

# BRUNSWICK TODAY

*Comprehensive Plan | Section 2*



# Trends



With a median age well above that of the state and US, we are getting older.



Technology is enabling us to work remotely and shop online, and it is changing how we travel.



Storms are more severe and more frequent.



Our housing preferences are changing. We seek smaller homes with less maintenance. We can work and learn anywhere, so we are choosing locations that offer a better quality of life.

# Overview

## Existing Conditions, Emerging Trends, Issues & Opportunities

Since it was established in 1764, Brunswick County has evolved into a quiet, yet growing, coastal community. In that time, many things have stayed the same. As its people have diversified and its population grown, the county has retained a strong sense of community identity. As its primary industry changed from farming to tourism, it retained its agrarian rural roots and remains a top producer of fruits and vegetables. While accommodating modern development and supporting infrastructure, the county has effectively celebrated its heritage through the preservation of some of its historic sites, neighborhoods, and buildings.

Described as one of the gems of the Southeast, Brunswick County has become the fastest growing county in the state according to 2022 census data and is increasingly a choice for business investment due to factors such as its proximity to key transportation resources. It is well known as a premier tourist destination with its stunning beaches, and, increasingly, as a preferred location for second homes and retirement living.

An understanding of the characteristics that define the county as well as the emerging trends that will present both issues and opportunities over the next few decades will help the community define the vision for the future, determine the appropriate steps forward, and manage change effectively. As a snapshot of existing conditions in 2020, this

section highlights the major features of the county, including its people, places, economy, and the natural and built environment. It also notes specific challenges the community is facing in connection with anticipated growth over the next few decades, including the following:

- Mitigating impacts of development on the environment and cultural assets
- Minimizing the devastating effects of natural disasters on properties and infrastructure
- Managing infrastructure as growth puts pressure on existing systems
- Reducing traffic congestion building on the highways, including scenic roadways
- Enhancing connectivity in terms of mobility as well as social, economic, and environmental networks
- Maintaining affordability as real estate values (and housing prices) soar
- Growing the economy and the tax base
- Keeping and creating jobs in the county, ensuring employment opportunities and higher wages for residents
- Retaining the community's identity and sense of place
- Improving the health, well-being, and quality of life of the residents, especially older people aging in the county



# The People

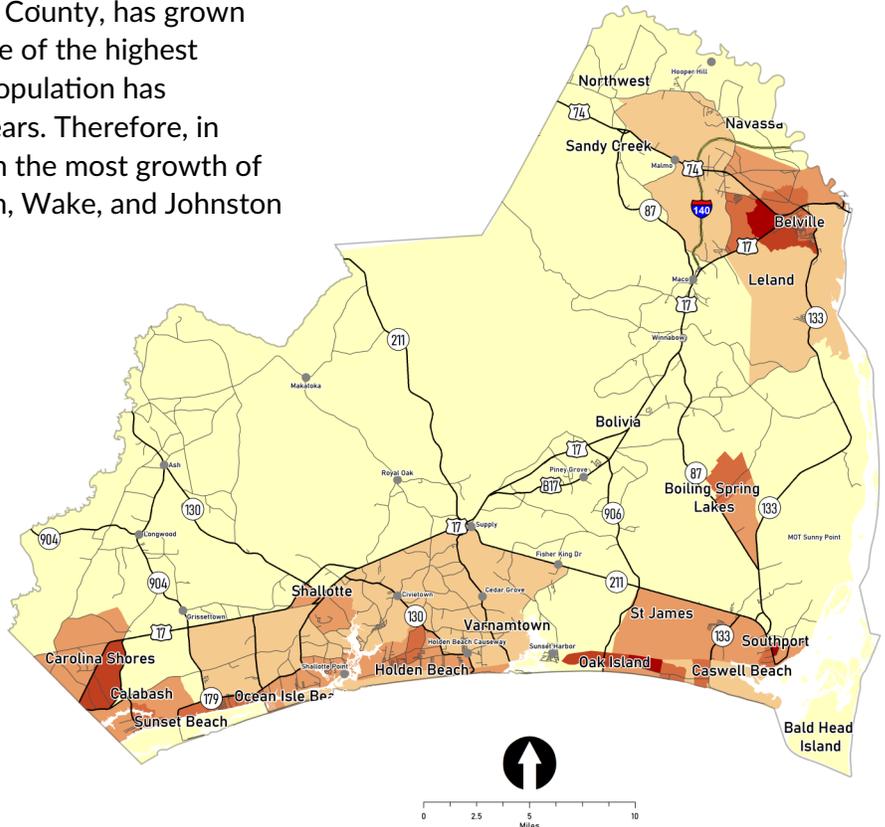
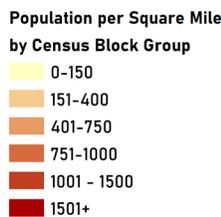
The people of Brunswick County have been described by some as those who want to savor the good things about life at a slow and carefree pace. This county is home to farmers, commercial fishermen, young families, golf enthusiasts, and retirees who value the area's coastal beauty and sense of community. Over time, the population has become more diverse, especially as many people from all over the US have chosen to relocate to this part of North Carolina for retirement.

# Population Growth

Since 2010, the population of the entire Coastal Region of North Carolina, which includes Brunswick County, has grown steadily. Brunswick County has seen some of the highest growth rates in the state. The County's population has increased by 94% over the past twenty years. Therefore, in terms of a percentage increase, it has seen the most growth of any county in the state, followed by Union, Wake, and Johnston Counties.

## Figure 2.1 Population Density Map (2020)

This map depicts the population density (persons per square mile) in each census block in Brunswick County. The highest concentrations of residents are in the coastal communities. Towns in the northern part of the county, which are within commuting distance of Wilmington, have also attracted a lot of growth.



Sources: U.S.Census and Noell Consulting Group

## Population Growth - Estimates and Projections (2000-2040)

73,717  
(2000)

**85%**

Percentage of the population has increased over the past 20 years, which is the greatest percentage of any County in the state!

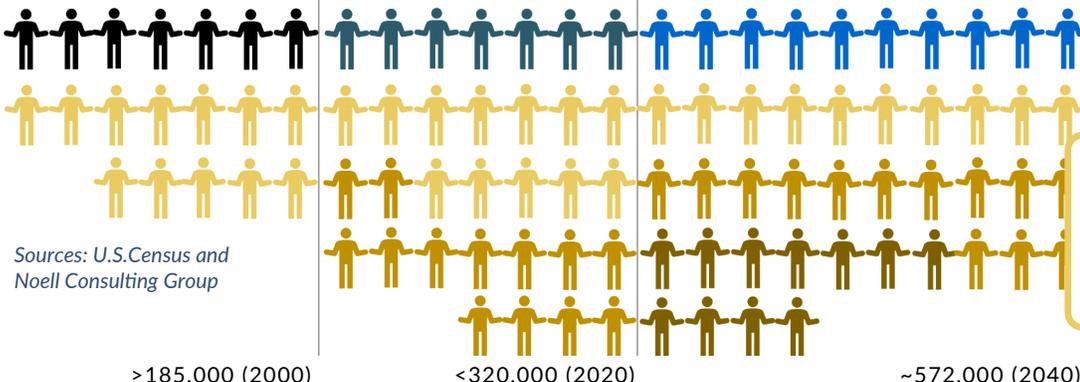
136,693  
(2020)

**72%**

Percentage the County is expected to grow over the next 20 years. Only Johnston and Union counties are expected to grow faster.

235,171  
(2040)

Not only is Brunswick County the fastest growing county in the state, it's ranked fourth in growth nationwide.



Sources: U.S.Census and Noell Consulting Group

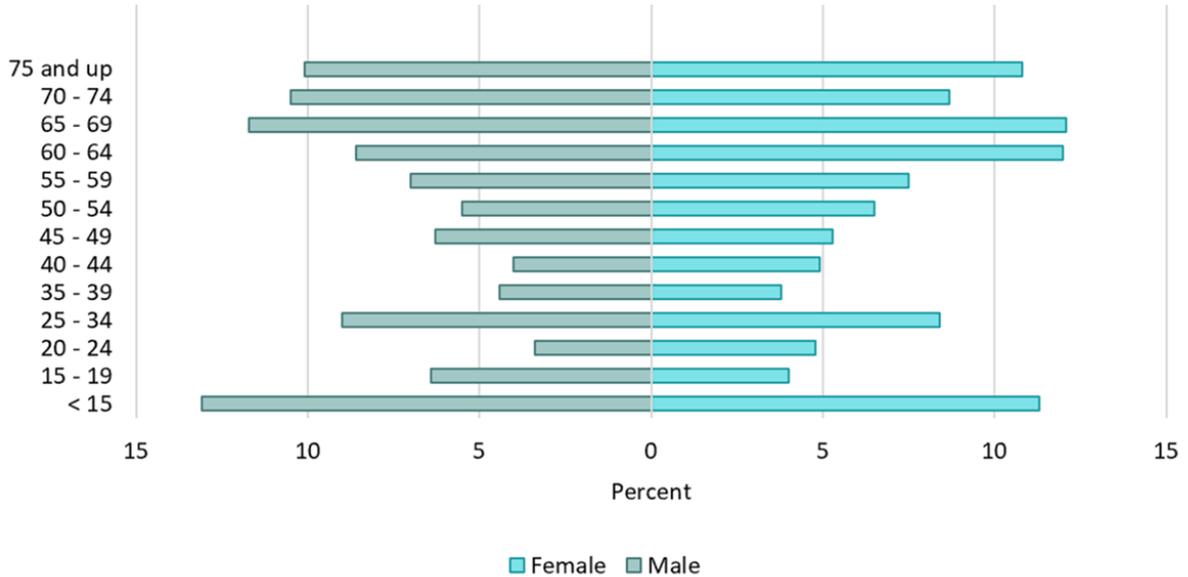
>185,000 (2000)

<320,000 (2020)

~572,000 (2040)

# Demographics

## Population by Age Group (2018)

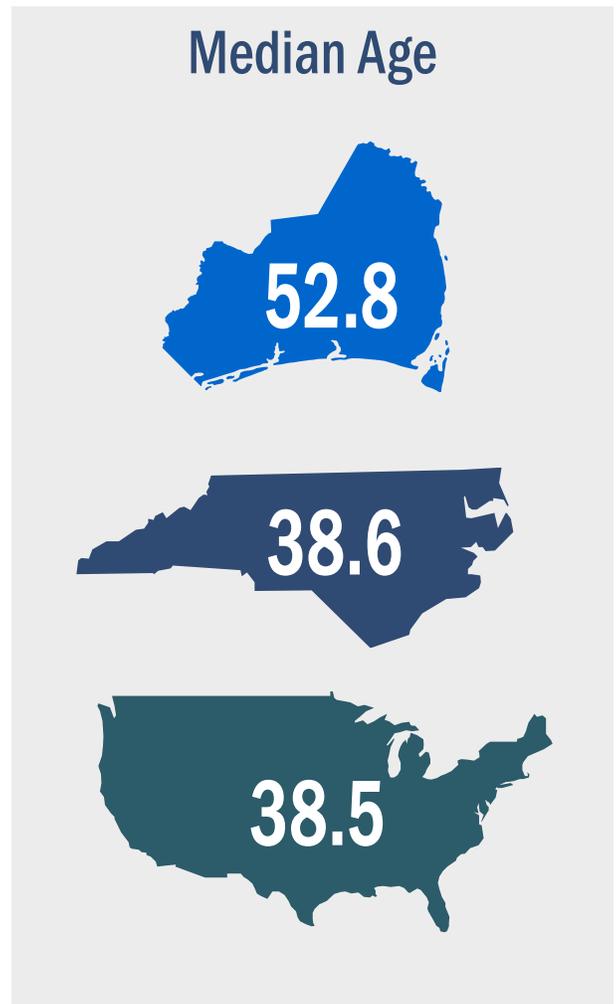


The population of Brunswick County is getting older. Between 2010 and 2019, Brunswick County saw a 60% increase in the number of people ages 65 and up. While this is due in part to some long-time residents aging, the real reason for the growth in the upper age groups is newer residents. Older people relocating here for retirement are driving the median age up to above 50, which is much higher than the state and the US. Other characteristics of the population are changing with the in-migration of people. Educational attainment is higher now and household income, which was roughly equal to that of the state in 2012, has been steadily rising.



Percentage of the County's population over 25 that had earned a bachelor's degree or higher (2019).

Sources: U.S.Census, 2019





# The Place

One thing many of these residents have in common regardless of their length of residency is their love of the coastal community. While Brunswick County is best known for its white sandy beaches and island destinations, it also boasts acres of picturesque farmlands and irreplaceable natural resources in the Green Swamp. In fact, it is an ideal location for filming of television shows and movies thanks to its natural beauty and proximity to Wilmington's thriving film industry. Situated between two major metropolitan areas, Wilmington, North Carolina and Myrtle Beach, South Carolina, Brunswick County offers access to a wide variety of amenities while retaining its quiet, quaint identity. The historic towns and cultural sites, recreational opportunities both natural and manmade, and agreeable weather all add up to an enviable standard of living for county residents.

# Historic & Cultural Resources

Brunswick County boasts 15 buildings on the National Register of Historic Places, and over 40 state-recognized Historic Preservation Sites (see map below for their locations). As the map shows, these resources are spread across the county, with concentrations in historic town centers including Southport, Shallotte, and Leland. These resources not only ground the community in a strong sense of shared history and wonder, they also inspire visitors and residents alike to explore the county and engage with its history and culture.

## DID YOU KNOW...?

Historic sites in Brunswick County predate the United States itself. Fort Anderson was constructed on the site of a pre-Revolutionary port on the Cape Fear River. Referred to as "Brunswick Town," it was destroyed by the British in 1776.

- National Register of Historic Places Buildings
- North Carolina Historic Preservation Sites
- National Register of Historic Places Districts
- State Historic Districts

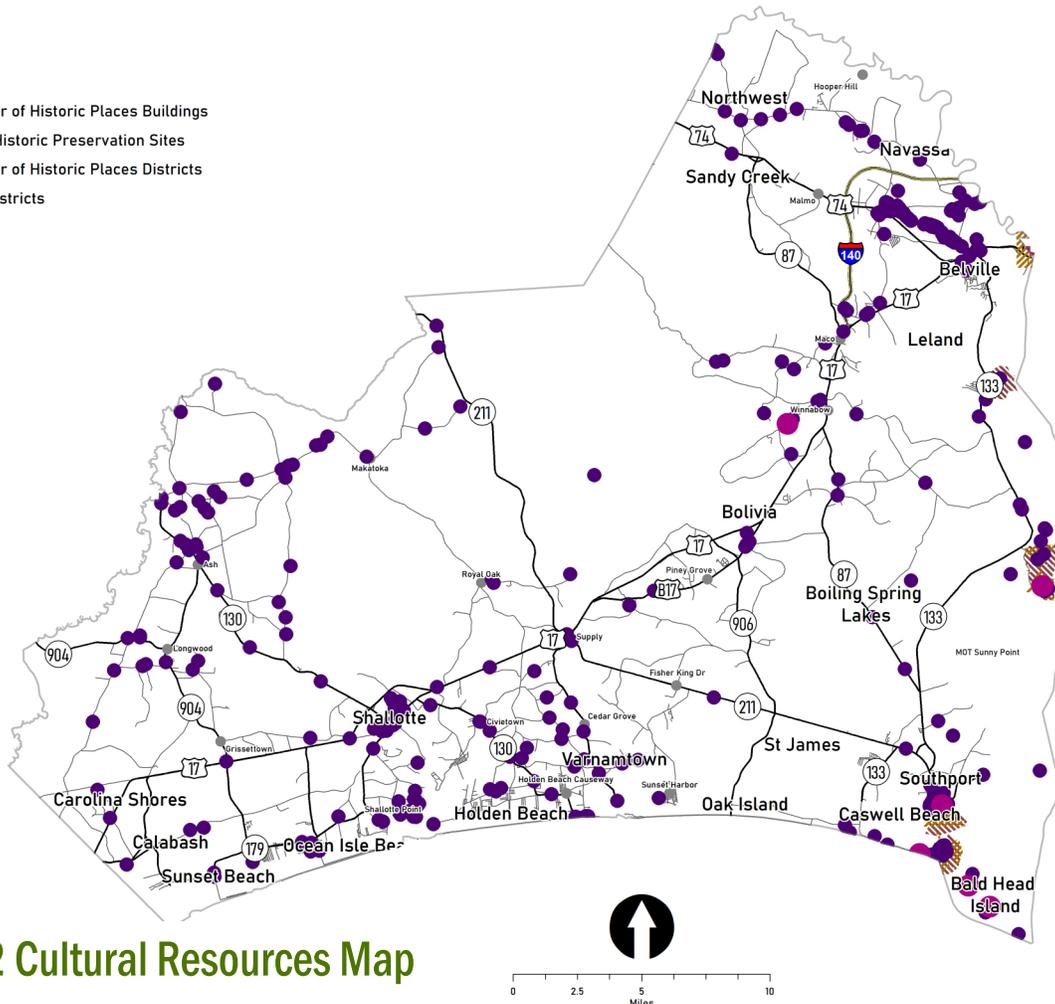


Figure 2.2 Cultural Resources Map

Source: Brunswick County GIS, 2020



**Above:** The Old Brunswick County Jail is one of fifteen structures in Brunswick County on the National Register of Historic Places.



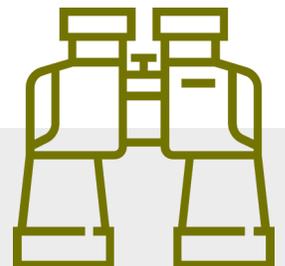
**Right:** Orton Plantation is one of the oldest structures in Brunswick County, and has been home to lawyers, physicians, military leaders, and a Colonial governor.



**Above:** The ruins of St. Philip's Church in the Brunswick Town Historic District. Before its destruction at the hands of British soldiers in the Revolutionary War, it was known as one of the finest religious structures in the state.



**Left:** The Town of Calabash, in southern Brunswick County just over the border from South Carolina, is known across the world for its fried seafood, and lends its name to a host of "Calabash-style" restaurants across the Southeast.



**3**

The number of miles of "Brunswick Town Road," a designated NCDOT Scenic Byway.

# Natural Resources

## Areas of Environmental Concern

The quality of life for residents and visitors of Brunswick County is directly linked to the area's natural systems. One of the primary purposes of a CAMA Land Use Plan is to establish an integrated program capable of rational and coordinated management of coastal resources to ensure their protection over the long term. Identification and recognition of Areas of Environmental Concern (AECs) is critical to the plan. The AECs have environmental, social, economic, and aesthetic value, and are categorized as follows:

### Estuarine and Ocean System

This system is the coast's broad network of brackish sounds, marshes, and surrounding shores.

### Ocean Hazard Areas

Oceanfront beaches and the dunes that protect public buildings and the environment behind them by absorbing the force of wind and waves.

### Public Water Supplies

Fresh drinking water, which is vital to human health and the economy and vulnerable to sea-level rise and saltwater intrusion.

### Natural and Cultural Resources

Resources that are important to the entire state due to their natural and cultural heritage value.

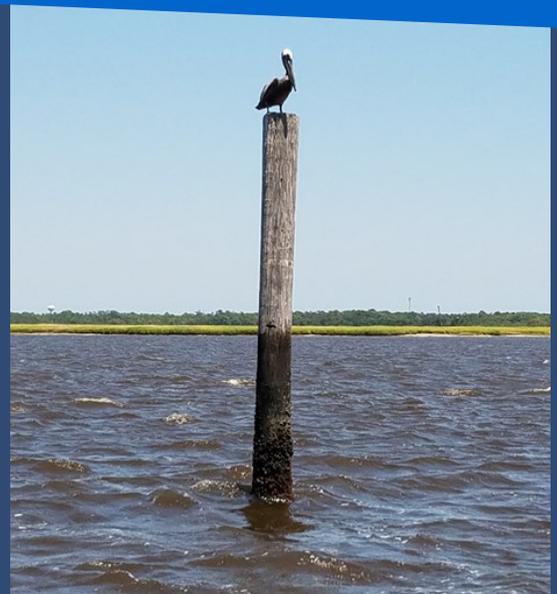
Within Brunswick  
County, there are  
approximately

**282,728**

acres of wetlands.

## Estuarine and Ocean System Components

- **Coastal Wetlands.** Valued most for the natural habitats they provide for various plant and animal species, storm impact mitigation, and natural water filtration.
- **Estuarine Waters.** Important habitat for a diverse range of shellfish, birds, and other forms of marine wildlife.
- **Coastal Shorelines.** The non-ocean shoreline along the estuarine waters, estuaries, sounds, bays, fresh and brackish waters.
- **Public Trust Areas.** Public trust areas include coastal waters and the submerged tidal lands below the normal highwater line (NHW).



Coastal Shorelines

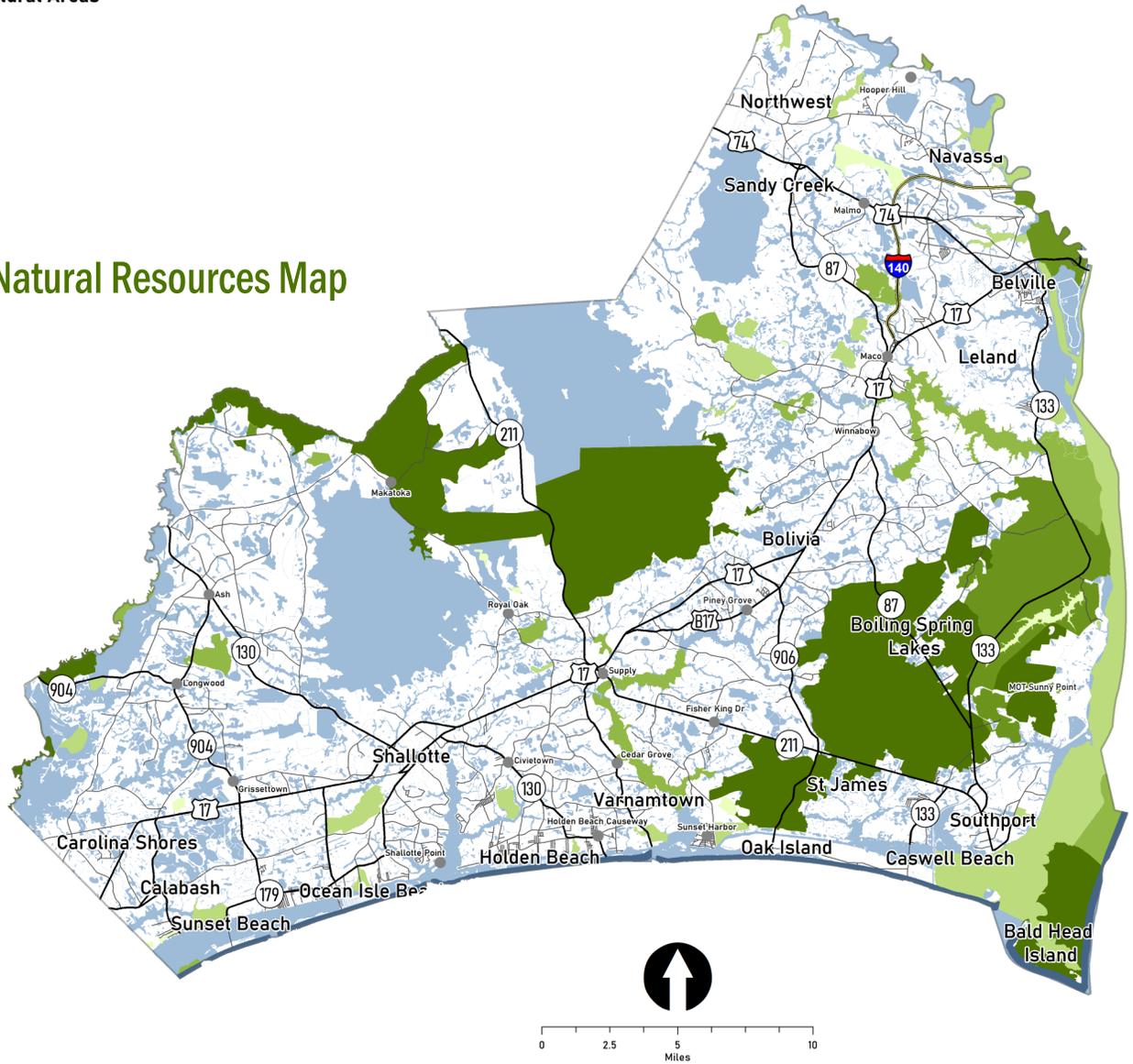
Coastal Area Management Act Setback Areas

**Natural Heritage Natural Areas**

**Conservation Rank**

- C1 (Exceptional)
- C2 (Very High)
- C3 (High)
- C4 (Moderate)
- C5 (General)
- Wetlands

**Figure 2.3 Natural Resources Map**



Source: Brunswick County GIS, 2020



Estuarine Waters



Coastal Wetlands

# Development Pattern

## DID YOU KNOW...?

During the Gulf War operations of Desert Shield, Desert Sortie, and Desert Storm, MOTSU handled over 90% of the resupply munitions for US forces.

## Protected Lands

Several parcels throughout the county are owned and maintained by Federal, State, and local governments and other public entities. Many are shown on the Protected Areas Map, which also displays lands that are privately held and protected through conservation easements and other mechanisms. Among them are several large parcels that, in addition to protecting natural habitats, are used for special purposes. Combined, the scale of these protected areas have and will continue to have an impact on the development pattern in the county.

## Military Installation

Established in 1955, Military Ocean Terminal Sunny Point (MOTSU) is situated in the southeastern part of Brunswick County on nearly 9,000 acres and is responsible for storing and shipping Department of Defense ammunition. This site has been used as a strategic military shipping hub since 1725, and

it remains the largest military terminal in the world and the key ammunition shipping point on the Atlantic coast for United States' military. MOTSU maintains 16+ miles of rail lines and an interchange yard in Leland, facilitating a seamless transfer of munitions between trucks, rails, and ships.

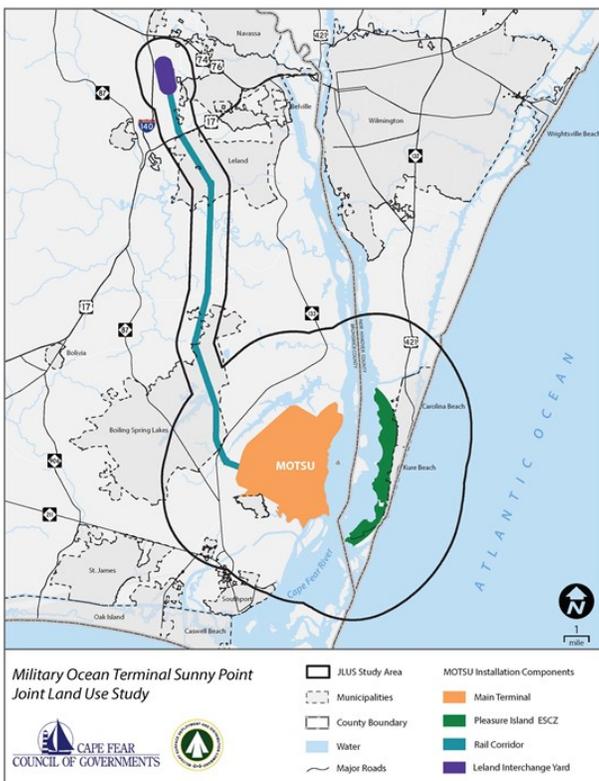


Figure 1: JLUS Study Area Map

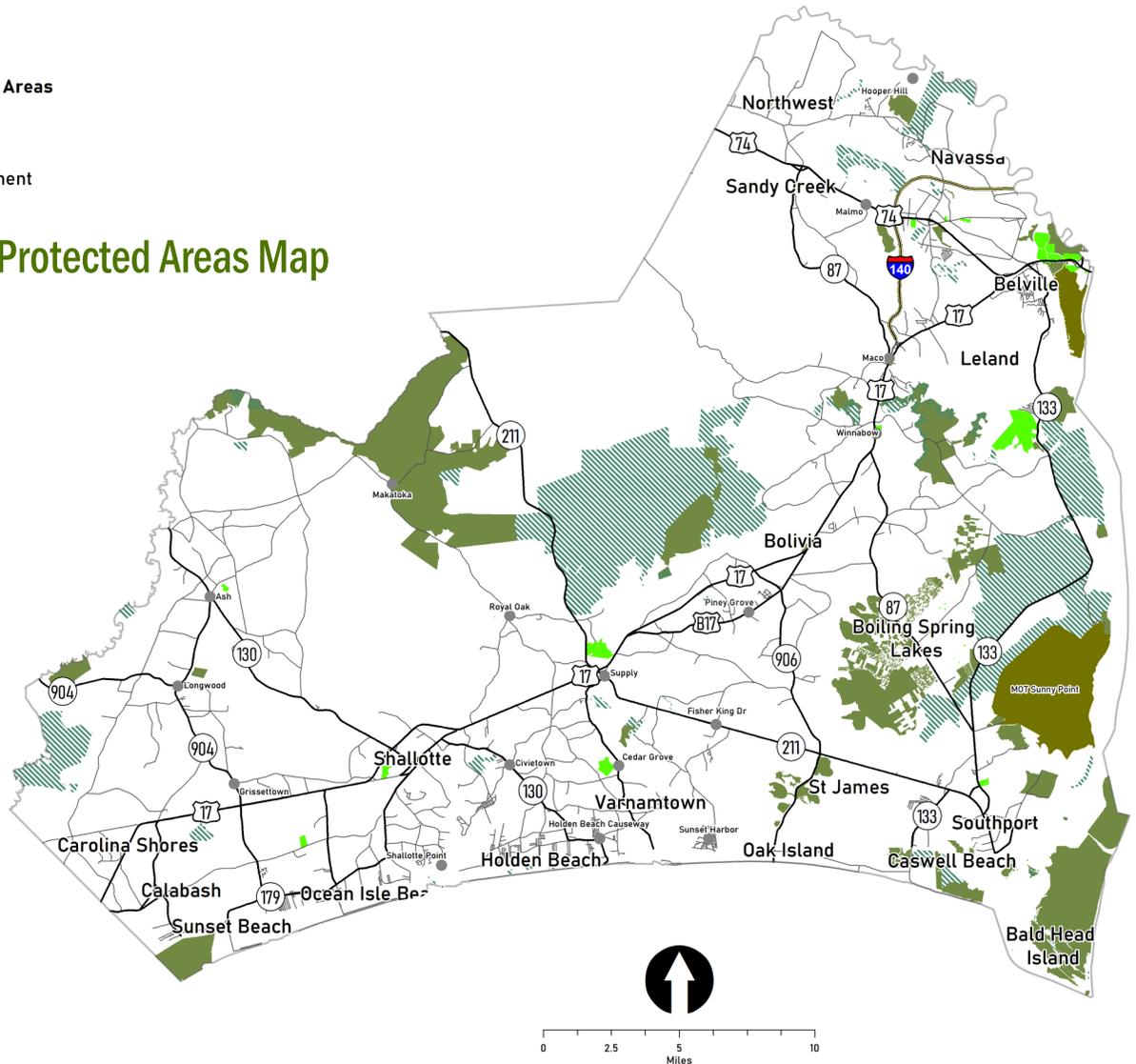
Encroachment of development, particularly residential subdivisions, has become a concern in recent years. To address the relationship between the installation and neighboring development, the Military Ocean Terminal Sunny Point Joint Land Use Study (JLUS) was conducted. Completed in 2019, the JLUS examined areas of potential conflict and sought to establish policies and procedures for managing compatible land uses adjacent to and encroaching on MOTSU. To protect public safety and maintain safe evacuation routes, the JLUS recommends that local governments:

- Consider adopting regulations to restrict certain uses, particularly residential, as well as the density/intensity and height of structures adjacent to MOTSU, the Leland Interchange Yard, and the rail corridor connecting them; and
- Involve MOTSU representatives in decisions pertaining the land use and development.

**Parks and Protected Areas**

- Federal
- State
- Local Government
- Private

**Figure 2.4 Protected Areas Map**



Source: Brunswick County GIS, 2020

## State-Maintained Land

The NC Wildlife Resource Commission (NCWRC) manages game lands in the county, including more than 18,000 acres in the Juniper Game Creek Game Land and 2,048 in the Green Swamp Game Land. Within them are some rare plant species, such as the Longleaf Pine, and they abut one of the state's core black bear habitats: the bear sanctuary in the Green Swamp Preserve.

Bald Head Island (BHI) is another area of the county with land that is managed by the State. Bald Head Woods Reserve is a 191-acre protected maritime forest. Together, this reserve and the BHI State Natural Area, comprise approximately 10,000 acres of the 12,000-acre island.



*The Green Swamp Preserve is an environmental gem, home to longleaf pines, venus fly traps, orchids, and at least 14 different species of insectivorous plants. Its 17,424 acres are managed by The Nature Conservancy.*

## Development Characteristics

Urbanization of the county has occurred primarily along the coastline in the beach communities as well as areas along US-17 and NC-211. Built at a relatively low density, the existing development pattern is comprised primarily of single-family homes and small-scale, local-serving businesses.

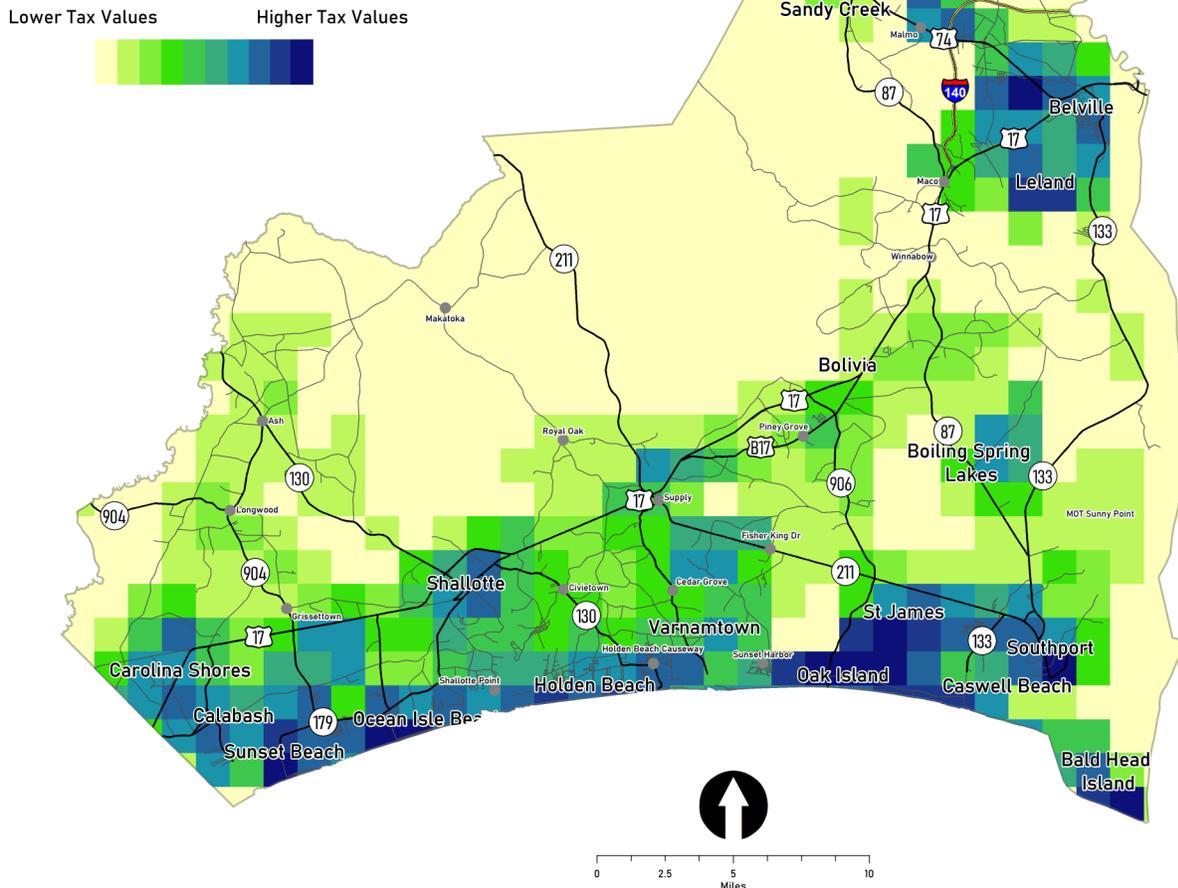
Recently, the northern communities, particularly Leland and Belville, have experienced higher rates of growth as retirees and families seek neighborhoods conveniently located between the beaches and downtown Wilmington. New development in that part of the county includes a variety of housing types and densities as well as shopping centers with national retailers and franchise restaurants as the predominant types of tenants.

# \$1.9M

The value per acre of land developed for townhomes in Brunswick County is almost \$2 million.

Land values have been steadily rising as the demand for sites for residential and commercial development climbs to new levels. The higher value real estate is located in the beach communities, along the major highways, and in areas near Wilmington.

### Figure 2.5 Land Values Map



Source: Brunswick County GIS, 2020



Image source: pinterest.com

Local “mom-and-pop” shops and restaurants located in the historic town centers and surrounding areas cater to the tourists.



Image source: journalnow.com

Grocery-anchored retail centers serve the local population as well as vacationers.

## DID YOU KNOW...?

The average density of residential development is less than 3 units per acre.



Image source: southeastdiscovery.com

The county’s 50 miles of shoreline have been a major driver of real estate development. Homes on the waterfront are selling for at least three times the median price of \$250,000 for single-family homes in the county, according to realtor.com (December 2020).



Image source: brunswickforest.com

As a popular retirement location in the Southeast, the county has had an increase in residential development, particularly in the form of planned communities. Many are gated and most offer a wide variety of recreational amenities including golf courses, walking trails, and fitness centers. (Pictured above: Brunswick Forest)



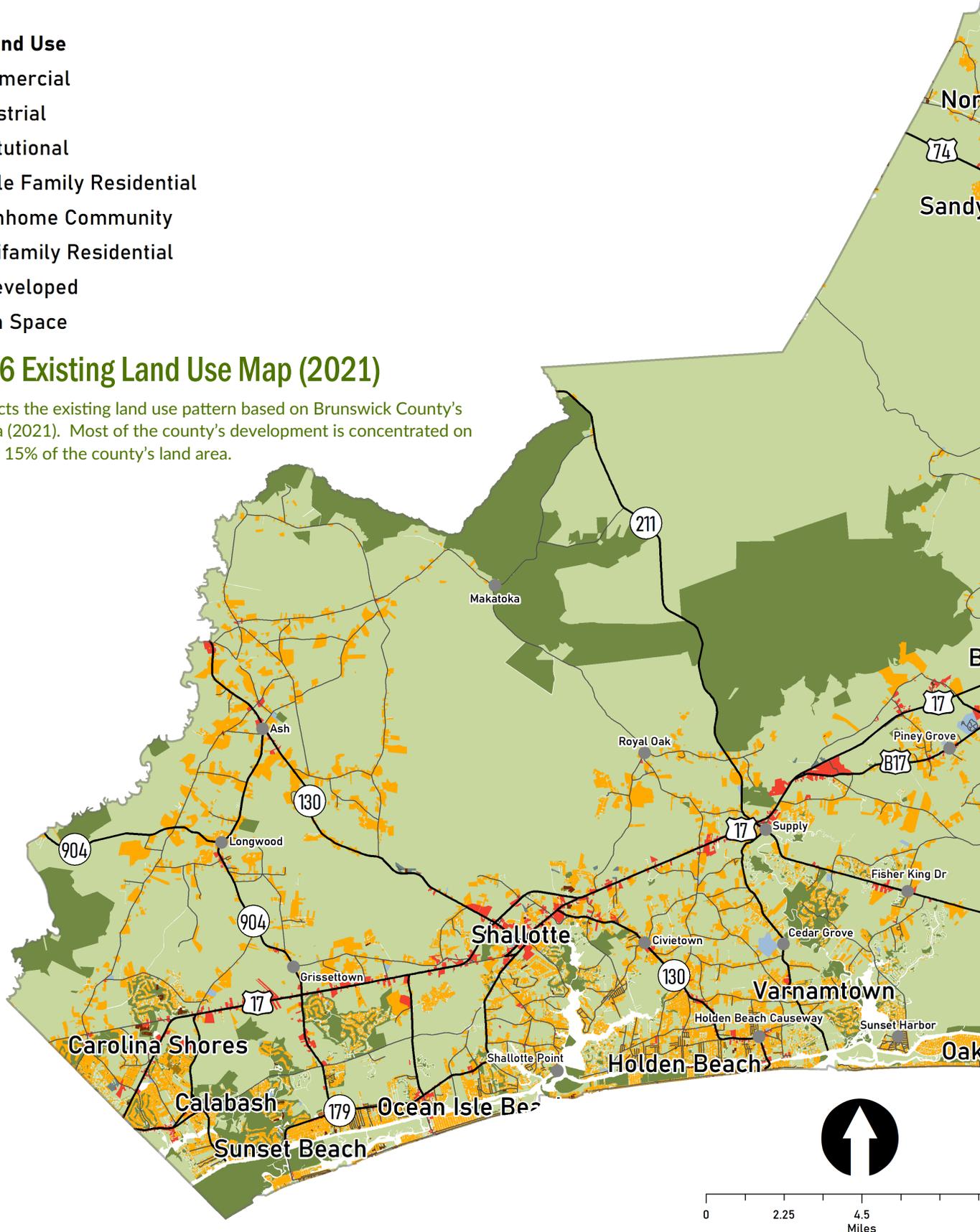
Residential building permit activity has been steady over the last few years. From 2017 to 2020, the number of residential building permits issued annually has exceeded 1,000.

### Existing Land Use

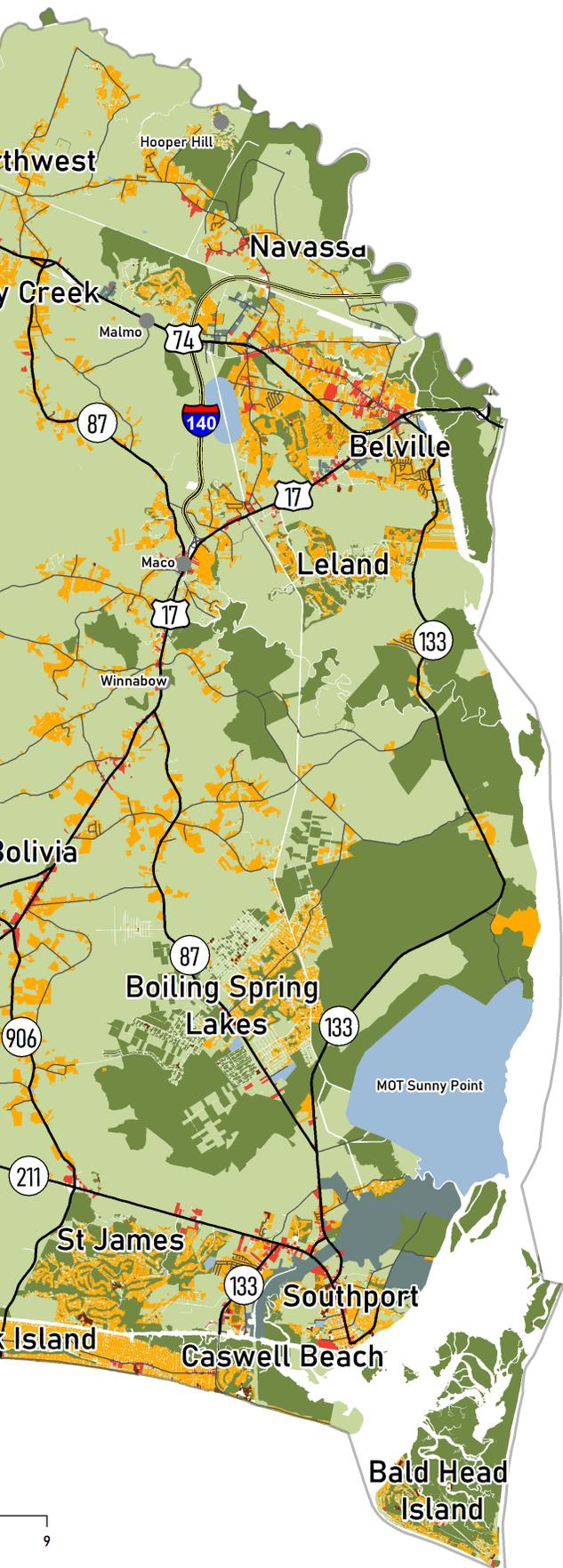
- Commercial
- Industrial
- Institutional
- Single Family Residential
- Townhome Community
- Multifamily Residential
- Undeveloped
- Open Space

## Figure 2.6 Existing Land Use Map (2021)

This map depicts the existing land use pattern based on Brunswick County's tax parcel data (2021). Most of the county's development is concentrated on approximately 15% of the county's land area.

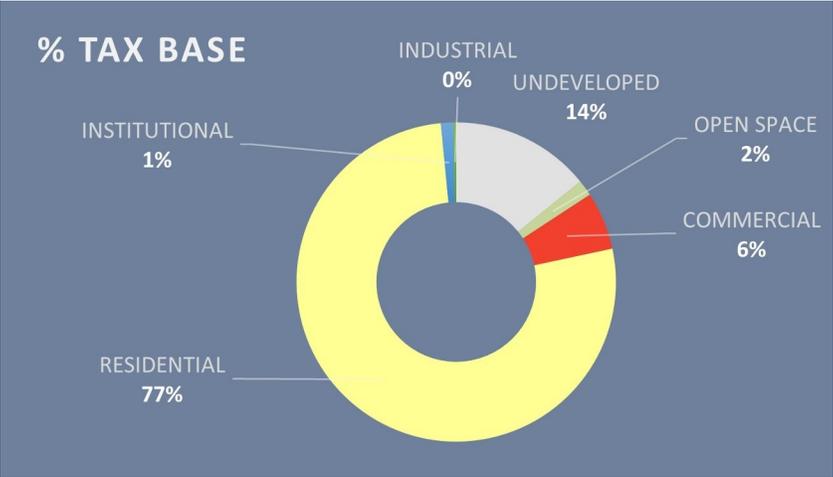
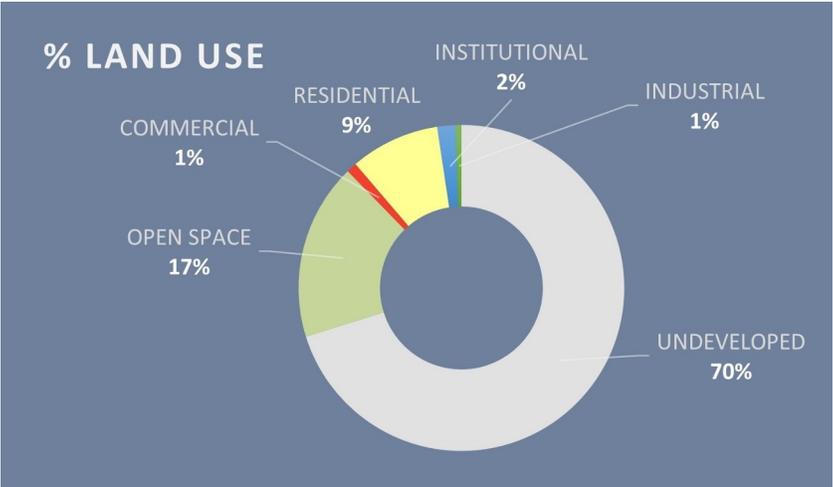


Source: Brunswick County GIS, 2021



# DID YOU KNOW...?

Almost 85% of the county is relatively undeveloped.



While single-family housing development occupies only 17% of the county's total land area (excluding water bodies and public rights-of-way), it accounts for more than 76% of the County's tax base.

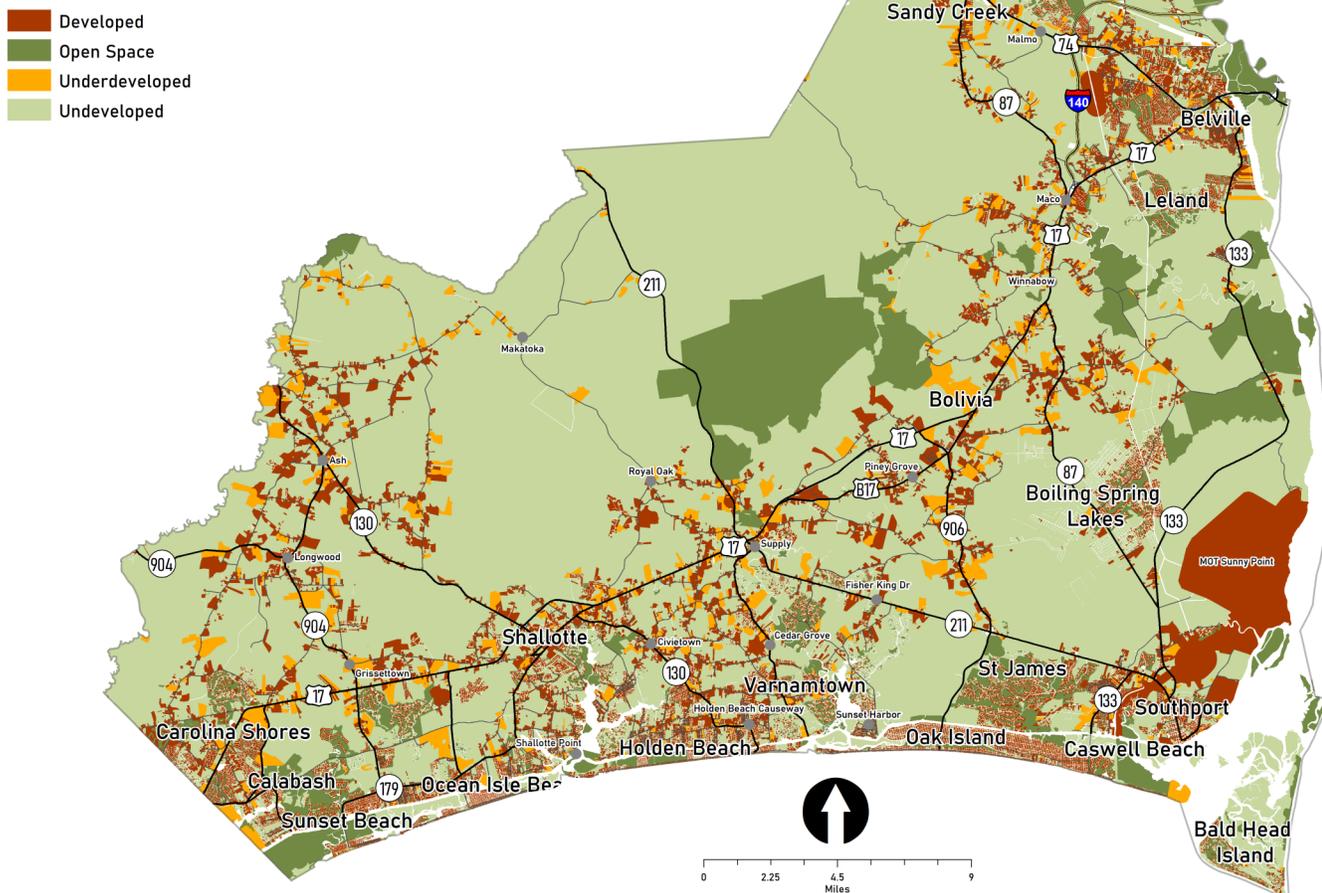
## Development Status | Land Supply

The development status of all parcels in the county is described as follows:

- **Developed** – The level of investment is high and such parcels are not likely to redevelop over the next 20 years.
- **Open Space** – Parcels of land are protected as public parks, state-maintained game lands, military installations, or privately-owned conservation easements.
- **Underdeveloped** – The level of investment is low relative to the parcel value and the property is therefore ripe for redevelopment.
- **Undeveloped** – With few or no structures, parcels of land remain vacant or relatively undeveloped. (Note: These parcels include agricultural lands that are managed for timber, cultivated fields, and pastureland.)

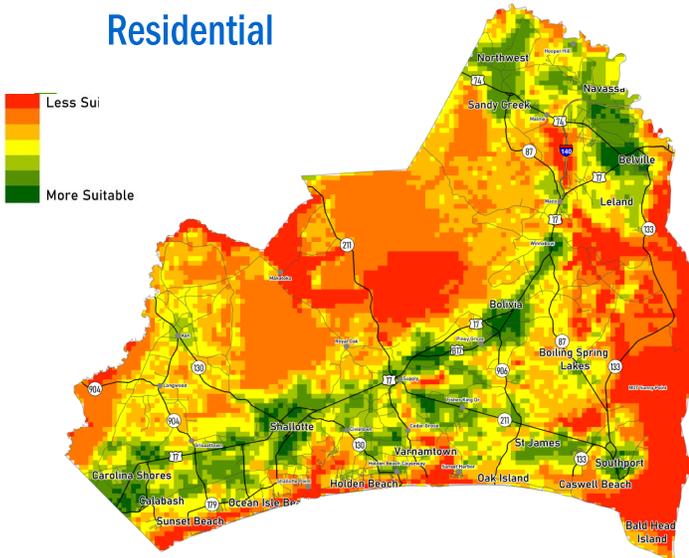
Combined, some of the “undeveloped” and “underdeveloped” parcels in the county’s jurisdiction constitute the “Land Supply,” which is approximately 45,000 acres of land that may be available for future development. If land currently in use for agriculture is included, that number could be as high as 140,000.

Figure 2.7 Development Status Map (2020)

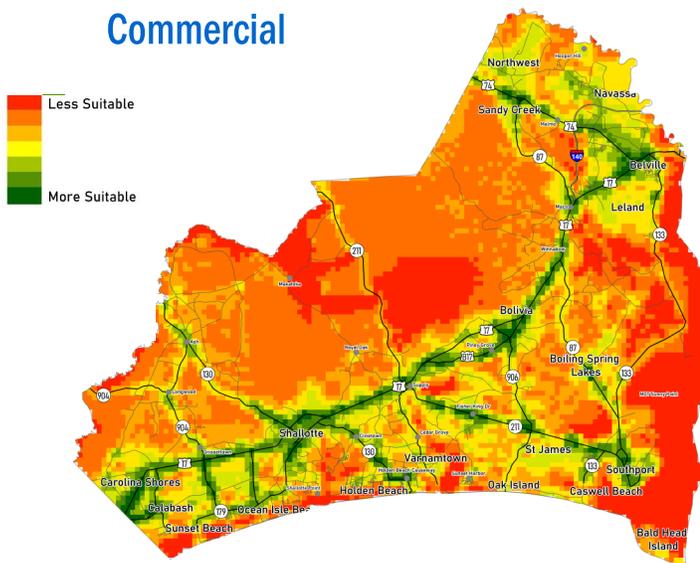


Source: Brunswick County GIS, 2020

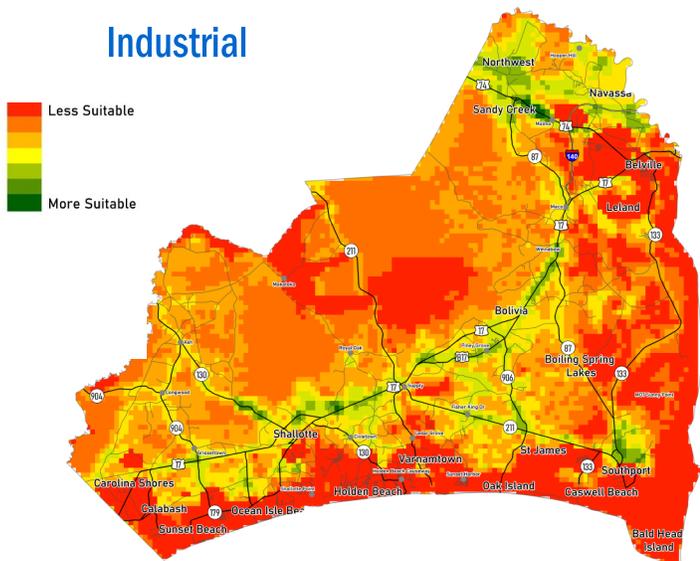
## Residential



## Commercial



## Industrial



## Development Suitability

Some of the land that comprises the Land Supply is not highly suited for future development. A suitability analysis was conducted to delineate areas to which future growth will be drawn.

The suitability of land refers to the capacity of land to support a type of land use. This is based on various attributes, such as availability of infrastructure, access, parcel size, topography, environmental conditions, and proximity to other uses. Regulatory constraints can also have an impact on suitability. All such factors make a parcel more or less attractive for future growth. In the three maps shown below, green areas are more suitable and red areas are generally less suitable.

### Residential Suitability Factors

- Proximity to existing schools
- Proximity to existing towns
- Proximity to water and sewer utilities
- Proximity to roads and major intersections
- Lack of environmental constraints
- Distance from historic resources
- Outside military mission areas (e.g., proximity to MOTSU)

### Commercial Suitability Factors

- Proximity to existing towns
- Proximity to water and sewer utilities
- Proximity to roads and major intersections
- Lack of environmental constraints
- Distance from historic resources
- Outside military mission areas

### Industrial Suitability Factors

- Parcels larger than 50 acres
- Proximity to water and sewer utilities
- Proximity to roads and major intersections
- Lack of environmental constraints
- Distance from historic resources
- Outside military mission areas

# Living: Housing & Neighborhoods

Though the average household size in Brunswick County is smaller than that of the state and the US, single-family detached homes comprise more than 60% of all housing in the county. Roughly half of all housing is occupied by the owners. The other half are rented (13%) or are vacant (38%). Many of the vacant homes are those constructed for seasonal use and made available to visitors as vacation rentals.

Total Housing – 86,968

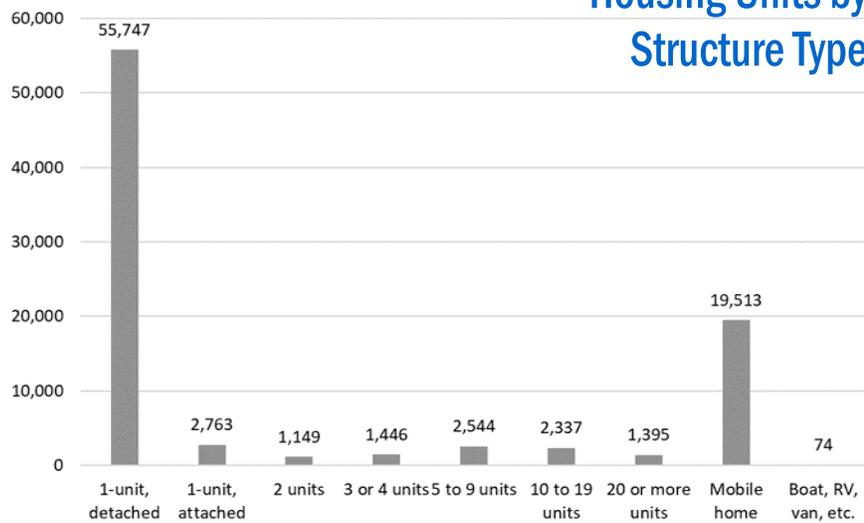
Occupied – 54,226

- Owner-occupied – 42,857
- Renter-occupied – 11,369

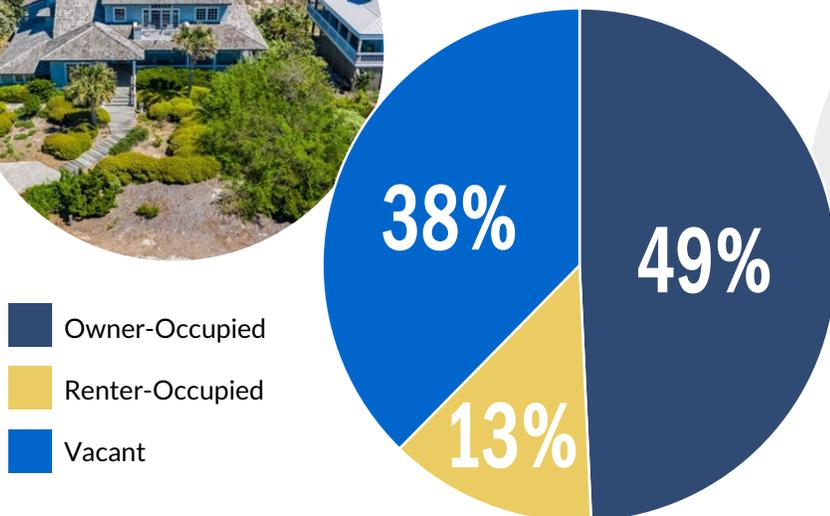
Vacant – 32,742\*

*\*Vacant homes include those that are rented to visitors (“visitors” refers to occupants that stay for less than two months).*

Housing Units by Structure Type



Owner vs. Renter-Occupied



38%

of all housing in the County is considered **unoccupied**, possibly indicating a strong short-term, vacation rental market.

## DID YOU KNOW...?

### Household Size



Over half (52.8%) of renter households spend 35% or more of household income on rent.

# \$350,000

## Median Home Sale Price, 2020

By the end of 2020, home prices had soared to a new median of almost \$350,000 (up more than 15% over the previous year). As people all around the US realized they could easily work and learn remotely while avoiding exposure to the COVID-19 virus, Brunswick County became a popular choice for those seeking temporary and permanent relocation options. Rising home prices are affecting the affordability of housing in the county. So, many who work in the county rent their homes. Others find housing outside of the county and routinely commute into Brunswick County for work.

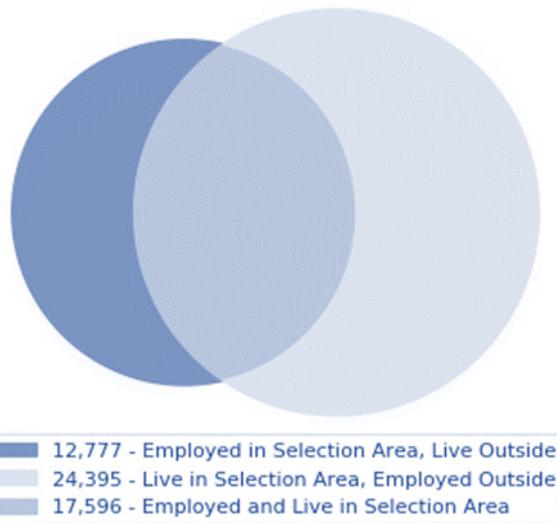
Source: BCAR



# Working & the Economy

Attracting visitors and retirees, Brunswick County has seen steady job growth in healthcare, retail, and hospitality. The County has recognized the need to diversify employment to include industries that offer higher wages and salaries. With the help of Brunswick Community College, the County is increasingly able to assure prospective employers a skilled workforce and opportunities for customized training.

## Inflow/Outflow Jobs Count, 2017



## Anticipated Benefits of Job Growth:

- More employment opportunities for Brunswick County residents
- Increased tax base
- Reduced traffic congestion with shifts in the commuting patterns

## Employment by Industry Sector (NAICS)



Sources:  
Occupational Employment Statistics: 2019  
Employment and Wages in North Carolina; U.S. Census Bureau, Center for Economic Studies LEHD On the Map, 2017.

## Projected Job Growth By 2026



### Brunswick Community College

Ranked as the best community college in the country according to a recent study by SmartAsset, Brunswick Community College is bolstering economic development efforts through job training that is related to potential industry growth and aligns with employer needs. In addition, the college offers Early College program to high school students and has established a business and industry incubator in Leland.

College graduation rates increased 22% between 2012 and 2018. County leaders have encouraged enrollment



through The Brunswick Guarantee, a program that enables eligible Brunswick County high school graduates to pursue a degree, diploma, or certificate at no cost at Brunswick Community College.

## Top 10 Major Employers by Number of Employees



Source: NC Commerce, Labor and Economic Analysis Division, Top 25 Employers by NC County - Brunswick County (2020)

The county is home to two of North Carolina's seven lighthouses, as well as numerous museums and historic districts, rich recreational amenities, and excellent restaurants that appeal to long-time residents and visitors alike. The revenue that is generated annually due to the sheer number of people passing through and spending money on shopping, dining, entertainment, and lodging is the reason tourism remains a key component of the local economy.

As noted earlier in this section, the seasonal population, comprised of second-home owners and visitors, nearly triples the county's population each year. Coupled with the spending power of full-time residents whose average household income exceeds that of the state and the US, tourists' and part-time residents' impact on the local economy is substantial. According to Visit North Carolina, tourist spending in 2019 was up almost 6% from the previous year.

Job growth in tourism-related businesses, such as food services and accommodations, is strong. However, the associated hourly wages are not sufficient to bolster household incomes among many workforce-age residents. Higher income jobs are needed to sustain the retail and dining required to compete for a larger share of the regional market.

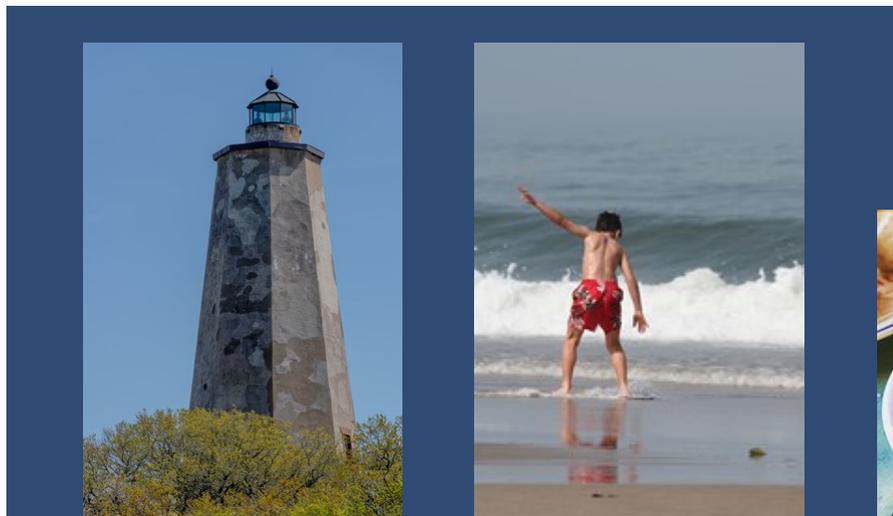


# >\$54,000

## Median Household Income

Median Household Income is rising. However, that is due in part to the income levels of retirees moving into the county. Almost 15% of jobs in the county are in the accommodation and food services industry. Workers in food service earn an hourly wage (\$11.36) that is about 59% of the average hourly wage (\$19.35) in Brunswick County.

According to a 2019 study by Airbnb, hosts in the County had a **combined income of \$6 million dollars** with approximately 37,000 guests arriving during the 12-month period.



Brunswick County experiencing “retail leakage” as many residents spend money every day in neighboring counties where they work. Retailers outside the Brunswick County market are fulfilling a portion of the demand. Some revenue is lost as Brunswick County residents commuting to jobs outside of the county on a regular basis make retail purchases closer to their places of employment. Other revenue is lost to Wilmington and Myrtle Beach as these cities offer shopping options and experiences not present in Brunswick County. Estimates reveal that the county loses over \$300 million annually to neighboring communities.

Recent commercial development along the US Highway 17 corridor, particularly in the northeastern part of the county, is beginning to shift spending activity back to Brunswick County. However, retail trends across the US indicate a higher percentage of sales through online retail. Prior to the Coronavirus

pandemic, almost 12% of all sales were online. Today, that number is over 16%. Many retail establishments with brick-and-mortar locations will survive as part of experiential shopping destinations.



Brunswick County residents spend a lot of money outside the county on retail purchases.

The total retail leakage is

**\$330 million**

*Sources: SEDC 2017-2022 Comprehensive Economic Development Strategy, ESRI's Business Analyst*

## DID YOU KNOW...?

Almost 15% of jobs in the county are in the accommodation and food services industry.

## Tourist Spending

According to Visit North Carolina, Brunswick County had **\$633.62** million in domestic tourist spending in 2019, up 5.8% from the previous year.

Local tax receipts totaled **\$38.37** million.



# Agriculture

According to the Agricultural Development Plan, prepared by Brunswick County in 2019, over 250 farms are operating in the county. While the average size of farms has decreased over time to less than 200 acres, the amount of land devoted to agriculture is actually increasing. Approximately three-fourths of agricultural land is comprised of managed timber lands. The other 25% is devoted to crops and livestock. Combined, agricultural operations yielded over \$43M in cash receipts in 2016. Brunswick County maintains its position as a major producer of fruits and vegetables in the state.

The 2019 study identifies several threats to existing agriculture in the county. Among them is encroaching development. Residential subdivisions are being approved and constructed at a rate that has farmers

concerned about the long-term viability of agriculture in Brunswick County. The Voluntary Agricultural District (VAD) program is one mechanism that helps protect farmers from development conflicts. Mitigating farming-related impacts, such as noise and odor, on neighboring development can hamper productivity. By placing land in a VAD, farmers are in a stronger position to continue pre-development farming activities while avoiding litigation associated with complaints from adjacent development. Participation in the program has helped raise awareness of agriculture and unified the agricultural community.



Low Profitability

Aging Farmers

Rapid Growth, Rising Real Estate Values, and Rising Taxes

Lack of Agriculture Support

Regulations

Wildlife

Loss of Pollinator Habitat



in production of tomatoes



in production of fruits and vegetables

Sources: Ag Census (2012), Brunswick County Agricultural Development Plan (2019)



County residents value agriculture as important to maintaining the local economy, landscape, and heritage. In fact,

**78%**

of survey respondents want to protect agriculture and expressed concern about the encroachment of development on it.

## DID YOU KNOW...?

Farmland is increasing in Brunswick County.

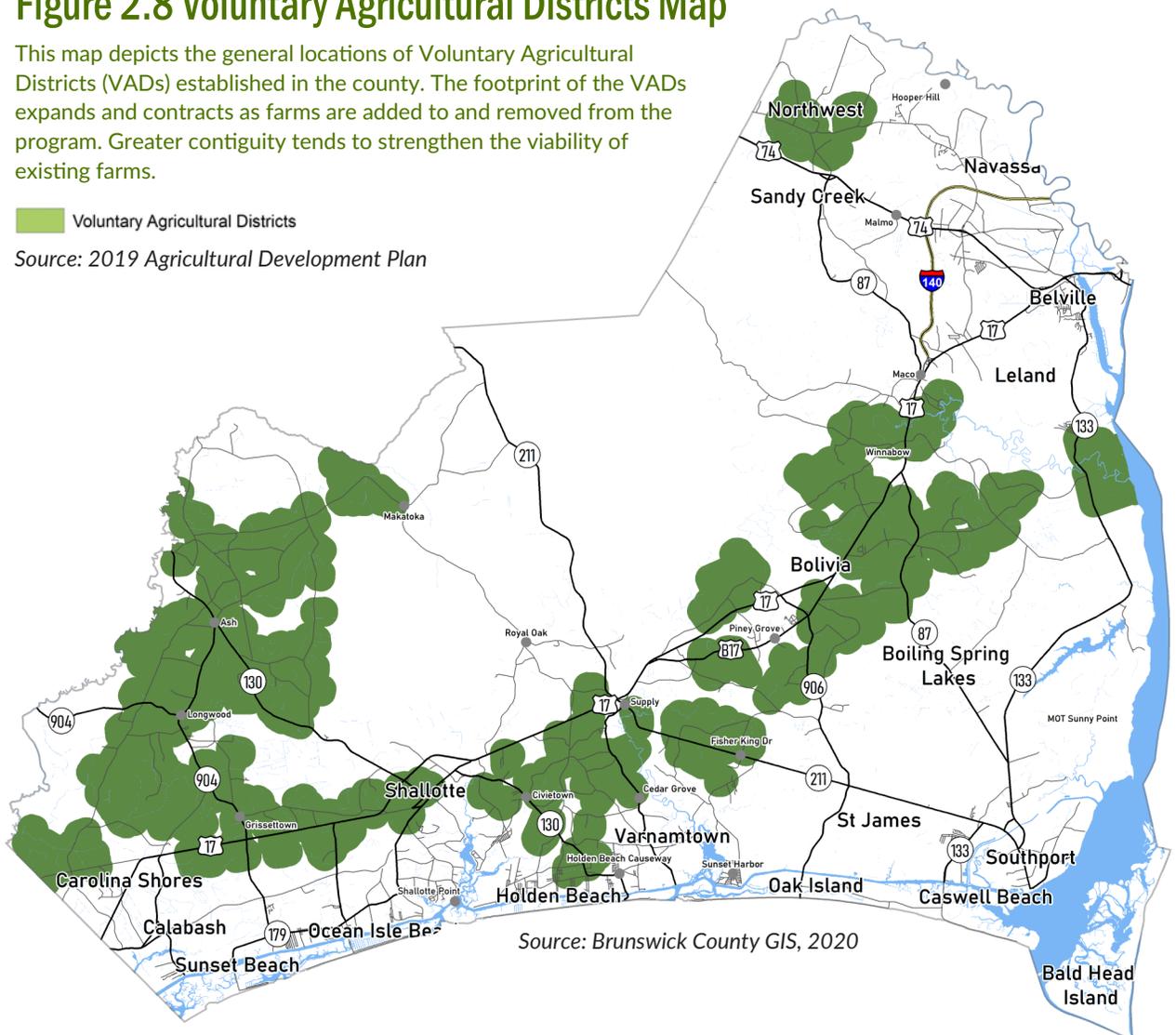
- 84% of land area is in agriculture
- 76% of that in timber
- 254 farms
- Avg farm size: 179 acres

### Figure 2.8 Voluntary Agricultural Districts Map

This map depicts the general locations of Voluntary Agricultural Districts (VADs) established in the county. The footprint of the VADs expands and contracts as farms are added to and removed from the program. Greater contiguity tends to strengthen the viability of existing farms.

 Voluntary Agricultural Districts

Source: 2019 Agricultural Development Plan



Source: Brunswick County GIS, 2020

# Health & Well-Being

The County updates its Community Health Assessment (CHA) every three years. The 2019 assessment identified priority areas to be considered in the planning and creation of the community health improvement plan (CHIP). The top three are:

- **Chronic Conditions** (with an overarching theme and focus on the aging population)
- **Substance Misuse**
- **Access to Health Care**

Interestingly, survey\* respondents identified specific areas for improvement to neighborhoods and the community as a whole that could address health issues. Among the top ten topics listed were accessibility to health services and healthy food, roadway design and maintenance, availability of recreation facilities, and employment opportunities. These and other factors affecting health and well-being are directly related to the built environment. The CHA outlines ways to improve health through better planning and design of the physical environment:

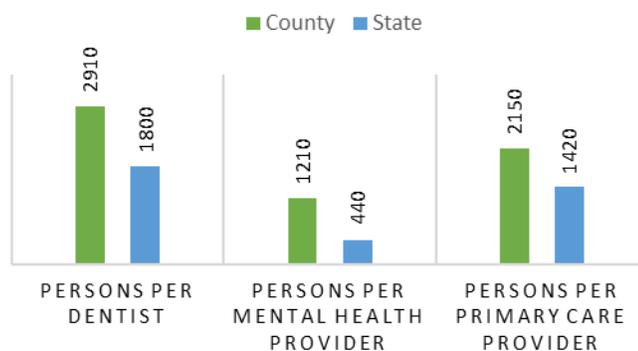
- **Access to Exercise Opportunities** – 21% of those surveyed said access to better/more recreational facilities such as parks, trails, and community centers would help residents improve their health.
- **Access to Healthy Foods** – 14% of County residents struggle with food insecurity (2018) (NC is 15%)
- **Transportation** – The lack of transportation was cited as one of four barriers to health care access.
- **Housing Quality** – In addition to costs, housing conditions can negatively affect quality of life.

\* This survey was part of the analysis completed for the Brunswick County Community Health Assessment (CHA), 2019

## 7 OF THE TOP 10 CAUSES OF DEATH ARE CHRONIC DISEASES:

1. Cancer
2. Heart Disease
3. Unintended Injuries
4. Lung Disease
5. Stroke
6. Alzheimer's Disease
7. Diabetes
8. Motor Vehicle Injuries
9. Kidney Disease
10. Pneumonia / Flu

## Persons Per Health Care Provider In The County



When Brunswick County survey\* respondents were asked how they would improve their health if they could, respondents said:

- **Eating healthy food (54%)**
- **Exercising (50%)**

Source: Brunswick County Community Health Assessment (CHA), 2019

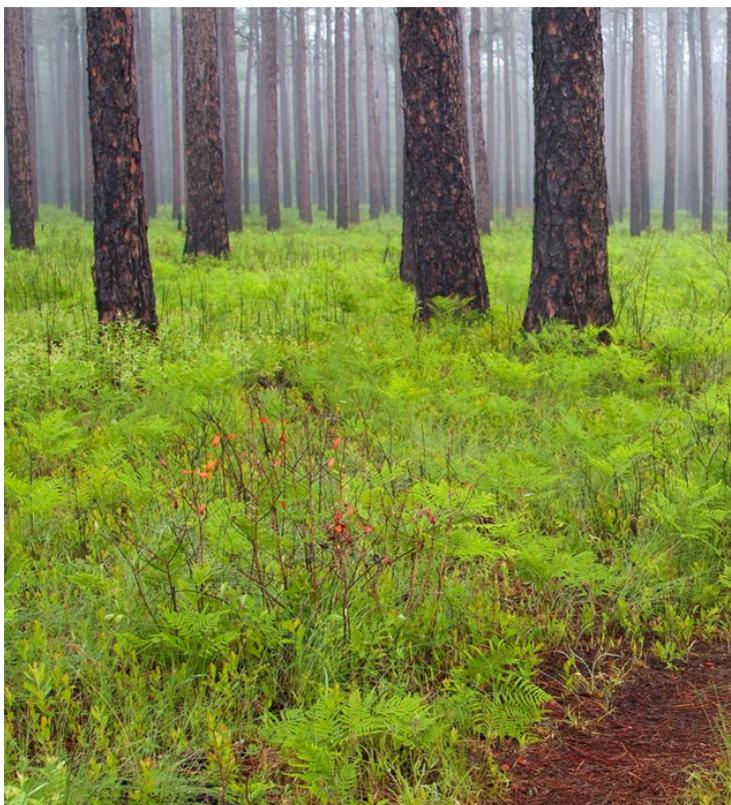


Pickleball is just one of many popular recreational activities that residents of Brunswick County enjoy.

When asked what would address the health needs of the Brunswick County community, local health care professionals identified the following:

- Improvements made to **park facilities**
- Expansion of **senior center facilities**
- Increased access to **exercise classes** and **recreational activities**
- Improved access to **affordable and nutritious foods**
- Increased access to **health education** and **screenings**

**29%**  
of all adults in the  
County are considered  
**obese**



Brunswick County has many publicly-accessible open space areas that could support “**ecotherapy**,” nature-based programs and exercises that can help patients cope with mental and physical illnesses. Instead of prescriptions for more pills, doctors around the country are increasingly prescribing time in nature for the treatment of a range of mental health disorders and chronic illnesses such as diabetes and high blood pressure.

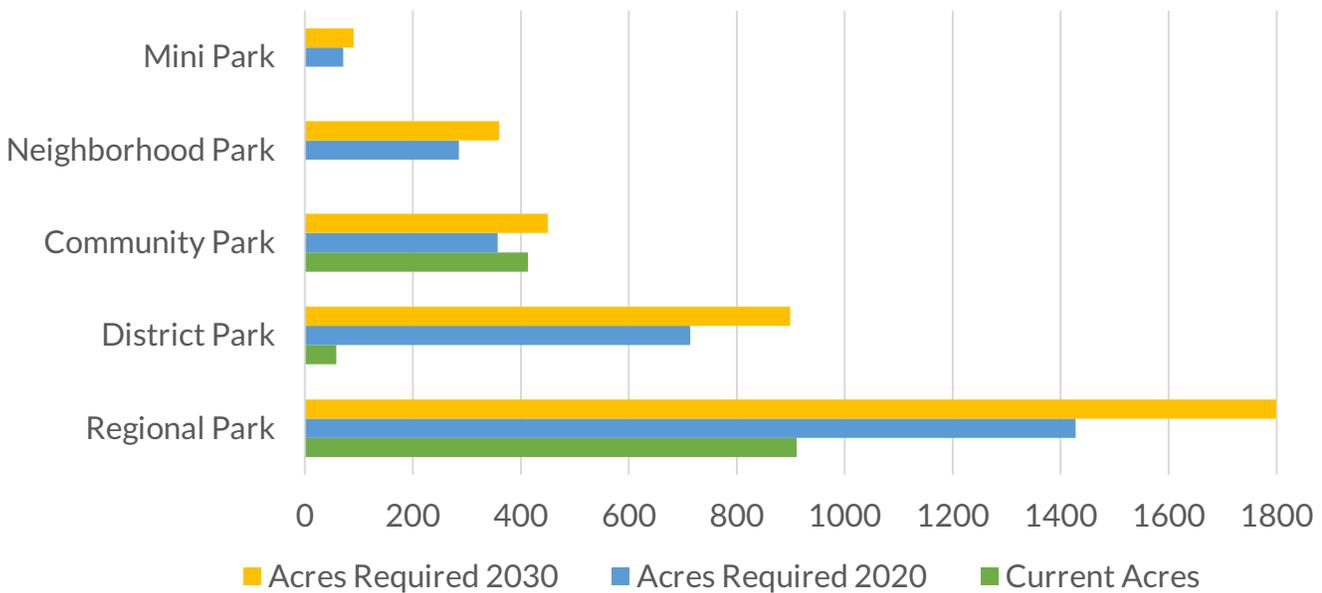
<https://www.nbcnews.com/health/health-news/dose-nature-doctors-prescribe-day-park-anxiety-n823421>

# Recreation

Brunswick County maintains a variety of park types that serve the existing population. Based on the latest budget figures from the *North Carolina Office of State Budget and Management, facts and figures*, for per capita cultural and recreation expenses (2018), Brunswick County outspent other North Carolina counties of similar population size. With that level of investment, the County is well-prepared to

meet some of the needs of its growing population. The County has nearly reached the target recommended for existing recreation facilities but will need to expand to meet anticipated future population growth. (Refer to Section 4 of the Comprehensive Parks & Recreation Master Plan for a detailed assessment of the County's current inventory of park and recreation facilities and programs.)

## PARK ACREAGE



# 1,382

The total number of acres in County-maintained parkland as of 2020.





# 88%

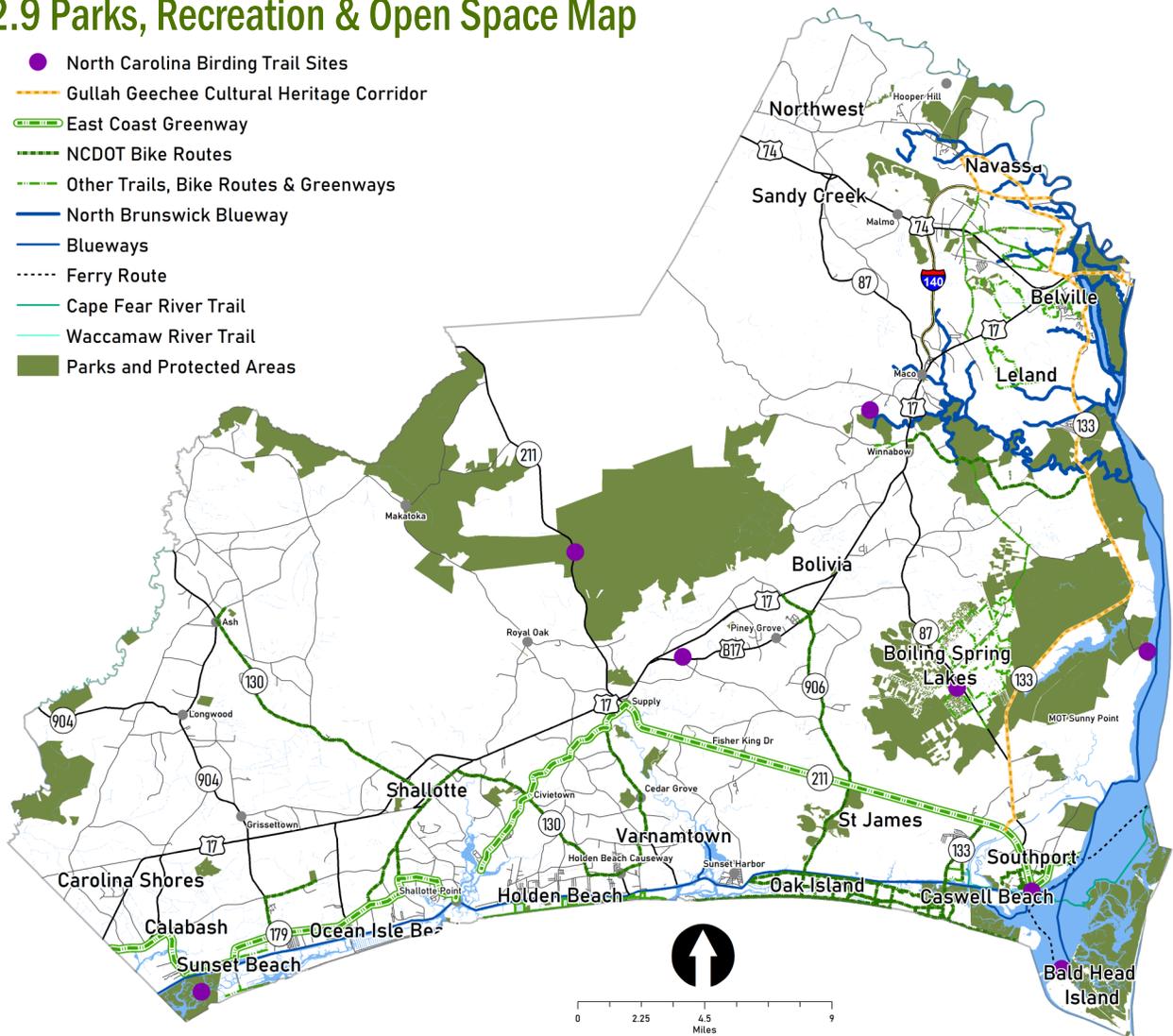
of survey respondents expressed support for more walking trails in the county.



Blueways and greenways are among the most utilized recreation facilities in the county.

## Figure 2.9 Parks, Recreation & Open Space Map

- North Carolina Birding Trail Sites
- Gullah Geechee Cultural Heritage Corridor
- East Coast Greenway
- NCDOT Bike Routes
- Other Trails, Bike Routes & Greenways
- North Brunswick Blueway
- Blueways
- Ferry Route
- Cape Fear River Trail
- Waccamaw River Trail
- Parks and Protected Areas



Source: Brunswick County GIS, 2020

# Infrastructure: Transportation

As Brunswick County continues its current pattern of growth, transportation matters will certainly be a focal point for local and state officials. Through a network of roadways, some freight rail service, public transportation provided by Brunswick Transit System, bike/pedestrian routes, ferry systems, and airports people and products are transported within the county. Though Brunswick County does not own, build, or maintain roads, per North Carolina state statutes, state contributions help fund the NC Department of Transportation (NCDOT) initiatives within the county, as well as Powell Bill initiatives to help with improvements for some municipal assets. In December 2020, Brunswick County began work to update its Comprehensive Transportation Plan (CTP), which is a long-range plan that identifies major transportation improvement needs and develops long-term solutions for the next 25 to 30 years. The study is a joint effort with Brunswick County municipalities, the NCDOT, Grand Strand Area Transportation Study Metropolitan Planning Organization (GSATS MPO), and the Cape Fear Rural Planning Organization (CFRPO).

## SNAPSHOT OF SOME NCDOT ROAD IMPROVEMENT PROJECTS:

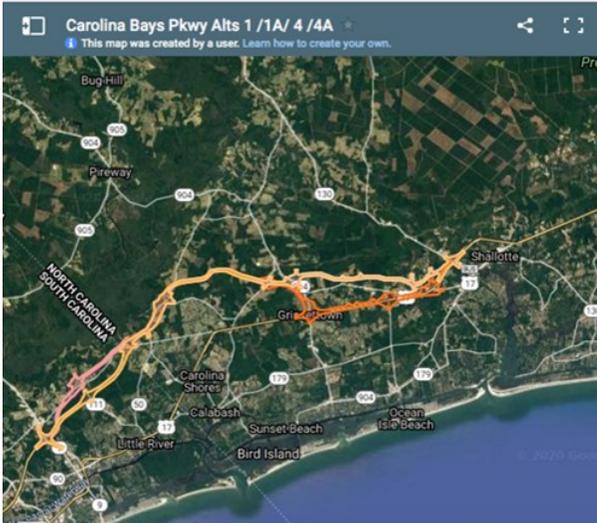
- Carolina Bays Parkway Extension (Date TBD)
- NC-211 Widening - Sunset Harbor Road to Midway Road (Post 2029)
- Widen NC-133 from US-17/74/76 to Old River Road (6/2/2022)
- NC-130 at Longwood Rd and Waccamaw School Rd Intersection (1/6/2022)
- US-17 at Thomasboro and Pea Landing Roads Superstreet (7/7/2022)
- US-17 Bus (Main St) and Wall St/Shallotte Ave Realignment (3/18/21)

Source: NCDOT, 2020

A few areas with roadway transportation challenges include the southern portion of US-17 (Ocean Highway) corridor within potential areas of the Carolina Bays Parkway Extension, NC-211 (Southport-Supply Road) from its intersection with US-17 to Southport, and those related to growth and circulation in the northern end of the county in and around US-17 and NC-133. These and other areas are targeted on the NCDOT project development listing for Brunswick County, which is a statewide competitive process. Another challenge is traffic congestion from rapid increases in new development).



DETAILED STUDY ALTERNATIVES 1, 1A, 4 AND 4A



Source: Brunswick Beacon, 9-22-20

This image depicts potential alignments of the Carolina Bays Parkway (SC-31) Extension into Brunswick County.



Access to a port, interstate highways, and rail distribution lines make Brunswick County an ideal hub for refrigerated transport of perishable food.



Almost 90% of survey respondents indicated that improving transportation (roads, sidewalks, etc.) in Brunswick County is of the most important, as access for emergency services (97%) as well as access to healthcare (93%), education (67%), area destinations, and services are also important.

**“[Build] more walkable areas with connectivity to destinations.”**

~Survey respondent

## DID YOU KNOW...?

The average travel time to work for residents is about 24 minutes.

### TRANSIT SERVICE



Brunswick Transit System (BTS) was incorporated in 1989 as a non-profit community transportation system for non-emergent needs. Available to all county residents, BTS offers limited trips to New Hanover County.

# Infrastructure: Utilities

## Public Wastewater Service

In the late 1990s, Brunswick County began operating its first wastewater treatment plant (WWTP) to serve the Leland Industrial Park. Today, Brunswick County operates six wastewater treatment plants with a permitted treatment capacity of 10,855,000 gallons per day. A Wastewater Master Plan is expected to be completed by end of 2022 to guide and forecast growth plans for wastewater treatment and conveyance facilities for the next 20 years.



*Brunswick County operates over 25 miles of reuse force mains that supply water for irrigation to four golf courses. Brunswick County also owns and operates 1,040 acres at three dedicated sites for irrigation of cover crops and infiltration ponds.*

619

The number of miles of the County sewer transmission and collection system.



*The largest of the County's sewer treatment facilities, the West Brunswick Water Reclamation Facility located in Supply, NC, was completed in 2006 to serve the unincorporated areas in central Brunswick County as well as the community of Supply and the towns of Bolivia, Holden Beach, St. James, and portions of Shallotte.*

## Public Water Service

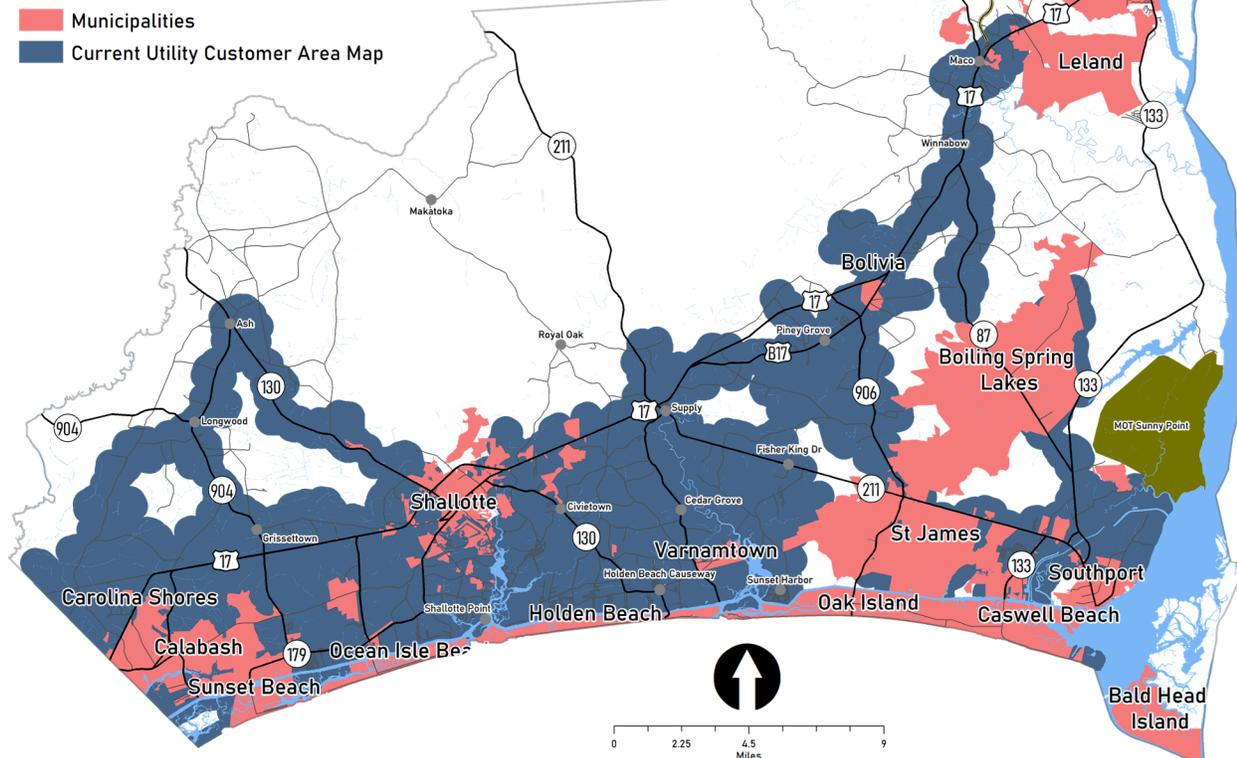
Brunswick County operates two water treatment plants: the 24 million gallon per day Northwest Water Treatment Plan (WTP) that treats raw water from the Cape Fear River and the six million gallon per day 211 WTP that treats groundwater. Brunswick County retail water rates have seen minimal adjustments over the past 17 years. The only increase occurred in FY 2015 when the

monthly retail base rate was increased by \$1. Meanwhile, volumetric rates for retail customers were decreased by \$0.90 in both FY 2004 and FY 2020. A new Master Water Plan is expected to be completed by the end of 2022. This will help in guiding water treatment, capacity, and expansion into the future.

**Total Brunswick County Water System Capacity: 30 MGD**

### Figure 2.10 Current Utility Customer Area Map

This map depicts the areas within which public water and wastewater services are currently provided.



Source: Brunswick County Public Utilities, 2021

# Stormwater Management

Flooding occurs during most major storm events in Brunswick County. Flooding associated with hurricanes, such as Hurricane Florence in 2018 that according to National Oceanic and Atmospheric Administration National Centers for Environmental Information caused \$24B in public and private property damage in NC, can be particularly devastating. Efforts to better manage stormwater and reduce the impacts of flooding include some initiatives of the

County and State of North Carolina. Among them are the creation of stormwater management regulations that guide the design and implementation of stormwater control measures intended to treat and reduce the offsite flow rates from developed project surfaces. Additionally, Brunswick County is participating in the RISE Program to develop a portfolio of priority projects that strengthen regional resilience.

**Figure 2.11 High-Risk Flood Areas and CAMA Setbacks Map (2020)**

This map depicts the areas that are subject to flooding during major storm events.



Source: Brunswick County GIS, 2020

**HIGH-RISK FLOODING & CAMA SETBACKS**

Approximately 27% of Brunswick County is located in a flood hazard area. The greatest storm surge impact occurs with hurricanes. Figure 2.11 shows the general areas of Brunswick County that may be affected by hurricane-generated storm surge.



## Regulations

The County's Stormwater Ordinance requires individual property owners to maintain all streams, creeks, ditches, swales, pipes, culverts, etc. that are on the private property. The County neither provides maintenance of drainage ways nor controls stormwater conveyance along North Carolina Department of Transportation roadways.

### **A county Stormwater Permit is required for:**

- All non-residential new development.
- Non-residential redevelopment that increases impervious surface on the site.
- Residential development that disturbs more than an acre.
- Residential developments where the site will be graded, filled, or excavated and thereby change the elevation of a location by more than four inches.
- Residential development or any related disturbance within 30 feet of the banks of a natural stream or water body.

Development in Brunswick County is also subject to the North Carolina Coastal Stormwater regulations enforced by NC Department of Environmental Quality (NCDEQ).

*The number of acres that lie within the high-risk flood areas of the county, which is roughly 42% of the total land area. Approximately 16% of the flood areas are developed for residential or commercial uses.*

**225K**  
acres

## Electric

Brunswick County residents have two electrical service providers, depending on location: Duke Energy Progress and Brunswick Electric Membership Corporation (BEMC). Duke owns and operates the Brunswick Nuclear Plant in Southport, as well

as various electrical transmission and distribution assets within the county. BEMC, a not-for-profit electric power provider owned and governed by its local membership, owns and operates various substation, transmission and distribution assets.



**BRUNSWICK ELECTRIC**  
MEMBERSHIP CORPORATION

- **79,000** Members
- **4** Counties Served
- **6,909** Miles of Line

## NC Electric Power Provider Service Areas



*Brunswick County has two electrical service providers: Duke Energy Progress and Brunswick Electric Membership Corporation (BEMC).*

-  **Brunswick Electric Membership Corporation**
-  **Duke Energy Progress**

## (Limited) Natural Gas

Piedmont Natural Gas, a business unit of Duke Energy, is the trusted natural gas provider for residential and business customers in North Carolina, South Carolina and Tennessee.



*Focus Broadband is a nonprofit cooperative chartered in 1955. As the primary broadband provider in Brunswick County, Focus Broadband supports the community with local telephone service and a wide variety of services, related to high-speed Internet, Cable TV, Business Communications, and Security. Focus Broadband continues to utilize grant opportunities to expand high speed internet to the rural areas of the county.*



*Duke Energy's Brunswick nuclear power plant, named for Brunswick County, covers 1,200 acres about five miles from the Atlantic Ocean. The site is adjacent to the Town of Southport and was opened in 1975.*

## Broadband

Our need for reliable internet access has only increased with COVID-19. As businesses continue to operate with employees working remotely, and as more students are participating in online learning from home, we are requiring faster upload and download speeds to be productive. In addition, as we have shifted away from in-person activities to virtual interactions through online platforms, we expect uninterrupted internet connections for meetings, shopping online, and telehealth medical exams.

## Broadband Coverage

Census blocks shown in blue have at least one provider delivering download speeds of 25 mb/s and upload speeds of 3 mb/s.



# Other Community Facilities & Services

The County provides many services to the community and supports the delivery of services by other entities operating in the county. Among them are senior centers, public schools, libraries, garbage pick-up, landfill, and public safety (fire, law enforcement, and emergency medical services). Through funding and partnerships, county resources are directed in a manner that helps ensure accepted standards are met and the quality of life of county residents is maintained.



*In 2018, hundreds of residents helped the County celebrate the opening of the Brunswick Center at Calabash, the County's fifth senior center.*



*Enrollment in Brunswick County Schools is over 12,000 (FY2020). The pressure on the public school capacity is lessened by the area charter schools, with 13,698 enrolled.*



*Through its five branches, the Brunswick County Library system offers storytimes and read-a-longs, which are just some of the many programs designed for children.*



## Education

The Brunswick County Schools (BCS) District consists of three traditional high schools, one Early College High School, five middle schools, 10 elementary schools, and one trade school (The COAST). In 2020, enrollment across all public schools in the county was more than 12,000. Overall, enrollment has been steady over the past 10 years.

With the increase in the number of households with families with school-age children in the northeastern part of the county, capacity issues have resulted in the need for the opening of a new 12-classroom addition at North Brunswick High School (ready for the 2021-22 school year) which followed a six-classroom addition at Lincoln Elementary and Town Creek Elementary along with the new Town Creek Middle School.

In partnership with Brunswick Community College, BCS offers Early College High School. About 375 students participated in the 2019-20 as well as the 2020-21 school years at BCECHS.

Charter schools enrolled 13,698 students in 2020-21.

## Senior Resources

Brunswick Senior Resources offers over 30 classes weekly at five locations. These are comprised of a variety of exercise, health and wellness, education, and arts & crafts classes. The Brunswick County Parks and Recreation Department uses the buildings to provide shag, karate, and cheer instructions to the public at different times throughout the year. Senior Nutrition is provided at sites in Boiling Spring Lakes, Oak Island, Calabash, Shallotte, Surry, Southport, and Ash.



OVER

6,000

individuals are served by  
Brunswick Senior Resources

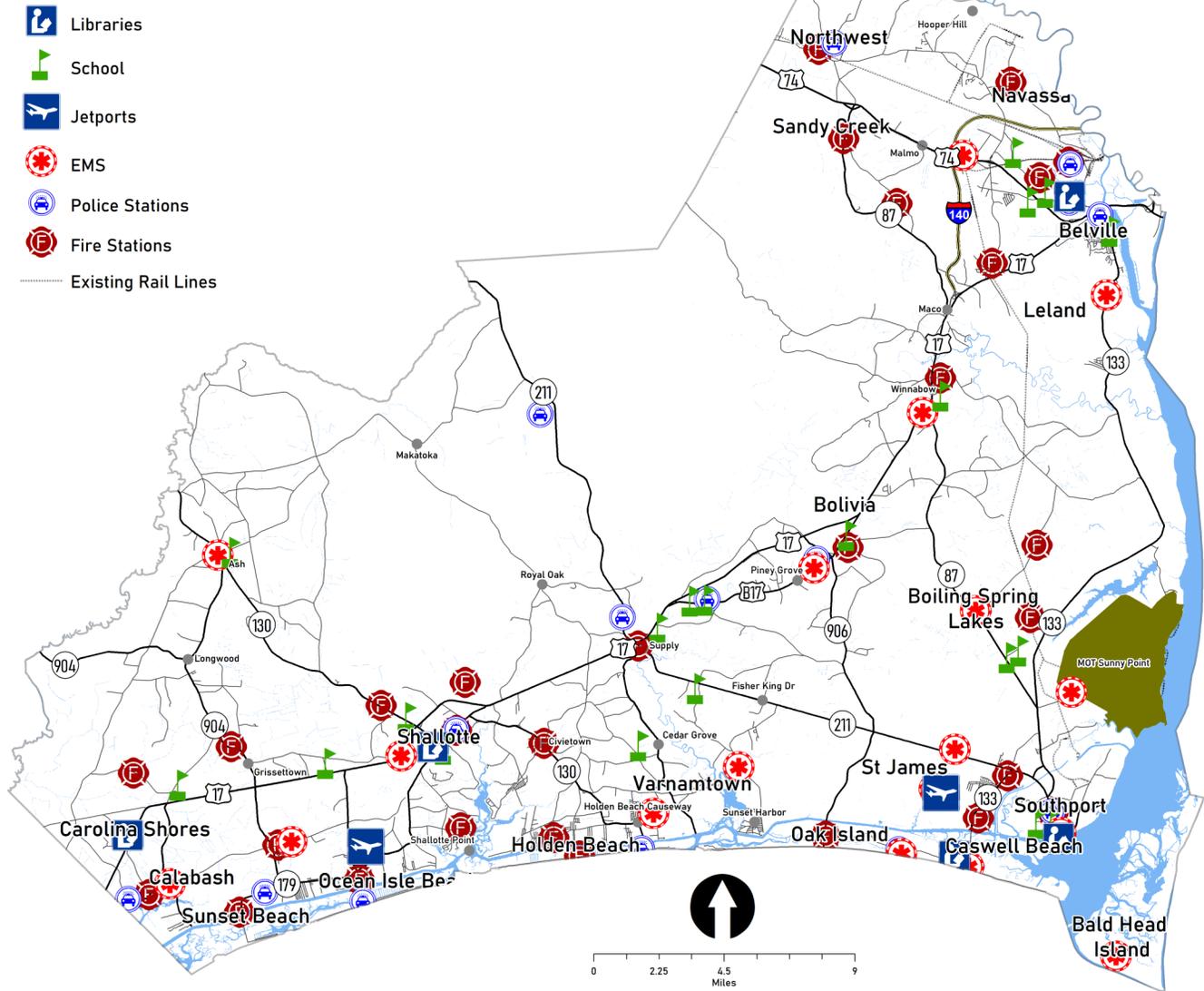


## Libraries

The Brunswick County Library System has five branches. The locations of each are shown on Figure 2.12. In addition to the typical materials (books, periodicals, music, and historical records), the library branches are community resources offering computer access, educational and community events, and eBooks. Recognizing the opportunity to play a role in enhancing the lives of residents, the Library has expanded its reach with online tools including links to entertainment and educational enrichment.



Figure 2.12 Community Facilities Map



Source: Brunswick County GIS, 2020

## Brunswick County Public Safety by the Numbers

Number of hospitals EMS transports to	Average response time for a paramedic level ambulance	Law enforcement staff	ISO rating (Fire)
<b>11</b>	<b>9.98</b> minutes	<b>250+</b>	<b>5</b> or lower



## Fire

The County has 22 fire departments operating 41 fire stations and three training centers. Of the 22 departments, seven are municipal departments, 14 are non-profit, and one is a federal fire department. Staffing of the departments are a mix of career and volunteer staff. Response times range from three to eight minutes in urban and suburban areas, and six to twelve minutes in the rural areas of the county. The fire departments in the county have worked hard to improve their Insurance Services Office (ISO) fire ratings and currently have a Class five rating or lower in the county, resulting in county residents paying the lowest rates offered on residential homeowner's insurance.



## Law Enforcement

As the chief law enforcement agency in Brunswick County, the Brunswick County Sheriff's Office is a large, multi-faceted organization served by over 250 sworn and professional staff members and over 100 volunteer personnel. The agency provides general law enforcement, serving and protecting the fourth largest county in North Carolina. With substations in Calabash and Belville and an array of support operations necessary to ensure broad coverage, the Sheriff's Office provides specialized regional services to the entire county, including the incorporated cities and the unincorporated areas. Operating and maintaining the following are also among the services:

Brunswick County Detention Center facility - The center provides a number of educational and rehabilitative programs to its inmate population of over 350.

Brunswick County 911 Communications Center - The center is the central dispatch facility serving Emergency Medical Services and all of the Sheriff's Office field personnel, investigators, and specialty units.

Brunswick County Animal Services - The center provides adoption services and the pick-up of stray or unwanted animals in Brunswick County.

## EMS

Brunswick County Emergency Medical Services is a paramedic level emergency medical system. It is currently staffed by 101 full time employees and 41 part time employees who practice under a very dynamic set of EMS protocols to provide up-to-date and quality pre-hospital emergency care. County EMS is currently budgeted for nine paramedic ambulances for 24 hours per day, two 12-hour peak load ambulances, two paramedic quick response vehicles, and a paramedic supervisor quick response vehicle. These units are also assisted by a paramedic level ambulance from Sunny Point Military Ocean Terminal, an Advanced EMT ambulance from Southport Fire and EMS, and an EMT-Basic ambulance from St. James Fire and EMS. Emergency medical services on Bald Head Island is contracted and provided by Bald Head Island Public Safety. As part of the Brunswick County Emergency Medical Services System, there are also three non-emergency medical transport providers and the Airlink Helicopter based at Brunswick Novant Medical Center. The local fire departments also provide medical first response within their districts on emergency calls.



