle (ARS)	<i>Clemmys guttata</i>	February-mid April	

Source: SC DNR

* Contact National Marine Fisheries Service (NMFS) for more information on this species

** The U.S. Fish and Wildlife Service (FWS) and NMFS share jurisdiction of this species

ARS Species that the FWS has been petitioned to list and for which a positive 90-day finding has been issued (listing may be warranted); information is provided only for conservation actions as no Federal protections currently exist.

ARS* Species that are either former Candidate Species or are emerging conservation priority species

BGEPA Federally protected under the Bald and Golden Eagle Protection Act

C FWS or NMFS has on file sufficient information on biological vulnerability and threat(s) to support proposals to list these species

CH Critical Habitat

E Federally Endangered

P/P-CH Proposed for listing or critical habitat in the Federal Register

S/A Federally protected due to similarity of appearance to a listed species

T Federally Threatened

Note: These lists should be used only as a guideline, not as the final authority. The lists include known occurrences and areas where the species has a high possibility of occurring. Records are updated as deemed necessary and may differ from earlier lists.

B. NEEDS AND GOALS

Barnwell County contains an abundant supply of agricultural land and open space where wildlife is plentiful and land remains in a natural state.

- The primary goal of Barnwell County should be to protect and preserve the productive agricultural and forested areas and a significant amount of natural areas to support the agribusiness segment of the economy and to promote the health and well-being of the citizens and to increase the quality of life and enjoyment for the citizens of Barnwell County.
- Respect and manage natural resources through conservation of the intact natural environment and restoration of the disturbed natural environment. Natural resources include water resources

such as rivers, lakes, creeks, and aquifers; wetlands; Carolina Bays; riparian corridors; native plants and wildlife; and significant scenic areas.

- Strive for cleaner air and water and support policies and programs that will foster energy and water conservation, stormwater management, reduced solid waste generation, and cleanup of contaminated sites.
- Protect sensitive plant species on the Heritage Trust list from the impacts of development.
- Preserve significant natural resource areas for future generations by maintaining low residential densities in the rural areas and in areas containing regionally and nationally important ecosystems for fish and wildlife and by recognizing that resource lands such as farms and forests provide economic, social and environmental benefits.

C. IMPLEMENTATION STRATEGIES

- 3.1** Develop and implement the Barnwell County Comprehensive Plan and Zoning Ordinance to insure that land use compatibility is maintained and preserved.
- 3.2** Develop and adopt land development regulations that will insure that natural resource preservation is included in all future development within the County.
- 3.3** Promote and support the beautification of public areas in the towns and the development of beautification sub-committees in the towns and outlying communities to promote beautification projects.
- 3.4** Work with South Carolina Department of Transportation to develop a non-attainment area program consistent with the National Ambient Air Quality Standards and the state's air quality plans.
- 3.5** Maintain appropriate setbacks from natural water resources to preserve the integrity of riparian corridors and utilize grading and sedimentation controls to reduce impacts from development outside corridors.
- 3.6** Work with the Barnwell Conservation District and the Department of Natural Resources to delineate hydric land areas and insure that land use compatibility with these areas is maintained.
- 3.7** Collect and maintain countywide GIS maps and data for soil and slope conditions, natural water bodies, wetlands, hydric areas, flood plains, prime agriculture and timberland, aquifers, endangered and threatened wildlife habitat, and significant scenic areas. Utilize this information to assist local government, property owners, and developers in identifying resources and limitations.
- 3.8** Strive to attract and retain environmentally clean industries to the area.

- 3.9** Work with the Department of Natural Resources and SC DHEC to minimize non-point source runoff and enforcement of sediment and erosion control regulations for land disturbing activities.
- 3.10** Evaluate the economic benefits of hunting and fishing as well as the impact these activities have on natural resources in the County.
- 3.11** Encourage and promote the use of the County's many sources of greenspace in order to increase community health and life satisfaction.
- 3.12** Examine possible environmental education opportunities that contribute to the preservation of natural resources while simultaneously empowering youth and communities.

Chapter 4: Historic and Cultural Resources

Purpose and Intent

The Historic and Cultural Resources Element of the Comprehensive Plan relates to historically significant sites and cultural resources in Barnwell County. This portion of the report is designed to inventory these resources in order to determine ways to preserve and protect them.

A. BACKGROUND AND INVENTORY OF EXISITNG CONDITIONS

Historical Overview

Indigenous tribes inhabited the area that now constitutes Barnwell County for thousands of years prior to the arrival of European settlers. Spanish explorers led by Hernando de Soto are oftentimes referred to as the first Europeans to explore the area although where exactly they forded the Savannah River is a matter of open debate by historians and archeologists. King Charles II of England granted the Province of Carolina in 1663 to eight Lords Proprietors that had provided him financial and political assistance during his restoration to the English throne. The establishment of the Carolina Province was originally intended to serve as a bulwark against the Spanish and prevent their expansion northward along the Atlantic Coast from their possessions in Florida. By the early 1700s, the area that now constitutes Barnwell County began to be settled by colonists from the British Isles seeking opportunities in the backcountry as available land in coastal regions became more scarce and expensive. In addition to the British settlers, a significant contingent of German-Swiss settlers had begun to arrive along the upper reaches of the Edisto River by the mid-1700s. By 1769, the area now known as Barnwell County was a part of the Orangeburg District of South Carolina.

During the Revolutionary War, four known skirmishes took place between loyalist and patriot forces in what is now Barnwell County: the Battle of Vince's Fort, the Battle of Morris Ford, the Battle of Steel Creek, and the Battle of Slaughter Field. Shortly after the British surrender and end of the war, Winton County was formed in 1785 as one of four counties created from the former Orangeburg District. Within the Barnwell County Courthouse archives, original court records of Winton County dating back to 1786 still exist. Winton County's separate court was abolished in 1792, and the county had transformed into the Barnwell District by 1800. The county was named after Revolutionary War General John Barnwell, the patriarch of a prominent Beaufort planter family and local militia leader.

Situated along the original carriage road between Augusta and Charleston, Barnwell County would benefit from its strategic position along this trade route. Growth expanded significantly after the construction of a railroad between Hamburg (now North Augusta) and Charleston by the South Carolina Canal and Rail Road Company. When completed in 1833, the rail line was the longest in the world and the first to offer regular passenger service using a steam locomotive. By

the 1840s, over 100,000 bales of cotton a year were being shipped along the rail line to Charleston's port. Farms prospered along the route, and the Towns of Williston and Blackville eventually developed as important stops along the railroad. The success of cotton cultivation in the area also led to the subsequent rise in the County's slave population. Although whites comprised almost 80 percent of the Barnwell region's population in 1800, they had become a minority within the County by 1850. Additionally, by 1850, only the Edgefield District to the north produced more cotton in the state than Barnwell did.

As part of the Confederacy during the Civil War, Barnwell County remained generally unaffected until the final year of the war. After Major General William Tecumseh Sherman's March to the Sea, troops under his command passed through Barnwell County on their way from Savannah to Columbia. Brevet Major General Hugh Judson Kilpatrick's cavalry arrived in Barnwell County by February 1865, where they destroyed rail lines and burned down residences, businesses, and farms. Kilpatrick's cavalry commandeered Banksia Hall in Barnwell for five days, and it became a Federal occupation headquarters during Reconstruction. In the aftermath of the Civil War, racial tensions ran high during the Reconstruction era, and events such as the Ellenton Riot in 1876 led to considerable bloodshed. In the last half of the 19th century, Barnwell County diminished in area as Aiken County was formed from portions of it in 1868 as well as Bamberg County in 1897 and Allendale County in 1919.

After the Civil War, Barnwell County remained an important agricultural region with significant amounts of cotton continuing to be produced. However, due to increased global supply, increased production costs, and the arrival of pests such as the boll weevil, crops other than cotton such as corn, peas, peanuts, watermelon, cucumber, and asparagus began to be cultivated in significant numbers. During the early and middle 20th century, Barnwell County benefited politically from the representation of influential politicians within the state's legislative and executive branches. Coined the "Barnwell Ring" by Edgefield's Strom Thurmond during his 1946 gubernatorial campaign, notable politicians from the County included State Senator Edgar A. Brown, State Representative and longtime Speaker of the House Solomon Platt, State Representative Winchester C. Smith, and Governor Joseph Emile Harley. These figures wielded an inordinate amount of power and influence within the state's governmental affairs for nearly half a century.

In November 1950, President Harry S Truman's administration proposed the development of the Savannah River Plant shortly after the Soviet Union detonated its first atomic weapon. The Savannah River Plant would encompass nearly one-third of Barnwell County's total land, including valuable farmland along the Savannah River, in addition to land in neighboring Aiken and Allendale Counties. The Savannah River Plant was constructed by the E. I. du Pont de Nemours Company in the early 1950s, and five nuclear reactors in total were constructed. The Savannah River Plant was a crucial source of refining the nuclear material necessary to produce the nation's nuclear arsenal during the Cold War. It undoubtedly provided a stimulus to the industrial development of the County; however, it led to the forced relocation of hundreds of residents living within its proposed boundaries, including the entire Towns of Ellenton and Dunbarton. Following the collapse of the Soviet Union and the end of the Cold War in the early 1990s, the Savannah River Site, its new name as of the late 1980s, began downsizing its workforce, and its mission restructured principally to the environmental remediation of the area.

Historical Inventory

Barnwell County has a wealth of historically and culturally significant places. Only five of these sites are on the National Register of Historic Places. Several sites, including the Barnwell County Courthouse and Sundial, the Blackville Passenger Depot (Blackville Library), and the Kline Railroad Depot are eligible to be included in the National Register. In 1991-92 and 1995, historic surveys were completed in Williston, identifying over 100 late 19th century and early-to mid-20th century buildings contributing to a potential National Register District. Attention should be given to those sites and their potential for nomination to the National Register when planning for the preservation of Barnwell County's historic and cultural resources.

Listed below are many of important resources of Barnwell County and their location. Those sites listed on the National Register are shown in bold with the date of the listing included.

1. **Banksia Hall**, NR 5/31/1974, Barnwell - This early 19th century example of Lowcountry architecture was the site of the Federal headquarters during the Reconstruction era.
2. Barnwell County Courthouse, Sundial and the Circle, Barnwell - Highly accurate although it was erected two years prior to standard time, the vertical sundial is thought to be the only one of its kind in the United States. The present courthouse was built in 1878-79 succeeding several other buildings on the site. The Courthouse and Sundial are the anchor buildings in what is known as the Circle, or downtown area, which contains many historic commercial structures.
3. **Bethlehem Baptist Church**, NR 7/10/1979, Barnwell - This pre-Civil War church was organized in 1830 and built in 1833. In 1855 it was organized as a black church and in 1876 it was sold to the black congregation. The present building was constructed in 1889 utilizing original materials.
4. Buckingham, Barnwell - Privately owned antebellum home that was built in 1825.
5. **Church of the Holy Apostles, Episcopal**, NR 4/13/1972, Barnwell – The church is significant for its unusual Gothic Revival architecture. The church was spared by General Sherman's troops in the Civil War; however, legend has it that it was used as a horse stable by General Kilpatrick's cavalry and its baptismal font used as water trough.
6. **Church of the Holy Apostles, The Rectory**, NR 4/13/1972, Barnwell - Constructed circa 1857 in the same Gothic style as the church, this private residence was built by Rev. Edwin A. Wagner, who was the first rector of the Episcopal Church of the Holy Apostles. Though commonly called the Rectory, the house has always been a private residence. The house also survived Federal occupation.

7. Iris Hill, Barnwell - Built by Lewis O'Bannon in 1815. O'Bannon also laid out the original streets in the town of Barnwell.
8. **Circle Theater (Old Barnwell Presbyterian Church)**, NR 4/13/1972, Barnwell - Now used as a theater, the building was constructed as a church in 1848. The church was a temporary courthouse after Federal troops burned the county courthouse in 1865.
9. St. Andrews Roman Catholic Church, Barnwell – Built in 1831, it is one of the oldest church buildings in Barnwell and survived the Civil War unscathed.
10. Barnwell County Museum, Barnwell - The museum offers exhibits, tours and special programs. Since 1978, the Effie Fuller Center at the Barnwell County Museum has provided cultural programs to include concerts, plays, traveling exhibits from the State Museum, and local arts and crafts exhibits. It also sponsors a well-known children's author each summer for the local library's Children's Story Hour and a workshop for teachers.
11. Barnwell County Library - The library was originally the home of C.G. Fuller, who patented the process of tar and gravel roads and was responsible for paving dirt roads throughout the County. The library houses local newspapers on microfilm from 1877 to the present as well as the Manning Collection of Barnwell families. The library also sponsors a Children's Story Hour and summer reading programs.
12. Winton County Courthouse site, near Barnwell - Located approximately five miles south of Barnwell on SC Highway 3, this site is where the original Winton County Courthouse, which was constructed of pine logs, once stood. On the site are memorials to veterans of the Revolutionary War and the War of 1812.
13. Mennonite Community - Similar in religious belief to the Amish, the Mennonite community in Barnwell County settled in the Blackville area, establishing a church and school.
14. Old Shamrock Hotel, Blackville - The Save Our Shamrock organization is currently raising funding for the restoration of this former hotel in downtown Blackville.
15. Depot Library (Blackville Passenger Depot), Blackville - The current library was originally the town's train depot that was moved from the railroad bed and renovated.
16. James H. Hammond Museum, Blackville - The museum is named after Blackville native Senator James H. Hammond. This 19th century building was formerly a private school, town hall, and jailhouse.
17. Floyd Manor Inn, Blackville - Utilizing pillars shipped from England in 1886, this building was once the manor house of an 8,000-acre plantation.

18. Healing Springs, near Blackville - Artesian springs believed by Native Americans to have healing powers, some locals still collect the spring water for drinking and bathing.
19. Healing Springs Baptist Church, near Blackville — Founded in 1772, the church is located near the Healing Springs.
20. L'Artigue House, Blackville - This example of Lowcountry antebellum architecture was built circa 1832.
21. **Ashley-Willis House**, NR 6/22/2004, Williston - Occupied by Federal troops during the Civil War, this house was built by John Ashley in the 1820s out of adobe brick, plaster, and siding. It is notable for its Doric columns and is one of the few surviving gable-front Greek Revival architectural style in the state outside of Charleston.
22. Kline Railroad Depot, Kline - The Kline Depot was once a thriving stop on the Carolina Midlands Railroad.
23. Railroad Bed of “Best Friend of Charleston” - Blackville was a prominent stop on the Charleston-Hamburg line, which when constructed was the longest commercial line in the world.
24. Collins Park, Barnwell - Dedicated in September 2000, this park on the corner of Main and Marlboro Streets is a historical park featuring Barnwell County citizens who have made outstanding contributions to state government.
25. Duncan House, Barnwell - Located on Dunbarton Boulevard, the house was built by William H. Duncan circa 1892.
26. Inman Scott House, Williston - This house was built in 1860 by John Smith, who sold it to Thomas Scott in 1900, and it is one of the few antebellum houses remaining in the County.
27. Duncannon, Barnwell - Located five miles west of Barnwell, this residence was built by Col. William H. Duncan between 1846-47.
28. Agriculture Heritage Museum at the Clemson University Edisto Research and Education Center.

Cultural and Recreational Inventory

The residents of Barnwell County enjoy all of the pleasures traditionally associated with rural and

small town life while maintaining convenient access to the amenities offered by some of the state's larger metropolitan areas. The county's proximity to Augusta, Georgia provides citizens with the shopping and cultural amenities of a metropolitan area. The City of Aiken has a history of championship horse racing and is also known for its cultural opportunities, historic architecture, and well landscaped areas as well as the Ruth Patrick Science Education Center and DuPont Planetarium. In Columbia, Barnwell County citizens can enjoy the Riverbanks Zoo, the Koger Center, the Town Theater, the State Museum, EdVenture Children's Museum, the State House, and the University of South Carolina campus. Historic Charleston is the home of the world famous annual Spoleto Festival and is consistently ranked as a premier tourist destination in the United States. All of these activities are a relatively short drive from Barnwell County.

An abundance of cultural and recreational opportunities also exist within the County for those who wish to stay a little closer to home. The mild climate inherent to this area provides an environment that is conducive to many outdoor activities such as year-round golf, tennis, or fishing as well as several different annual festivals and special events. Southern Palmetto Regional Chamber hosts Wonderful Day in May at the Barnwell Airport. The Town of Hilda hosts the Fireman's Fun Festival, also in May. In the month of September, the Old Time Horse Farmers Gathering is held near Blackville. The Town of Blackville also hosts a Heritage Festival as well as a Music and Art Festival, and Taste of Blackville Festival. There is also a Christmas Parade during the holiday season. Williston has three special annual events: Wonderful Williston Weekend, the Christmas Tree Lighting, and Prayer Breakfast. In the City of Barnwell, annual special events include the Tree Lighting and a fishing tournament.

Barnwell County schools provide active art, drama, and music departments, and a student production of a "Living Museum" is an event which the area looks forward to each year. The Circle Theater, which is housed in the old Presbyterian Church in Barnwell, offers four productions each year. The Barnwell County Museum, located in the City of Barnwell, houses exhibits and artifacts that tell the story of the County. The Barnwell County Arts Council was formed in January of 1998 with a mission to educate and stimulate participation in the cultural arts. The Barnwell County Library is also an integral part of cultural activity and attracts many people who are researching their genealogy in the County.

In addition to art, drama, and music, Barnwell County offers two agricultural heritage organizations. The Agricultural Heritage Center in Blackville offers an agricultural museum and a hands-on learning facility. The Ellenton Agricultural Club located between Barnwell and Snelling is a historic fixture in the County that promotes the County's agrarian quality of life. Barnwell County also has clubs and professional organizations for residents and visitors to enjoy. Some of the many resources include the Lions Club, the Masons, Rotary Club, Jaycees, Sertoma Club, Boy and Girl Scouts, and the NAACP. Additionally, all of the major municipalities in the County have Garden Clubs.

B. NEEDS AND GOALS

The inventory section of the Historical and Cultural Resources Element focused on the existing historical resources and cultural amenities in Barnwell County. This section will suggest methods

of sustaining existing resources as well as possible improvements based on the results of the previous section.

- The primary goal of this element is to maintain and enhance the economic viability of historic structures and sites in the County in order to increase the quality of life and enjoyment for the citizens of Barnwell County. Additional goals include:
 - Improve the aesthetic appeal and commercial viability of historic resources through historic preservation and adaptive reuse.
 - Promote cultural activities in the County through the development of a recognizable character for Barnwell County.

C. IMPLEMENTATION STRATEGIES

- 4.1** Adopt and enforce the Comprehensive Plan and the Zoning Ordinance to insure that land use compatibility is maintained and preserved.
- 4.2** Develop and adopt land development regulations that will insure that historic preservation is considered in all future development and that infill development is compatible with existing development.
- 4.3** Promote the rehabilitation of historic houses and commercial buildings and consider incentives to purchase and rehabilitate deteriorating or substandard historic buildings for adaptive reuse.
- 4.4** Work with the State Historic Preservation Office (South Carolina Department of Archives and History) to submit applications for eligible properties and districts to the National Register of Historic Places.
- 4.5** Support the efforts of professional, fraternal and cultural organizations to provide services and bring cultural events to the County.
- 4.6** Establish a committee to work with South Carolina Department of Parks, Recreation and Tourism, the South Carolina Heritage Corridor, Barnwell County Arts Council, and the Lower Savannah Tourism Director in the development of a driving tour of Barnwell County to focus on significant historical areas.

- 4.7** Encourage the Barnwell County Economic Development Commission and the local chamber of commerce to support heritage tourism in their strategic planning.
- 4.8** Establish a committee for the creation of a low interest revolving loan program for housing rehabilitation.
- 4.9** Develop and adopt a sign ordinance to maintain consistent, nonintrusive, and aesthetically pleasing signage in the County.
- 4.10** Support the development of additional parks and park amenities in Blackville, SC.

Chapter Five: Community Facilities

The Community Facilities Element of the Comprehensive Plan provides information about the characteristics of the infrastructure and amenities that contribute to the viability and livability of a community. The current status as well as improvements to the quality of community facilities has a great impact on economic development and urban expansion. This element of the Comprehensive Plan will address a range of community facilities and services including but not limited to water, sewer, storm drainage, transportation and solid waste. In part, it is the purpose of the comprehensive planning process to examine existing and anticipated conditions and to identify and evaluate potential problems and opportunities associated with these conditions. This provides a basis for the development of plans and policies designed to minimize or avoid problems and maximize opportunities.

It is the purpose of the first section of the Community Facilities Element to identify and evaluate the existence and extent of community facilities and public services provided in Barnwell County in relation to current and anticipated future needs. The availability and capability of a community's infrastructure are key factors that impact the quality of life and are critical to the ability of a community to generate and sustain future economic growth and development.

The second section of the Community Facilities Element will conclude with the identification of issues and problems that need to be addressed and set forth goals and implementation strategies designed to minimize or avoid problems and maximize opportunities.

A. INVENTORY

Water Supply and Distribution

Water service is presently provided to several areas within Barnwell County. Barnwell, Blackville, Williston, Elko and Hilda provide community water systems in Barnwell County.

The largest of the County's water systems is owned and operated by the City of Barnwell. The City of Barnwell is presently served by a city water system consisting of 16-, 12-, 10-, 8-, and 6-inch water mains that provide groundwater from six city wells. Information obtained from the South Carolina Department of Health and Environmental Control indicates that the system has a flow capacity of approximately 1.5 million gallons per day with an elevated storage capacity of 650,000 gallons. The system presently provides service to 2,088 customers (4,563 persons). The City of Barnwell has two generators for use in an emergency situation to operate two wells.

The water system in the Town of Williston is owned and operated by the town and serves approximately 1,597 customers located both inside and outside of the town limits. The Town of Williston's water distribution assets consist of four main wells. Information obtained from SCDHEC states the system's total reliable capacity is 1,088,000 gallons per day. The total water storage capacity of Williston's water system consists of four elevated tanks that have a 525,000-

gallon total capacity. The water system has three generators for emergency situations and emergency metered connections with the Town of Elko (public water system). The town's water production and distribution facilities appear to be adequate.

The Town of Elko owns and operates a groundwater and associated potable water system. The system serves approximately 371 customers (150 service connections) with one 100,000 gallon elevated storage tank. Elko's system has connections with the Town of Williston if an emergency were to arise.

The Town of Blackville also owns and maintains its own water system consisting of four wells with a regulated capacity of 425,900 gallons per day. The system has two generators capable of operating wells during an emergency event. The town has approximately 950,000 gallon capacity in elevated tanks, which provides adequate pressure and capacity to meet the town's water needs.

The Town of Hilda owns and operates a groundwater and potable water distribution system that serves 311 customers (126 service connections) with a capacity of 312,000 gallons per day. The system is serviced by two wells and one elevated storage tank with approximately 100,000 gallons. The system has two generators capable of operating wells during an emergency event.

It should be noted that the five water systems have received various improvements over the past five to 10 years. Economic Development Administration (EDA) and Community Development Block (CDBG) grants have been used to provide system upgrades for improvements for industry to improve water flow for fire hydrants. While these grants have helped, all the municipalities continue to have basic infrastructure upgrade needs with regards to their respective systems. In 2016, voters approved a Capital Projects Sales Tax that includes projects for water and sewer in Williston, Elko, and unincorporated areas in Barnwell County. Twenty years ago a feasibility study was conducted for the consolidation of the water systems. From that study a recommendation was made for a regional water treatment plant and distribution system as a long-term goal.

Sewage Collection and Treatment

Sewer service is presently provided to Barnwell, Williston, and Blackville within Barnwell County. South Carolina Department of Health and Environmental Control (SCDHEC) monitors and inspects the wastewater facilities, permits, and toxicity levels.

The City of Barnwell owns and operates its own wastewater treatment plant. The city currently has a capacity of three million gallons of wastewater per day. The wastewater effluent discharge is to the Salkehatchie River.

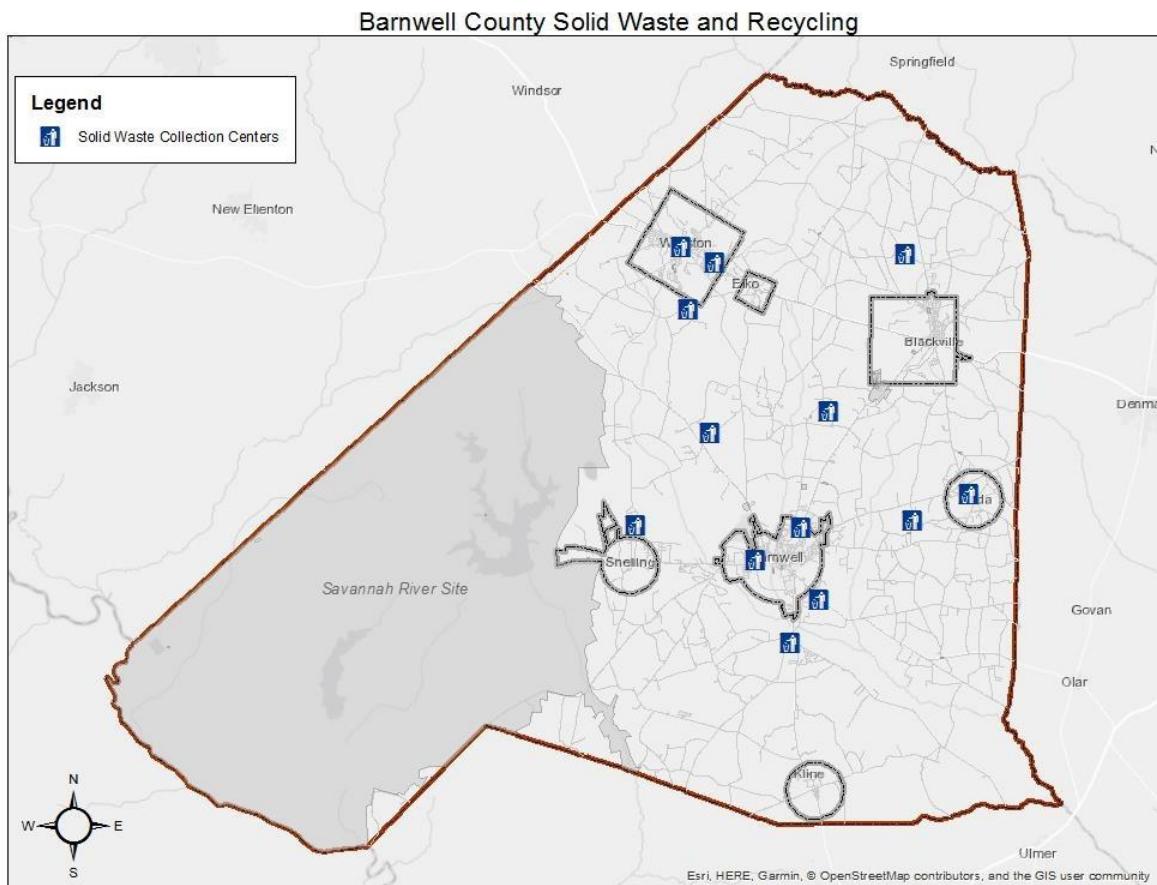
The Town of Williston provides sanitary sewer service to customers located within the town limits. The town's sewer system currently has a normal daily inflow of approximately 500,000 gallons and is permitted to treat as much as 1.257 million gallons per day. Treated effluent is currently discharged to a dedicated spray field with groundwater monitoring requirements. The spray field site is 360 acres with a total of 190 acres available for spray irrigation.

The Town of Blackville also owns and operates its own sewer system. The town has a new wastewater treatment plant that has a treatment capacity of 800,000 gallons per day with effluent discharge into Windy Hill Creek to South Fork Edisto River. The average daily flow is 0.22 million gallons per day.

One common problem of all aging sewer systems is inflow and infiltration. Inflow occurs when water enters the system through residential drains, cooling water discharges and storm runoff. Infiltration occurs when water enters a wastewater collection system from the ground through defective pipes, joints, or manhole walls. It is important to monitor and alleviate these problems so the efficiency of the wastewater treatment plants is not diminished.

Solid Waste Collection and Disposal

With the exception of waste collection services provided by the Towns of Williston and Blackville and the City of Barnwell, solid waste in Barnwell County is transported from the various nine drop-off sites located throughout the County to the Barnwell County transfer site located approximately seven miles outside the Barnwell city limits. The County then transports the solid



waste to Three Rivers Solid Waste Authority landfill, a Subtitle "D" landfill located on the

Department of Energy Savannah River Site in Aiken County with the capacity to meet regional solid waste disposal needs. Recycling centers are also provided at drop-off sites.

Electricity, Renewable Energy and Telecommunications

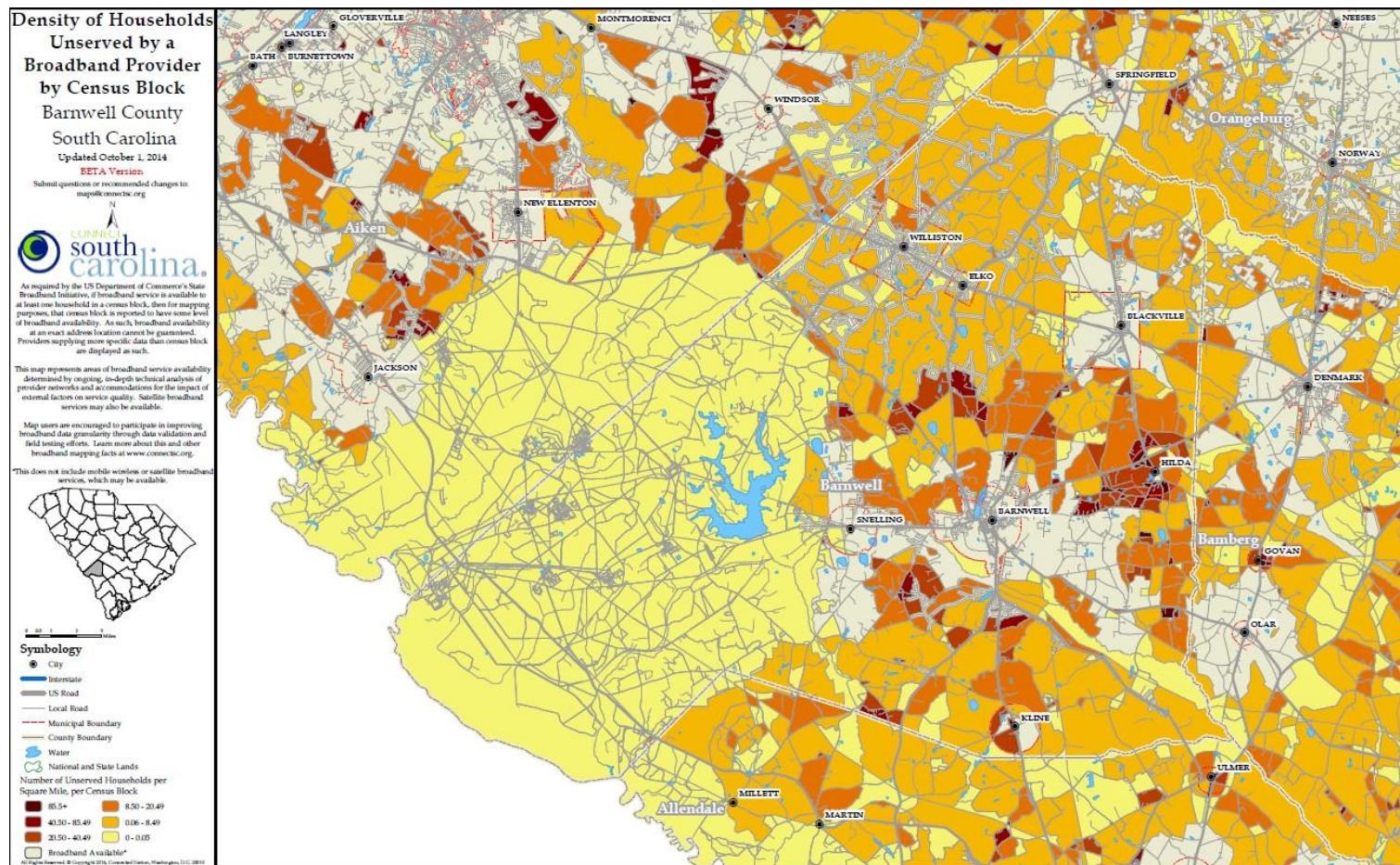
Three electric companies serve Barnwell County: Dominion Energy, Edisto Electric Cooperative, and Aiken Electric Cooperative. Natural gas service in the County is provided by Dominion Energy. Renewable energy sources, such as solar farms, are becoming a more common part of the landscape across South Carolina. Cypress Creek Renewables is operating a 16-acre solar farm outside of Barnwell. Like solar farms, telecommunications are a fast-growing service area. As the need for telecommunications has grown over the past five-ten years, more companies service the Barnwell County area with various capabilities that would include cable and TV, satellite and mobile providers. Companies include AT&T, Earthlink, Atlantic Broadband, TDS (Telephone and Data Systems), Dish and Direct TV, as well as Sprint, Verizon and T Mobile.

Broadband

Broadband service and access are a necessary utility function for communities to be fully engaged in today's world. Broadband service in telecommunication is commonly identified as high-speed internet access. Broadband includes several high-speed transmission technologies to include Digital Subscriber Line (DSL), cable modem, fiber, wireless, and broadband over power lines (BPL).

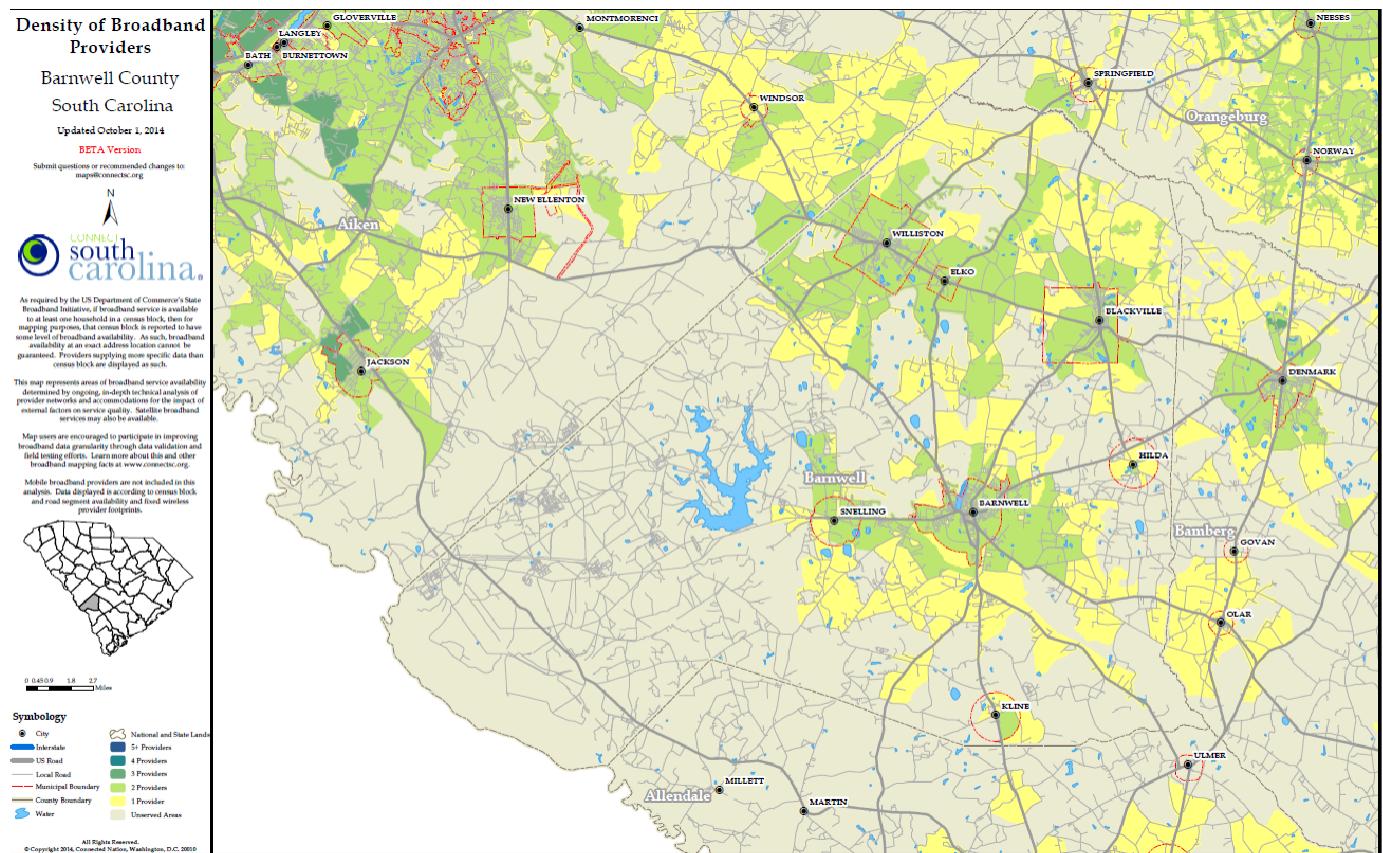
Recognizing that a large majority of rural America lacked access to broadband services, the Federal Communication Commission (FCC) released a National Broadband Plan in 2010. This plan initiated an ongoing study of broadband issues and how to fill the need gap in rural areas. While the large majority of the Towns of Snelling, Blackville and Barnwell have broadband available, other municipalities and unincorporated areas of Barnwell County are underserved by broadband providers. See figure 5.1 regarding underserved households in Barnwell County in 2014.

Figure 5.1 Density of Household Underserved by Broadband Provided – Barnwell County



Since the FCC released the plan in 2010, programs have been created to address needs, such the U.S. Department of Agriculture (USDA) Re-connect Loan and Grant Programs. See figure 5.2 Density of Providers in Barnwell County in 2014 below.

Figure 5.2 Density of Broadband Providers – Barnwell County



Source: Connect South Carolina – Density of Broadband Providers – Barnwell County 2014

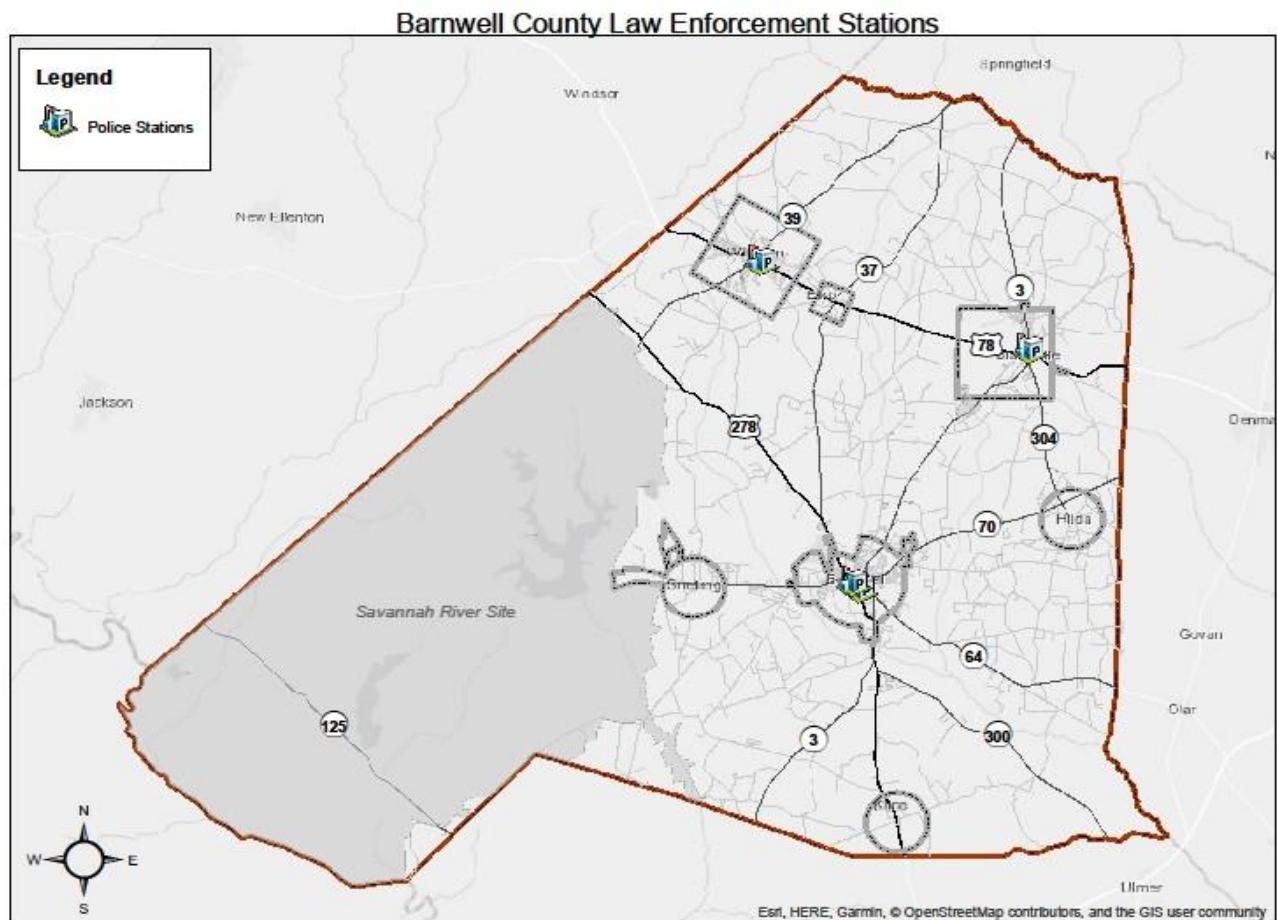
Police Protection

Law enforcement in Barnwell County is the responsibility of the Barnwell County Sheriff's Department. In addition to the elected Sheriff, the department currently has a force of 28 full time officers and eight reserve officers. The Sheriff's Department utilizes 45 vehicles. According to the South Carolina Law Enforcement Division (SLED), larceny was the most common type of offense that the Sheriff's Department saw in 2016/2017. Currently the County Sheriff's Department provides a Resource Officer to each school in Barnwell

County.

Of the municipalities, Barnwell, Blackville and Williston each have their own police departments. The City of Barnwell has 15 sworn full time officers and two support staff. The City also completed a new police station in 2019 that was funded through a Capital Project Sales Tax. Blackville's police department consists of seven full time officers and 10 equipped vehicles. Williston's police force includes nine full time officers, two part time officers and one reserve officer. The Williston Police Department has nine police cars and two on-call cars. The department has a policy of purchasing two new vehicles every other year.

The detention center is a co-ed facility rated for 124 inmates. In 2020, the detention center began housing up to 75 federal inmates through an agreement with the U.S. Marshals Office.



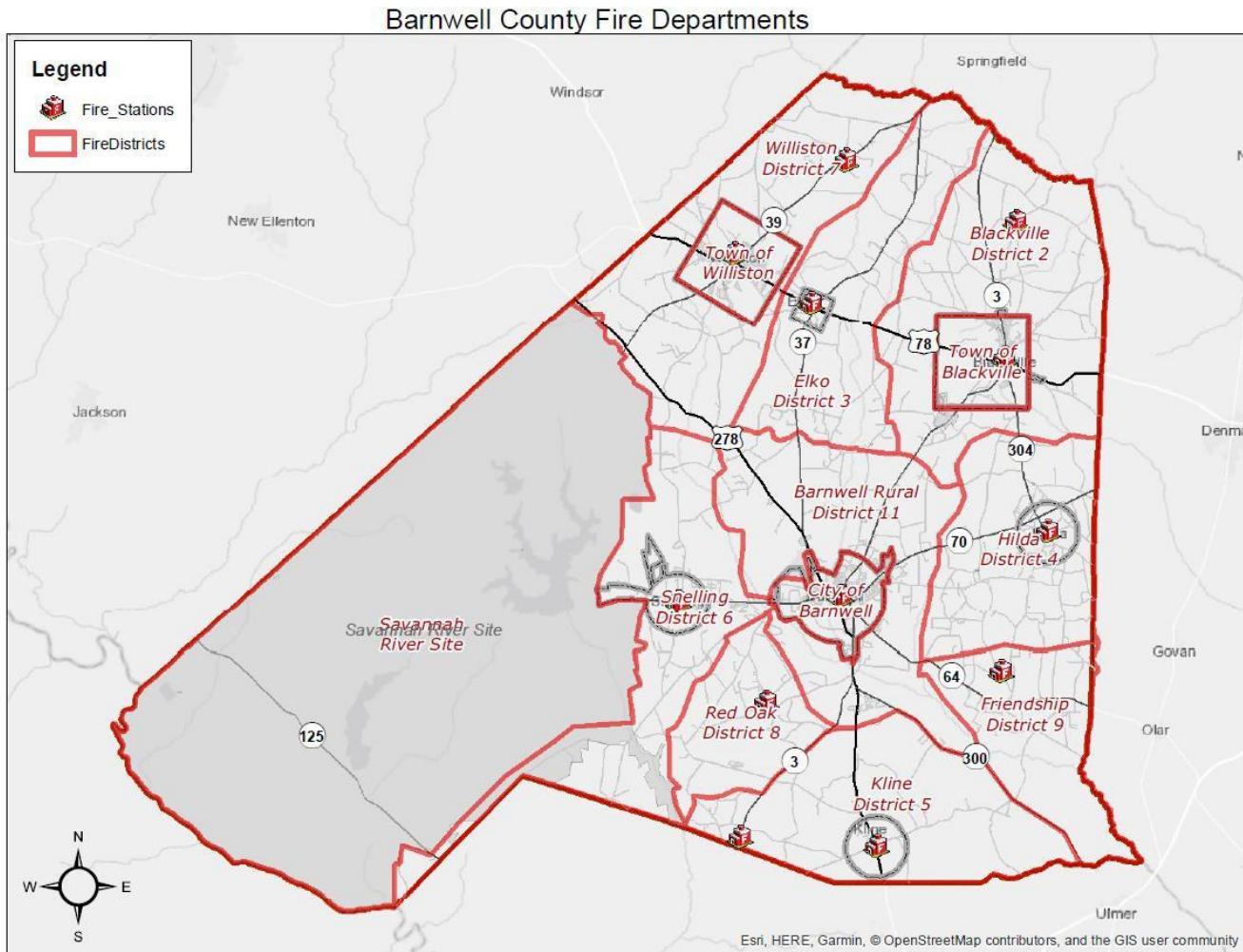
Fire Protection

Fire protection in Barnwell County is provided by rural fire departments strategically located throughout the county and manned by volunteers. Barnwell County employs a Fire Coordinator position to coordinate efforts with regards to working with the district firefighters, seeking grants, working with the Fire Commission, repairing equipment, and more. This network of fire-fighting units functions under a mutual support system whereby the closest adjacent unit is also dispatched to a call in an adjacent district as backup and support. Fire departments are outfitted with pumper trucks and tankers. In the County, there are a total of 10 rural fire departments. They are Barnwell Rural, Kline, Snelling, Williston, Blackville, Red Oak, Long Branch, Elko, Hilda and Friendship. The Insurance Services Office (ISO) rating for the rural areas of the County is 5.

The City of Barnwell's fire protection force has four full time employees and 30 volunteers. Equipment utilized by the fire department consists of one ladder company, one rescue company, three specialty trailers for lighting, HazMat, and foam operations. The ISO rating is 3.

A 30-member volunteer force provides fire protection for Williston and the surrounding areas through the Town of Williston's fire department. The town also employs a part-time fire chief. The major fire-fighting equipment owned by the town is four pumper trucks, one tanker and one service truck with a cascade air system in addition to a quick response pick-up truck. The ISO rating is 3.

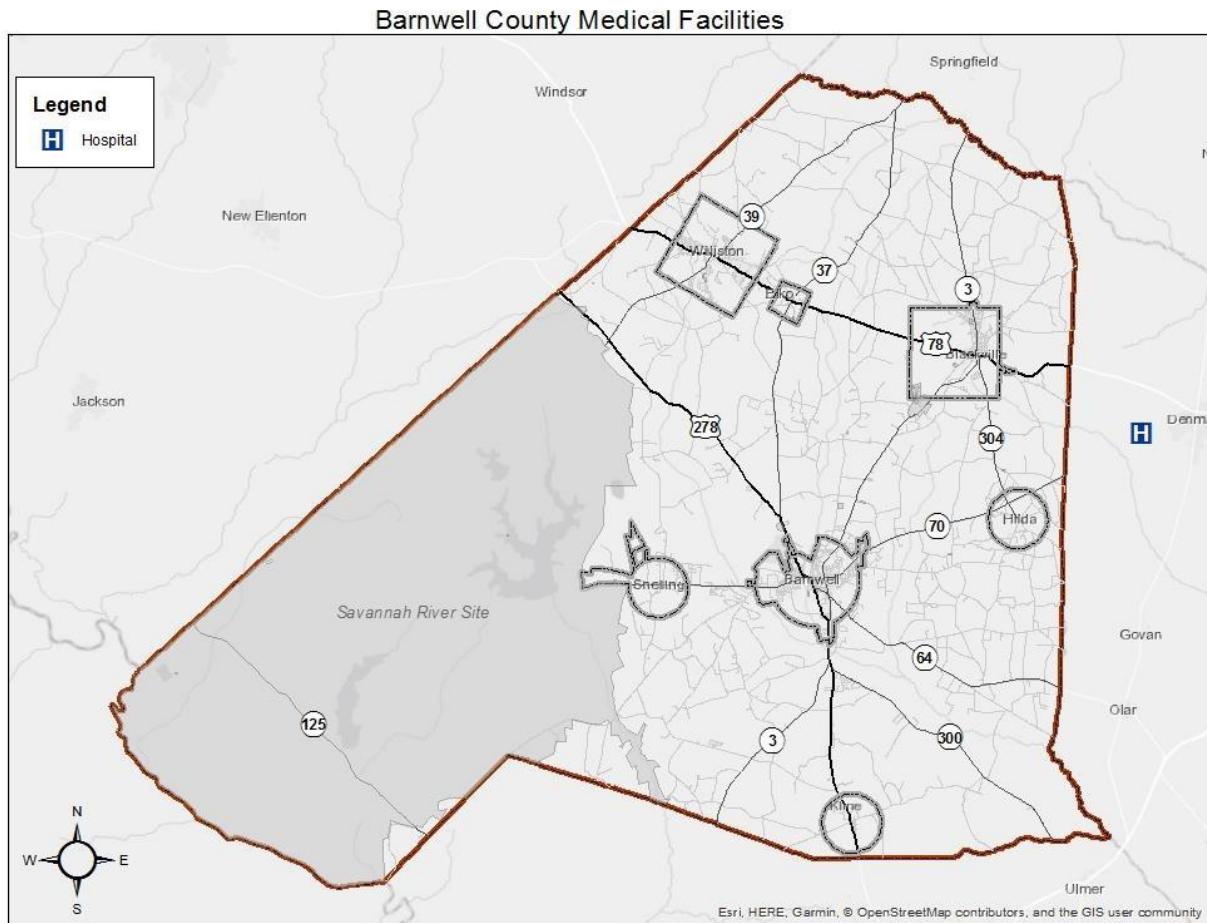
The Town of Blackville has a volunteer force of 23 in the town's fire department and employs a full-time fire chief. The fire department is equipped with four pumper trucks, one tanker, one brush truck and one service vehicle. In addition, the town's fire department has a 10-story ladder truck that serves the entire County. The ISO rating is 4.



Emergency Medical Services

Emergency Medical Services (EMS) for Barnwell County are contracted through Medshore, a private accredited ambulance service. In January 2019, County Council formed an EMS committee to review the current EMS operations and work out problems and formulate potential solutions. The committee produced a comprehensive report in December 2019 that identified and addressed areas for improvements and initiatives for implementation.

In 2016, Southern Palmetto Hospital in Barnwell closed. The closest area hospital is Allendale County Hospital approximately 20 miles south of the City of Barnwell. The RMC Bamberg-Barnwell Emergency Medical Center opened a 20,500-square-foot facility in 2019. The facility provides emergency care, state of the art diagnostic imaging, laboratory service, outpatient x-ray, CT and ultrasounds services along with ER radiology services.



Railroads

As is the case throughout most rural portions of the United States, rail passenger service is no longer available in Barnwell County. A CSX line that runs from Orangeburg through the Town of Snelling to the Savannah River Site provides the nearest access to rail freight service. Plans to provide a rail spur to the South Carolina Advanced Technology Park in Snelling are currently underway. This spur will provide easier access to freight service for the industrial area. A CSX line that runs in an east-west direction through Allendale County also provides Barnwell County with access to rail freight service.

Air

Commercial air service is available at the Columbia International Airport adjacent to Interstate 26 in Columbia. The Columbia facility is located approximately 50 miles north of the City of Barnwell. Bush Field in Augusta, Georgia also provides commercial air service and is located 55 miles west of Barnwell. Commercial air service is also available at the Charleston Airport near

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Interstate 26, approximately 90 miles southeast of the City of Barnwell. Additionally, the Savannah International Airport is located approximately 100 miles from Barnwell adjacent to Interstate 95.

The nearest air transportation facility is the Barnwell Regional Airport, a general aviation facility located on the outskirts of the City of Barnwell on Highway 278. The airport provides two operable runways, with the primary runway length of 5,119 feet. The airport also offers 100LL-A jet fuel. The airport facility offers hanger space (T-hangars and community hangars), currently on a waiting list basis.

Water

The closest commercial seaport to the county, via highway access, is Port Royal, near Beaufort, approximately 85 miles away. The Port of Charleston is approximately 115 miles from Barnwell, and the Port of Savannah is approximately 90 miles away in Savannah, Georgia.

Transportation

A safe and efficient transportation system is critical to the livelihood of a community. The transportation network facilitates the internal day-to-day functioning of the community and provides access to goods and services. Transportation, to include roads, bicycle and pedestrian projects, will be more thoroughly discussed in Transportation, Element Eight, of this Comprehensive Plan.

General Government Facilities

The offices of most general County services are housed in the County Administration Building located immediately adjacent to the Barnwell County Courthouse. The Administration Building presently houses the offices of the County Administrator, Assessor, Auditor, Finance, Treasurer, Building Inspections/Zoning and Emergency Management and Operations Center. In addition to these services, the County operates a number of other departments, such as the Animal Shelter, Building and Grounds, Detention Center, Public Works, Solid Waste, Veterans Affairs and Voter Registration and Elections in various locations mainly in the City of Barnwell.

As mentioned earlier, the voters of Barnwell County approved a Capital Projects Sales Tax in 2016. Included in the projects are repairs and renovation of the Barnwell County Courthouse, which are underway.

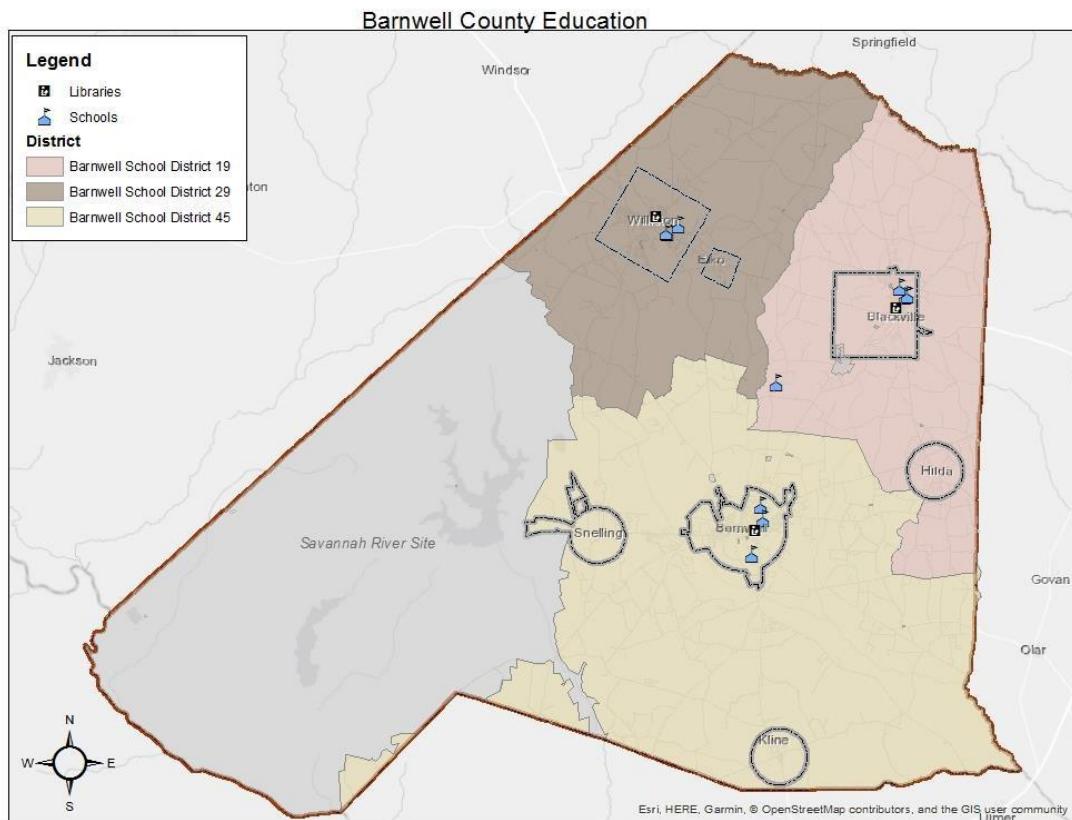
Education

Barnwell County currently has three Public School Districts. Williston School District 29 is comprised of Williston-Elko High School, Williston-Elko Middle School, and Kelly Edwards Elementary School. Blackville District 19 is comprised of Blackville-Hilda High School, Macedonia Elementary/Middle School, Barnwell County Career Center, and Bamberg-Barnwell County Adult Education Program. Barnwell School District 45 includes Barnwell Primary School,

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Barnwell Elementary School, Guinyard-Butler Middle School, and Barnwell High School. Pursuant to the South Carolina Department of Education 2019-2020 Proviso 1.88 A, the consolidation of Barnwell School District 19 and 29 is currently being considered. In addition to the public school system, numerous secular and religious private schools exist in Barnwell County.

Technical training is available to the County through a Denmark Technical College satellite campus located in the City of Barnwell. The college offers continuous enrollment in its two-year educational and certification programs in technical fields as well as a complete junior college curriculum. In addition, post-secondary educational opportunities are offered by nearby Voorhees College in Denmark and South Carolina State University, Orangeburg-Calhoun Technical College and Claflin College in Orangeburg. The nearest state university is USC-Salkehatchie, a regional campus of the University of South Carolina that is located approximately 17 miles from the center of Barnwell County. The University of South Carolina-Columbia is the main campus of the university and is approximately 65 miles from the center of Barnwell County. Also within commuting distance, USC-Aiken and Aiken Technical College are located in the Aiken area.



Libraries

The Aiken-Bamberg-Barnwell-Edgefield (ABBE) Regional Library System serves Barnwell County. The ABBE System operates the Blackville, Williston and Barnwell branches. The Barnwell Branch, located at 40 Burr Street, is the newest facility, opening in October 2005. The Blackville Branch Library is located on North Solomon Blatt Avenue in Blackville, and the Williston Branch Library is located in

the Old School Building on Springfield Street in Williston.

The Barnwell County Public Library includes the Manning Collection, a collection of documents and references used by genealogists from around the nation. The genealogy section of the library is one of the strengths of the library as evidenced by the routine visits by persons researching their family histories. The library manager engages in community programs and outreach activities such as visiting schools and daycare centers to establish reading programs. Additionally, through its Internet access and on-line reference database, the library has virtually eliminated the need to house periodicals and other similar reference materials. The library facility also has two community rooms that are available for use for meetings, luncheons, trainings, and a host of other events.

Recreation

While Barnwell County does not maintain any recreational parks, there are many recreational opportunities throughout the County. Through the various municipalities and unincorporated areas there is something for all ages. These include organized youth sports programs, special events, passive and active recreation, senior programs and festivals to name a few. Some of these facilities have been discussed in the Natural Resources Element of this Comprehensive Plan.

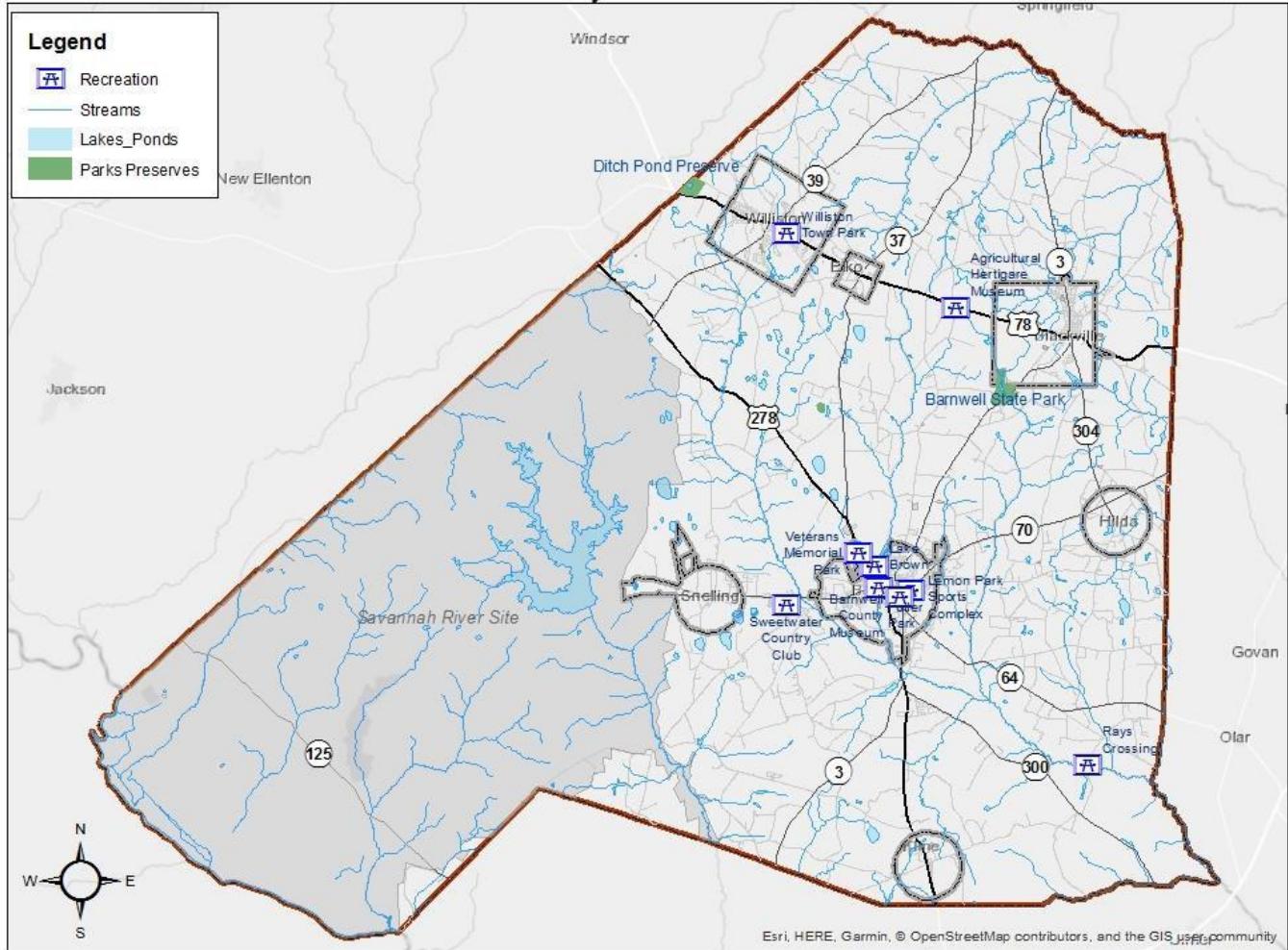
Generations Unlimited provides services for senior citizens at the Golden Retreat Activity Center in Blackville and The Gail Reyes Senior Center in Barnwell. Services include transportation, nutrition, home health, case management, information, education, exercise and referral services to persons age 60 years and older.

The City of Barnwell has six parks. Three passive recreation facilities are Collins Park, Darnell Park and Jack Phillips Park hosting picnic opportunities and gardens. Two parks, Fuller Park and Lemon Park, have amenities that accommodate active sports facilities and programs; lastly, Killney Park offers grilling, picnic tables, fishing and access to Lake Edgar Brown. Veteran's Memorial Park is a six-acre park located in the City of Barnwell, adjacent to the Barnwell Regional Airport.

The Town of Blackville maintains the Blackville Community Center, a former gymnasium, for various functions and gatherings. The center provides ample space for public forums and community activities. Blackville also has Main Street Park located on the old railroad bed running through the downtown area. God's Acre Healing Springs is an artesian well and popular tourist spot just outside of Blackville.

Other recreational facilities include Williston Town Park and Snelling Park, which offers a walking track, playground and picnic area. Golf courses in the county include Sweetwater Country Club in Barnwell and Williston Country Club in Williston. Barnwell State Park is located outside of Blackville and offers a wide array of recreational opportunities.

Barnwell County Parks and Recreation



B. NEEDS AND GOALS

The Community Facilities Element of the Comprehensive Plan highlights the amenities that contribute to the viability and livability of a community. Improving a community's facilities can be one of the most important methods of promoting and controlling quality development. It also

can be one of the most difficult undertakings for a County because of the major expenses that can be associated with these types of projects. Throughout the planning process, a variety of new improvement projects have been suggested, all of which are important to the development of Barnwell County.

- The primary community facilities goal for Barnwell County is to continue improvements to the viability and the livability of the County by supporting efforts to strengthen the infrastructure and services available to the citizens of the County and by offering new ideas to continue these improvements.
- Assure a safe, functional and efficient transportation network that serves the needs of County residents, business, agriculture and industry.
- Maintain the quality of existing development and assure the quality and compatibility of future development.
- Provide for the convenient and sanitary disposal of solid waste.
- Provide reliable emergency, medical, fire and police protection.
- Promote improvement and expansion of education facilities and opportunities in the County.
- Promote improvement and expansion of recreational programs and facilities in the County.

C. IMPLEMENTATION STRATEGIES

The implementation strategies for the proposed goal should begin immediately and continue until the suggested projects have been completed. The following policy suggestions are offered to County Council to implement this goal:

5.1 Continue to support efforts for the expansion or consolidation of water and sewer service to underserved areas and continue studying the feasibility of a regional water system.

5.2 Support efforts for sustainability and resiliency with regards to all infrastructure projects to include but not limited to: water and wastewater systems, stormwater management systems, and telecommunications.

5.3 Support efforts for renewable energy initiatives and opportunities as is appropriate.

5.4 Continue to maintain solid waste convenience sites in the County and routinely evaluate the need for additional sites.

5.5 Initiate efforts to establish a countywide recreational system to provide recreational services and facilities throughout the County.

5.6 Maintain the integration of countywide fire services through equipment exchange efforts and fire commission coordination.

5.7 Support efforts for expanding senior services and care programs and facilities.

5.8 Promote and provide incentives for the development of quality private retirement facilities, such as assisted care facilities, to encourage the growth of the retirement-aged population in the County.

5.9 Support efforts to improve the accessibility for broadband in the County.

Chapter Six: Housing Element

The Housing Element of the Comprehensive Plan provides information about the supply, conditions and characteristics of housing in Barnwell County. Housing characteristics are closely related to the economy of the area as housing values reflect some income characteristics of the population. Housing is included in this Plan to ensure policies are in place to promote safe and affordable housing in the County and provide housing options for residents of various demographic and economic backgrounds.

The strategies for housing are meant to preserve existing housing stock and encourage community revitalization while promoting a supply of safe and structurally sound homes. To further enhance the quality of life of the residents, the strategies encourage attractive land uses that promote community identity and support a wide range of housing needs with particular emphasis on promoting diverse and affordable housing opportunities.

A. INVENTORY

Understanding the existing housing conditions in the County is crucial to planning for the needs of current and future residents. The following sections closely examine the existing housing stock by assessing housing characteristics, tenure and costs.

Housing Supply and Conditions

Data from the US Census Bureau shows that Barnwell County's housing units increased slightly by 3.75% between 2000 and 2018 year estimates. Table H-1 below reflects this data. From 2000 to 2010, there was a slight increase in housing units and from 2010 to the estimated 2018 a flat to marginal increase of less than one percent.

Table H-1 – Number of Housing Units for Barnwell County

	Units	Percent of Change
2000	10,191	
2010	10,484	3.0%
2018*	10,525	0.4%

*Source: U.S. Census Bureau and *ACS 2018 5-Year Estimates*

In a comparison of housing unit characteristics shown in Table H-2 below, the data shows that the number of occupied homes in Barnwell County between 2000 and 2010 decreased only by

one percent, but the vacancy increased, in that same time frame, by 32 percent. That trend continued over the 2010 – 2017 span, with occupied housing dropping six percent and vacant housing increasing by 36 percent. The data also shows a decline over time in owner-occupied housing and an increase in rental housing.

Looking at the data overall, the trends tend to show a drastic increase in vacant housing units in the County and a significant increase in renter-occupied housing. Conversely, occupied homes and owner-occupied homes have decreased. While the majority of housing stock is owner-occupied, it is important to note the decreasing trend.

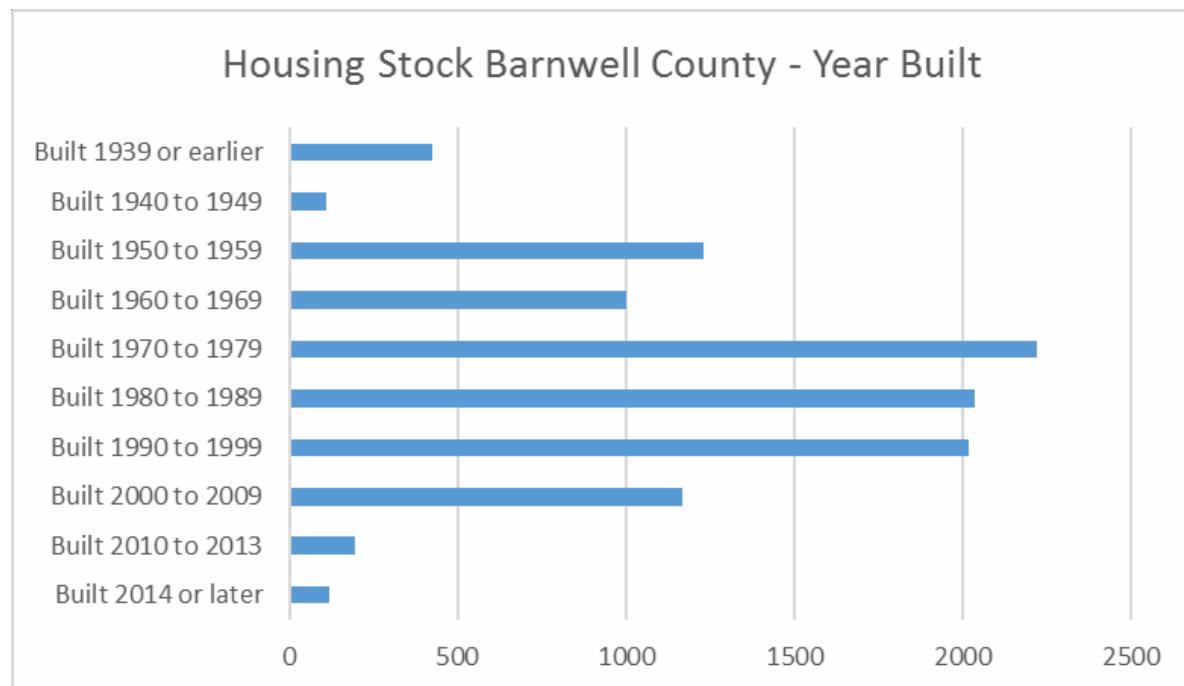
Table H-2 Barnwell County Housing Characteristics

	2000	2010	% Change	2017*	% Change	% Change 2000-2017
Total Housing Units	10,191	10,484	3%	10,525	0.39%	3.2%
Vacant Housing Units	1170	1547	32%	2099	36%	79%
Occupied Homes	9021	8937	-1%	8426	-6%	-6.6%
Owner-Occupied Housing	6810	6280	-7.8%	5826	-7.2%	-14%
Renter-Occupied Housing	2211	2657	20%	2600	2%	17.5%

Sources: U.S. Census Bureau and 2013-2017 ACS 5-Year Estimates

While analyzing the housing conditions, it is important to look at the housing stock in terms of age. Figure 6.1 depicts housing built before 1939 through 2014 or later. It is evident that the majority of the housing stock was built between 1970 and 1999. There was a sharp decline in housing being built from 1999 through 2009 and a extreme decline from 2009 through 2014 or later. What the data says, is that the majority of the current housing stock is 20 – 49 years old with very little new housing being built. An aging housing stock could account for the higher rate of vacant housing units.

Figure 6.1 Housing Stock by Year Built



66.8%. Barnwell County is in line with the State of South Carolina's data for owner-occupied and renter-occupied housing. In both cases, the large majority of tenure is owner-occupied.

Figure 6.2: Housing Tenure, 2017



Table H-3 shows the value of owner-occupied housing units in Barnwell County as reported in the 2013-2017 ACS 5-Year Estimates. Figure 6.3 on the next page also shows the Housing Values for Barnwell County. The largest percentage of housing units falls in the \$50,000 - \$99,999 range with the median property value being \$76,200.

Table H-3 Barnwell County Owner Occupied Housing Value

	Units	% of Total
Less than \$50,000	1,626	27.90%
\$50,000 to \$99,999	2,032	34.90%
\$100,000 to \$149,999	836	14.30%
\$150,000 to \$199,999	560	9.60%
\$200,000 to \$299,999	567	9.70%
\$300,000 to \$499,999	172	3.00%
\$500,000 to \$999,999	23	0.40%
\$1,000,000 or more	10	0.20%
Total	5,826	100.00%
Median Property Value	76,200	

Source 2013-2017 ACS 5-Year Estimates

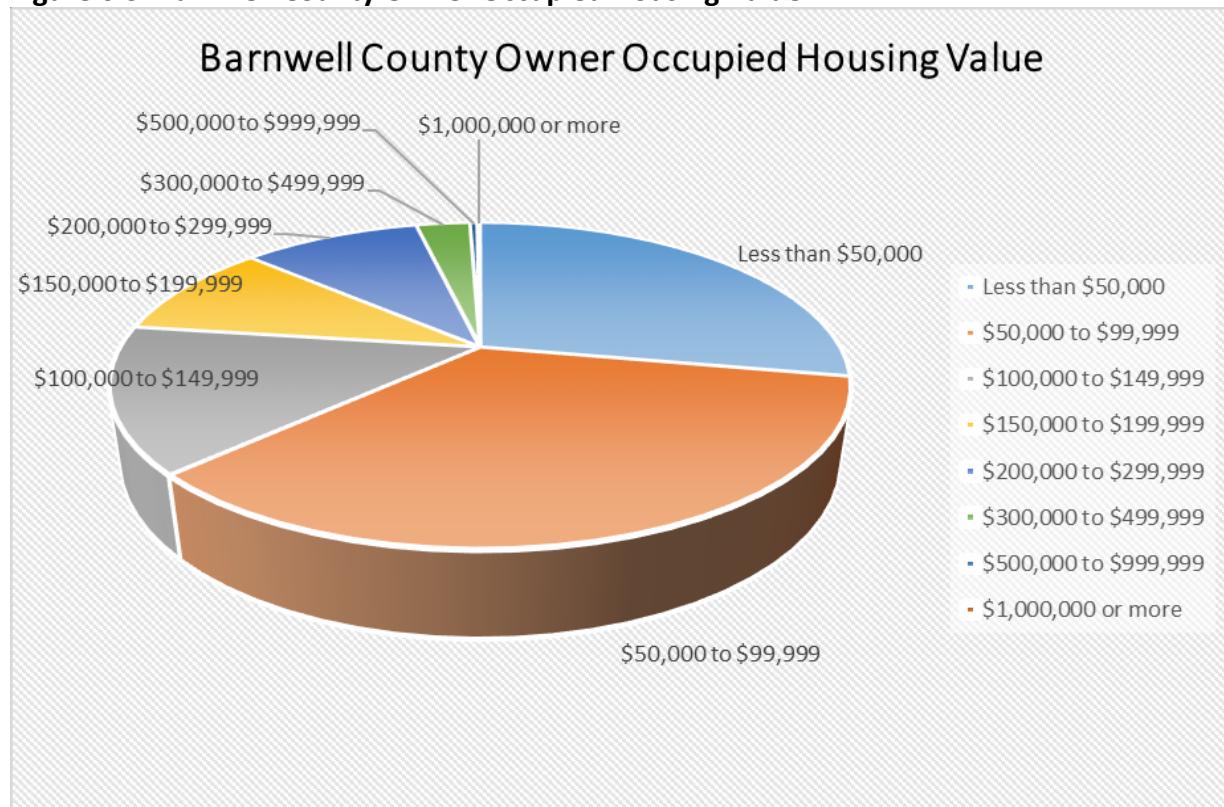
Figure 6.3: Barnwell County Owner Occupied Housing Value

Table H-4 reflects the comparison of house values throughout the County. The County's median housing value is well below South Carolina's median housing value of \$148,600.

Table H-4 Comparative Housing Values

	Population	Median Housing Value	Median Rental Cost
Barnwell County	21,788	\$76,200	\$603
Barnwell City	4,552	\$98,600	\$626
Blackville	1,989	\$55,400	\$481
Elko	182	\$61,700	\$455
Hilda	428	\$59,100	\$519
Kline	177	\$66,000	\$704
Snelling	350	\$63,000	\$695
Williston	3,026	\$93,600	\$572
Allendale County	9,402	\$52,100	\$617
Bamberg County	14,842	\$65,800	\$754
Orangeburg County	89,116	\$92,700	\$668
Aiken County	165,707	\$135,900	\$767
<i>South Carolina</i>	<i>4,893,444</i>	<i>\$148,600</i>	<i>\$836</i>

Source 2013-2017 ACS 5-Year Estimates

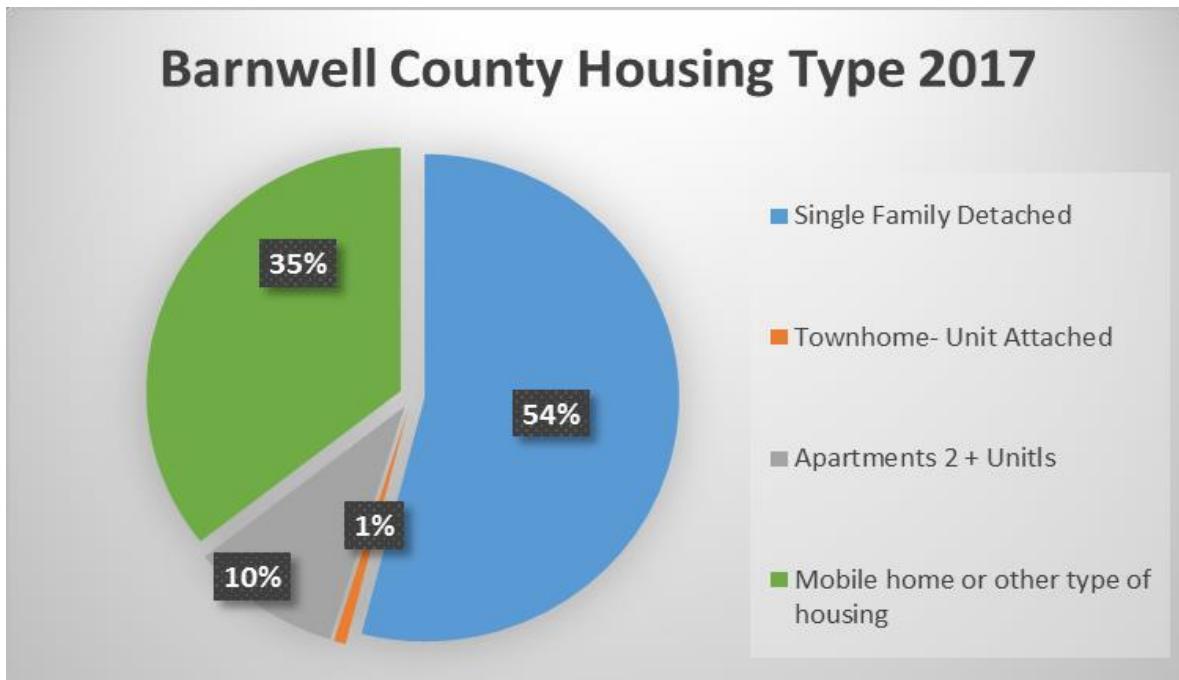
The data from Table H-4 also show that Barnwell County ranks third out of the five counties listed for median housing values. Median rent is also a good measure, especially with the data indicating renter-occupied housing is on the rise for Barnwell County. Barnwell County's median rent cost is not only well below the State's median rent cost but the lowest County cost out of the five counties listed.

As evident in Table H-4, median housing values and median rental costs share a direct relationship with population. Like all the counties in the above comparison, the 2000 median rent and housing values in Barnwell County are well below state averages and are a reflection of the economic conditions in the region as well as the housing conditions themselves. The impact that housing values play on the ability of a local government to provide services cannot be overstated. Revenues generated through property taxes are dramatically affected by property values and are one of the major sources of revenue for local governments and school districts in South Carolina.

Housing Types

As shown in Figure 6.4, there is quite a difference between types of homes across the County. The majority of homes are single-family detached units, with the second type being mobile/manufactured homes. Lastly, a small percentage of townhouses and apartments are noted throughout the County.

Figure 6.4: Barnwell County Housing Type 2017



Manufactured Homes

Manufactured housing is often a more affordable alternative to purchasing a stick-built home. The manufactured housing market is a very competitive industry and quite possibly a critical solution for affordable housing. In Barnwell County, approximately 35% of housing structures are mobile/manufactured homes. Home ownership for families adds positive benefits in the financial realm and non-financial realm of people's lives. Local government policies in place that enhance the ability for families to own their homes while promoting compatibility among all housing types is advantageous to the community's economic and social health and well-being.

The regular misconception that manufactured housing located near adjacent site-built housing would automatically depreciate the property values of the site-built housing has occurred for many years. Manufactured homes with a fixed foundation or listed as real property often appreciate at comparable rates to site-built residential properties. There is no clear negative correlation between the overall appreciation rate of site-built residential properties and the presence of manufactured housing in close proximity. There are several factors that impact the future value such as location, community, initial price paid, age and maintenance, inflation rate, etc. The Manufactured Housing Institute of South Carolina (MHISC) is a wonderful resource tool for homebuyers in South Carolina and provides invaluable information on the manufactured housing industry.

The South Carolina Modular Housing Institute (SCMHI) represents the modular industry in the State and is a resource for modular homebuyers. There are two categories of modular homes, on-frame and off-frame. Both categories have zoning parity with site-built or stick-built homes, and any local requirements and rules which are enacted by local authorities must be reasonable and uniformly applied and enforced without any distinction as to whether a building is a modular or constructed on site in a conventional manner.

Housing Affordability

The affordability of homes is a noteworthy concern, particularly for low-to-moderate income (LMI) earners, service workers, seniors, and entry-level professionals. Housing is considered affordable when occupants pay less than 30 percent of their monthly income on monthly housing costs. The tables below reflect the median value of owner-occupied housing units and median rental for Barnwell County compared to the state. While the state of South Carolina as a whole has seen steady increases in median home values, Barnwell County has experienced much slower growth.

Table H-5 Median Value of owner-occupied housing units

	2000	2017	Percent Change
Barnwell County	\$66,600	\$76,200	14.4%
South Carolina	\$94,900	\$148,600	56.6%

Source: 2000 Census 2013-2017 ACS 5-Year Estimates

Table H-6 Median Rental (Gross Rent*)

	2000	2017	Percent Change
Barnwell County	\$384	\$603	57.5%
South Carolina	\$510	\$836	63.9%

Source: 2000 Census 2013-2017 ACS 5-Year Estimates

*Includes monthly rent agreed or contracted plus the estimated monthly cost of utility and fuel.

It is significant to note that 1,355 households were paying more than 30% of income on owner-occupied housing. More than half of renter-occupied households were cost burdened. See Table H-7 and H-8.

Table H-7 Cost Burdens Homeowners (paying 30% or more of income on household costs)

Owner- Occupied	Estimate	Percent
Total Units with mortgage	2346	40.30%
Cost Burdened	747	32.10%
Total Units without mortgage	3480	59.70%
Cost Burdened	608	18.30%

Source: ACS 2013-2017 5-Year estimates

Table H-8 Cost Burdens Renters (paying 30% or more of income on household costs)

Renter -Occupied	Estimate	Percent
Total renter units	2307	100.00%
Cost Burdened	1187	56.6%
<i>Source: ACS 2013-2017 5-Year estimates</i>		

Table H-9 below shows the number of the homes in Barnwell County with incomplete plumbing and kitchen facilities. These numbers have decreased since the Census and are reflective of improvements taking place in the County.

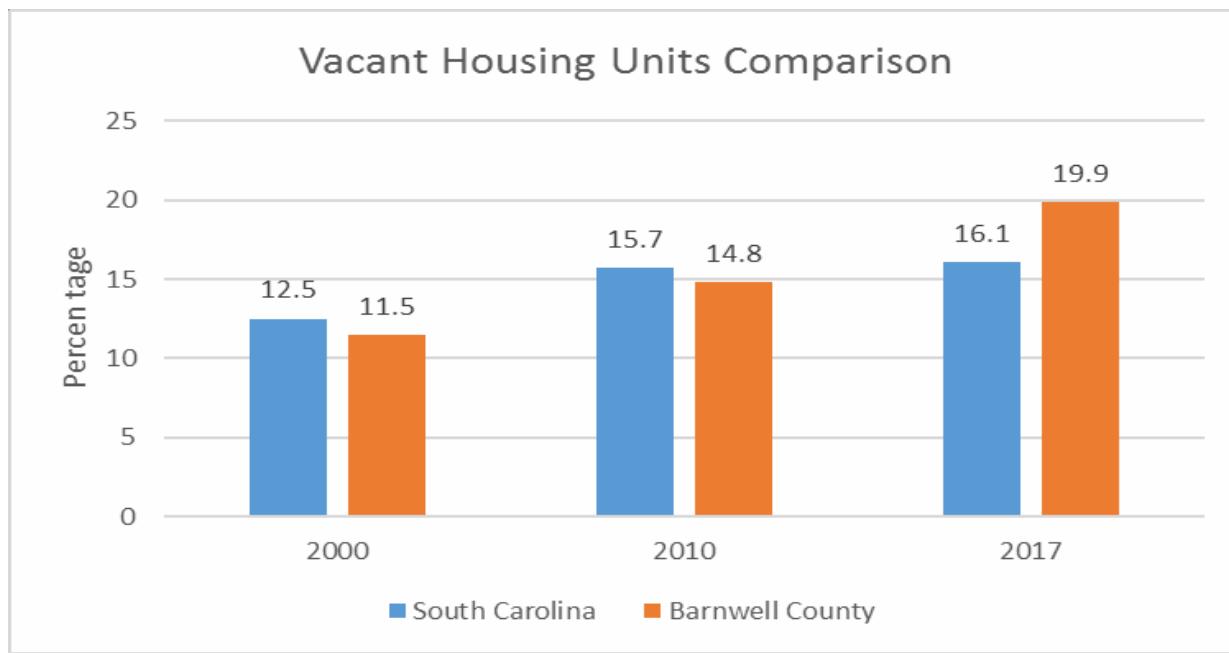
The lack of telephone service has become difficult to evaluate due in part to today's age of communication and technological advances. Telephones are now mobile rather than land-based. While the percentage of housing without telephone service has dropped, the percentage of households without some sort of telephone service is likely to be much lower. While lack of transportation continues to be a barrier, the data citing with no vehicle available are improving.

Table H-9 Facility and Service Barriers to Habitable Housing in Barnwell County

	2000	2017
Lacking Complete Plumbing Facilities	1.40%	0.40%
Lacking Complete Kitchen Facilities	0.60%	0.10%
With No Vehicle Available	13.90%	11.80%
No telephone Service	7.20%	5.6%

Source 2000 Census – 2013-2017 ACS 5-Year Estimates

The number of vacant housing units in Barnwell County increased significantly between 2000 and 2017. This is an increase of almost eight percent. In comparison, the state of South Carolina increased by only 3.6 percent during the same timeframe. This indicates that the percentage of vacant housing units in the County is more than 10% (and increasing) and is a valid concern in terms of abandonment, health and safety issues, and unsightly conditions. This increased vacancy rate could be contributed to several factors including but not limited to the decrease in population since 2000 and fall off from the housing market collapse in the mid-2000s.



Source: US Census and 2013-2017 ACS Estimates

The most common type of housing unit in the County, both owner and renter occupied, is the single detached unit, with the mobile home being the next common housing type. Eleven percent make up apartments and townhomes. The South Carolina Regional Housing Authority #3 assists Barnwell County in providing housing for low and moderate income, elderly, and disabled citizens. Public housing in the County consists of a 70-unit complex and a 36-unit complex in Williston, a 35-unit complex and a 36-unit complex in Blackville, and a 100-unit complex and a 50-unit complex in the City of Barnwell. There are six additional apartment complexes throughout the County that accommodate the elderly and disabled.

B. NEEDS AND GOALS

The adoption of minimum construction standards can raise the overall standard of living in the County and possibly increase the viability of the area. However, it should be understood that like zoning these types of policies are long-term and overall improvements will take several years.

- The primary goal of the Housing Element is for Barnwell County to improve housing opportunities in a manner that will raise standards for new developments, protect the historical value of the County's older residences, and provide safer housing for those areas in which substandard housing currently exists.
- Promote neighborhood enhancement programs such as volunteer days, park cleanups, and plantings.
- Promote fair housing activities, especially during the month of April, which is national Fair Housing Month.

C. IMPLEMENTATION STRATEGIES

The following policies are offered to help the County encourage the objectives of the primary goal:

6.1 Enforce building standards; adopt and enforce zoning and land development standards for new development.

6.2 Maintain a building inspector/zoning administrator to enforce building standards, zoning and land development standards for new development.

6.3 Support agencies and businesses that seek to eliminate housing discrimination.

6.4 Pursue funding and tax incentives for housing construction, rehabilitation, and home ownership programs for low-to-moderate income households.

6.5 Encourage development of a variety of quality housing unit types and sizes to meet the varying needs of all families and their associated income levels.

6.6 Encourage programs and projects designed to preserve and enhance the character and integrity of existing residential neighborhoods and to preserve Barnwell County's historically significant structures.

6.7 Promote the rehabilitation of historic houses and provide incentives to purchase and rehabilitate deteriorating or substandard historic buildings for adaptive reuse.

6.8 Enforce building code standards to upgrade substandard housing units and to remove through due process non-repairable structures. The County shall use condemnation proceedings only when rehabilitation is not feasible or if public safety is jeopardized.

6.9 Work toward eliminating the factors that degrade the neighborhood such as incompatible land uses, code violations, abandoned houses, and derelict cars.

6.10 Implement a policy to dispose of abandoned mobile/manufactured homes.

6.11 Work with the Lower Savannah Housing Consortium for funding opportunities, guidance and educational information for affordable housing options in the County.

Chapter Seven: Land Use Element

The Land Use Element addresses existing development patterns, problems and conflicts as well as future land use needs and controls. The Land Use Element is not intended to be a regulatory device, but rather to act as a policy tool to assist the County in the endeavor of growth management, taking into consideration the needs of property owners. An existing land use survey forms a basis for determining development problems and desirable and undesirable trends. It also serves as a guide for projecting desirable future land uses, based on community goals and objectives. This element identifies current land uses and presents needs and goals as well as implementation strategies.

A. INVENTORY

As revealed by a field survey and a Geographic Information System (GIS) analysis of the existing land use map, the predominate use of land in Barnwell County, including the Savannah River Site, is agriculture ($\approx 45\%$). The Savannah River Site, which is 90% forested, covers 34% (118,739 acres) of Barnwell County. Since SRS property is not developable land, the following land use percentages exclude the area within its boundaries. Municipalities within Barnwell County account for approximately 9.7% of the County's acreage. Because this analysis focuses on County land use, the following land use percentages will also exclude the area within the boundaries of each municipality.

Existing Land Use Categories

Barnwell County is approximately 558 square miles (357,583 acres). When excluding the Savannah River Site, Barnwell County is approximately 373 square miles (238,844 acres). Existing land use in the County includes the full range of urban uses including residential, commercial, industrial, public and semi-public uses, as well as vacant land. Efforts to promote and sustain growth in the County should concentrate on preserving and protecting its residential areas, increasing the potential for new residential development through the infill of currently vacant and/or dilapidated properties, and the promotion of commercial interests.

Agricultural and Vacant Land

There are some identified areas within the County comprised of either vacant land or land that is being used for agricultural purposes. The vacant land existing in Barnwell County consists of both platted lots as well as vacant acreage. Agricultural land use comprises the majority of the County's land use, with approximately 74.2% of its acreage. Vacant land accounts for approximately 11.8% of Barnwell County's acreage.

Residential

A majority of Barnwell County's population resides in rural areas scattered throughout the County. Residential development is dependent upon soil type and topography because these are primary factors that relate to the ability of the site to support a septic field or the limiting factors of slope and floodplains that may render a portion of the site unusable. While areas of concentrated residential development are discernable on the Existing Land Use Map, much of the rural residential development occurring in Barnwell County is widely distributed.

For this analysis, there are two types of residential land use. These land uses are Residential Manufactured Housing (RMH) and Residential Single Family (RSF). Residential land use makes up approximately 11.7% of the County's land use, with RSF being the most common type. RSF makes up approximately 8.6% of land use, while RMH makes up approximately 3.1%.

Commercial and Industrial Land Use

Commercial land use in Barnwell County is primarily distributed throughout the southern region of the County, especially around the City of Barnwell. Commercial land accounts for less than 1% of the total land use in the County. Industrial land also accounts for less than 1% of the County's total land area. It is primarily located in the southern region of the County, near Snelling.

Public and Semi-public Land Use

Existing public and semi-public land uses in the County consist of public administration buildings, churches, cemeteries, parks and recreation facilities, and other such type uses. Public land use represents approximately 1.8% of the County's acreage. There are three types of public and semi-public land uses. These land uses consist of Public Institutional (PUBI), which represents churches, schools, libraries, and cemeteries among others, Public Administration (PUBA), which represents governmental type facilities, and Public Recreation (PUBR), which represents parks, open space and recreational facilities available to citizens. Public Institutional land use represents approximately 0.6% of the County's total acreage, Public Administration land use represents approximately 0.8% of the County's total land use, and Public Recreation land use represents approximately 0.4% of the County's total land use.

Table 7.1: Barnwell County Land Use Percentages

Category	Count	Acres	%
Agriculture (AGR)	1,957	160,148.20	67.05%
Municipalities	7,180	23,049.91	9.65%
Commercial (COM)	99	597.60	0.25%
Industrial (IND)	6	476.05	0.20%
Public Administration (PUBA)	12	1,768.53	0.74%
Public Institution (PUBI)	100	1,272.63	0.53%
Public Recreation (PUBR)	9	768.21	0.32%
Residential Manufactured Housing (RMH)	1,314	6,644.07	2.78%
Residential Single Family (RSF)	2,695	18,576.89	7.78%
Vacant	2,662	25,542.48	10.69%
Total	16,034	238,844.57	100.00%

Table 7.2: Barnwell County Current Land Use Percentages (Excluding Municipalities)

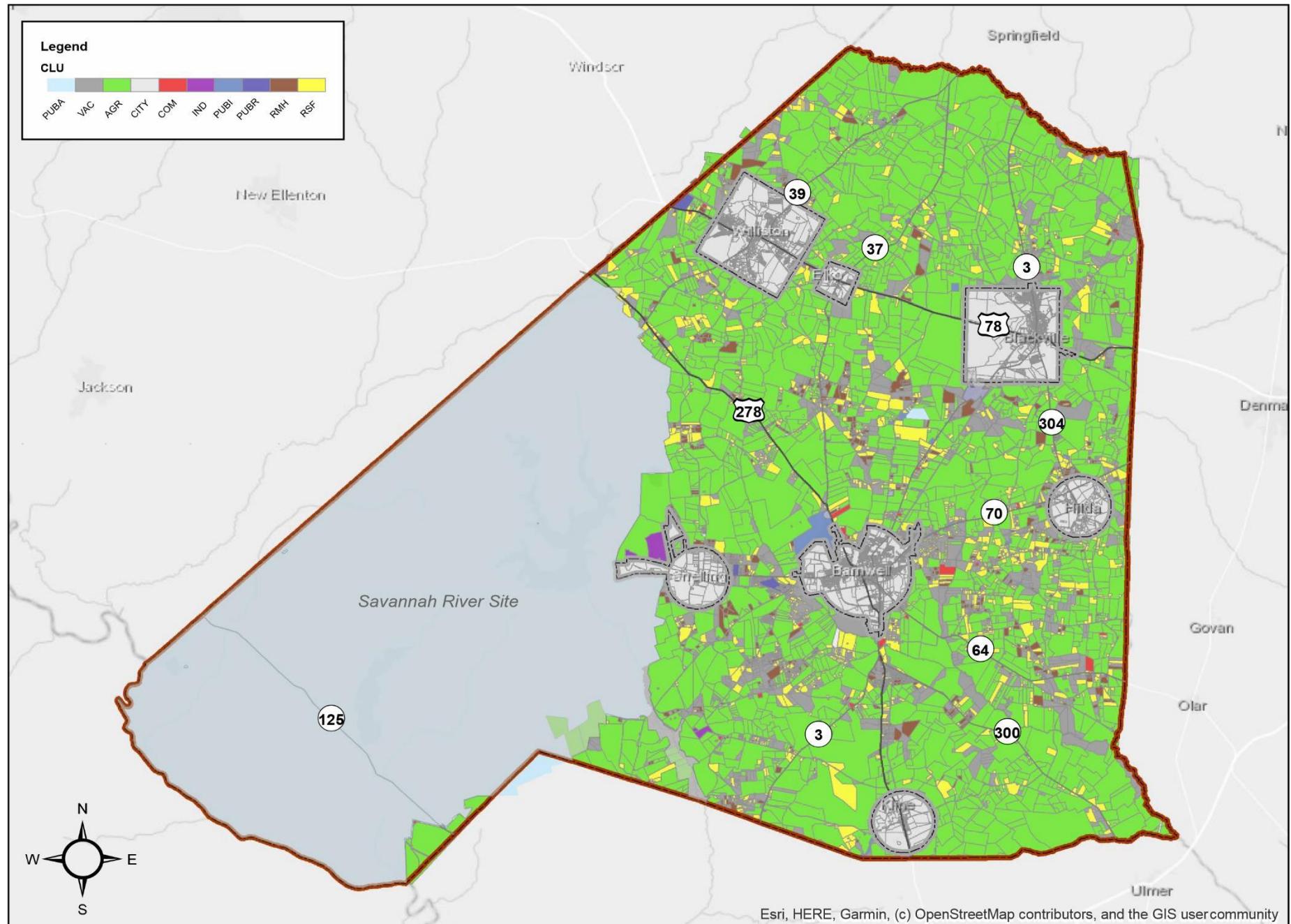
Category	Count	Acres	%
Agriculture (AGR)	1,957	160,148.20	74.21%
Commercial (COM)	99	597.60	0.28%
Industrial (IND)	6	476.05	0.22%
Public Administration (PUBA)	12	1,768.53	0.82%
Public Institution (PUBI)	100	1,272.63	0.59%
Public Recreation (PUBR)	9	768.21	0.36%
Residential Manufactured Housing (RMH)	1,314	6,644.07	3.08%
Residential Single Family (RSF)	2,695	18,576.89	8.61%
Vacant	2,662	25,542.48	11.84%
Total	8,854	215,794.66	100.00%

Table 7.1 above shows each land use category along with the count, acreage, and

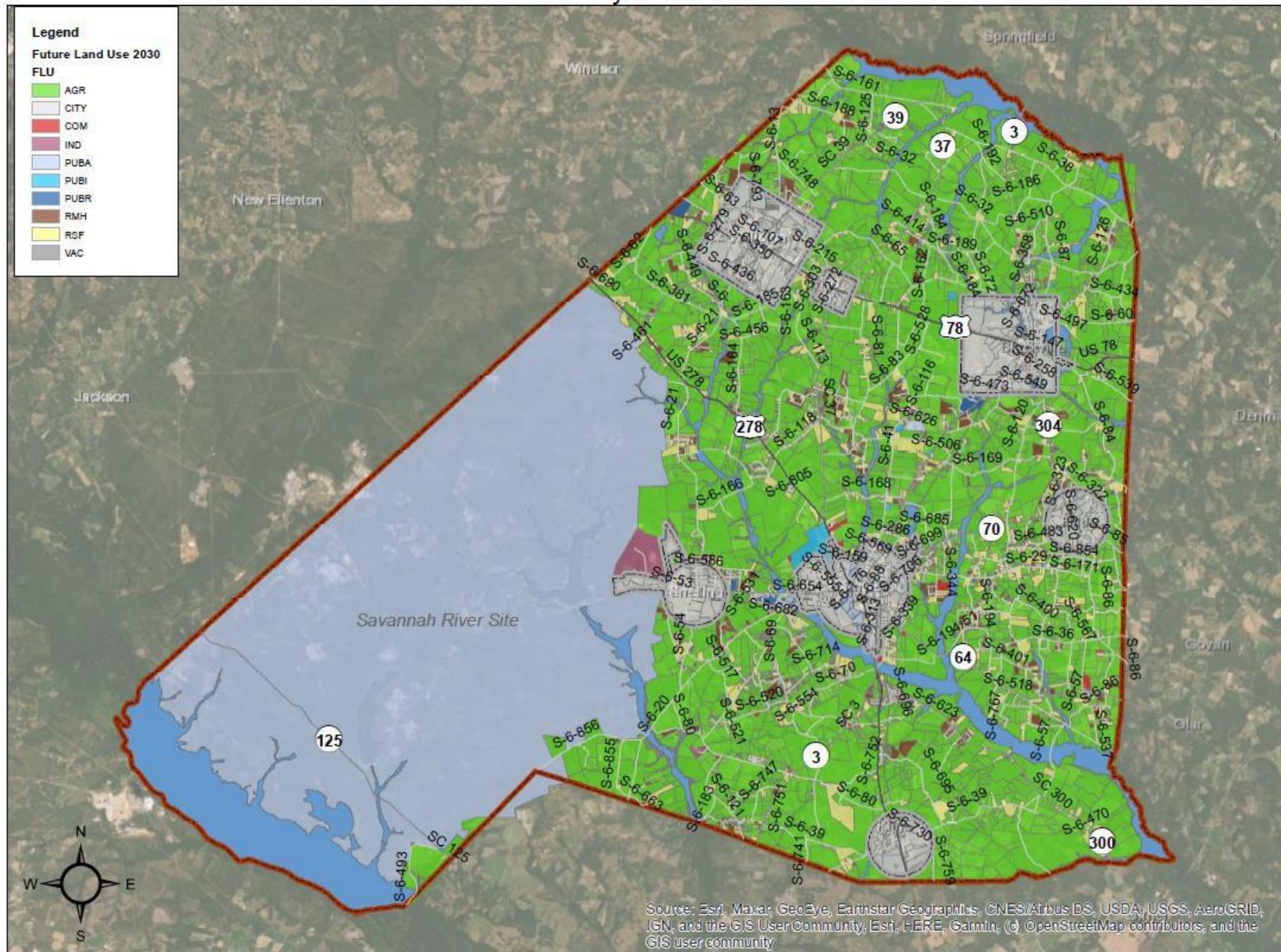
Barnwell County Comprehensive Plan 2021-2031

percentage of all land in Barnwell, including the acreage of each municipality. However, for some purposes, an analysis without the municipality acreage is necessary. Therefore, table 7.2 represents the land use data and excludes municipality acreage. The map below provides geospatial data for Barnwell County's current land uses for 2019.

Map 7.1: Barnwell County Current Land Use



Map 7.2: Barnwell County Future Land Use



Future Land Use

Barnwell County's future land use patterns are reflected on the Future Land Use Map, which provides the foundation for this Comprehensive Plan. The Future Land Use Map indicates the intended distribution and intensity of land uses over the next 10 years to provide greater land use predictability and transparency, and to create a logical framework for future zoning and development.

The Future Land Use Map, like the Current Land Use Map, uses color-coded categories to express public policy on future land uses across the County. Its land use designations have been drawn based on existing and desired development patterns, streets, parcel lines, environmental features and other logical boundaries.

Land Development Constraints

Assuming that vacant property can be purchased at a reasonable price when a market for additional land development occurs, the potential for conflicting land uses would be a most probable land development constraint. Another consideration would be development incompatible with environmental regulations that provide protection for wetlands, mature forests, historically significant areas, and areas populated by threatened or endangered species.

B. NEEDS AND GOALS

The inventory section of the Land Use Element focused on existing land use in Barnwell County. This section will project the achievements the County wishes to obtain based on the results of the previous section.

- The primary goal of the Land Use Element is to develop, implement and enforce land use and development regulations in compliance with the County's proposed Zoning Ordinance. This will assure the quality and compatibility of future development, maintain the quality of existing development, and further develop the character of the County. Other goals developed from the objectives in this plan are listed below:
 - Promote efficient land development that is compatible with adjacent land uses, is well integrated with the transportation system, and is sensitive to the natural environment.
 - Promote the balance of conservation and development.

- Support innovative operations and facilities to encourage an appropriate balance of automobile use and to encourage energy efficiency and the use of renewable resources.
- Maintain and strengthen scale and character of existing development by avoiding land uses that are overwhelming and unacceptable due to their size and scale.
- Support innovative and varied approaches to development and provide for the coexistence of urban and rural land uses.
- Support economic development efforts and encourage the entry of new industry while assuring the quality and compatibility with neighboring areas.
- Support local and regional efforts in the comprehensive planning process.
- Improve the aesthetic appeal of the developed areas.

C. IMPLEMENTATION STRATEGIES

This section of the Land Use Element offers suggested policies for implementation of desired goals and objectives.

- 7.1. Adopt the Barnwell County Comprehensive Plan. Utilize the Land Use Element of the Comprehensive Plan and the Future Land Use Map to guide land development, redevelopment, and rezoning.
- 7.2. Adopt and implement land development regulations to insure quality and compatibility of new development.
- 7.3. Develop, adopt and enforce a Zoning Ordinance for Barnwell County.
- 7.4. Develop a program for the extension of utilities and services to assist industrial and commercial development in suitable areas according to the goals of the County.
- 7.5. Seek state and federal assistance for agricultural programs designed to increase and improve agricultural and forestry production.
- 7.6. Promote compatibility and gradual transitions between areas of different land uses and enhance desirable characteristics in mixed use areas by utilizing the planning and zoning process to create opportunities for new mixed-use development.

- 7.7. Encourage industrial development to occur in existing industrial areas.
- 7.8. Periodically evaluate changes in land use in the context of regional needs and overall welfare of the community impacted by new development.
- 7.9. Assign responsibility for maintaining proper updates of Barnwell County's Comprehensive Plan and Zoning Ordinance. Establish schedule and procedural methods for review of the Comprehensive Plan and Zoning Ordinance.
- 7.10. Encourage and support techniques for the acquisition and maintenance of open space in the County.
- 7.11. Explore financing mechanisms to pay the cost of capital improvements necessitated by new development.
- 7.12. Encourage residential development that provides opportunities for a variety of income levels.
- 7.13. Encourage appropriate mixed-use development within future planned communities. For example, retirement communities would not be expected to include employment generators other than local community services.
- 7.14. Encourage appropriate buffers to mitigate conflicting land uses.
- 7.15. Encourage high quality residential, commercial, and industrial land developments.
- 7.16. Encourage new development to preserve significant natural resources, historic resources, and scenic areas.
- 7.17. Discourage development within 100-year floodplains and other areas not suitable for development.

Chapter Eight: Transportation Element

Overview

Transportation is an important *Comprehensive Plan* Element because it provides the strategies tying the movement of people and goods with the strategies of economic development and land use. Because roads are capital facilities maintained in part by the County, they are linked to the strategies for capital facility improvements and the provision of adequate public facilities. Furthermore, the general health, safety, and welfare of the citizens and visitors to Barnwell County are strongly influenced by the road network's ability to handle capacity during emergencies and other events when traffic volumes are increased.

A transportation system that offers a complete network of transportation choices, including, but not limited to, pedestrian and bicycle facilities is key to developing a sustainable community. The provision of transportation in the County should reflect the unique characteristics of the landscape and adhere to the character outlined in the development quality strategies of the *Comprehensive Plan*. Safe and adequate transportation options should maintain and enhance the rural character throughout the County.

Transportation systems are not confined solely to roads. In Barnwell County, the transportation system includes air, rail, sidewalks and bicycle paths, local and collector roads, arterial roads, and highways. The economy of the County and region is dependent upon the viability and success of the transportation system. Therefore, a key strategy in this Element is to support the system and ensure that it is balanced with land use recommendations.

Purpose and Intent

The purpose of the Transportation Element of the Comprehensive Plan is to: present information and strategies that respect the scenic beauty, community character, natural resources, and cultural heritage of Barnwell County in the provision and use of any transportation system; consider the impacts of proposed new development in the existing transportation systems during review of proposed developments; improve efficiency of the existing and planned transportation system by managing its supply and demand; encourage the provision of safe, convenient pedestrian and bicycle systems; encourage public transit options in the County; promote intermodal transportation systems such as pedestrian and bike ways; and support and improve the existing emergency and transportation planning policies.

Background and Inventory of Existing Conditions

The County's primary function in relationship to transportation is through improvements of roadways and drainage. In Barnwell County, transportation planning is a combined effort of the County, the County Transportation Committee (CTC), adjacent counties and municipalities, the South Carolina Department of Transportation (SCDOT), and the Lower Savannah Council of Governments (LSCOG), which is the rural transportation planning organization for the region as

designated by the SCDOT. Together, these agencies analyze the short and long-range transportation needs of the region and offer a public forum for transportation decision making. The LSCOG prepares a five-year plan which is included in the SCDOT Statewide Transportation Improvement Program (STIP).

South Carolina Department of Transportation

The SCDOT is responsible for transportation planning for federal and state highways. Its focus is on providing statewide regional networks of transportation. Plans from SCDOT allocate federal and state funds toward projects. The SCDOT Commission determines the funding priorities for the federal-aid program following each new federal highway bill and annual appropriations act which includes the funding level allocated to the LSCOG for rural transportation planning functions. Since the mid-1990s, the allocation between urban and rural federal-aid funds for MPOs (Metropolitan Planning Organizations) and COGs (Councils of Government), called Guideshare, has been based on study area population.

There are many ongoing planning efforts associated with the LSCOG that focuses on rural regional transportation improvements. Three primary documents encompass the regional transportation efforts:

1. The *Rural Planning Work Program* (RPWP) lists the transportation tasks to be performed by the LSCOG planning staff on an annual basis.
2. The *Long-Range Transportation Plan* (LRTP) is used as a guide for region plans to invest in the transportation system over a 25-year period. The plan includes environmental, social, and intermodal considerations. Estimated available financial resources guide the vision of the LRTP. The LRTP was adopted in 2005 and must be updated every five years to reflect changing conditions. The plan is currently being updated for 2045.
3. The *Transportation Improvement Program* (TIP) is a short-range five-year capital improvement program prioritizing projects for federal funding. The current program spans from fiscal years 2017-2022. A project must have available funding and be included in the LRTP to be included in the TIP.

Map 5.7 of the existing LSCOG Guideshare project is included in this Transportation Element of the Comprehensive Plan.

Functional Class Definitions

Interstates: Roadways that serve high-speed and high-volume regional traffic. Access to a freeway is limited to grade separated interchanges with mainline traffic signals.

Principal Arterials: Roadways that serve high-volume traffic over long distances. Access is highly controlled with a limited number of intersections, medians with infrequent openings, and no

direct parcel access. Adjacent land uses are served by other network roadways, service roads and inter-parcel connections (US 78).

Minor Arterials: Roadways that serve high-volume traffic over medium distances. Access is restricted through prescribed distances between intersections, use of medians, and no or limited direct parcel access (e.g., SC 39, SC 70, SC 3, and 64 US 278).

Collectors: Roadways that serve as links between local access facilities and arterial facilities over medium to long distances, outside of or adjacent to subdivision developments. Collectors are managed to maximize the safe operation of through-movements and to distribute traffic to local access (SC 37, portions of SC 3, 300 and 125).

Locals: Roadways that provide direct parcel access and deliver parcel-generated trips to the collector network (neighborhood streets).

The primary means of transportation in the County is the automobile, which requires a reliable road network. The County has an extensive network of County and state roads. Additionally, two interstates (I-26 (E-W) and I-95 (N-S) are within an hour drive. There are eight State highways, which are reflected in Map 8.1: SC Highway Network below.

Map 8.1: US and SC Highway Network

Traffic volumes are used to measure how much traffic or congestion there is in a particular section of the road network. Traffic volumes are measured in Average Daily Trips (ADTs). The map below reflects the traffic volumes for the major US and SC routes in Barnwell County. The ADTs are provided by SCDOT and include 2017 most recent available data. The U.S. Census Bureau, 2013-2017 American Community Survey 5-year Estimates show that 7,754 Barnwell County residents commuted to work. Of those:

- 58.2% work inside Barnwell County
- 38.5% work outside of Barnwell County

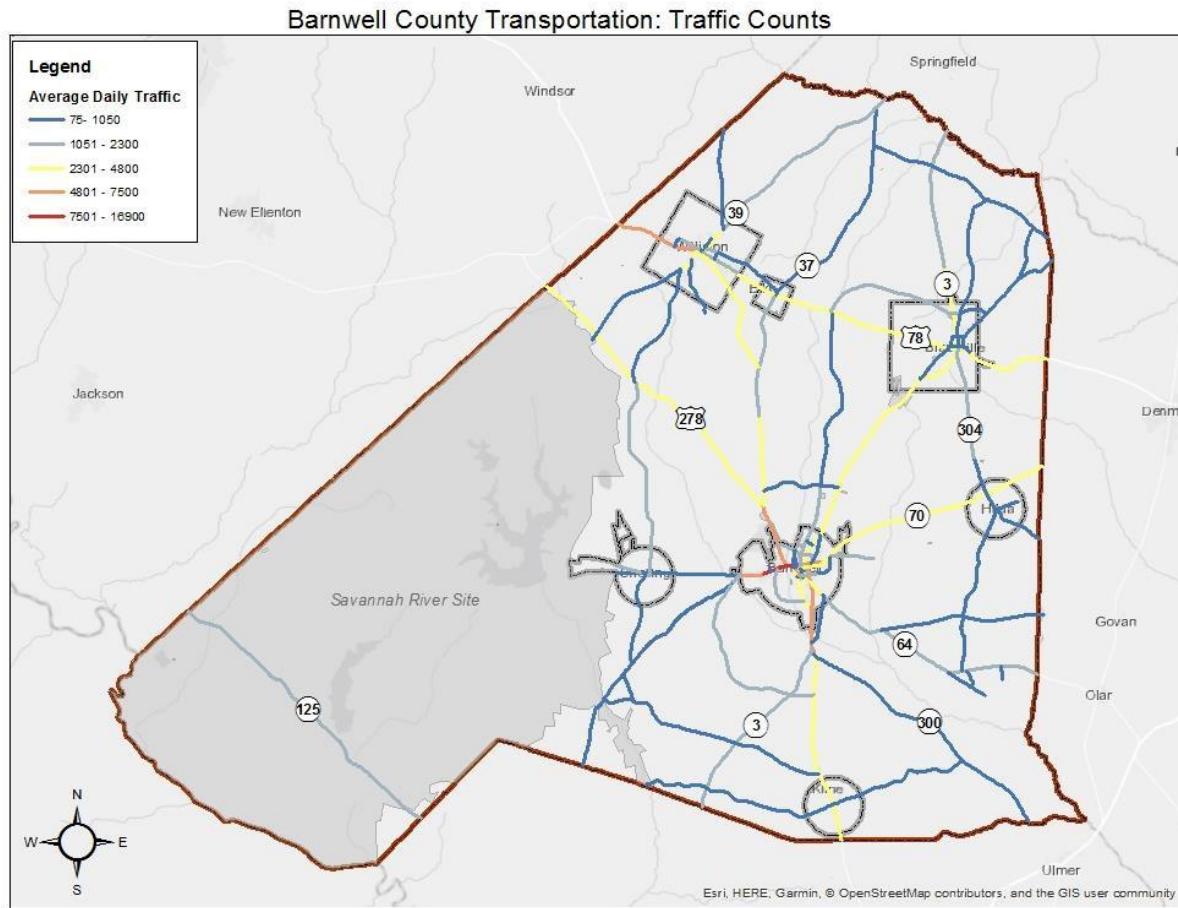


Table 8.1 MEANS OF TRANSPORTATION TO WORK

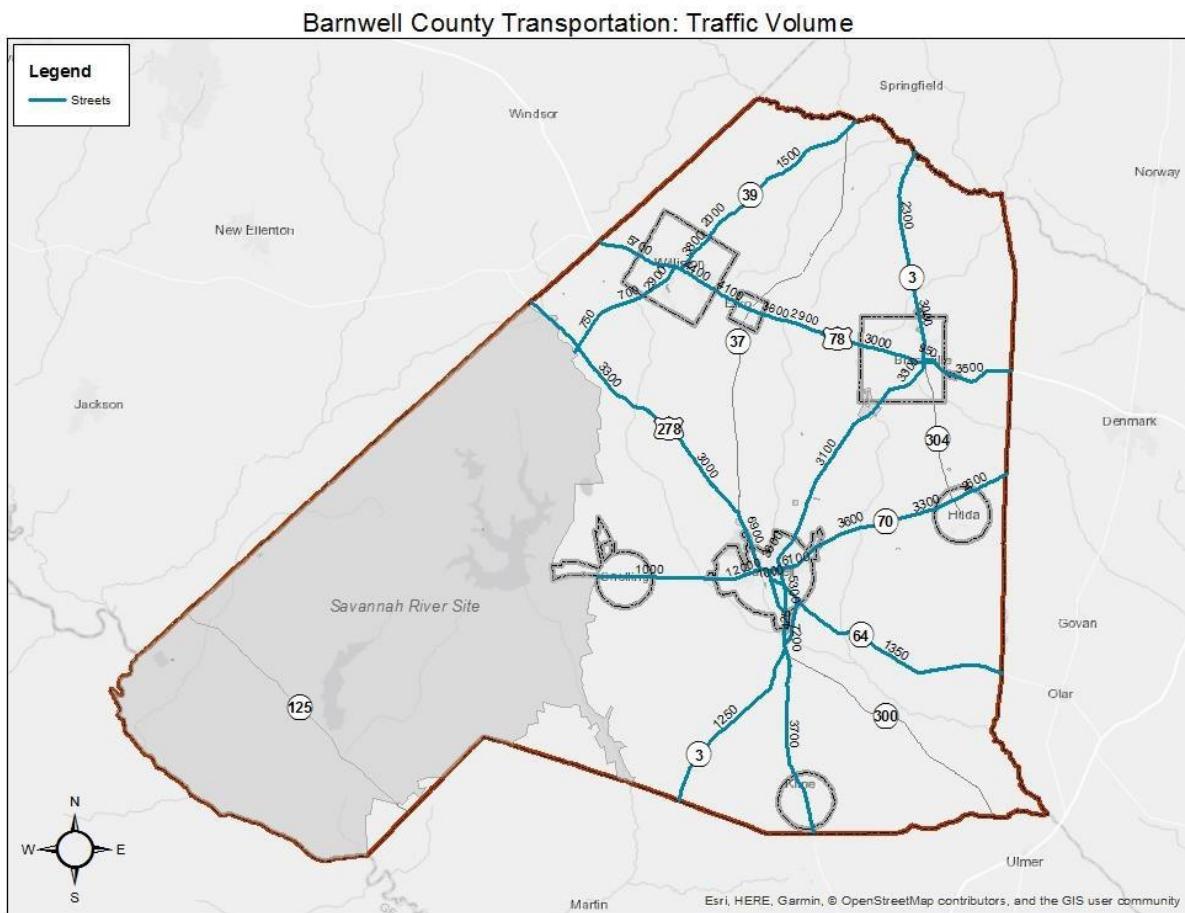
Mode of Commute	
Car, truck, or van	95.40%
Drove alone	87.00%
Carpooled	8.40%
Public transportation (excluding taxicab)	0.30%
Walked	1.50%
Bicycle	0.00%
Taxicab, motorcycle, or other means	1.10%
Worked at home	1.70%

Source: US Census Bureau 2013-2017 ACS 5 Year Estimates

Barnwell County residents heavily rely on personal automobiles to get to work and perform other necessary activities.

Land use patterns affect transportation infrastructure requirements and increase transportation costs. Therefore, the transportation and land use elements need to be coordinated.

Map 8.2: Traffic Volumes



Source: South Carolina Department of Transportation

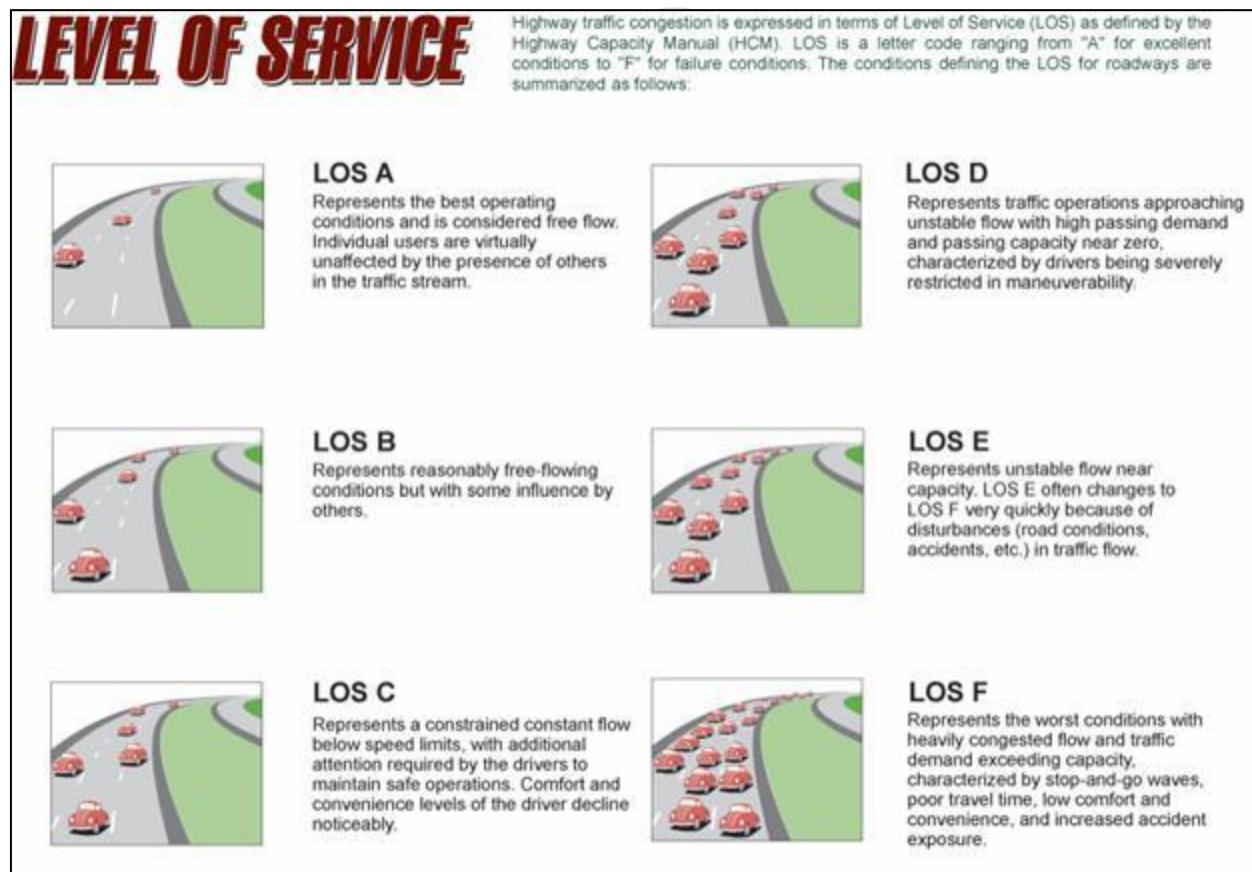
Traffic volumes are useful when planning for future growth and development, particularly to developers in the retail sector, in determining future retail locations. Traffic volumes, current and future land use patterns, as well as other factors, are a critical component to analyze the need for improvements to the existing road system and for new roads. Local population significantly influences the relationship between transportation and land use. Population growth in areas where current transportation infrastructure is inadequate adds significantly to travel times. Alleviating potential traffic woes requires identifying existing traffic problem areas, while looking at future population projections and identifying potential long-range road improvement projects.

The Level of Service (LOS) is one factor used to determine the need for road improvements. The LOS ranges from A to F depending on the particular road and traffic counts. A LOS A signifies that

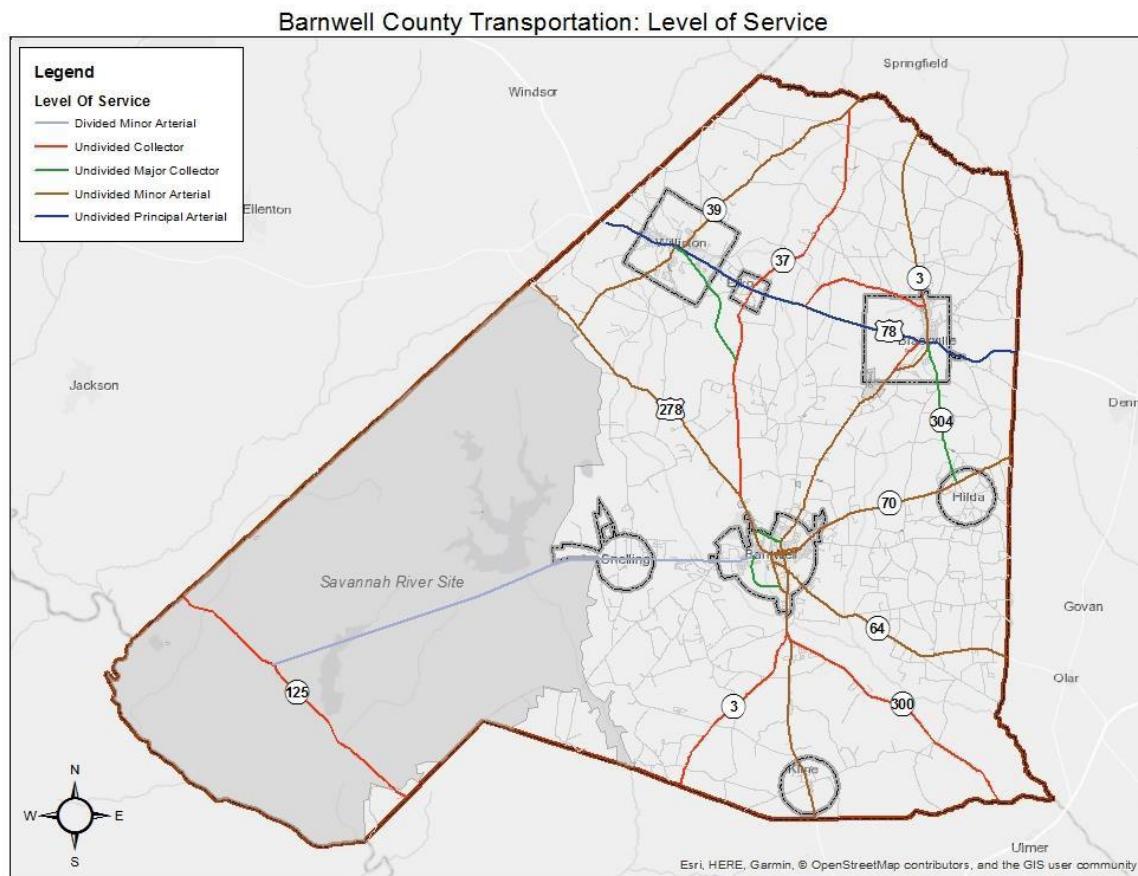
desired speed and movements are virtually unaffected by the presence of other vehicles and constrained only by the geometric features of the roadway and driver preferences. A LOS F means that traffic flows in a stop and go fashion because of capacity inadequacies. This measure is typical within densely developed urban areas along freeways. A LOS E signifies the road is operating at maximum capacity and that traffic flows at about 30 mph. When this condition occurs, there are a number of alternatives:

- widen the road to carry more traffic;
- build other new roads to better distribute traffic in the area;
- discourage increasing per capita automobile travel while encouraging the use of transit or carpooling (historically not feasible or successful in rural areas);
- promoting and facilitating bicycling and walking as a viable means of transportation; or a combination of the above.

Figure 8.1: Level of Service



Map 8.3: Level of Service (LOS):



Source: South Carolina Department of Transportation

Currently, the existing transportation network in Barnwell County appears to be functioning adequately, and seems to facilitate direct access through the municipalities and County and between the populated areas of economic activity.

The majority of the identified roadway segments identified by SCDOT (2019 Average Daily Traffic) have an estimated ADT of 750 up to 4,800 vehicles per day. The highest ADTs are SC 3 (7,200), US 278 (6,900) and US 78 (3,500). Based on the traffic volumes for the routes throughout Barnwell County, the LOS for the transportation system in the County is an A to B, which is a range from a completely free-flow condition to free flowing with some influence by others. In the municipal areas of Barnwell County, the LOS is a B to a C.

Rail Passenger Service

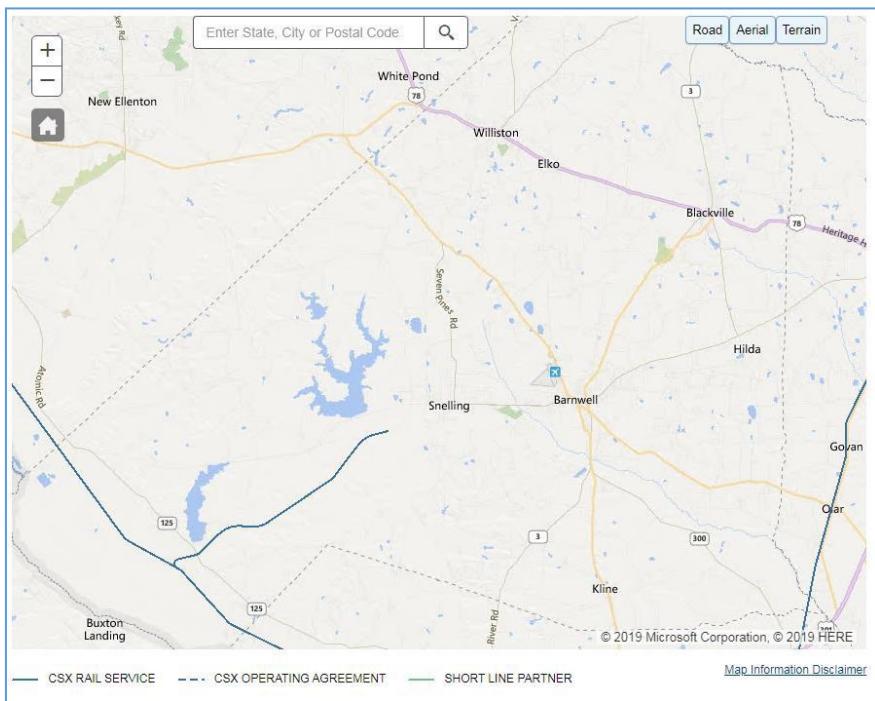
Barnwell County is not served by rail passenger service. However, Bamberg County, adjacent to Barnwell County, is unique in having passenger rail service provided by the Amtrak Silver Star Passenger trains, located in Denmark (DNK). The Denmark stop is located between Columbia, SC

and Savannah, GA as part of the route that runs along the east coast from New York to Miami, plus connectors to western destinations.

The Silver Star route connects New York/Tampa/Miami via Columbia. The train arrives in Denmark at 2:35 am going south to Savannah, GA and arrives in Denmark going north to Columbia, SC at 2:45 am.

Rail Access

Barnwell County has access to CSX rail lines. The SC Advanced Technology Park, a 1,606 acre industrial park located in the western portion of Barnwell County, has rail on-site with an additional rail spur to be constructed in 2020. The current rail has direct access to three major companies within the industrial park.



Map 8.4: CSX Rail System Airports

Commercial air service is conveniently available within one to two hours travel from Barnwell County in several directions.

Commercial air service is available at the Columbia International Airport adjacent to Interstate 26 in Columbia. The Columbia facility is located approximately 50 miles north of the City of Barnwell. Bush Field in Augusta, Georgia also

provides commercial air service and is located 55 miles west of Barnwell. Commercial air service is also available at the Charleston Airport near Interstate 26, approximately 90 miles southeast of the City of Barnwell. Additionally, the Savannah International Airport is located approximately 100 highway miles from Barnwell adjacent to Interstate 95.

The nearest air transportation facility is the Barnwell Regional Airport, a general aviation facility located on the outskirts of the City of Barnwell on Highway 278. The airport provides two operable runways, with the primary runway length of 5,119 feet. The airport also offers 100LL-A jet fuel. The airport facility offers hangar space (T-hangars and community hangars), currently on a waiting list basis.

Sea Ports

The Port of Charleston and the Port of Savannah are both reasonably close to Barnwell County. The Port of Charleston is the busiest container port along the Southeast and Gulf coasts, and ranks fourth nationwide. Access to the port includes both highway, via Interstate 26, and rail via CSX. It is located approximately 111 miles from Barnwell County. The Port of Savannah is the second largest on the East and Gulf Coasts, serving as a major distribution hub to and from a 26-state region, and is approximately 90 miles from the County.

Biking/Walking

In 2012, the Lower Savannah Council of Governments completed the *LSCOG Regional Bicycle and Pedestrian Plan*. The LSCOG Plan stated that in 2012, there were 4,731 walking trips and 54 bicycling trips annually, and these numbers were anticipated to increase in 2025 to 8,956 walking trips and 1,920 bicycle trips annually. The Plan identifies a number of improvements for paved shoulders. The existing Plans should be used as blueprints to both infrastructure and programmatic activities. These Plans can be a springboard to other economic activities.

South Carolina Multimodal Transportation Plan and Freight Network Study

Every five years the state of South Carolina updates its transportation plan. US 78 and 278 are part of the multimodal Freight Network and considered Strategic Highway Corridors by SC DOT.

Other Transportation Initiatives

The SC DOT “C” Program is a partnership between SC DOT and the 46 counties of South Carolina to fund improvements on state roads, county roads, city streets and other local transportation projects. The “C” funds are derived from 2.66 cents per gallon of the state gasoline tax. These funds are distributed to each of the 46 counties based on a three-part formula. The formula allocates one-third of the “C” funds based on the ratio of the land area of the county to the land area of the state, one third based on the ratio of the County population to the state population, and one third based on the rural road mileage in the County to the rural road mileage in the state. By law, each County is responsible for establishing a County Transportation Committee (CTC) appointed by the County's Legislative Delegation. In Barnwell County, members of the CTC are appointed by County Council. The CTC is entrusted with the authority to select and approve projects to be funded utilizing “C” funds.

The Barnwell County “C” Program apportionment of funds for Fiscal Year 2019-2020 was \$1,050,900. This amount is based on the following:

County	Area		Population		Rural Roads		Apportionment	
Barnwell	Sq. Mi	Percent	Number	Percent	Miles	Percent	Percent	Amount
	549	1.82	22,621	0.49%	624	.96%	1.09%	1,050,900

Source: SCDOT

The total amount of "C" funds for the State of SC was \$96.5M.

Table 8.1: Barnwell County C-Fund Projects (Active and Scheduled as of 3-2020)

Active Projects

Location	ACTIVITY/PHASE	ESTIMATE \$
Jewel Ln (.26), Roy & Holms St (.25)	DESIGN	\$65,000.00
Sanders Ln, & White Oak (.74)	CONSTRUCTION	\$55,000.00
Lunar Lane (.85 mi)	CONSTRUCTION	\$925,000.00
(2019-11-005) Saddlebrook rocking	CONSTRUCTION	\$58,000.00
Dicks Street	PAVING	\$40,000.00

Location	ACTIVITY/PHASE	ESTIMATE \$
OLD JACK ROAD	DESIGN	\$45,000.00
WOODCREST SUBDIVISION	DESIGN	\$45,000.00
SANDY HOOK ROAD	DESIGN	\$55,000.00
BALIN, THOROUGHBRED, & TRUCKER	DESIGN	\$75,000.00
WILLOW CREEK CIRCLE	DESIGN	\$55,000.00

Public Transportation

Generations Unlimited (GU) runs the Barnwell County public transit system. For fiscal years 2018-2019 and 2019-2020, GU runs, on average, 235 trips per day. Roughly 93% of the trips are re-occurring, with the largest two areas being for work and medical. The third largest segment is for the senior center and group dining (for congregate senior meals through the Council on Aging). GU also provides a share ride service for trips originating in Barnwell County. Trips for share ride include, but are not limited to, business, childcare, medical, shopping and veteran needs.

Complete Streets

For over 50 years, the prime consideration in road design and construction has been the automobile. This has led to a road system that is unsafe, if not unusable, for walking and cycling and is automobile dependent for transportation to work, food, shops, and any other destination.

Retail and commercial development is often accessible only by automobile along roads that have the heaviest traffic. Potential shoppers are left with fewer choices but to fill up the tank and drive. Complete Streets are a different way to think about designing, building, and using our streets. Instead of a single user – the automobile – Complete Streets are designed to accommodate all users: pedestrians, bicyclists, transit, and the automobile. Complete Streets make for livable, walkable, healthy communities.

The Complete Streets concept is applicable in both rural and urban communities and balances safety and convenience for everyone who uses the roads. This concept is especially important to keep (or recapture) in smaller downtown retail centers and to help connect downtown and schools with the surrounding residential communities.

Safe Routes to School

South Carolina is the only state in which the State Department of Education owns, operates, and maintains the fleet of school buses that services all South Carolina public schools. This bus service is not required to provide pick-up and drop-off within a 1.5-mile radius of schools. For students living within this 1.5 radius who walk and bike to school with non-existent or inadequate facilities such as sidewalks and bike lanes, getting to school can be unsafe.

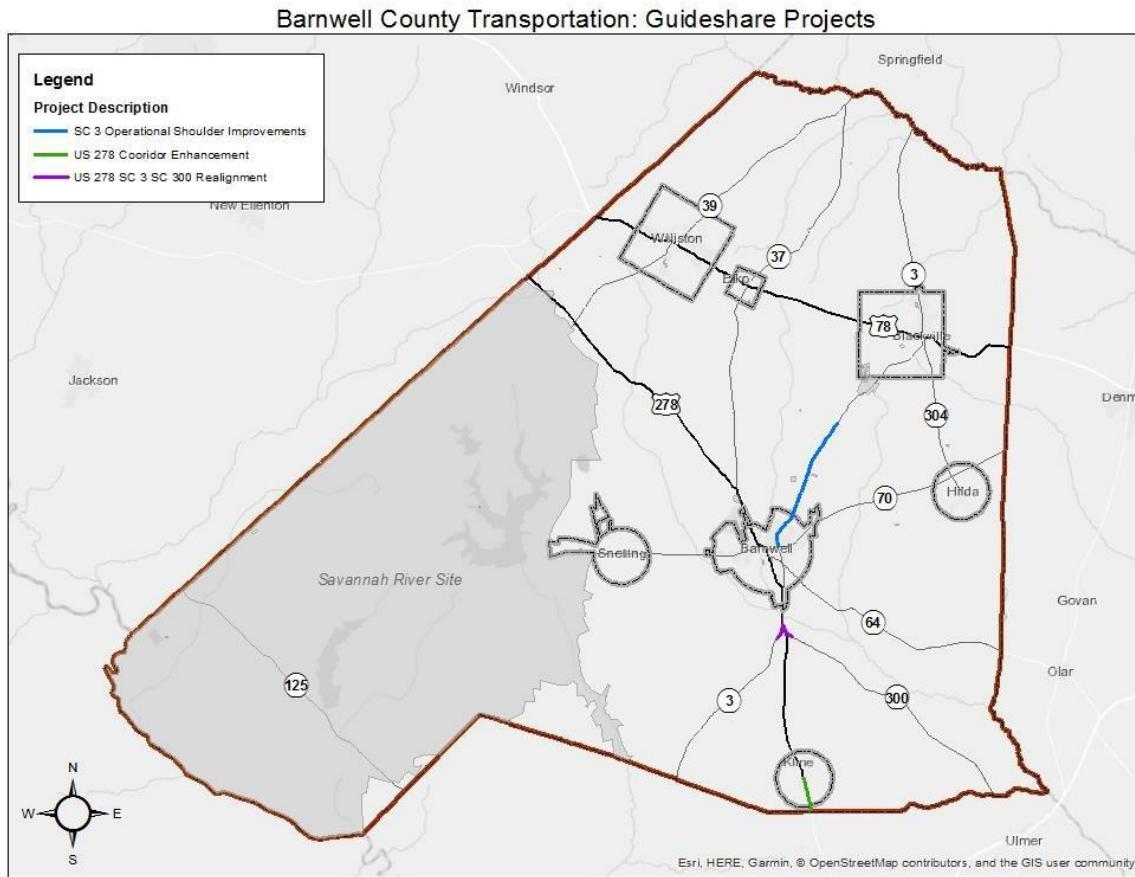
Safe Routes to School (SRTS) is a growing movement across the US that brings together parents, schools, and community leaders to encourage students, including those with disabilities, to walk and bike to school. SRTS activities and resources focus on improving walking and biking conditions around schools while building healthy habits and safety skills.

Individualized plans are developed for each participating school. Each of the three school districts in Barnwell County have received funding for projects: Barnwell 45--Barnwell Elementary and Barnwell Primary; Barnwell 29--Williston-Elko Middle School and Kelly Edwards Elementary; and Barnwell 19--SRTS for Macedonia Elementary.

LSCOG Guideshare Projects

Included below is the remaining programmed Guideshare projects for Barnwell County and associated map for the 2017-2022 STIP years.

Map 8.5: Guideshare Project



Intersection Improvement Projects:

- US 278/SC 3/SC 300 Intersection – This project includes the realignment of SC 3 and SC 300 at their intersection with US 278 to improve the currently skewed intersection in Barnwell County.

Corridor Improvement

- US 278 (Barnwell Road/Kings Avenue) Corridor Enhancement – This project will include the addition of 4 foot paved shoulders using resurfacing, restoration and rehabilitation; extending from S-519 (Jennings Road) near the Town of Allendale Town limits to S-39 (Boiling Springs Road/Big Fork Road) in the Town of Kline.

Shoulder Improvement

- SC 3 (Marlboro Avenue) Operational/Shoulder Improvements – This project will include improving the SC-3 (Marlboro Avenue) corridor from SC-70 (Main Street) to S-506 South of S-169 (Ashleigh Road) in the City of Barnwell.

Transportation Element Goal

A transportation system that is coordinated with land use patterns and community character and which promotes alternative ways to move people and goods with an acceptable level of service that supports economic development and maintains a high quality of life.

Transportation Element Needs

Transportation Element needs include, but are not limited to, the following:

- Tying transportation with the strategies of housing, economic development, and land use;
- Encouraging transportation options such as public transit and pedestrian and bicycle systems;
- Improving the efficiency of the existing and planned transportation system, with particular attention to connectivity and emergency planning; and
- Ensuring that transportation planning is a coordinated effort of all jurisdictions.

Transportation Element Strategies and Time Frames

The County should undertake the following action strategies to support the transportation Goal and the Vision for this Plan. These implementation strategies will be reviewed a minimum of every five years and updated every 10 years from the date of adoption of this Plan.

- 8.1.** Continue open communication efforts between the SCDOT District Maintenance Office and County Administration. Request notification from the District Office when improvements are planned (e.g. tree trimming, repaving, etc.).
- 8.2.** Ensure that all factions and representations are working with the County Transportation Committee to communicate transportation needs.
- 8.3** Support and promote the development of public transportation services.
- 8.4** Take an integrated land use/transportation planning approach when new developments locate in Barnwell County, and design so as to not create pressure on the roadway system.
- 8.5** Support a multimodal approach when planning for improvements to the transportation system.
- 8.6** Support transportation funding programs and grants to assist with leveraging funds.

Chapter Nine: Priority Investment Element

A. OVERVIEW

In 2007, the South Carolina Priority Investment Act (PIA) was signed into law by Governor Sanford. This Act is an amendment to the South Carolina Local Government Comprehensive Planning Enabling Act of 1994 and adds two new elements to the comprehensive planning process. The two new elements added in this act include the Transportation Element and the Priority Investment Element. The Act seeks to improve the planning and coordination of public infrastructure decisions in a community.

The Priority Investment Element gets local governments to analyze available public funding for public infrastructure and facilities, such as water, sewer, roads, and schools, over the next 10 years and to recommend projects for expenditures of those funds for needed public infrastructure. The PIA Act also requires coordination with relevant jurisdictions and agencies, such as counties, municipalities, public service districts, school districts, public and private utilities, transportation agencies, and other public entities that are affected by or have planning authority over the public project. According to the Act, coordination means “written notification by the local planning commission or its staff to adjacent and relevant jurisdictions and agencies of the proposed projects and the opportunity for adjacent and relevant jurisdictions and agencies to provide comment to the planning commission or its staff concerning the proposed projects.”

Process

To prepare the list of public infrastructure projects, County administration should develop a prioritized list of capital improvements based on needs identified in the separate elements, as well as those including facilities needed to maintain existing service levels or repair/replace obsolete or worn out facilities. Projects on the capital improvements list should include facilities identified in other plans such as a Central Business Master Plan and other infrastructure needs assessments.

Capital Improvements Plan

The result of this process would be a Capital Improvements Plan (CIP) with an outlook of 10 years. Projects should be listed by department, projected construction date, facility cost estimates, and where appropriate, annual operating expenses. Projected revenues should also be shown. The projects in the 10-year CIP should reflect the best efforts of the County to identify and prioritize future needs. The project listing in the CIP is intended for use as a tool to guide growth and does not necessarily mean the projects are approved or funded at the policy-making level. Further analysis, prioritization, and review of the projects may be necessary prior to the actual implementation of the capital projects.

Future analysis, prioritization and review should be completed with comments and/or participation from relevant agencies and jurisdictions, to include at a minimum Barnwell County, neighboring municipalities within Barnwell County, public service districts, school districts, public and private utilities, transportation agencies, Lower Savannah COG, and other public and private entities that may be affected by or are adjacent to proposed projects. In this process, for example, the volunteer fire departments may coordinate with each other, emergency management agencies, and other applicable entities prior to the upgrade of firefighting vehicles or equipment. It is important that regional coordination efforts be documented and any comments received be considered in the planning process. It is important to identify the appropriate coordinator for each project listed in the CIP.

Likely federal, state, and local funds available for public infrastructure and facilities during the next 10 years include, but are not limited to:

- General Obligation Bonds
- The County Transportation “C” funds Program
- The Capital Sales Penny Tax
- Community Development Block Grants, PARD, SCDOT, USDA, etc.
- The HOME Program
- The Rural Guideshare Program
- EDA/Workforce Investment Funds

The strategies and implementation measures contained in this element are intended to work in concert with and support current County initiatives to insure that these efforts continue in the future. Summaries of the focuses of the other Plan elements are listed below.

1. Population Element

Identifies demographic trends to help guide policy decisions that will meet the needs of current and future residents.

2. Economic Development Element

Includes strategies to balance business and employment growth with population growth.

3. Natural Resources Element and Cultural Resources Element

Focuses on strategies to preserve, protect, and enhance the County's significant natural and cultural resources that contribute to the quality of life of its residents.

4. Housing Element

Includes strategies to ensure a sufficient supply of diverse, safe, and affordable housing types.

5. Transportation Element

Identifies the locations and types of improvements planned for the County's transportation systems for the next 20 years. The Transportation Element also references the *Transportation Improvement Plan (TIP)* completed by the LSCOG, and the County Transportation Committee (CTC) that coordinates the recommended transportation improvements with the underlying land use recommendations carried forward in this Plan and provides recommendations for allocation of state and federal funding.

6. Community Facilities Element

Focuses on strategies to balance land use planning with the availability of public facilities and services.

7. Land Use Element

Contains specific recommendations on the location, type, form, and intensity of growth that should occur in the County. The Land Use Element contains specific guidelines for each of these areas, which reference the provision of services appropriate to maintain and enhance their respective character. The character of the Rural Area has been identified in this Plan as a unique and valuable resource in the County. There are limited public facilities and services in the Rural Area. The Plan includes guidelines for preservation of agricultural and rural landscapes, and makes it clear that roads and services should be of a high quality while maintaining and enhancing the rural character. Strategies and implementation measures for the Rural Area focus on improvement of quality without significant expansion of capacity that may encourage more suburban style growth.

There are several identified projects as part of the 2016 Capital Project Sales Tax Ordinance (2016 Penny Sales Tax). Those projects are listed in the following table.

Table 9.1: 2016 Capital Project Sales Tax

Projects	Allotted Funding
Transfer station renovation	\$200,000
Courthouse repairs	\$3,600,000
Water/sewer system improvements (sewage line to SCAT Park/water line from Barnwell to Hwy 78 down Reynolds Road)	\$2,000,000
Purchase/repair SCA Building	\$1,000,000
Repair/replace landfill scale house	\$125,000

Source: Barnwell County Ordinance 2016-8-333-O

B. NEEDS AND GOALS

The primary goal for this element should be to sustain an infrastructure system that enhances economic development, promotes regionalism, and improves quality of life. Improvement of system delivery and performance should be a high priority while preparing a Capital Improvements Plan.

Throughout the process of identifying projects and funding sources, County administration should consider the benefits of regional planning and seek to attain these three important goals: clearly defined and established authority, meaningful participation, and ongoing funding sources. Without these elements, efficient delivery of local and regional services will be difficult to obtain.

C. IMPLEMENTATION STRATEGIES

The Priority Investment Element prioritizes the actions for the County over the next five to 10 years. The strategies contained in this Element together with the implementation initiatives that follow, are intended to lay the groundwork to meet the goals of this Plan. All of the strategies contain elements of the implementation initiatives. Those initiatives are explained in detail following the strategies listed below. Some of the strategies come from other elements of this Plan to be carried forward through implementation actions described in this element. Other strategies are aimed at interjurisdictional coordination and cooperation, which is another implementation action the County will take to meet the goals of this *Comprehensive Plan*.

Additional tools the County can use to carry out the strategies of this Plan are included in the implementation toolbox, which is located in the appendix to the *Comprehensive Plan*. These implementation strategies will be reviewed a minimum of every five years and updated every 10 years from the date of adoption of this Plan.

- 9.1. Continue to coordinate with municipalities in the County to achieve consensus on regional issues and strategies to address regional issues in an effort to ensure long-term consistency and compatibility between County and municipal plans.
- 9.2. Continue regional coordination with neighboring counties to plan concurrently and compatibly, with particular attention to the regional implications of decisions regarding transportation system improvements, solid waste disposal, detention centers, and the extension of public sewer and water services, etc.
- 9.3. Advocate for coordinated public facilities and services necessary to support the regional land use pattern adopted in Barnwell County.
- 9.4. Continue coordinating with SCDOT and LSCOG to enhance transportation planning in Barnwell County, focused upon the following:
 - Identification of roadway improvements in future updates of the *Five-Year Transportation Improvement Plan* (TIP) that support the development pattern in the Barnwell County *Comprehensive Plan*;
 - Long-term planning for state highways that supports the goals of the Barnwell County *Comprehensive Plan*; and
 - Design of state highways that supports the goals of the Barnwell County *Comprehensive Plan*.
- 9.5. Continue Emergency Planning coordination with surrounding counties, LSCOG and the South Carolina Emergency Management Division (SC EMD) to adequately plan for natural and man-made disasters.
- 9.6. Encourage long-term public-private partnerships in land use, housing, economic development, and infrastructure planning.

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility

□ = Additional responsibility

		Responsibility								TIME FRAME
		County Council	Planning Commission	Civic Organizations	Service Providers	Brd. of Zoning Appeals	Community Volunteers	Economic Dev. Orgs	Committee	
1. Population Element										
1.1	Monitor population growth trends and demographic shifts as indicators of population change and use this information to guide future updates to the Comprehensive Plan.	□	✓							Ongoing
1.2	Place a high priority on projects and programs that generate and attract employment, improvements, or investments that are consistent with the policies of the Barnwell County Comprehensive Plan.	✓	□							Ongoing
1.3	Expand upon the number of beautification projects such as litter pick-up, Adopt-A-Highway, signs, and lighting. These projects will improve the aesthetics of the County, increase community pride, and attract more visitors and development to Barnwell County, which will in turn focus on the County as a whole rather than as individual municipalities.	✓				□		□		Ongoing
1.4	Support a diverse population through land development regulations which accommodate a range of housing, transportation, and employment opportunities.	✓	□							Ongoing
1.5	Improve efforts to increase the availability of rental housing and provide incentives to developers to build a wider variety of housing types such as retirement and assisted living housing.	✓								Ongoing
1.6	Identify new mechanisms (such as social media outlets and innovative community workshops) to engage the county's younger population in the community planning process.	✓	□					□		Ongoing
1.7	Review and support existing and new social service programs for seniors, especially in the lower economic levels. Services can include increased transit, activities and medical services through the Council on Aging or other organizations.	✓	□							Ongoing
1.8	Recruit and retain young families who want the rural lifestyle with appropriate employment opportunities and community activities. Also, investigate opportunities to attract more family friendly businesses to the County, such as a bowling alley and a public pool.	□							✓	Short Term
1.9	Explore opportunities to attract and retain families with young children, such as youth athletic and outdoor recreation programs. Work to identify possible funding sources, such as grants, to create new programs.	□							✓	Short Term

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility

□ = Additional responsibility

		Responsibility							TIME FRAME
		County Council	Planning Commission	Civic Organizations	Service Providers	Brd. of Zoning Appeals	Community Volunteers	Economic Dev. Orgs. Committee	
2. Economic Element									
2.1	Place a high priority on projects that will generate and attract private sector employment, improvements, or investments that are consistent with the policies of the Comprehensive Plan.	✓					□		Ongoing
2.2	Strive to attract and retain clean, safe, and high-paying industries to the area.	✓	□						Ongoing
2.3	Promote further development of the existing industrial areas in and near the industrial parks.	✓					□		Mid – Long Term
2.4	Establish and support a close working relationship with relevant economic developers and area education providers.	✓	□						Ongoing
2.5	Continue to support and encourage infrastructure improvements (such as road improvements) that will improve the quality of life and attract new businesses and industries.	✓	□						Ongoing
2.6	Support existing businesses and provide all feasible incentives for new businesses.	✓	□						Ongoing
2.7	Market the County's recently established Opportunity Zone, which comprises the area to the south and west of the City of Barnwell, to private investors to facilitate the development of workforce, affordable housing, new infrastructure, and start-up businesses.	□					✓		Short – Mid Term
2.8	Continue to promote and support the improvement of local schools that will encourage a well-trained and diversified workforce, particularly in the higher technology fields.	✓							Ongoing
2.9	Collaborate with and develop strategies for existing industries to ensure that Barnwell County's labor force is being adequately educated and trained to participate effectively in the local workforce, including a focus on the re-education of dislocated workers.	✓							Ongoing
2.10	Encourage the development of service-based businesses to entice Barnwell County's existing workforce to reside in the County instead of commuting.	✓							Ongoing
2.11	Continue to promote and support public transit programs and explore possibilities of expanding the transit network in the County.	✓		□					Ongoing
2.12	Encourage the operation of small, independent businesses.	✓	□			□			Ongoing
2.13	Encourage renovation and re-use of vacant industrial and commercial properties.	✓		□					Short-Mid Term
2.14	Foster public-private sector partnerships to provide community services.			✓	□				Short Term
2.15	Support the development of a technologically advanced communications infrastructure (fiber optic and other broadband lines) to attract telecommunication and other technologically dependent businesses to the area.	✓	□						Ongoing
2.16	Encourage tourism and professional visitors by promoting County assets and supporting facilities to accommodate visitors. Consider promoting the Barnwell County quality of life though national marketing campaigns.	□					✓		Short Term

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility □ = Additional responsibility

		Responsibility								TIME FRAME
		County Council	Planning Commission	Civic Organizations	Service Providers	Brd. of Zoning Appeals	Community Volunteers	Economic Dev. Orgs	Committee	
3. Natural Resources Element										
3.1	Develop and implement the Barnwell County Comprehensive Plan and Zoning Ordinance to ensure that land use compatibility is maintained and preserved.	✓	□							Short Term
3.2	Develop and adopt land development regulations that will insure that natural resource preservation is included in all future development within the County.	✓	□							Short Term
3.3	Promote and support the beautification of public areas in the towns and the development of beautification sub-committees in the towns and outlying communities to promote beautification projects.	□							✓	Short Term
3.4	Work with South Carolina Department of Transportation to develop a non-attainment area program consistent with the National Ambient Air Quality Standards and the state's air quality plans.	✓	□							Short Term
3.5	Maintain appropriate setbacks from natural water resources to preserve the integrity of riparian corridors and utilize grading and sedimentation controls to reduce impacts from development outside corridors.	✓	□							Ongoing
3.6	Work with the Barnwell Conservation District and the Department of Natural Resources to delineate hydric land areas and insure that land use compatibility with these areas is maintained.	✓	□							Ongoing
3.7	Collect and maintain countywide GIS maps and data for soil and slope conditions, natural water bodies, wetlands, hydric areas, flood plains, prime agriculture and timberland, aquifers, endangered and threatened wildlife habitat, and significant scenic areas. Utilize this information to assist local government, property owners, and developers in identifying resources and limitations.		✓							Ongoing
3.8	Strive to attract and retain environmentally clean industries to the area.	✓						□		Ongoing
3.9	Work with the Department of Natural Resources and SC DHEC to minimize non-point source runoff and enforcement of sediment and erosion control regulations for land disturbing activities.	✓	□							Ongoing
3.10	Evaluate the economic benefits of hunting and fishing as well as the impact these activities have on natural resources in the County.	□						✓		Short Term
3.11	Encourage and promote the use of the County's many sources of greenspace in order to increase community health and life satisfaction.	□						✓		Ongoing

Barnwell County Comprehensive Plan Implementation Strategies and Timeline

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility

= Additional responsibility

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility □ = Additional responsibility

		Responsibility								TIME FRAME
		County Council	Planning Commission	Civic Organizations	Service Providers	Brd. of Zoning Appeals	Community Volunteers	Economic Dev. Orgs	Committee	
5. Community Facilities Element										
5.1	Continue to support efforts for the expansion or consolidation of water and sewer service to underserved areas and continue studying the feasibility of a regional water system.	✓	□							Mid – Long Term
5.2	Support efforts for sustainability and resiliency with regards to all infrastructure projects to include but not limited to water and wastewater systems, stormwater systems, and telecommunications.	✓	□							Long Term
5.3	Support efforts for renewable energy initiatives and opportunities as is appropriate.	✓	□							Short – Mid Term
5.4	Continue to maintain solid waste convenience sites in the County and routinely evaluate the need for additional sites.	✓	□							Ongoing
5.5	Initiate efforts to establish a countywide recreational system to provide recreational services and facilities throughout the County.	✓	□					□		Mid Term
5.6	Maintain the integration of countywide fire services through equipment exchange efforts and fire commission coordination.	✓	□							Ongoing
5.7	Support efforts for expanding senior services and care programs and facilities.	✓	□							Short-Mid Term
5.8	Promote and provide incentives for the development of quality private retirement facilities, such as assisted care facilities, to encourage the growth of retirement-aged population in the county.	✓	□							Short-Mid Term
5.9	Support efforts to improve the accessibility for broadband in the County.	✓			□					Long Term

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility □ = Additional responsibility

		Responsibility							TIME FRAME	
		County Council	Planning Commission	Civic Organizations	Service Providers	Brd. of Zoning Appeals	Community Volunteers	Economic Dev. Orgs	Committee	
6. Housing Element										
6.1	Enforce building standards; adopt and enforce zoning and land development standards for new development.	✓	□			□				Ongoing
6.2	Maintain a building inspector/zoning administrator to enforce building standards, zoning and land development standards for new development.	□	✓							Short Term
6.3	Support agencies and businesses that seek to eliminate housing discrimination.	✓	□							Ongoing
6.4	Pursue funding and tax incentives for housing construction, rehabilitation, and home ownership programs for low-to-moderate income households.	✓	□							Ongoing
6.5	Encourage development of a variety of quality housing unit types and sizes to meet the varying needs of all families and their associated income levels.	✓	□							Ongoing
6.6	Encourage programs and projects designed to preserve and enhance the character and integrity of existing residential neighborhoods and to preserve Barnwell County's historically significant structures.	✓	□					□		Ongoing
6.7	Promote the rehabilitation of historic houses and provide incentives to purchase and rehabilitate deteriorating or substandard historic buildings for adaptive reuse.	✓	□					□		Ongoing
6.8	Enforce building code standards to upgrade substandard housing units and to remove through due process non-repairable structures. The County shall use condemnation proceedings only when rehabilitation is not feasible or if public safety is jeopardized.	✓	□							Ongoing
6.9	Work toward eliminating the factors that degrade the neighborhood such as incompatible land uses, code violations, abandoned houses, and derelict cars.	✓	□							Ongoing
6.10	Implement a policy to dispose of abandoned mobile/manufactured homes.	✓								
6.11	Work with the Lower Savannah Housing Consortium for funding opportunities, guidance and educational information for affordable housing options in the County.	✓	□	□						Ongoing

Barnwell County Comprehensive Plan Implementation Strategies and Timeline

✓ = Primary responsibility □ = Additional responsibility

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

7.15	Encourage high quality residential, commercial, and industrial land developments.	<input type="checkbox"/>	<input checked="" type="checkbox"/>						Ongoing
7.16	Encourage new development to preserve significant natural resources, historic resources, and scenic areas.	<input type="checkbox"/>	<input checked="" type="checkbox"/>						Ongoing
7.17	Discourage development within 100-year floodplains and other areas not suitable for development.	<input type="checkbox"/>	<input checked="" type="checkbox"/>						Ongoing

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility

= Additional responsibility

Barnwell County Comprehensive Plan

Implementation Strategies and Timeline

✓ = Primary responsibility

□ = Additional responsibility

Responsibility								TIME FRAME
	County Council	Planning Commission	Civic Organizations	Service Providers	Brd. of Zoning Appeals	Community Volunteers	Economic Dev. Orgs. Committee	
9. Priority Investment Element								
9.1	Continue to coordinate with municipalities in the County to achieve consensus on regional issues and strategies to address regional issues in an effort to insure long-term consistency and compatibility between County and municipal plans.	✓						Ongoing
9.2	Continue regional coordination with neighboring counties to plan concurrently and compatibly, with particular attention to the regional implications of decisions regarding transportation system improvements, solid waste disposal, detention centers, and the extension of public sewer and water services, etc.	✓						Ongoing
9.3	Advocate for coordinated public facilities and services necessary to support the regional land use pattern adopted in Barnwell County.	✓						Short Term
9.4	Continue coordinating with SCDOT and LSCOG to enhance transportation planning in Barnwell County, focused upon the following: •Identification of roadway improvements in future updates of the Five-Year Transportation Improvement Plan (TIP) that support the development pattern in the Barnwell County Comprehensive Plan; •Long-term planning for state highways that supports the goals of the Barnwell County Comprehensive Plan; and •Design of state highways that supports the goals of the Barnwell County Comprehensive Plan.	✓	□	□				Ongoing
9.5	Continue Emergency Planning coordination with surrounding counties, LSCOG and the South Carolina Emergency Management Division (SC EMD) to adequately plan for natural and man-made disasters.	✓						Ongoing
9.6	Encourage long-term public-private partnerships in land use, housing, economic development, and infrastructure planning.	✓	□					Ongoing