

Onslow County Comprehensive Plan

Adopted by the Onslow County Board of Commissioners
AUGUST 19, 2024

Certified by the North Carolina Coastal Resources Commission
DATE TBD





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SPECIAL THANKS

Onslow County Schools
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Onslow County Museum
Onslow County Administration

PREPARED BY:

Benchmark Planning

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EXECUTIVE SUMMARY

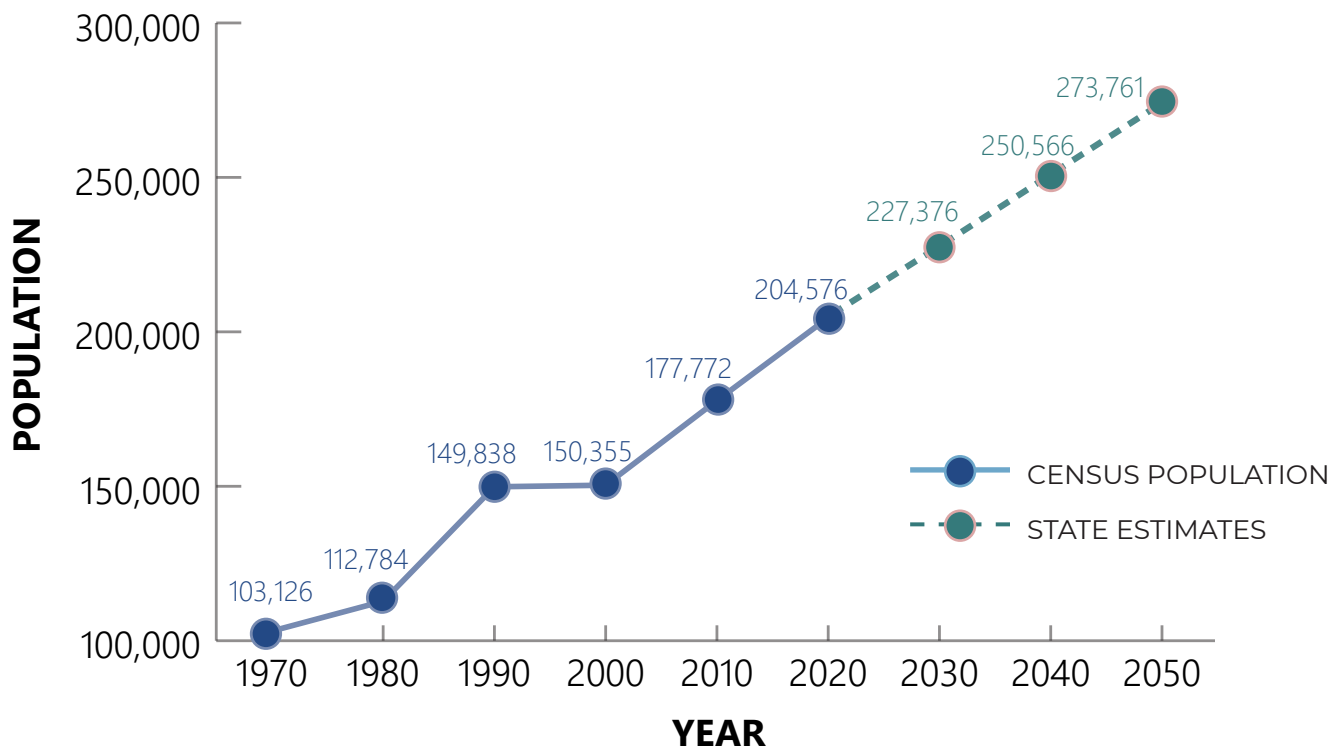
Horizon 2040 is the Comprehensive Plan and mandated Coastal Area Management Act Plan for unincorporated Onslow County and the Town of Richlands, which partnered with Onslow County in the planning process. Horizon 2040 will replace the County's current CAMA Core Land Use Plan that was adopted in 2009 and certified by the Coastal Resources Commission in 2010. Following its adoption, Horizon 2040 will serve as the primary policy guide for Onslow County's elected officials, Planning Board, and professional staff as they implement land use and development policies in furtherance of the vision of the plan, which states that:

Onslow County will grow as a balanced community, respecting its natural resources, coastal heritage, rural culture, positive military influence, and diversified economy to create a community of choice in Coastal North Carolina. The County's future will be guided by a collaborative effort of its citizens, businesses, local governments, military leaders, and service providers.

According to the NC State Demographer, Onslow County is anticipated to add 50,000 new residents by 2040, and another 20,000+ residents in the decade following. Ensuring that the County has solid policy guidance to accommodate this new growth will help

» ONSLOW COUNTY HISTORIC AND PROJECTED POPULATION

Source: US Census Bureau, United States Census (1970 - 2020), NC Demographer



to ensure that County policymakers are speaking with a unified voice and the community understands the County's development policies prior to new growth occurring. To that end, a primary feature of the plan is a Future Land Use Map, shown on the facing page, which will be used to guide land use policy through the implementation of zoning and development regulations that are consistent with plan, which is discussed in detail in the Future Land Use Strategy section beginning on page 197.

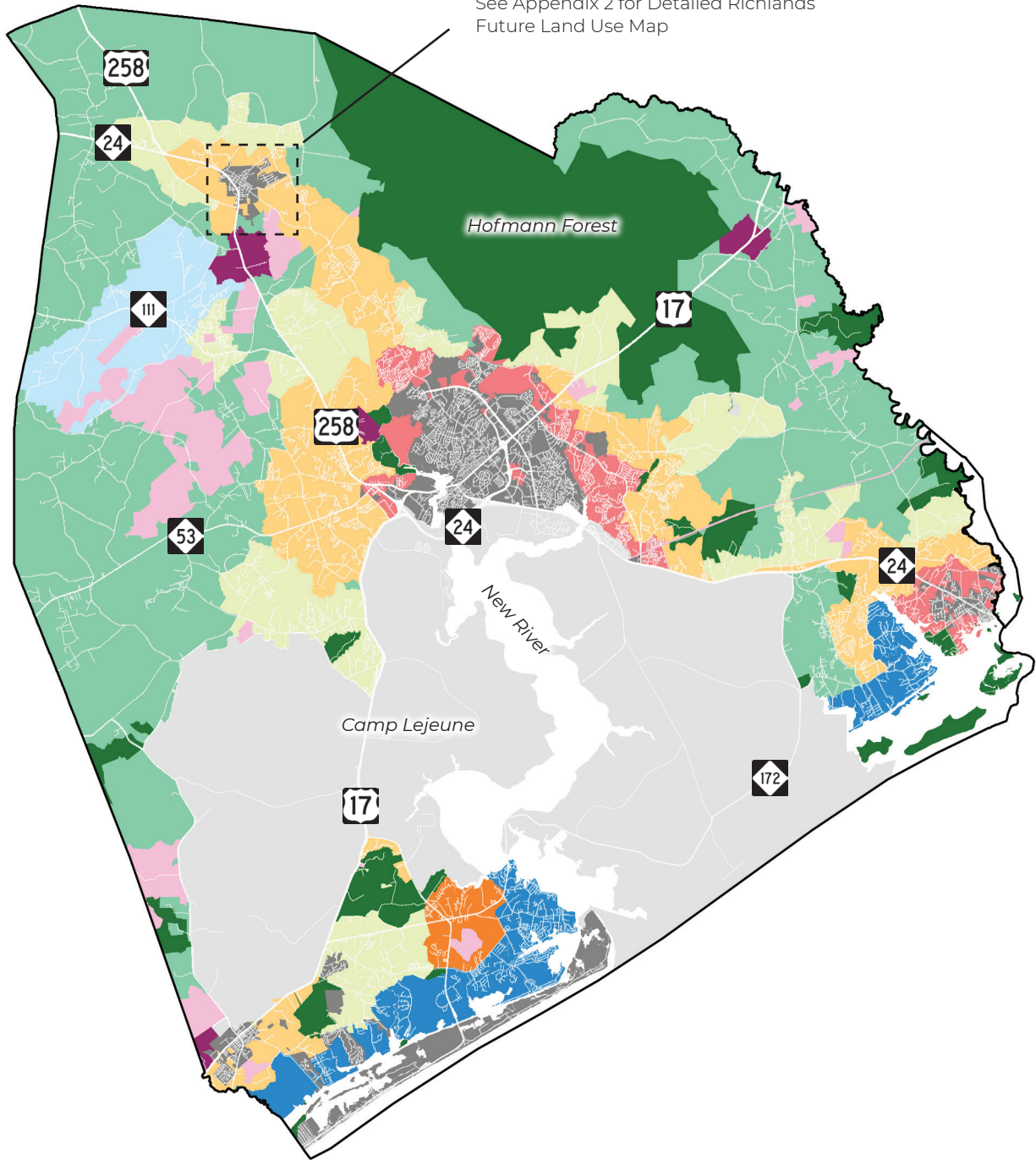
The plan's vision and future land use framework are further supported by a series of six goals, with associated objectives and strategies that are set forth in the Implementation Plan, which begins on page 169. Four of the six goals are mandated by CAMA, while two additional goals were developed during the planning process to address community input and maintain continuity with previous planning efforts. The four CAMA mandated goals are related to Land Use Compatibility, Infrastructure Carrying Capacity, Natural Hazard Areas, and Water Quality, while the two locally developed goals address Quality of Life and the promotion of High Quality Development. An Implementation Schedule, which begins on page 1XXX, sets aspirational timeframes to guide elected officials and staff as they work to prioritize and implement the recommended strategies.

The plan was developed through a process that spanned the period beginning in October of 2022 through August of 2024. Throughout the process, an advisory committee of representatives from the County Planning and Development Department, Onslow County Planning Board, Camp Lejeune, ONWASA, the Town of Richlands, and NCDOT helped to guide the development of the plan. The public engagement process included six public meetings in March of 2023 and April of 2024, a community survey that brought over 400 responses, a series of videos produced by the County to introduce the draft plan, and a project website that was used to keep residents informed throughout the process. Early engagement also included extensive stakeholder listening sessions that helped the project team develop a better understanding of Onslow County and ensure that the background research for the plan was directed toward locally important topics. Community input from the survey, public meetings, and direct messages through the project website were used to inform the plan throughout the process.

As the County moves through the implementation of the plan and utilizes it to guide land use and development policy, it will be critical to maintain and update the plan to address inconsistencies as they arise, incorporate new data as it becomes available, and adjust plan goals and objectives as community needs and desires evolve over time. While this plan looks toward the year 2040, it is reasonably expected that two or three major reviews and updates will, and should, occur in the interim to ensure that the plan remains current and relevant.

» FUTURE LAND USE MAP

See Appendix 2 for Detailed Richlands Future Land Use Map



Legend

Onslow County
Roads

- Agriculture & Forestry
- Airport Compatibility Area
- Conservation Lands
- Economic Development
- Infrastructure, Energy, and Extraction
- Military

- Municipality
- Rural Residential
- Suburban Growth
- Urban Growth
- Village
- Waterside Community





INTRODUCTION





Overview

Onslow County covers 767 square miles of the southeastern coastal plain of North Carolina, approximately 120 miles east of Raleigh and 50 miles north of Wilmington. The City of Jacksonville is the County seat, and the areas surrounding the City constitute the major population centers and growth areas of the County. The County is also home to the incorporated towns of Holly Ridge, Richlands, Swansboro, North Topsail Beach, part of Surf City; and the unincorporated community of Sneads Ferry.

In addition to the civilian population of more than 200,000 people, Onslow County is home to over 42,000 active military members who are stationed on the 156,000 acres that comprise the U.S. Marine Corps Base, Camp Lejeune, and the New River Air Station.

Horizon 2040 is the Comprehensive Land Use and Coastal Area Management Plan for Onslow County. It inventories existing demographic, housing, development, and environmental conditions in order to understand the County's foundation as it moves into the next twenty years. It sets a vision, as well as implementation strategies, which will direct the Board of Commissioners to act and respond to developmental concerns and other major factors which will impact the future of the County.

This Plan will replace Onslow County's last CAMA Core Land Use Plan, which was adopted in 2009, and certified by the Coastal Resources Commission in 2010. The previous plan was amended in 2014. Prior to this, the County had adopted a number of land use plans at varying scales, with the earliest being adopted in 1975. This Plan is subject to all of unincorporated Onslow County, as well as to the Town of Richlands.

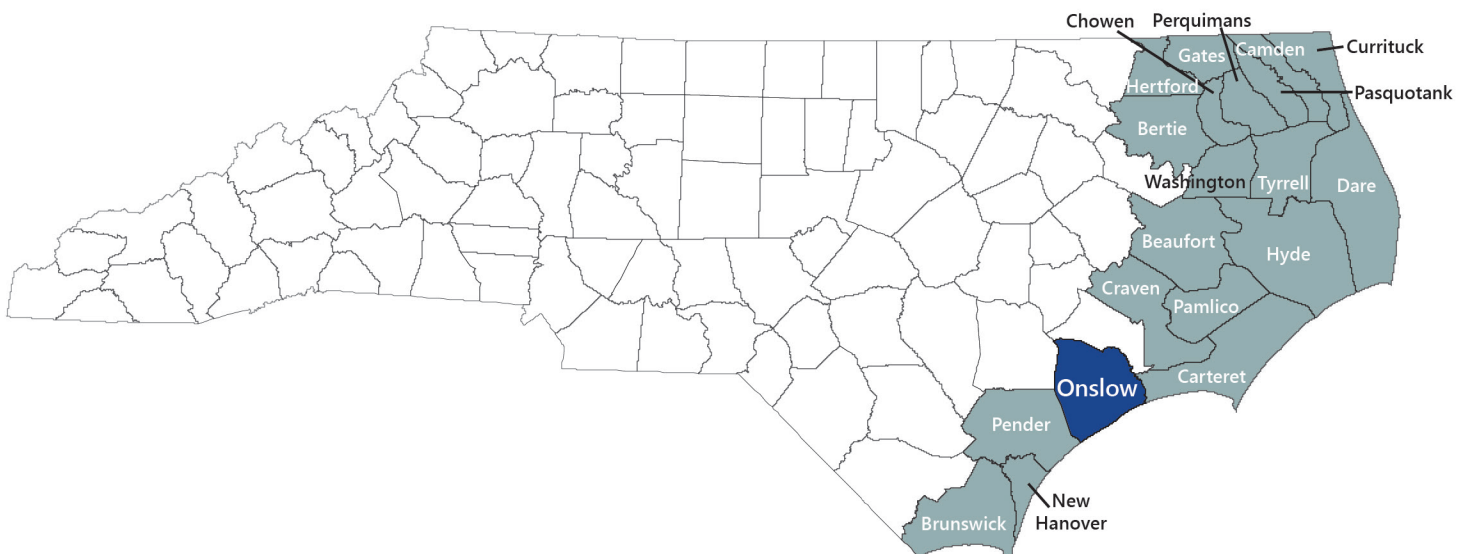


Coastal Area Management Act

In the early 1970s, North Carolina and other coastal states found that their precious coastal areas, including coastal sound and estuarine areas like those within Onslow County, were under threat from pollution caused by population growth, industrial development, and increased recreational usage. In response to these threats, the North Carolina legislature passed the Coastal Area Management Act (CAMA) in 1974. CAMA establishes a cooperative program of coastal area management between local and state governments; stating that local governments shall have the initiative for planning, while the State government establishes areas of environmental concern.

CAMA also establishes the Coastal Resources Commission (CRC) within the State's Department of Environmental Quality (DEQ), whose duties include approval of Coastal Habitat Protection Plans and designation of Areas of Environmental Concern. The CAMA guidelines require that each of the 20 coastal counties and the municipalities within those counties prepare and adopt a local land use plan in accordance with the guidelines established by the Coastal Resources Commission (CRC). A matrix which catalogs the CRC's requirements for a local land use plan is included in the Appendices of this Plan.

» COUNTIES COVERED BY THE COASTAL AREA MANAGEMENT ACT



Regional Context

As mentioned previously, Onslow County is located in southeastern North Carolina, approximately 120 miles east of Raleigh and 50 miles north of Wilmington. The County covers 767 square miles of fairly flat, rolling land, with the New River and its tributaries cutting through its center, connecting to a series of bays, the inlet, and ultimately the Atlantic Ocean, which forms the southern border of Onslow County.

The County is bordered by Pender, Duplin, Jones, and Carteret counties; the first and last of which are also coastal counties. Though there are no interstates in the County, there are a number of state and US highways which connect Onslow to surrounding counties, including US-17, US-17 Business, US-258, NC-24, NC-24 Business, NC-50, NC-53, NC-111, NC-172, and NC-210.

Onslow County is within the Jacksonville Metropolitan Statistical Area (MSA), which essentially accounts for the entire County, anchored by the City of Jacksonville. The Jacksonville Urban Area Metropolitan Planning Organization (JUMPO) is the regional planning organization within the County, serving the County as well as the municipalities of Jacksonville, Richlands, Holly Ridge, Swansboro, and North Topsail Beach. Previously, unincorporated portions of the County were within the Down East Rural Planning Organization, but this was changed when JUMPO expanded its boundaries in 2020.

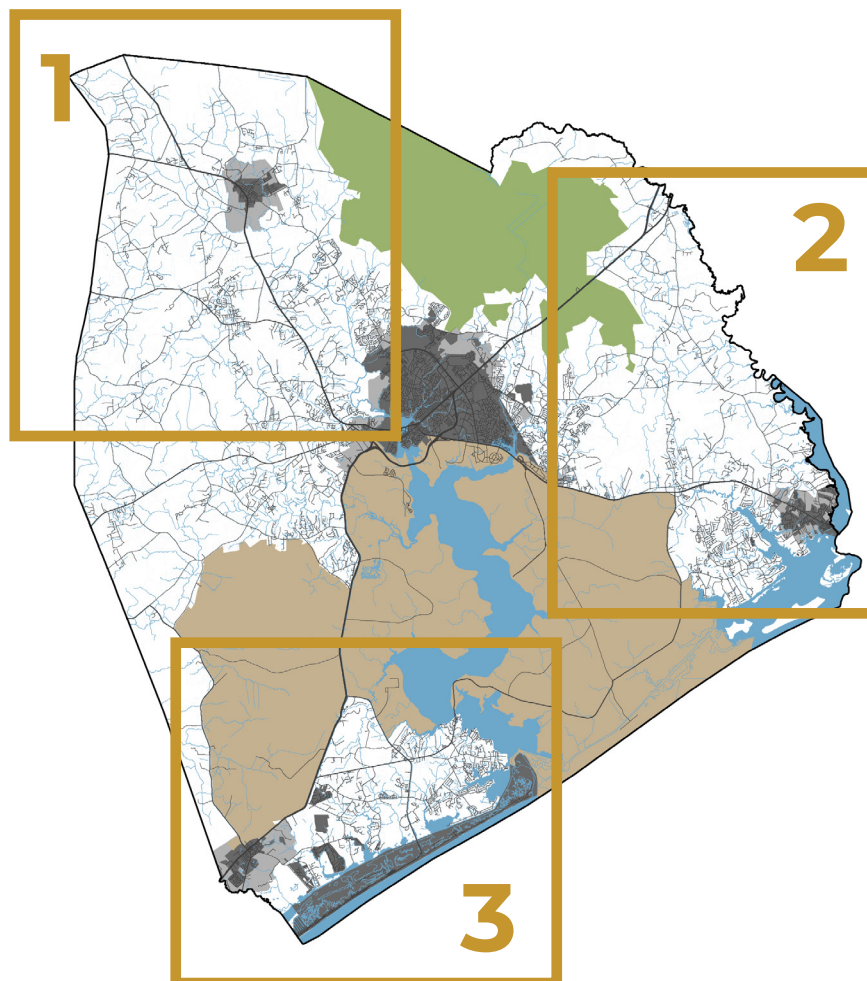
Plan Study Area

This Comprehensive Plan is subject to the entire unincorporated area of Onslow County, as well as the Town of Richlands. It does not include the municipalities of Jacksonville, Swansboro, North Topsail Beach, or Holly Ridge; all of which have their own comprehensive plans. The unincorporated community of Sneads Ferry will be included in this Plan. A large portion of the County is also occupied by Camp Lejeune, the New River Air Station, and the Hofmann Forest. While these areas will be mentioned throughout the Plan in relation to environmental conditions and military employment, policy and land use recommendations will not focus on these areas.

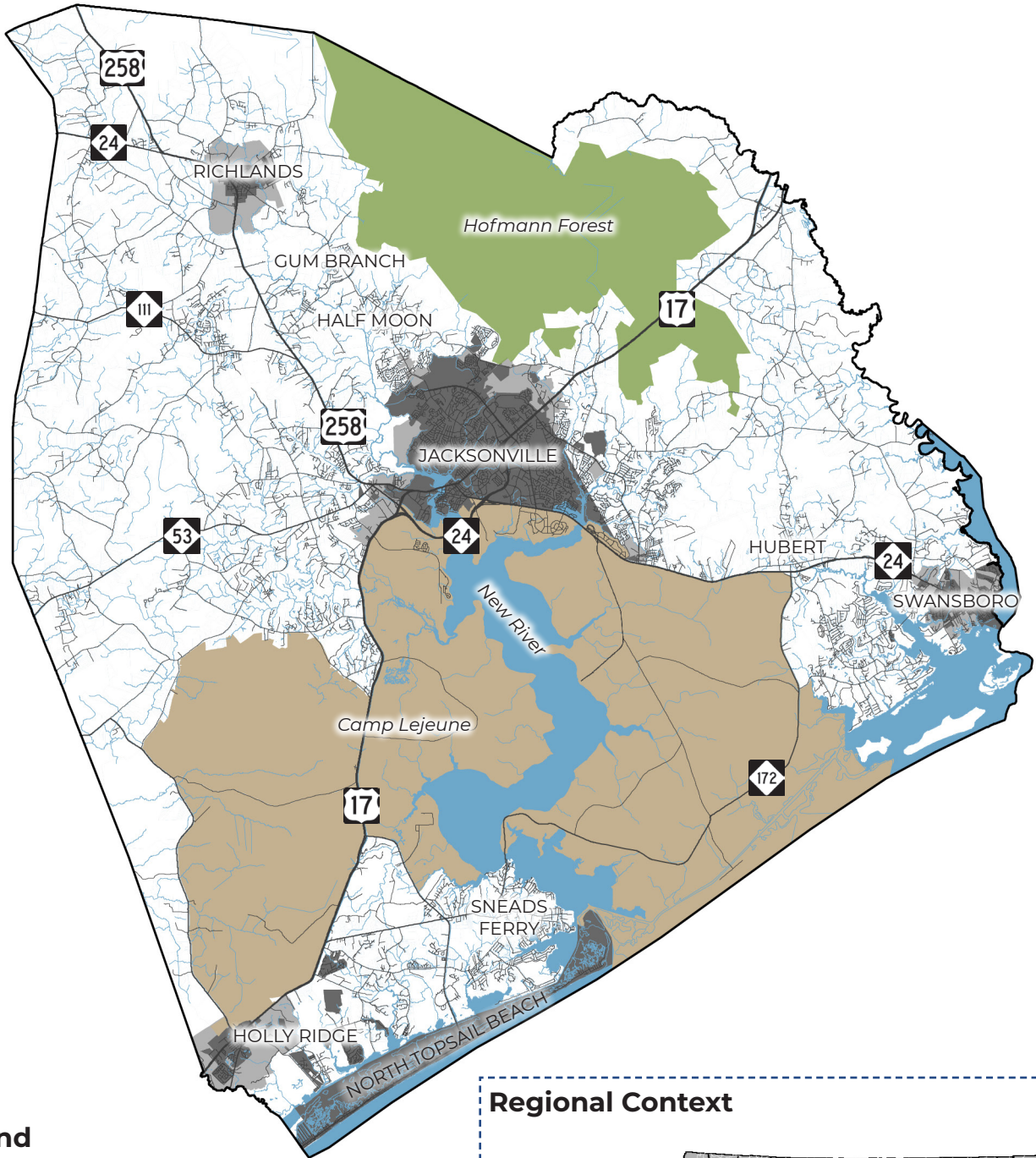
Because of the vast scale of the County, this Plan has divided the County into three regions: Northwest Region, East Region, and South Region. This provides an opportunity to better view some of the maps and related analysis. The three regions are shown on the map below, and each region is detailed at a closer scale on the following pages.

The Northwest Region encompasses the most northwestern segment of the County, including Richlands, Gum Branch, and Half Moon. The East Region encompasses the most eastern (central) part of the County, including Swansboro and Hubert, as well as portions of Camp Lejeune and the Hofmann Forest. The South Region includes the most southern corner of Onslow County, encompassing North Topsail Beach, Holly Ridge, Sneads Ferry, and portions of Camp Lejeune.





The maps on the following pages show military land in tan / beige, Hofmann Forest in green, water areas in blue, incorporated municipalities in dark gray, and extraterritorial jurisdictions in light gray (note that the portion of Camp Lejeune that is within the City of Jacksonville is not shown in dark gray for clarity's sake).



» **ONSLOW COUNTY BASE MAP**

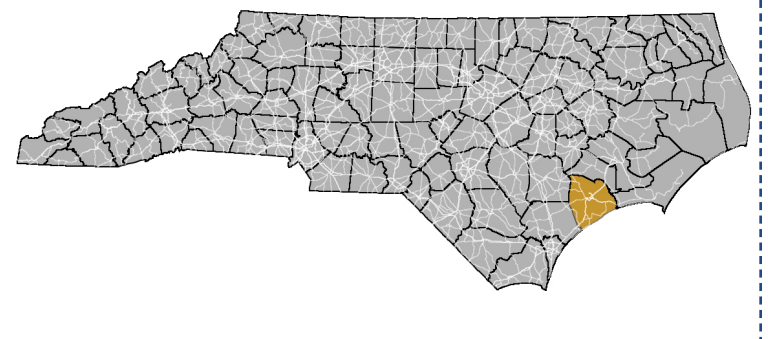


Legend

-  Onslow County
-  Water
-  Municipalities
-  Roads

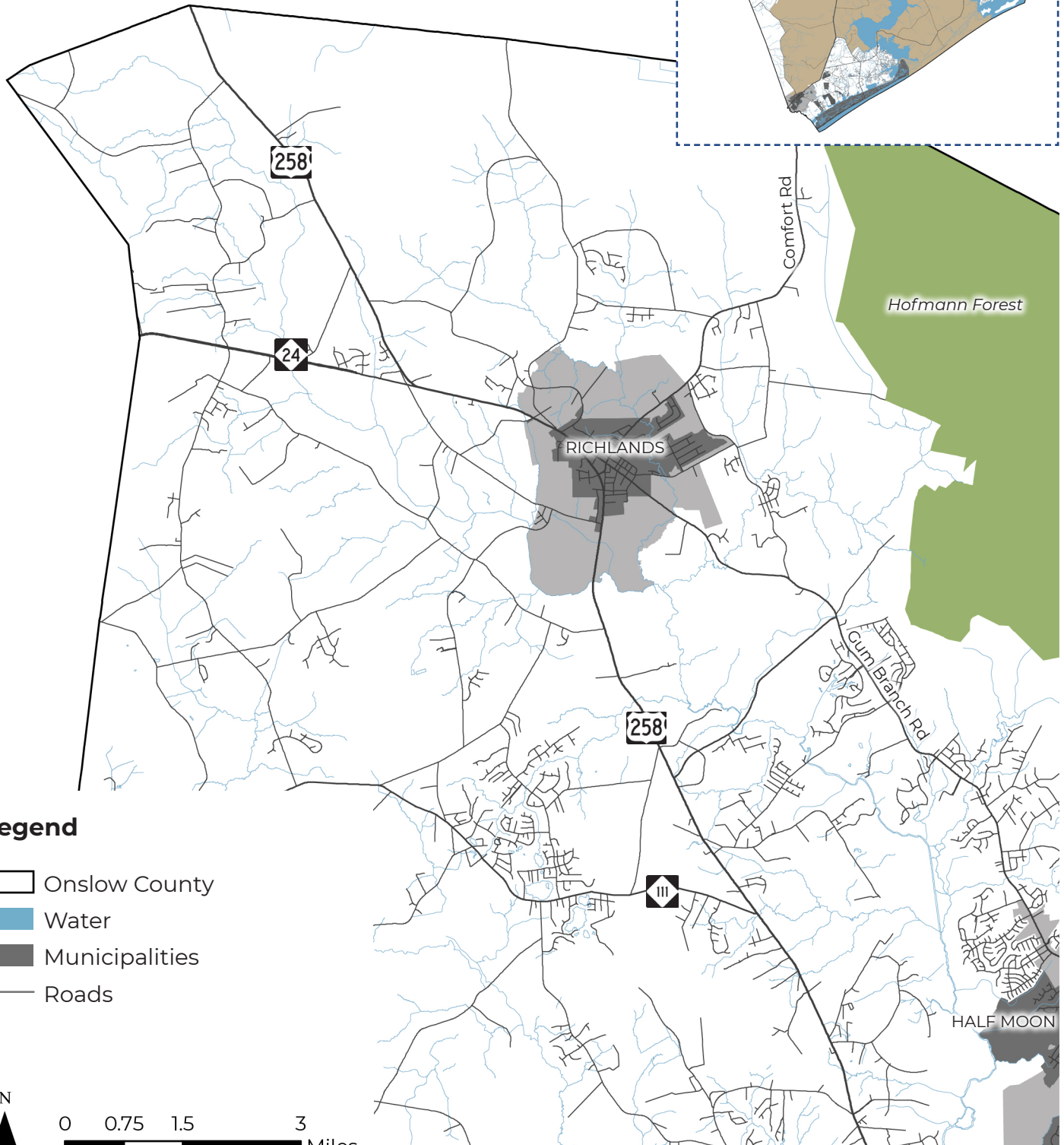
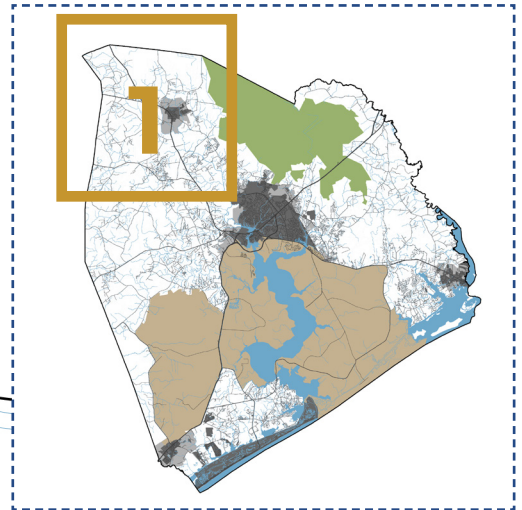


Regional Context



Source: Onslow County (2022)

» NORTHWEST REGION BASE MAP



Legend

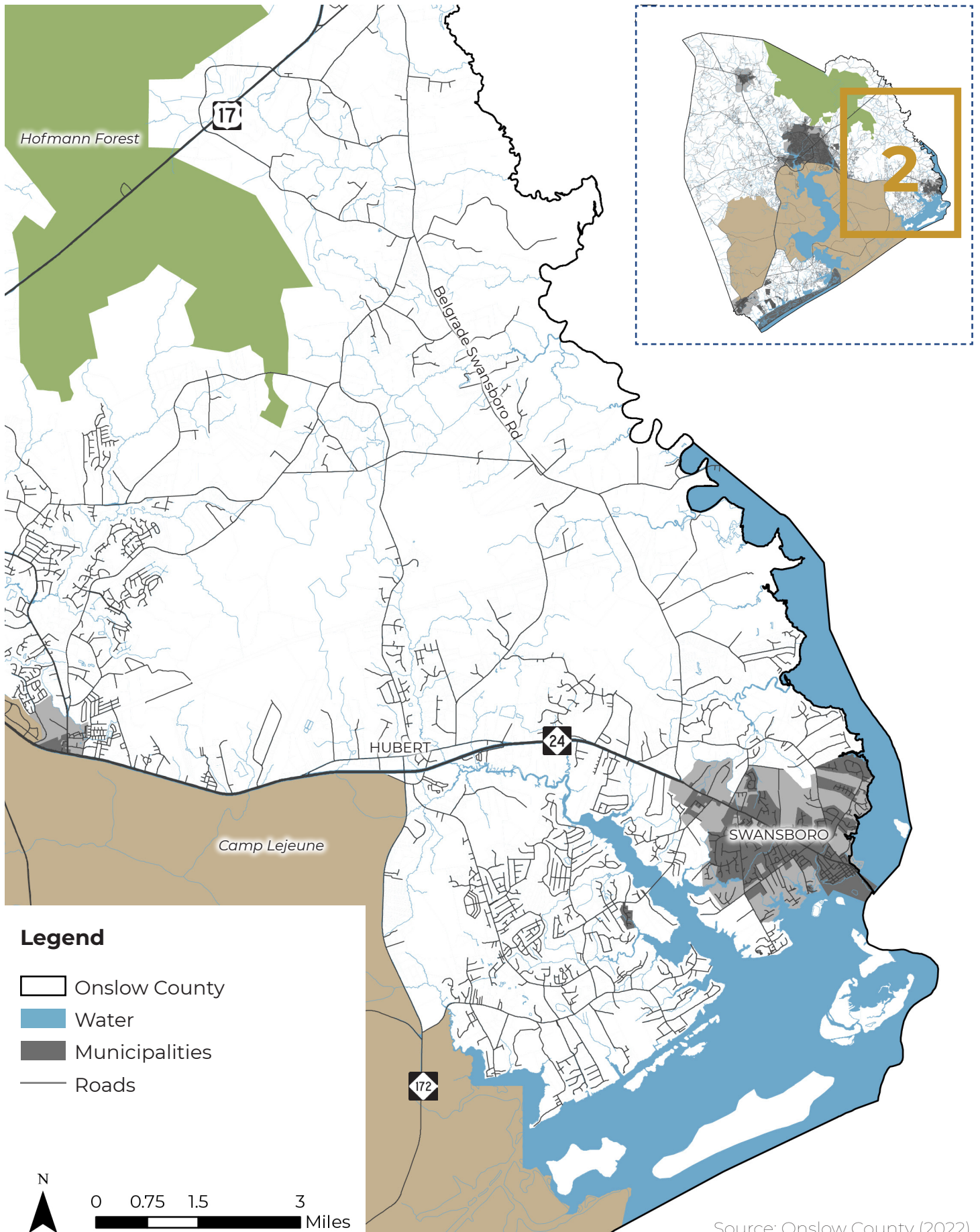
- Onslow County
- Water
- Municipalities
- Roads



0 0.75 1.5 3 Miles

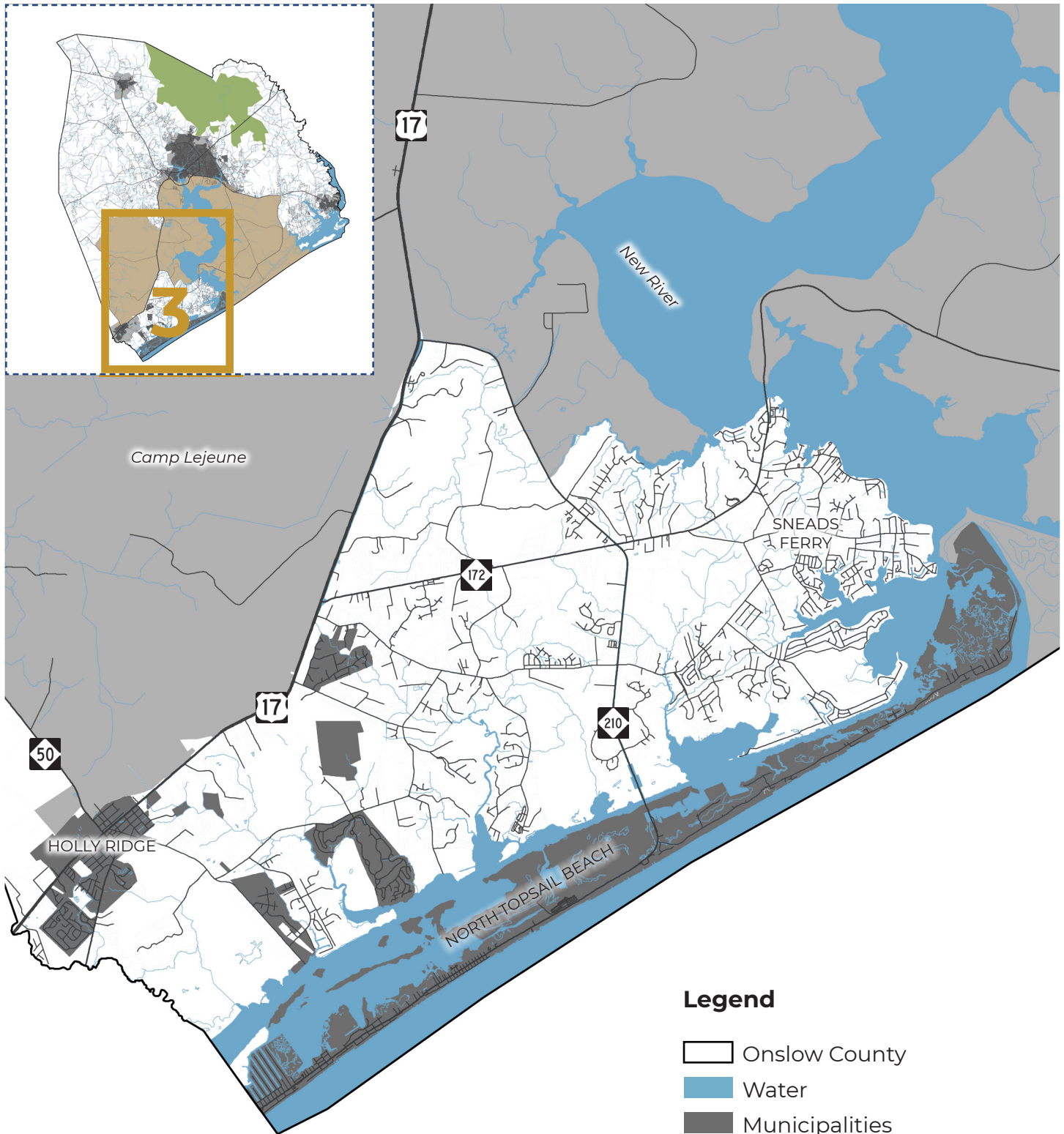
Source: Onslow County (2022)

» EAST REGION BASE MAP



Source: Onslow County (2022)

» SOUTH REGION BASE MAP



Legend

- Onslow County
- Water
- Municipalities
- Roads



Source: Onslow County (2022)

Planning Process

PREVIOUS PLANNING EFFORTS

Previous Comprehensive Plan- Amended 2014

As mentioned at the beginning of this document, the previous Comprehensive Plan was adopted by Onslow County in 2010. It was amended in 2014 to revise the future land use map and exchange some of the text. A major change from the 2010 Plan to this current Plan is that the Town of Holly Ridge is not an active participant. This Plan is solely for the unincorporated portions of Onslow County and the Town of Richlands.

Sneads Ferry Community Plan

The Sneads Ferry community is one of the fastest growing areas within Onslow County. In response to increased growth pressures, Onslow County and the Jacksonville Urban Area Metropolitan Planning Organization (JUMPO) partnered with the Sneads Ferry community to develop the Sneads Ferry Community Plan in 2015. The plan develops a community vision tied to land use recommendations and is backed by a strategy that addresses traffic and safety without compromising existing and potential development. The plan concludes with recommendations grouped under five headings: Focused Growth, Working Waterfront and Environmentally Sensitive Areas, Quality of Life, Community Engagement, and Transportation.

PUBLIC ENGAGEMENT

Public engagement was a major component of the comprehensive planning process. The different engagement methods and tools used during the process are described below and on the following page.

Project Website

The project website, OnslowHorizon2040.com, was used throughout the planning process as a means to keep the public informed about the Plan, identify opportunities to become more engaged in the process, and submit questions or comments about the project.

Community Survey

At the onset of the project, a community survey was made available, both online and in-person, to residents. The community survey was open from February to August 2023 and had about one dozen questions concerning residents' perceptions of the current and future state of Onslow County. The survey was shared on the project website, on the

County's website, on the County's social media pages, and in public email lists. The survey was also available in paper format at the County Government Center. Overall, 436 people participated in the survey.

Public Drop-in Meetings

There were two phases of public meetings conducted during the planning process. Toward the beginning of the project, public drop-in meetings were held at three locations within the County: Onslow County Museum, Swansboro Branch Library, and Sneads Ferry Branch Library. At each of these meetings, there were informational boards to introduce the community to the planning process and some background information about the County. Additionally, there was an activity which prompted residents to think about where they would like to see future development. Sneads Ferry had the highest attendance at these meetings, as residents are currently concerned about the areas' fast growing pace. All of the resources from the meetings, including a virtual opportunity to participate in the growth activity, were made available on the project website for those who were unable to attend. In total, about 90 participants came out to the first round of public meetings.

Following the completion of the draft plan, an additional round of public meetings were held to gather input on the completed document, including the finalized future land use map as well as the proposed implementation strategies and recommendations. Prior to holding the meetings, the draft plan was published on the project website and the County produced a series of short videos to introduce the plan to the community. Following several weeks of the community having an opportunity to review and comment on the plan, three public meetings were held on April 22, 23, and 24 at the Sneads Ferry Library, Queens Creek Elementary School, and at the Onslow County Museum in Richlands.

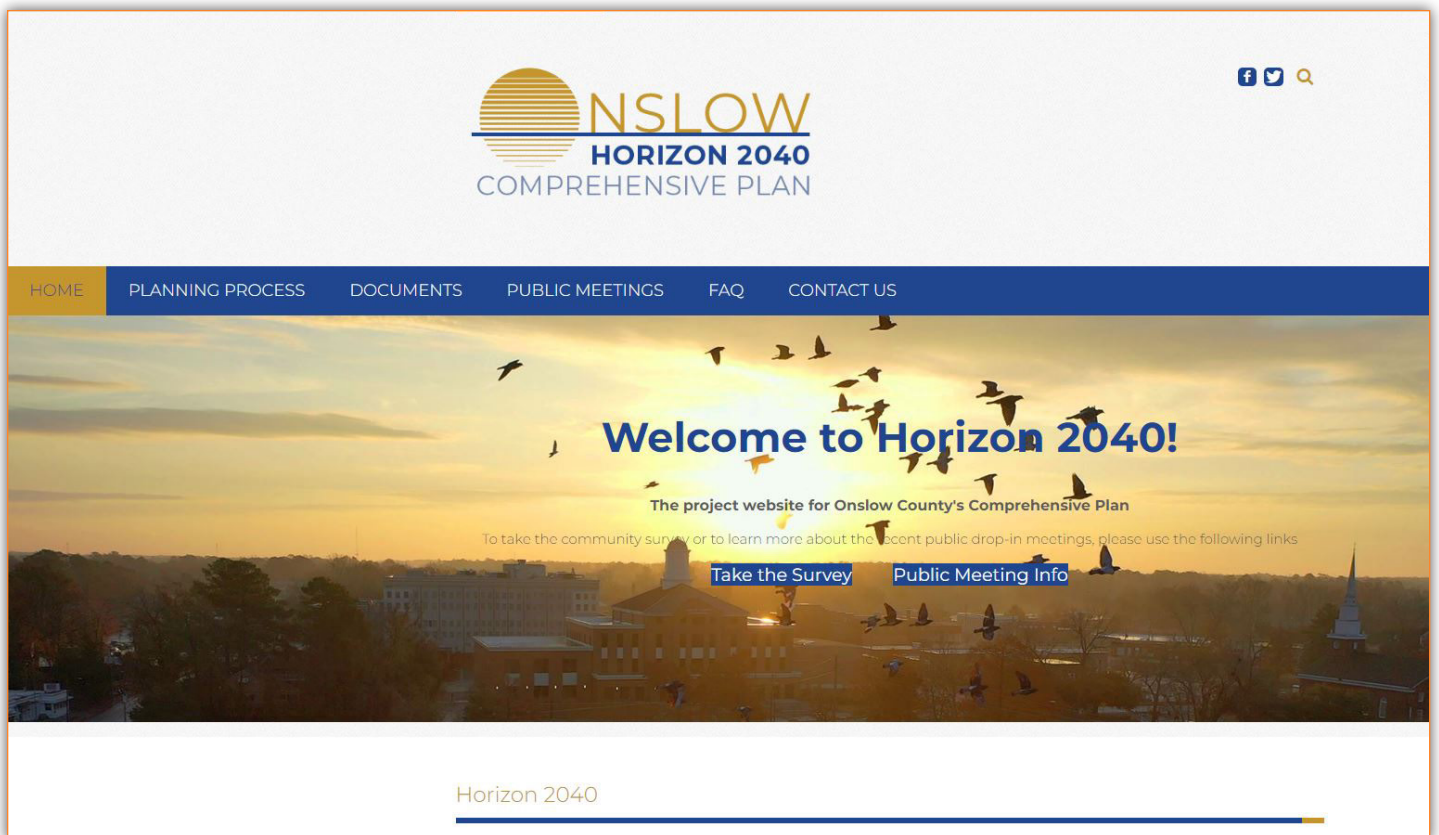
Adoption Process

After the public had an opportunity to review the draft Plan and the steering committee recommended approval of the Plan, the Planning Board considered the draft at a regular meeting on July 11, 2024. The meeting was advertised to the public and resulted in the Planning Board unanimously recommending adoption of the CAMA Comprehensive Plan. On Monday, August 19th, the Onslow County Board of Commissioners held a public hearing to review the Plan. The hearing was advertised in accordance with statutory requirements, with notice forwarded to the Division of Coastal Management (DCM) prior to publication. Following the public hearing, the Board of Commissioners voted unanimously to adopt the plan. Following adoption, the plan was forwarded to the North Carolina Coastal Resources Commission for CAMA Certification.



Online Engagement

In addition to the project website, online engagement was a major component of the public outreach strategy for this project. The County's social media pages serves as an important distributor of information about the plan. The project website linked to both the County's Facebook and Twitter pages, where information about engagement opportunities were shared with followers. When the draft plan was completed and published, the County produced a set of four short videos that introduced the plan to the community. These videos were published on the County's website, the project website, as well as the County's YouTube channel and social media sites. Throughout the process, email addresses were collected at public meetings and through the project website, and regular email updates were sent at major milestones in the planning process.



How to Use this Plan

This document helps guide the implementation of major projects, and the allocation of resources. The Plan is implemented through code enforcement, infrastructure and redevelopment projects, and new private development. It should be consulted prior to any decision being made by Onslow County staff, Planning Board, and / or Board of Commissioners concerning land use and development. Specifically, the State of North Carolina requires that the Planning Board and Board of Commissioners consult the Comprehensive Plan every time a major development or rezoning is considered. The Implementation Plan section at the end of this document is also a direct list of action items for Onslow County to pursue in the coming years.

Plan Structure

This Plan is divided into six subsections, as listed and described below:

- **Introduction:** The Introduction section is what you have just read. It highlights some primary background information about Onslow County and the planning process.
- **Community Characteristics:** The Community Characteristics section provides an analysis of demographic, economic, and other factors which comprise the makeup of Onslow County.
- **Environmental Constraints:** The Environmental Constraints section reviews the coastal and environmental conditions which impact, and are impacted by, growth and development. This includes wetlands, topography, floodplains, and habitats
- **Land Use Influences:** This section provides information on elements which influence land use in the County, including, but not limited to, transportation, utilities, and environmental features.
- **Implementation Plan:** This section provides the vision for the future of the County, as well as planning themes, goals, and strategies which direct plan recommendations.
- **Future Land Use Strategy:** The Future Land Use Strategy section provides the future land use map for Onslow County, and additional information on how to implement the map.



COMMUNITY CHARACTERISTICS



 **NSLOW**
HORIZON 2040
COMPREHENSIVE PLAN



Overview

The Community Character Section will cover the County’s history, population and demographic trends, and socio-economic traits in order to provide an understanding of the existing conditions. This will, in turn, assist with an analysis of future needs. It should be noted that several elements contained in this section, such as information on population and population projects, are required by the Coastal Area Management Act.

Onslow County History

HISTORY

The first English and European settlers arrived in Onslow County, which was originally part of the colonial precincts of Carteret and New Hanover, in 1713. Onslow County was formed in 1734 and was named for the Honorable Arthur Onslow, Speaker of the British House of Commons. After a lethal hurricane in 1752, the County Courthouse was relocated from Town Point to Wantland’s Ferry; a settlement which was eventually incorporated and named Jacksonville (after President Andrew Jackson) in 1842. Largely a collection of sparsely populated agrarian and maritime communities, Onslow County was dramatically changed in the early 1940s with the establishment of the Army’s Camp Davis near Holly Ridge (now closed) and the creation of Camp Lejeune in 1941.

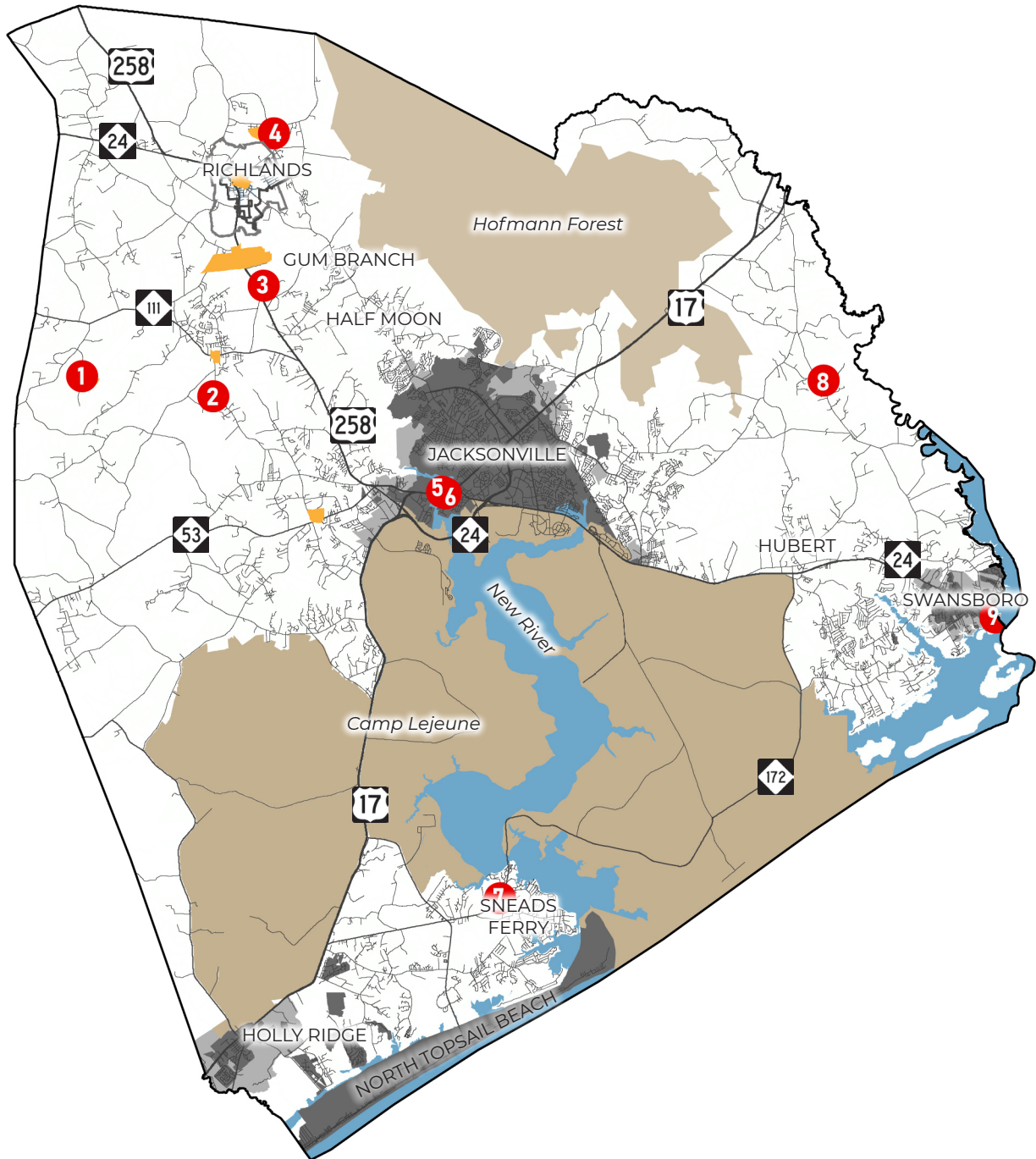
HISTORIC RESOURCES

There are nine sites in Onslow County that are on the National Register of Historic Places, listed as “NR” on the map on the following page. These historic sites include:



Avirett-Stephens Plantation is a historic plantation complex located near Richlands. The plantation house was built in 1851, and is a two-story, five bay Greek Revival style frame dwelling. It sits on a brick foundation and features a two-tiered porch with a shallow hipped roof. Other contributing factors are the antebellum cistern, family cemetery, and surrounding farmland. Today, the plantation is used as a wedding venue.

» HISTORIC RESOURCES

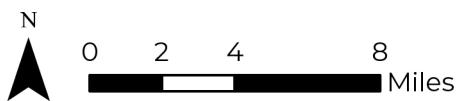


Legend

Historic Resources

- National Register Sites
- National Register Historic District

- | | |
|--|--|
| ● 1 Futral Family Farm | ● 7 Yopps Meeting House |
| ● 2 Alum Spring | ● 8 Palo Alto Plantation |
| ● 3 Avirett_Stephens Plantation | ● 9 William Edward Mattocks House |
| ● 4 Taylor Farm | |
| ● 5 Pelletier House | |
| ● 6 Bank of Onslow and Masonic Temple | |



Source: NC SHPO (2022)



Futral Family Farm is a historic farm complex located in Richlands. The main house was built around 1885, and is a one-story saddle-notched log hall-parlor dwelling. It was enlarged in 1906 by the son of the original owners and listed on the National Register of Historic Places in 1989. The house provides a rare surviving example of the once typical log house of the tidewater coastal plain.



Palo Alto Plantation is one of the few antebellum plantation houses surviving in the County. It was one of the largest plantations in the State. Built between 1836 and 1840, it is a two-story, five bay frame dwelling with Federal and Greek Revival style design elements. It was also the childhood home of Daniel L. Russell, Jr. (1845 - 1908), governor of North Carolina from 1897 to 1901.



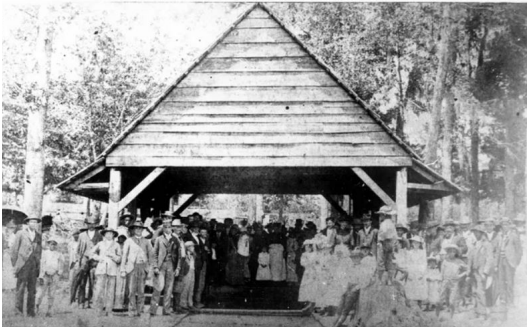
Bank of Onslow and Jacksonville Masonic Temple are two adjoining historic buildings located on Old Bridge Street in Jacksonville. The buildings are of the Beaux Arts and Tudor Revival architectural styles, and were constructed in 1916 and 1919, respectively. The buildings were jointly listed on the National Register of Historic Places in 1989.



Taylor Farm is a historic farm located in Richlands. The main house was built in 1931 - 1932, and is a two-story, brick dwelling with Colonial Revival and Bungalow/American Craftsman style design elements. Other contributing resources include two garages, a pump house, a barn, the Woodward-Taylor Cemetery, a silo complex, and the surrounding agricultural landscape.



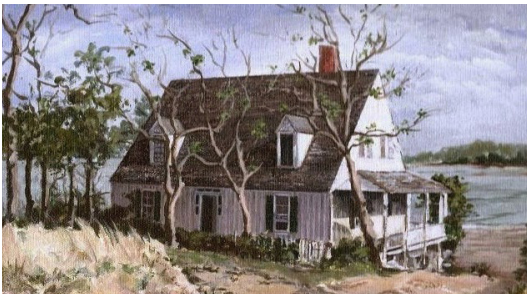
Yopps Meeting House is a historic Primitive Baptist Church in Sneads Ferry. The building was erected around 1890, but it is claimed that there was a log precursor built as early as 1813. The meeting house is a one-story, rectangular, frame building with Greek Revival style design elements. There are also two contributing cemeteries on the property.



Alum Spring is a historic sulfur spring located at Catherine Lake. The spring was the site of the County poorhouse during the post-American Civil War period. After the poorhouse moved, the County-wide “Big August” picnic social gathering was held at the Alum Spring until 1933. Alum Spring was listed on the National Register of Historic Places in 1990.



Pelletier House and Wantland Spring is located in Jacksonville. The house was built in the 1850s by Rufus Ferrand Pelletier in the Greek Revival style, and sits atop Wantland Spring, on the banks of the New River. The spring dates back to 1731 and the home is the oldest standing structure in the City. The house and spring were listed on the National Register in 1989.



William Edward Mattocks House was started in 1901 and completed in the 1910s. It is a 1.5 story, Colonial Revival style frame dwelling in Swansboro. A similar, 1.5 story frame house built about 1931 and operated as a cafe is also on the property. The house was added to the National Register in 1989.

Additionally, there are six National Register Historic Districts in the County, listed as “NRHD” on the historic resources map. These include: Catherine Lake, Richlands, Southwest, Venters Farm, Mill Avenue, and Swansboro. These are areas with historic attributes related to either architectural styles or local historical events.

Eighteen sites have been Determined Eligible (DOE) for the National Register and 41 sites are on the Study List (SL) for the National Register. Both of these classifications identify historic resources that may be eligible for the National Register but have not yet been added. A total of 1,101 sites and districts are identified on the map as historic properties in Onslow County. However, the majority of these are sites that have been surveyed but do not have an individual designation (SO), or sites that have been surveyed but are no longer in existence due to being moved or destroyed (SD).

Community Profile

POPULATION

Historic and Projected Population Growth

The current population of Onslow County is almost 205,000 people. Since 2000, the County has been growing steadily, adding more than 50,000 residents in twenty years. However, there was limited growth between 1990 and 2000, when the County grew by less than 1,000 people in a decade. The State of North Carolina projects that the County will continue to develop at a steady rate in the near future, growing by over 72,000 people in the next 30 years, and reaching a population around 274,000 by 2050.

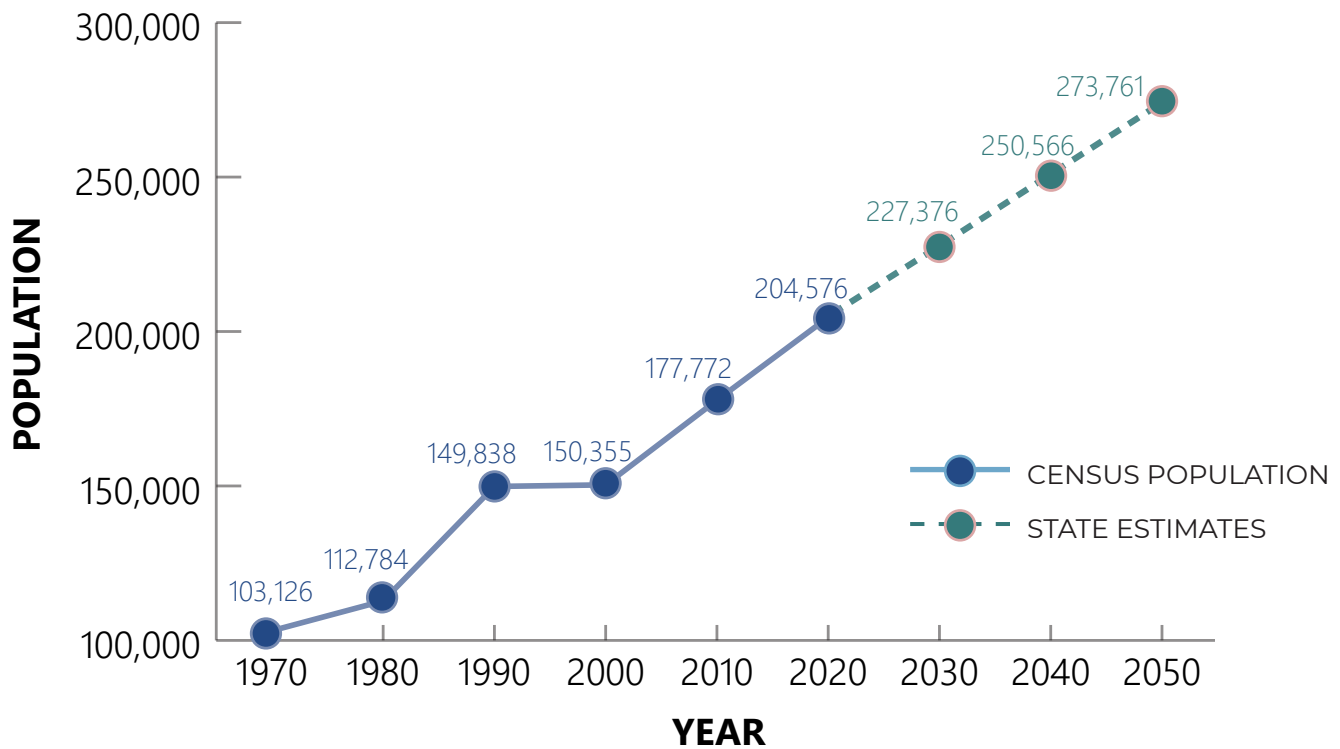
» HISTORIC POPULATION COMPARISON

Source: US Census Bureau, United States Census (1970 - 2020)

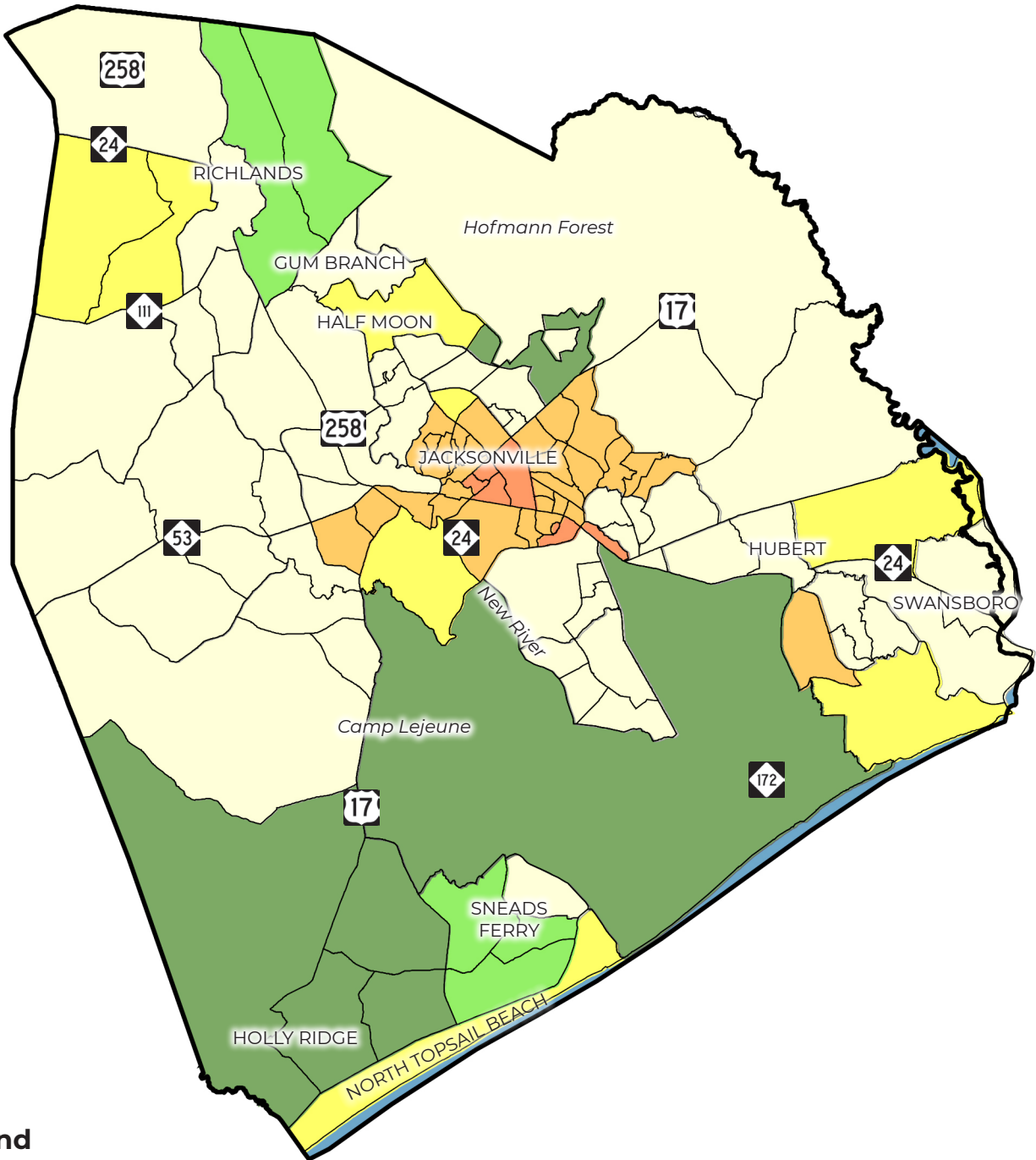
	1970	1980	1990	2000	2010	2020
NORTH CAROLINA	5,082,059	5,881,766	6,628,637	8,049,313	9,535,483	10,439,388
ONSLow COUNTY	103,126	112,784	149,838	150,355	177,772	204,576

» ONSLOW COUNTY HISTORIC AND PROJECTED POPULATION

Source: US Census Bureau, United States Census (1970 - 2020), NC Demographer



» POPULATION GROWTH



Legend

Onslow County

Census Block Groups

% Change since 2010

-60% to -25%

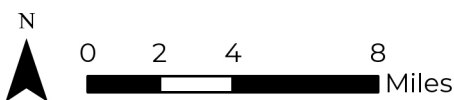
-25% to 0%

0% to 25%

25% to 50%

50% to 100%

Over 100%



Source: Decennial Census (2020)

» POPULATION COMPARISON

Source: US Census Bureau, United States Census (2000 - 2020)

	2000	2010	% CHANGE 2000-2010	2020	% CHANGE 2010-2020
NORTH CAROLINA	8,049,313	9,535,483	18.5%	10,439,388	9.5%
ONslow COUNTY	150,355	177,772	18.2%	204,576	15.1%

» COMPONENTS OF POPULATION PROJECTIONS

Source: North Carolina Office of State Budget and Management - State Demographer

PROJECTION PERIOD	POPULATION CHANGE		COMPONENTS OF CHANGE			
	TOTAL NUMERIC	TOTAL PERCENT	NUMBER OF BIRTHS	NUMBER OF DEATHS	NATURAL INCREASE <i>(births - deaths)</i>	NET MIGRATION
2020 - 2030	22,534	11.0%	35,805	14,474	21,331	1,203
2030 - 2040	23,190	10.2%	50,263	17,055	33,208	- 10,018
2040 - 2050	23,195	9.3%	55,552	19,102	36,450	- 13,255
2020 - 2050	68,919	33.8%	141,620	50,631	90,989	- 22,070

When comparing the County's population growth to the State's, it can be seen that the County experienced similar growth rates as North Carolina between 2000 and 2010 (around 18.5%). However, Onslow County grew by a much greater rate in the last decade. While the State of North Carolina grew by about 9.5% between 2010 and 2020, Onslow County grew by more than 15%.

Seasonal Population and Projected Growth

Extrapolation of data from the American Community Survey can provide an estimate for the seasonal population in Onslow County. Other sources, such as utility data and rental information may provide further insight into the seasonal population factors in the County. For instance, a quick search on AirBnb yielded more than 1,000 short term rentals, while apartments.com listed 259 rental units and apartmenthomeliving.com listed just 274 short term rentals in the County. The County has an occupancy tax, which may provide additional data on the number of rentals occurring (for 15 or more days).

» ESTIMATED SEASONAL POPULATION

Source: Benchmark, American Community Survey (2021), North Topsail Beach Comprehensive Plan

HOUSING TYPE	NUMBER OF UNITS	PERSONS PER UNIT	SEASONAL POPULATION CAPACITY
CAMPSITES	577	3.50	2,019
PUBLIC ACCESS PARKING LOTS	1,212	4.00	4,848
SEASONAL HOUSING UNITS	4,337	4.00	17,348
TRANSIENT BOAT SLIPS	165	3.00	495
TOTAL	6,291		24,710

» ESTIMATED AND PROJECTED SEASONAL POPULATION

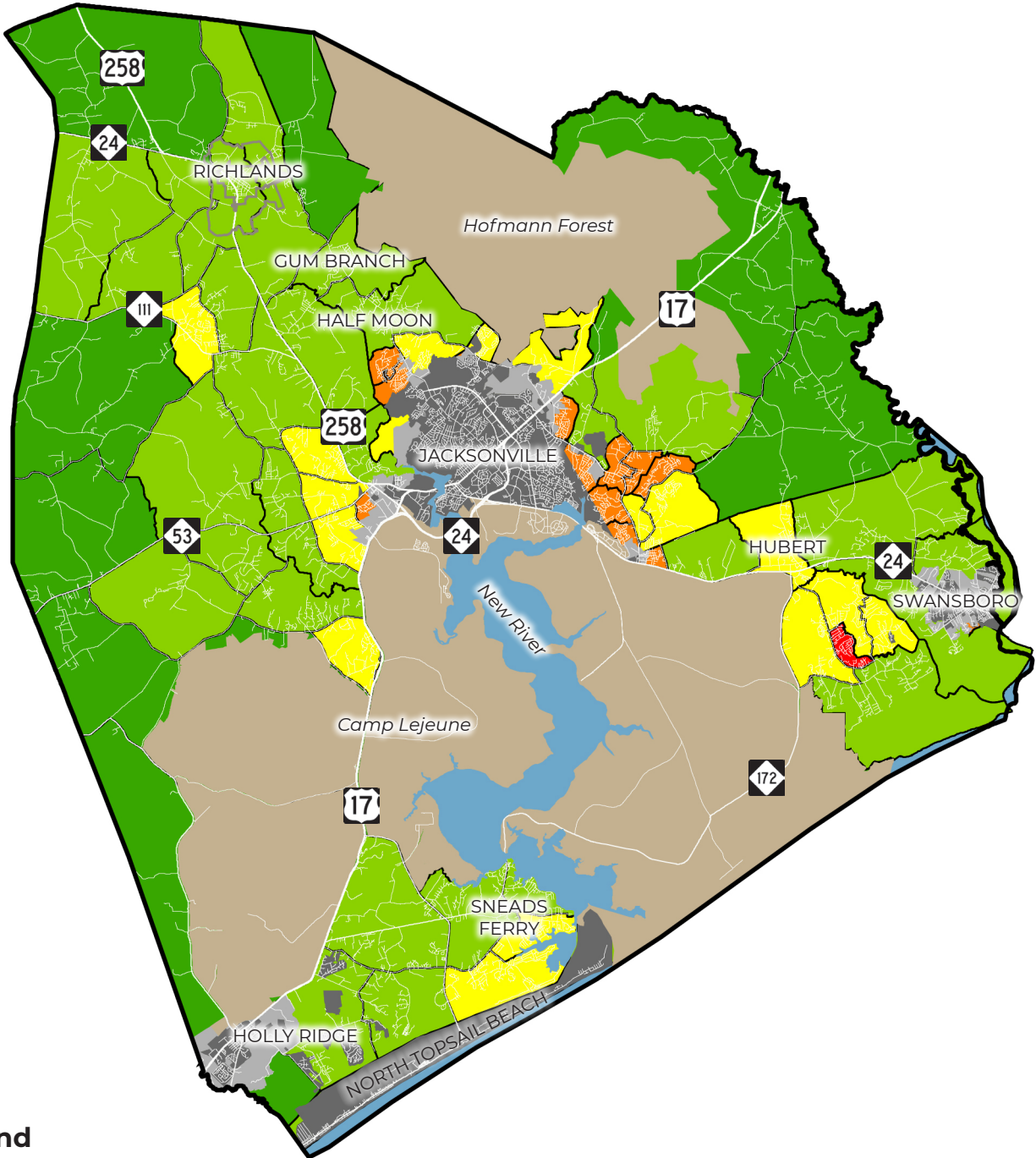
Source: Benchmark, American Community Survey (2021)

NUMBER OF SEASONAL UNITS	NUMBER OF SEASONAL UNITS	ESTIMATED SEASONAL RESIDENTS	ESTIMATED PERMANENT RESIDENTS
2011	3,337	9,077	177,772
2016	3,419	9,436	185,755
2021	4,337	11,320	206,160
2026 (ESTIMATE)	4,551	11,879	217,559
2031 (ESTIMATE)	4,791	12,506	228,959
2036 (ESTIMATE)	5,036	13,143	241,018
2041 (ESTIMATE)	5,280	13,781	253,077
2046 (ESTIMATE)	5,525	14,419	265,137
2051 (ESTIMATE)	5,769	15,057	277,197

The American Community Survey provides estimates of the number of housing units which are used for seasonal, recreational, or occasional use. Since 2011, approximately 5% of the County’s housing stock has been used seasonally. This accounts for about one-third of the total “vacant” housing units in the County, and totals 4,337 total seasonal units in 2021. Multiplying this by the average household size of 2.61, it can be estimated that there are 11,320 seasonal residents in Onslow County.

To forecast the seasonal population, it was assumed that this cohort would continue to make up about 5.5% of the projected population for the total County provided by the State of North Carolina in the next 30 years, reaching over 15,000 seasonal residents by 2051. The total population in the County is estimated to be over 275,000 in 2050, resulting in almost 300,000 total residents during the peak season in 2050.

» POPULATION DENSITY



Legend

- Onslow County
- Water
- Cities
- Roads
- Census Block Groups

People per Square Mile

- | | |
|--------------|---------|
| > 2,500 | 100-500 |
| 1,000- 2,500 | < 100 |
| 500-1,000 | |



Source: Decennial Census (2020)

Population Density

The greatest population density in the County is within the City of Jacksonville, where more than 2,500 people live per square mile (in some parts). Additional dense areas, shown in orange on the population density map, include Swansboro, parts of Camp Lejeune, and an area between Hubert and Swansboro. Much of the County remains rural, with less than 100 people living per square mile in all of the areas shown in dark green, and only 100 - 500 people per square mile in all of the light green areas.

Race and Ethnicity

Just over 63% of Onslow County residents are considered to be White or Caucasian. About 13.5% of residents are considered Hispanic or Latino and about 13.2% are considered Black or African American Alone.

Almost 6.5% of residents are two or more races, and while there are residents that can be described as American Indian, Alaskan Native, Asian, Native Hawaiian, Pacific Islander, or some other race; they each account for less than 2.5% of the total population. The table below and the pie chart on the following page illustrate the racial and ethnic characteristics of Onslow County's population.

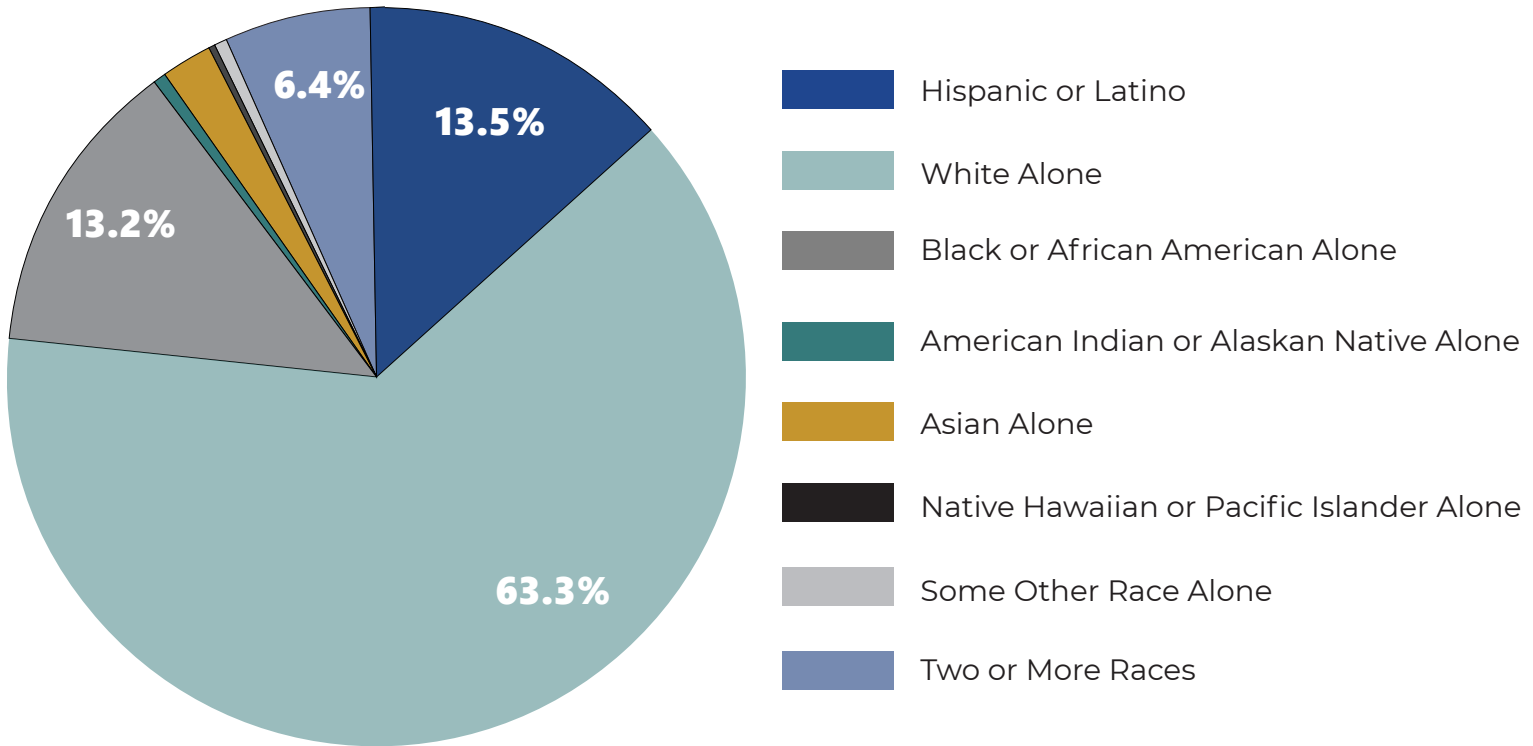
» **RACE AND ETHNICITY IN ONSLOW COUNTY**

Source: US Census Bureau, Decennial Census (2020)

RACE / ETHNICITY	PERCENT OF POPULATION
Hispanic or Latino	13.5%
White Alone	63.3%
Black or African American Alone	13.2%
American Indian or Alaskan Native Alone	0.5%
Asian Alone	2.2%
Native Hawaiian and Other Pacific Islander Alone	0.4%
Some Other Race Alone	0.6%
Two or More Races	6.4%

» RACE AND ETHNICITY IN ONSLOW COUNTY

Source: US Census Bureau, Decennial Census (2020)



Gender

The County's population is relatively evenly divided by gender, with approximately 48.9% of residents identifying as male and about 51.1% of residents identifying as female.

» GENDER RATIOS

Source: US Census Bureau, 2020 Decennial Census

54.9%
MALE

45.1%
FEMALE

Age Distribution

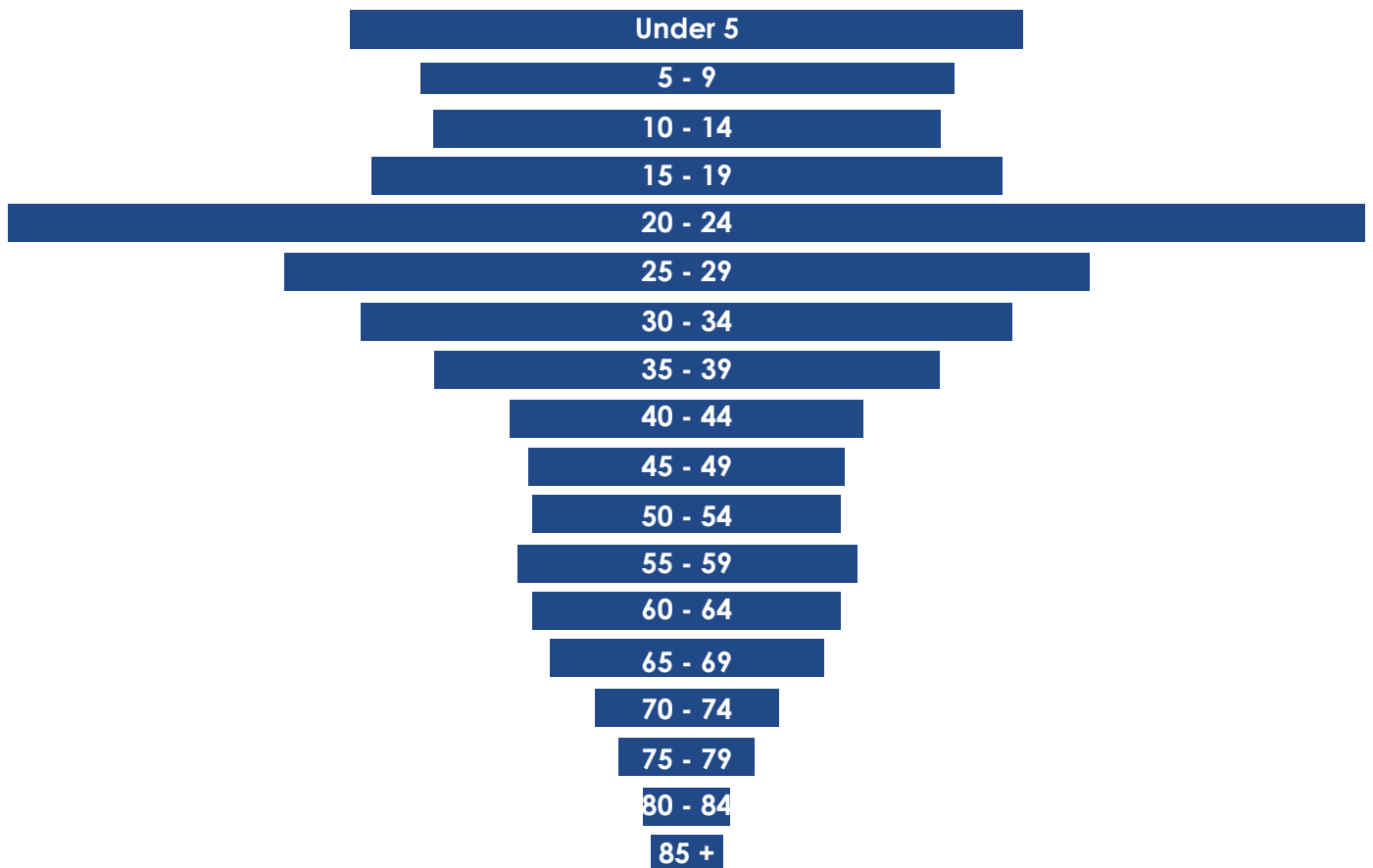
The population pyramid on the following page shows each of the age categories of residents who live in the County. Where the bars are larger, such as with the 20 - 24 year old category, a larger population resides within that age range in the County. Since Onslow County has a relatively small population over the age of 70, as well as a very large 20 - 24 year old age group, the median age of the County is very low. At just 26.9, Onslow County

is, on average, more than 12 years younger than the State of North Carolina. It can be assumed that this demographic characteristic is largely inflated by the large United States Military presence in the County, as it is home to a number of young marines, sailors, and soldiers.

One benefit of having a younger population is that the “age dependency ratio” is notably smaller than other communities. The American Community Survey calculates age dependency in an effort to examine the portion of the population that is dependent on others. In Onslow County, the old age dependency ratio is more than 12% lower than the State. The overall age dependency ratio is similarly almost 12% lower than North Carolina.

» **POPULATION DISTRIBUTION BY AGE GROUP**

Source: US Census Bureau, American Community Survey (2021)



» MEDIAN AGE AND DEPENDENCY

Source: US Census Bureau, American Community Survey (2021)

	ONSLow COUNTY	NORTH CAROLINA
Median Age	26.9	39.0
Age Dependency Ratio	50.8	62.5
Old Age Dependency Ratio	14.1	26.4
Child Dependency Ratio	36.8	36.1

*The Age dependency ratio is the population typically not in the labor force (under 16 and over 65) divided by the population in the labor force (16 - 65). A high number indicates a burden on the productive part of the population to maintain economy.

*The Old Age Dependency Ratio is the population over 65 divided by the population aged 16 - 64. A high number indicates a burden on the productive part of the population to maintain economy, particularly in relation to an aging population.

*The Child Dependency Ratio is the population aged 0 - 15 divided by the population aged 16 - 64. A high number indicates a burden on the productive part of the population to maintain economy, particularly in relation to a young population.

SOCIO-ECONOMIC CHARACTERISTICS

Educational Attainment

Approximately two-thirds of Onslow County residents have a high school diploma, some college experience, or an Associates Degree. Almost one-quarter of residents have a Bachelor's Degree or higher level of education and only about 8.2% have not finished high school. Comparing educational attainment to the State, the County has a smaller portion of residents with the highest levels of education (Bachelor's, Graduate, and Professional Degrees) but a larger portion of residents with just a High School Diploma, some college experience (and no degree), and Associates Degrees. This can largely be attributed to the young population, the large military presence, and the rural characteristic of the community.

Educational attainment has improved in the last decade, with the college degree population increasing by more than 8% and the portion of the population with some college experience increasing by almost 5%.

» **EDUCATION COMPARISONS (% OF 25+ POPULATION)**

Source: US Census Bureau, American Community Survey (2021)

	ONSLOW COUNTY	NORTH CAROLINA
No High School Degree	8.2%	10.9%
High School Graduate (includes equivalency)	29.6%	25.2%
Some College, No Degree	26.4%	20.8%
Associates Degree	10.9%	10.0%
Bachelor's Degree	17.0%	20.9%
Graduate or Professional Degree	7.9%	12.1%

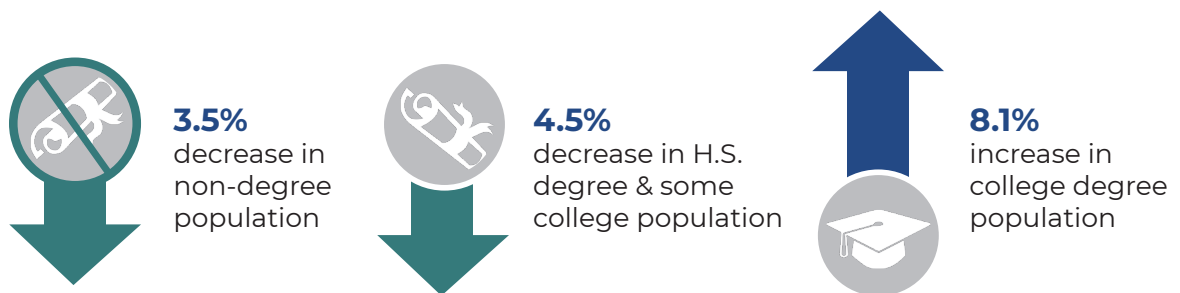
» **TREND COMPARISON (NET CHANGE 2011 - 2021, % OF 25+ POPULATION)**

Source: US Census Bureau, American Community Survey (2011, 2021)

	ONSLOW COUNTY	NORTH CAROLINA
No High School Degree	8.2%	10.9%
High School, Some College, or Associates Degree	66.9%	56.0%
Bachelor's Degree or Higher	24.9%	33.0%

» **TREND COMPARISONS (NET CHANGE 2011 - 2021, % OF 25+ POPULATION)**

Source: US Census Bureau, American Community Survey (2011, 2021)

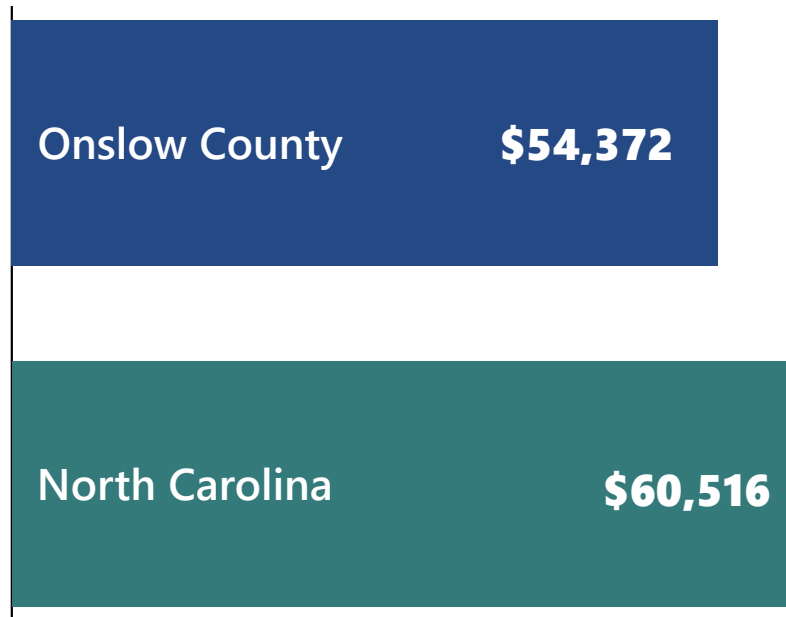


Median Income

The median household income in Onslow County is just over \$54,000. This is about \$6,000 lower than the median household income in the State of North Carolina. The median per capita income is also lower than the State, by approximately \$7,500. While the average household income in the State has increased by more than 30% in the last decade, household incomes in the County have only increased by almost 20%. Similarly, the State's average per capita income has increased by more than 35% since 2011, while the County's per capita income has only increased by 24.5% during this same time. The limited increase in incomes may be related to the large number of residents who are employed with the United States military.

» MEDIAN HOUSEHOLD INCOMES

Source: US Census Bureau, American Community Survey (2021)



» INCOME COMPARISONS

Source: US Census Bureau, American Community Survey (2011, 2021)

	ONSLow COUNTY	NORTH CAROLINA
Median Household Income (2011)	\$45,457	\$46,291
Median Household Income (2021)	\$54,372	\$60,516
Change in Household Income (2011 - 2021)	+ 19.6%	+ 30.7%
Median Per Capita Income (2011)	\$21,391	\$25,256
Median Per Capita Income (2021)	\$26,625	\$34,209
Change in Per Capita Income (2011 - 2021)	+ 24.5%	+ 35.4%

Poverty Status

Almost 24,000 people who live in Onslow County are considered to be in poverty. The United States Census Bureau calculates poverty by assuming a poverty threshold based on the estimated cost of living. They then determine the number of people and families estimated to earn less than the poverty threshold. On average, about 12.8% of Americans are in poverty; meaning that the County's rate of poverty is slightly above average. Almost 18% of children under the age of 18 years old are considered to be living in poverty while about 12.6% of those over the age of 65 are considered to be in poverty in the County.

It should be noted that poverty status cannot be determined for institutional group quarters (such as prisons and nursing homes), college dormitories, military barracks, or living situations without conventional housing (and who are not in shelters).

» **POVERTY STATUS IN ONSLOW COUNTY**

Source: US Census Bureau, American Community Survey (2021)

POPULATION FOR WHOM POVERTY STATUS IS DETERMINED	TOTAL POPULATION	PERCENT OF POPULATION
Total Population	23,993	13.3%
Under 18 Years Old	8,459	17.4%
65 Years and Over	2,345	12.6%

ENVIRONMENTAL INFLUENCES



 **NSLOW**
HORIZON 2040
COMPREHENSIVE PLAN



Overview

The Environmental Influences chapter of this Plan identifies a range of natural resources and environmental features which impact the growth and development potential in the County. Environmental influences include lands which are managed for habitat purposes, bodies of water, wetlands, watersheds, habitats and growing areas, soils, floodplains, and other natural hazards.

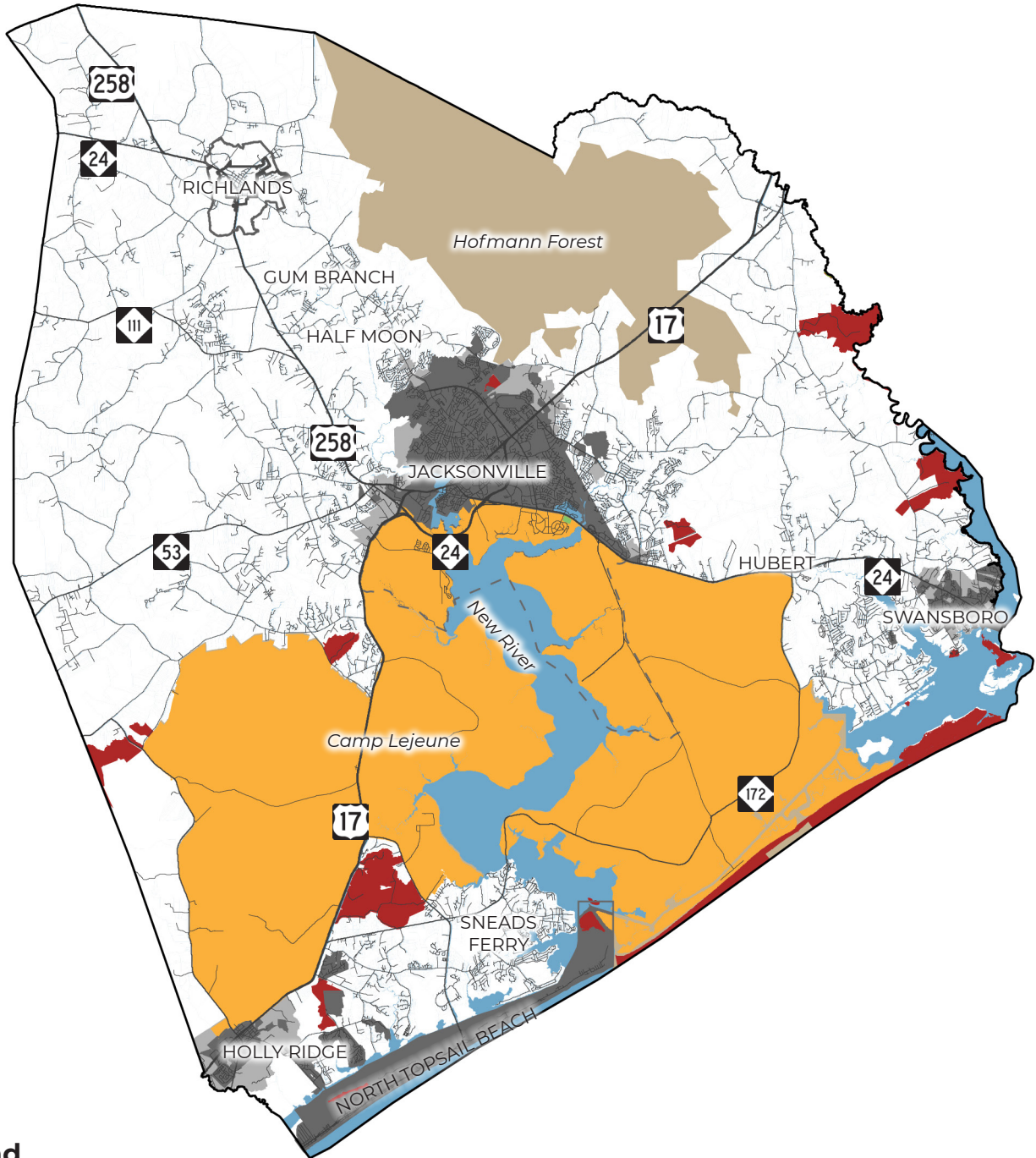
MANAGED AREAS

Onslow County contains a number of managed areas which are shown on the map on the following page. This includes land owned by the Department of Defense (DoD) and the State of North Carolina. The DoD land includes military training grounds, as well as significant natural land under federal management. State lands include Hammocks Beach State Park, WRC Turkey Creek Access Area, and WRC White Oak Waterfowl Impoundment. The New River is managed by the NC Division of State Parks and Recreation, as part of a federal government protection program. The federal government assigns protection to rivers with outstanding scenic, recreational, geologic, fish and wildlife, historic, archaeological, or other values. At the present time, there are only four river segments and one creek with these designations in the State; one of which is the New River in Onslow County.

In the County, there are two Land Trust Conservation Properties - the Everett Creek-Allen property (which is currently being preserved) and the Oakhurst property. There are also four Game Land areas - The Lanier Tract, H&M Farm, an unnamed area directly adjacent to the H&M Farm in Stones Creek, and the Rocky Run habitat area.

Land Management is an important tool in Onslow County to reinforce the preservation of the natural environment for all generations to come.

» LAND MANAGEMENT- PROTECTED AREAS



Legend

- Onslow County
- Water
- Cities
- Roads
- State
- Department of Defense



Source: USGS (2022)

FRAGILE AREAS OF ENVIRONMENTAL CONCERN

The Coastal Resources Commission (CRC), which is the governing body for the Coastal Area Management Act (CAMA), establishes areas of environmental concern (AECs) as the foundation of CAMA regulations. AECs are areas of natural importance that may be easily destroyed by erosion or flooding, or that may have environmental, social, economic, or aesthetic value. Generally, property is within an AEC if it is:

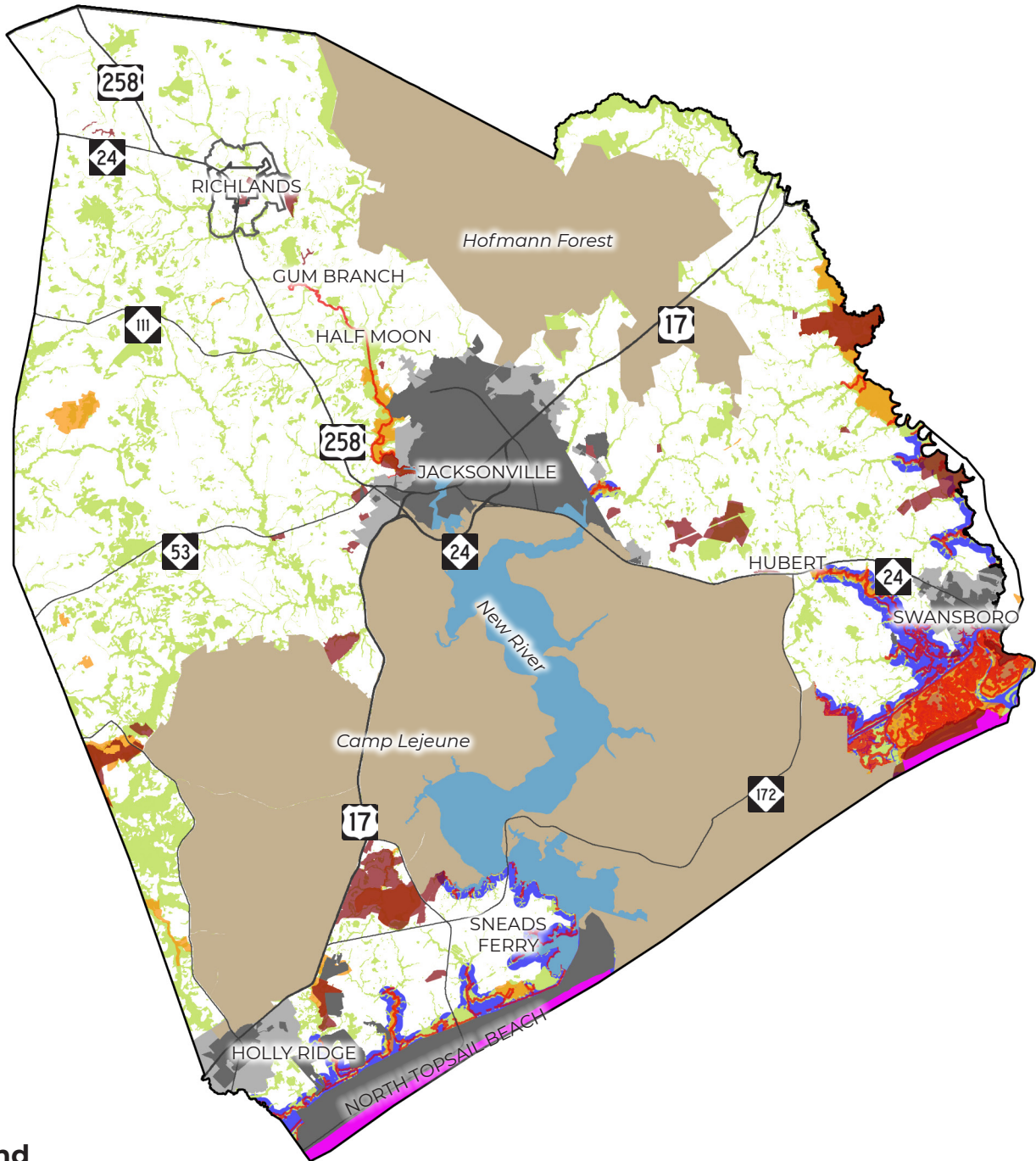
- In or on navigable waters;
- On marsh or coastal wetlands;
- Within 75 feet of the mean high water line along an estuarine shoreline;
- Near the ocean beach;
- Near an inlet;
- Within 30 feet of the north high water level of areas designated as inland fishing waters by the North Carolina Marine Fisheries Commission; or
- Within 575 feet of the mean high water line along an outstanding resource water shoreline.

The New River is one of just five
National Wild and Scenic River
Systems in the State of North Carolina

The subsections on the following pages describe the areas of environmental concern in Onslow County. Additionally, AECs are covered under the four categories of:

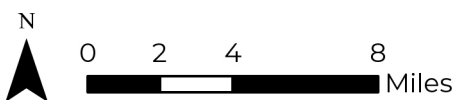
- **Estuarine and Ocean Systems:** Estuarine Waters, Public Trust Areas, Coastal Shorelines, and Coastal Wetlands
- **Ocean Hazard Systems:** Ocean Erodible AEC, Inlet Hazard AEC, and Unvegetated Beach AEC
- **Public Water Supplies:** Small Surface Water Supply Watershed AEC and Public Water Supply Well fields AECs
- **Natural and Cultural Resource Areas:** Significant Environmental or Cultural Resources

» FRAGILE AREAS OF ENVIRONMENTAL CONCERN



Legend

- | | |
|---|---|
|  Onslow County |  Coastal Wetlands |
|  Water |  Estuarine Shoreline |
|  Cities |  Critical Habitat |
|  ETJ |  Natural Heritage Areas |
| |  Biodiversity Areas |
| |  Areas near Inlets and Beaches |



Source: Benchmark Planning (2022)

Estuarine and Ocean System AECs

Estuarine Waters and Shorelines

An estuary is a semi-enclosed coastal body of water which has a free connection to the open sea. Estuaries serve as transition zones between fresh and salt water and are protected from the full force of ocean wind and waves by barrier islands, mudflats, and / or sand. The land and waters of estuarine systems are home to fish nursery areas, spawning areas, shellfish beds, and other habitats essential to North Carolina's commercial and recreational fishing industries. Estuarine shorelines act as natural barriers to erosion and flooding, and certain soil formations and plant communities found along estuarine shorelines also help to slow erosion. Estuaries also protect the water from excess sediment and pollutants. Estuarine waters and public trust areas are important for tourism because they support commercial and fishing, boating, swimming, and other recreational activities.

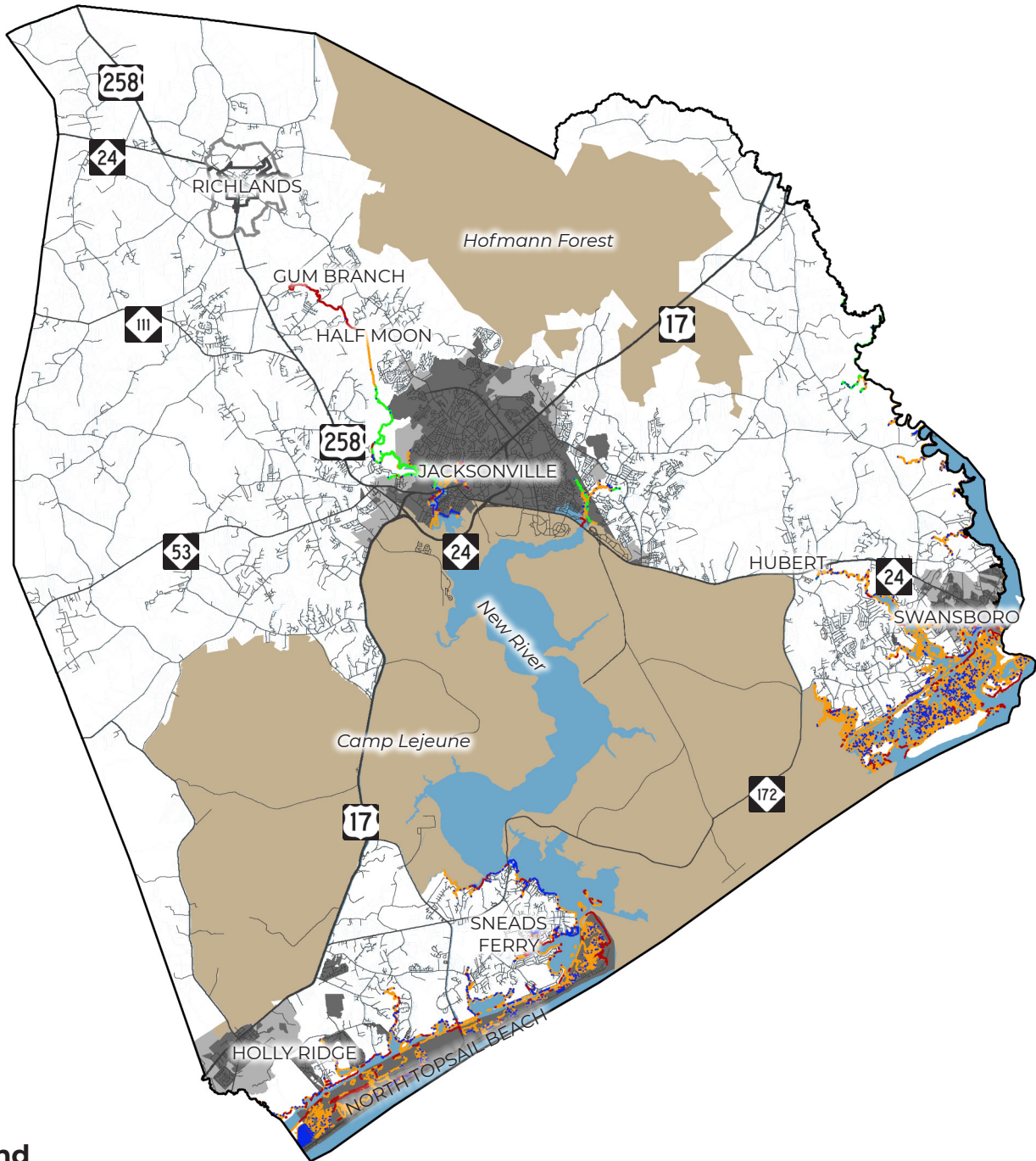
Within Onslow County, all of the coastal waters, as well as the predominant river bodies, are considered estuarine waters. This includes, but is not limited to, the White Oak River, Bell Swamp Creek, Mill Creek, Goose Bay, Kings Creek, Turkey Creek, Stump Sound, Alligator Bay, the New River, Bear Creek, Queens Creek, and the Intracoastal Waterway. These estuarine waters are flushed by a series of four inlets located along the southern coastline of the County: the New River Inlet, Browns Inlet, Bear Inlet, and Bogue Inlet.

Under CAMA rules, all land 75 feet leeward from the mean high tide are classified as estuarine shorelines and are subject to CAMA development regulations (which can be found at 15A NCAC 7H.0205-0208).

Public Trust Areas

The North Carolina Division of Coastal Management defines public trust areas as the coastal waters and submerged lands that every North Carolinian has the right to use for activities such as boating, swimming, or fishing. These areas often overlap with estuarine waters, but they also include many inland fishing waters and creeks. Although public trust areas must be delineated by on-site analysis, all submerged lands adjacent to the Intracoastal Waterway, or the creeks and rivers listed above, are designated as public trust waters.

Under CAMA regulations, all land 30 feet leeward of public trust areas are subject to the restrictions specified for estuarine shoreline areas.



Legend

- Onslow County
- Water
- Cities
- ETJ

Shoreline Type

- Marsh
- Swamp Forest
- Sediment Bank
- Misc. or Modified



Source: Division of Marine Fisheries (2012)

Coastal and Non-Coastal Wetlands

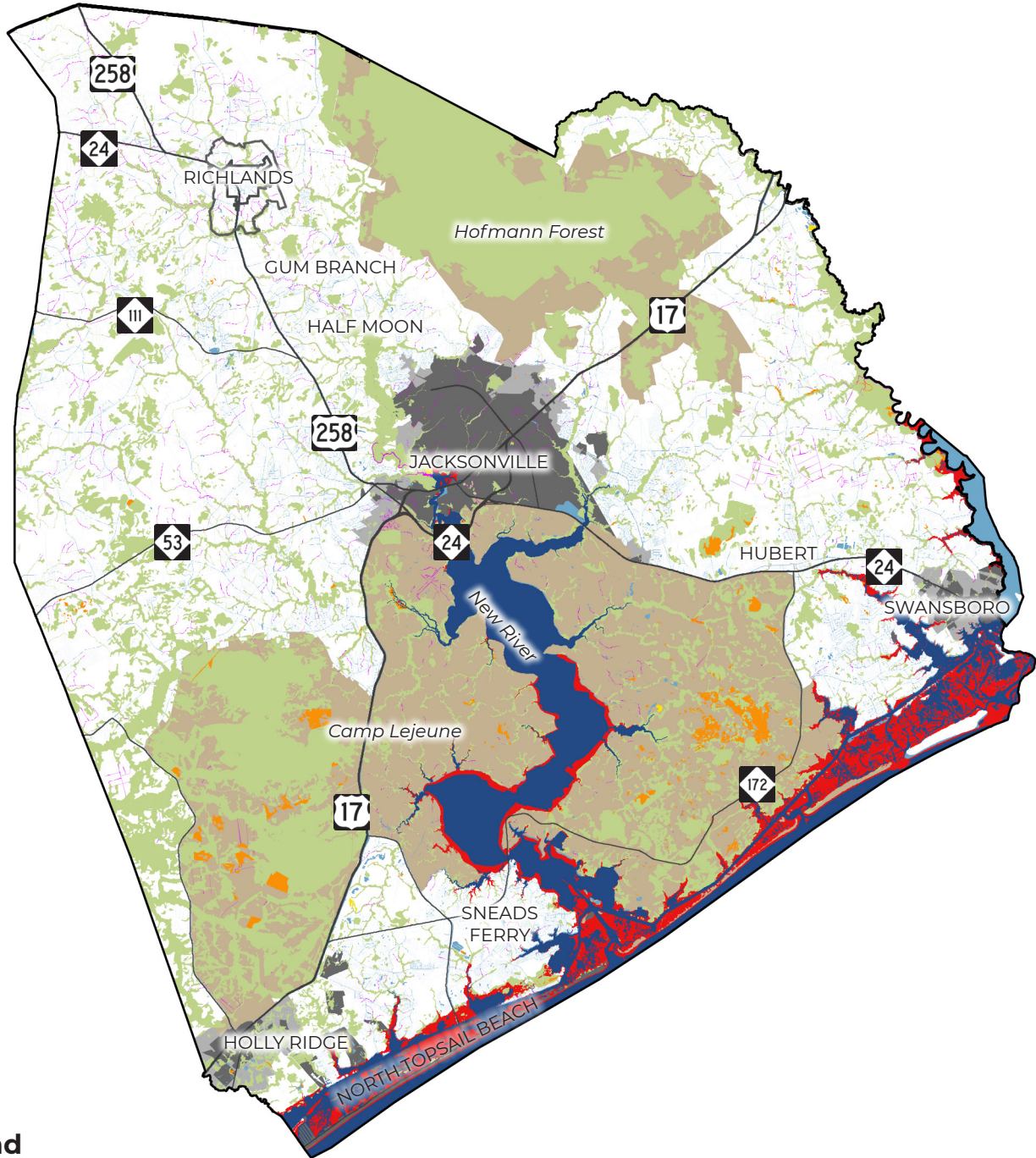
There are 116 square miles (more than 25% of the total County area) in wetland areas. The CRC defines coastal wetlands as any marsh in the coastal counties (including Onslow County) that are regularly or occasionally flooded by lunar or wind tides, and that include one or more of the following ten plant species:

- Salt Marsh (Smooth)
- Cord Grass (*Spartina alterniflora*)
- Black Needlerush (*Juncus roemerianus*)
- Glasswort (*Salicornia* spp)
- Salt (or Spike)
- Grass (*Distichlis spicata*)
- Sea Lavender (*Limonium* spp)
- Bulrush (*Scirpus* spp)
- Saw Grass (*Cladium jamaicense*)
- Cattail (*Typha* spp)
- Salt Meadow Grass (*Spartina patens*)
- Salt Reed or Giant Cord Grass (*Spartina cynosuroides*)

More than 90% of North Carolina's commercial and recreational seafood species such as shrimp, flounder, and crabs) depend on the protective habitat and nutrients found in coastal wetlands and estuarine waters for much of their lives.

Coastal wetlands provide significant environmental and economic benefits to Onslow County, including protecting against flooding, helping maintain water quality, providing habitat for wildlife, and serving as part of the estuarine system previously described. The wetlands in Onslow County are shown in the maps on the following two pages. There are seven different types of coastal wetlands present; the majority of which are freshwater forested / shrub wetland. There are also 13 wetland typologies in the County. Pocosin, Salt / Brackish Water, and Pine Flat are the most prevalent.

Coastal wetlands are also subject to CAMA regulations as specified for estuarine shoreline areas. Freshwater swamps and inland, non-tidal wetlands are not in the CAMA permit jurisdiction, unless they are specified as AECs. However, these wetlands are protected by Section 404 of the Federal Clean Water Act. An Army Corps of Engineers "Section 404" permit may be required for projects taking place in these non-coastal wetlands. There are several different types of United States Army Corps of Engineers (USACE) 404 permits, but the basic premise is that no discharge of dredge or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment.

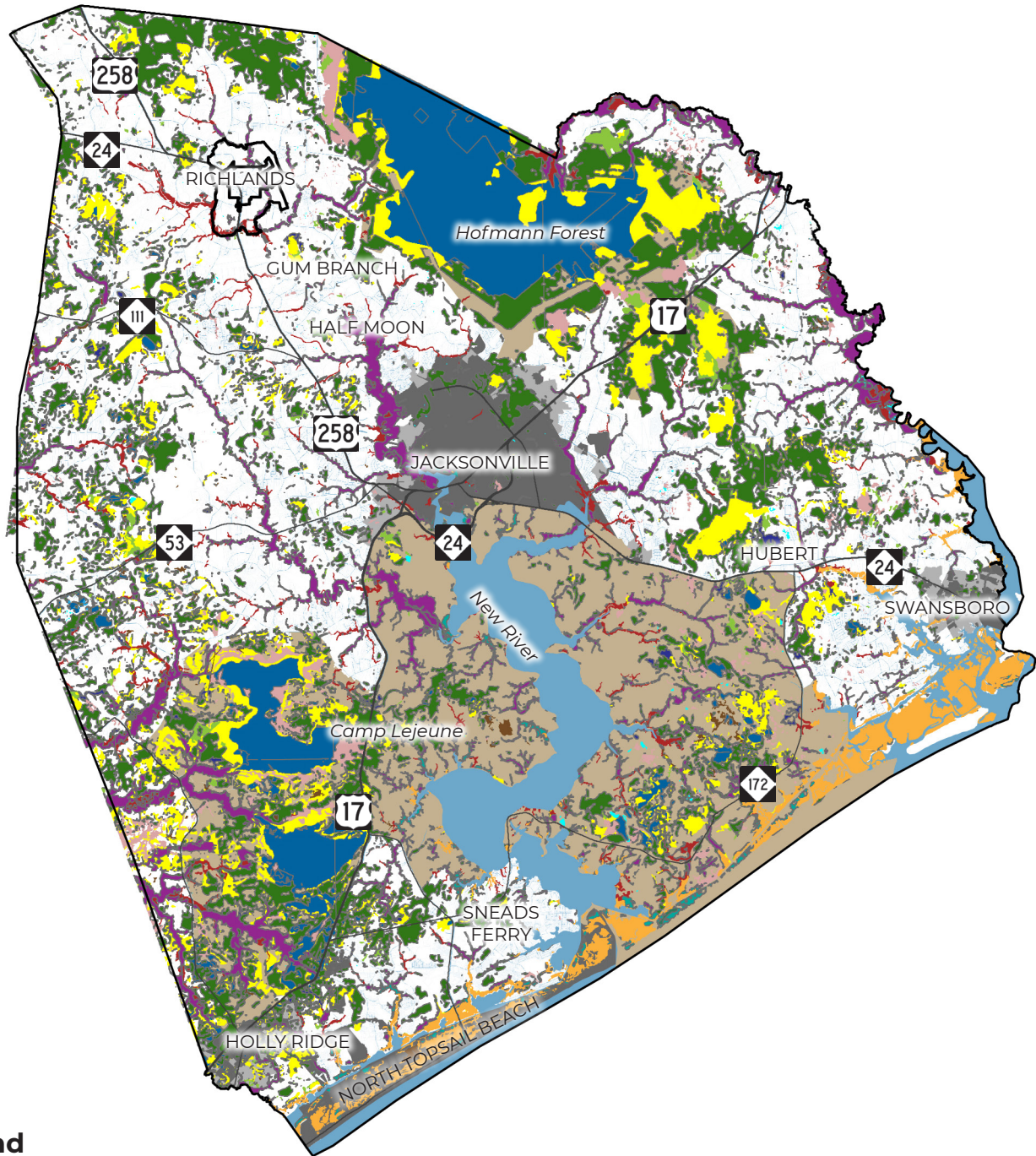


Legend

- Onslow County
- Water
- Cities
- Roads
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Riverine
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Freshwater Emergent Wetland
- Lake



Source: NC One Map(2022)



Legend

- | | | |
|---------------|-----------------------|---------------------------|
| Onslow County | Headwater Swamp | Bottomland Hardwood |
| Water | Human Impacted | Depressional Swamp Forest |
| Cities | Managed Pineland | Estuarine Forest |
| Roads | Pine Flat | Estuarine Shrub/Scrub |
| | Pocosin | Freshwater Marsh |
| | Riverine Swamp Forest | Hardwood Flat |
| | Salt/Brackish Water | |



Source: US Fish and Wildlife (2022)

Ocean Hazard System AECs

Ocean Erodible AEC

Ocean Erodible AECs include beaches and shorelines that are subject to long term erosion and significant shorelines changes. These areas are bounded on the seaward side by the mean low water line and on the land side at the first line of stable and natural vegetation. The map on page 47 illustrates the 2019 land setback that generally depicts the Ocean Erodible AECs. Within Onslow County, this covers the entire shoreline from North Topsail up to Bogue Inlet. However, because of the ever changing nature of these boundaries, site specific measurements should be utilized for permitting or other regulatory tasks to ensure accuracy.

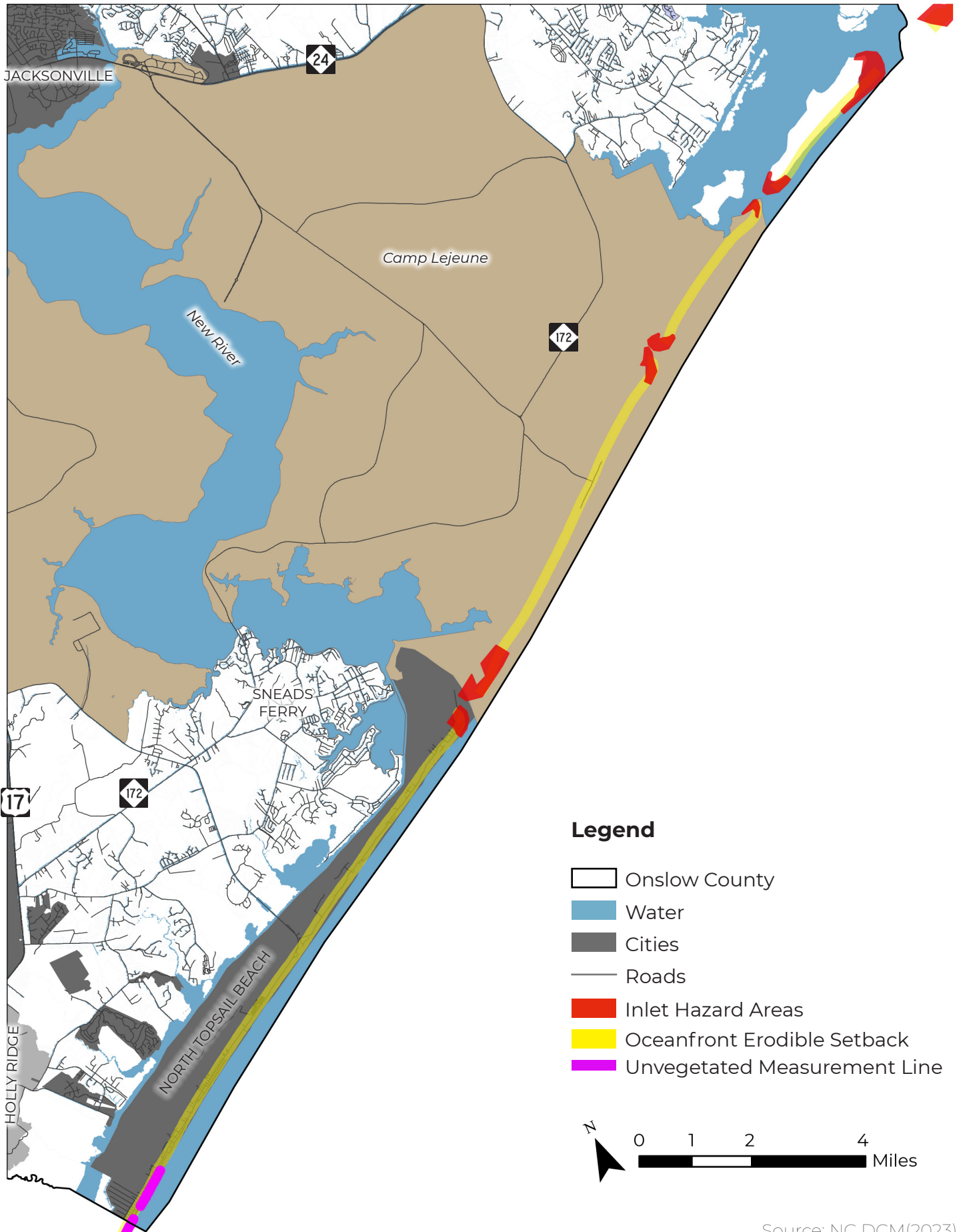
Inlet Hazard AEC

Inlet Hazard Areas describe areas that are especially vulnerable to erosion, flooding, and other adverse effects of weather due to their proximity to dynamic ocean inlets. Within Onslow County, inlet hazard areas surround the New River Inlet, Brown's inlet, Bear Inlet, and Bogue Inlet. There are proposed expansions of the inlet hazard areas on the north side of the Bogue Inlet and the south side of the New River Inlet; however, they have not yet been adopted by the Coastal Resource Commission.

Unvegetated Beach AEC

Unvegetated Beach Areas of Environmental Concern are defined under 15A NCAC 07H .0304(3). These areas are designated based on their lack of natural vegetation or stable vegetation due to hurricanes or major storms. In some cases, these areas can be temporary until vegetation can be restored. These areas are delineated on the following map through Measurement Lines that serve as a reference for oceanfront construction setbacks. There are two Unvegetated Beach AECs in Onslow County, both along North Topsail Beach. These areas were first designated in 2018 following impacts of Hurricane Florence.

» OCEAN HAZARD SYSTEMS



Source: NC DCM(2023)

Public Water System AECS

Public water supply AECs are designated to protect areas of coastal public water supplied from the negative effects of development. Currently, there are none of these AECs in Onslow County.

Natural and Cultural AECs

Natural and Cultural AECs are areas that contain significant environmental or cultural resources. While there are many areas of environmental and cultural significance within Onslow county, the AECS are specified by the Coastal Resource Commission due to their role in maintaining the coastal ecosystem, importance to scientific research and education, historical significance, or provision of aesthetic value.

Permuda Island

Permuda Island is currently the only Natural and Cultural AEC in Onslow County and one of only two of this type of AEC in the State. Permuda Island is located on the south-eastern most point of Onslow County in Stump Sound, between North Topsail Island and the mainland. The Island is 63 acres and around 1.5 miles long and can only be accessed by boat. The area has rich natural archaeological significance because it contains remains from various periods of early habitation by Native Americans. The area was first designated as a significant coastal archaeological resource AEC in 1985.

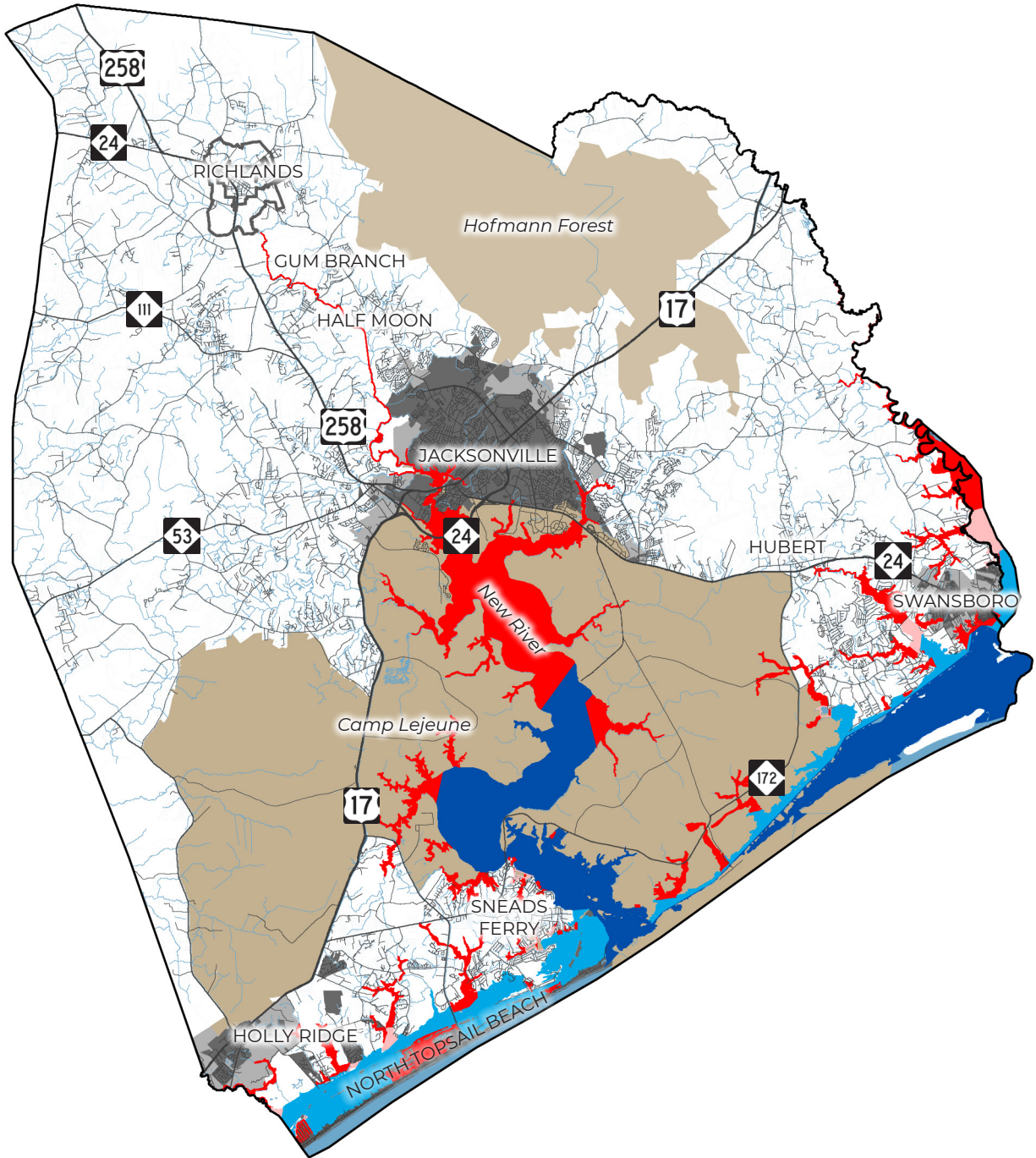
Primary Nursery Areas

Primary Nursery Areas are located in the upper portions of creeks and bays, and are typically shallow with soft, muddy bottoms surrounded by marshes and wetlands. Low salinity and the abundance of food in these areas is ideal for young fish and shellfish. To protect juveniles, many commercial fishing activities are prohibited in these waters. Primary Nursery Areas are divided into primary, secondary, and special secondary areas. Within Onslow County, all of the coastal waterways and tributaries of the New River are considered to be Primary Nursery Areas (under 15A NCAC 03R.0103). The main body of the New River is classified as a Special Secondary Nursery Area

In addition to Primary Nursery Areas, the waterways of North Carolina are divided into growing areas. Shellfish growing areas are individually managed and are classified based on their suitability for harvesting for human consumption. In other words, they are classified based on factors of contamination. The Division of Marine Fisheries determines the classification of each area based on potential pollutants, water quality data, stormwater run-off information, and the water circulation patterns; which all give insight to the levels of contaminants. Areas classified as “approved” are open for shellfish harvesting. “Conditionally approved” indicates areas that can be harvested in the right conditions (such as during a dry season) but are subject to temporary conditions of actual or potential pollution. “Restricted” areas are areas where a moderate degree of pollution or the presence of deleterious or poisonous substances may cause the water quality to fluctuate unpredictable, indicating that shellfish must undergo additional cleaning prior to consumption. “Prohibited” areas are locations where no current sanitary survey report is available or where the sanitary survey report or monitoring data show unsafe levels of fecal material, pathogenic microorganisms, or poisonous or deleterious substances.

The map on page 116 shows the shellfish growing areas in Onslow County. These typically correspond with primary nursery areas, though many of the inland areas are prohibited for shellfish harvesting. The primary way to improve water quality and increase the amount of approved shellfish growing / harvesting areas is to reduce the sources of pollution that are contributing to reduced water quality. Additional improvements could include planting seaweed, increasing the oyster population, managing erosion, and similar water quality improvement projects.

» SHELLFISH GROWING AREAS



Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas

Shellfish Growing Areas Current Classifications

- Approved
- Conditionally Approved- Open
- Conditionally Approved- Closed
- Prohibited



Source: NC Division of Marine Fisheries (2022)

Natural Heritage Areas

Natural Heritage Areas (NHAs) are designated by Congress as places where natural, cultural, and historical resources combine to form a cohesive, nationally important landscape. There are 43 NHAs in Onslow County, and a significant amount of them are in and around the Camp Lejeune military base. For this reason, those which have a United States Department of Defense (U.S. DOD) affiliation are listed separately below and on the following page.

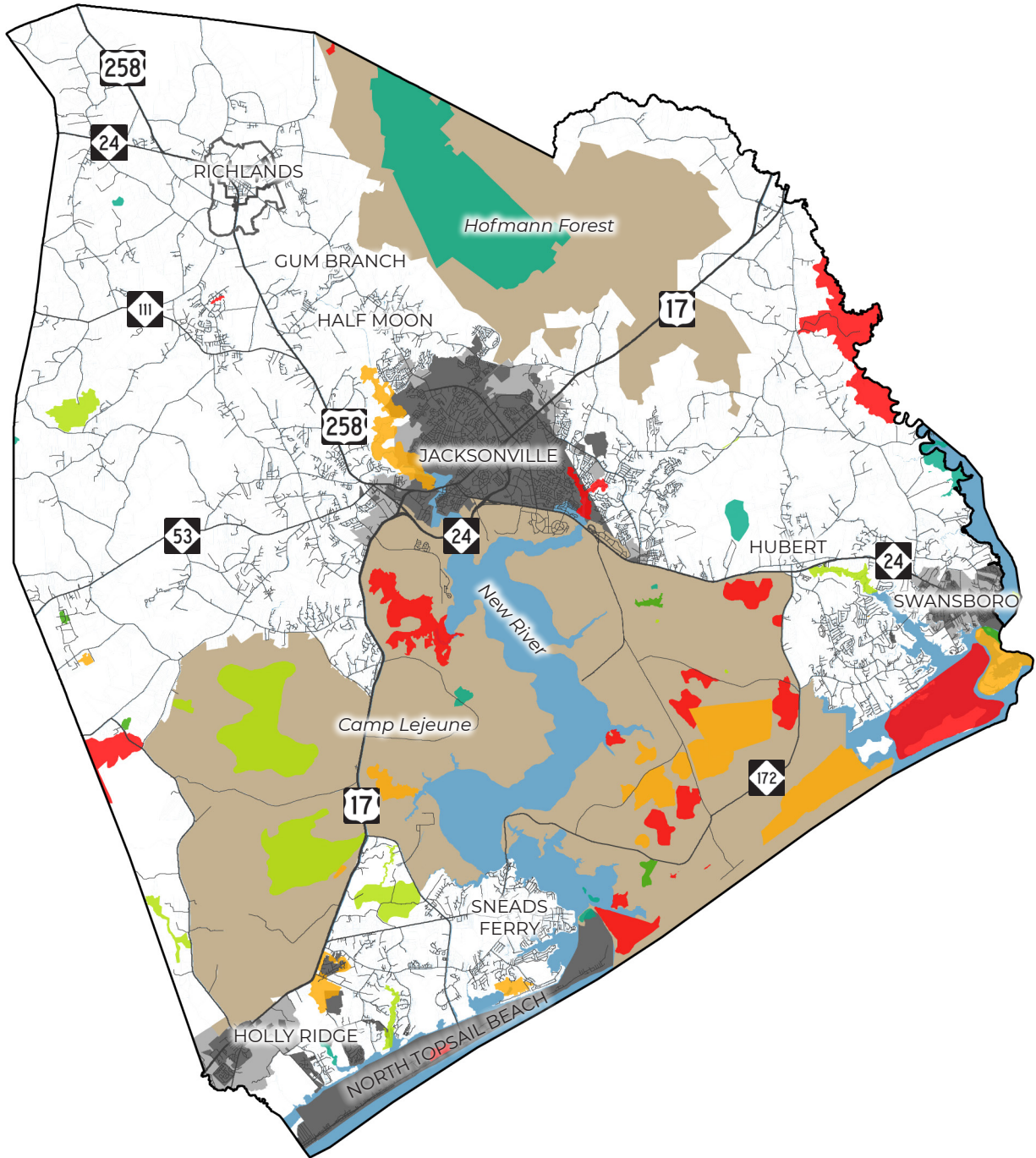
Natural Heritage Areas

- Alligator Bay Marshes and Forests
- Batchelor Road Flatwoods
- Folkstone Savannas
- Horse Swamp Savannas and Woodlands
- Maple Hill Limesink Complex
- New River Inlet Bird Nesting Islands
- New River Swamps and Marshes
- Nine Mile Creek Flatwoods
- Northeast Creek Tidal Forests
- Old 30 Road Powerline Savanna
- Rock House Cave Natural Area
- Stones Creek Sandhills
- Turkey Creek Marshes

U.S. DOD Natural Heritage Areas (Camp Lejeune)

- Africa Pond Limesinks
- Alligator Meadow Limesinks
- Browns Island
- Corn Landing
- Cowhead Creek Limesinks
- Dixon Pine Savanna
- Dove Road Pocosin
- Freeman Creek Meadow
- Frenchs Creek Coastal Goldenrod Site
- Frenchs Creek Limesinks
- G-10 Impact Area
- Hog Pen Road Flatwoods and Pocosin
- Longleaf Pine Ridge
- Loosestrife Pocosin
- Lyman Road Cypress Savanna
- Marines Road Sandhills
- Mile Hammock Bay Sandhills
- Millstone Creek Swamp
- Mockup Road Coastal Goldenrod Site
- New River Inlet
- Old Bear Creek Road Pond

» NATURAL HERITAGE PROGRAM AREAS



Legend

- | | | | |
|--|---------------|--|-------------|
| | Onslow County | | Exceptional |
| | Water | | Very High |
| | Cities | | High |
| | Roads | | Moderate |
| | Federal Areas | | |



Source: NCOneMap (2022)

U.S. DOD Natural Heritage Areas (Camp Lejeune - continued)

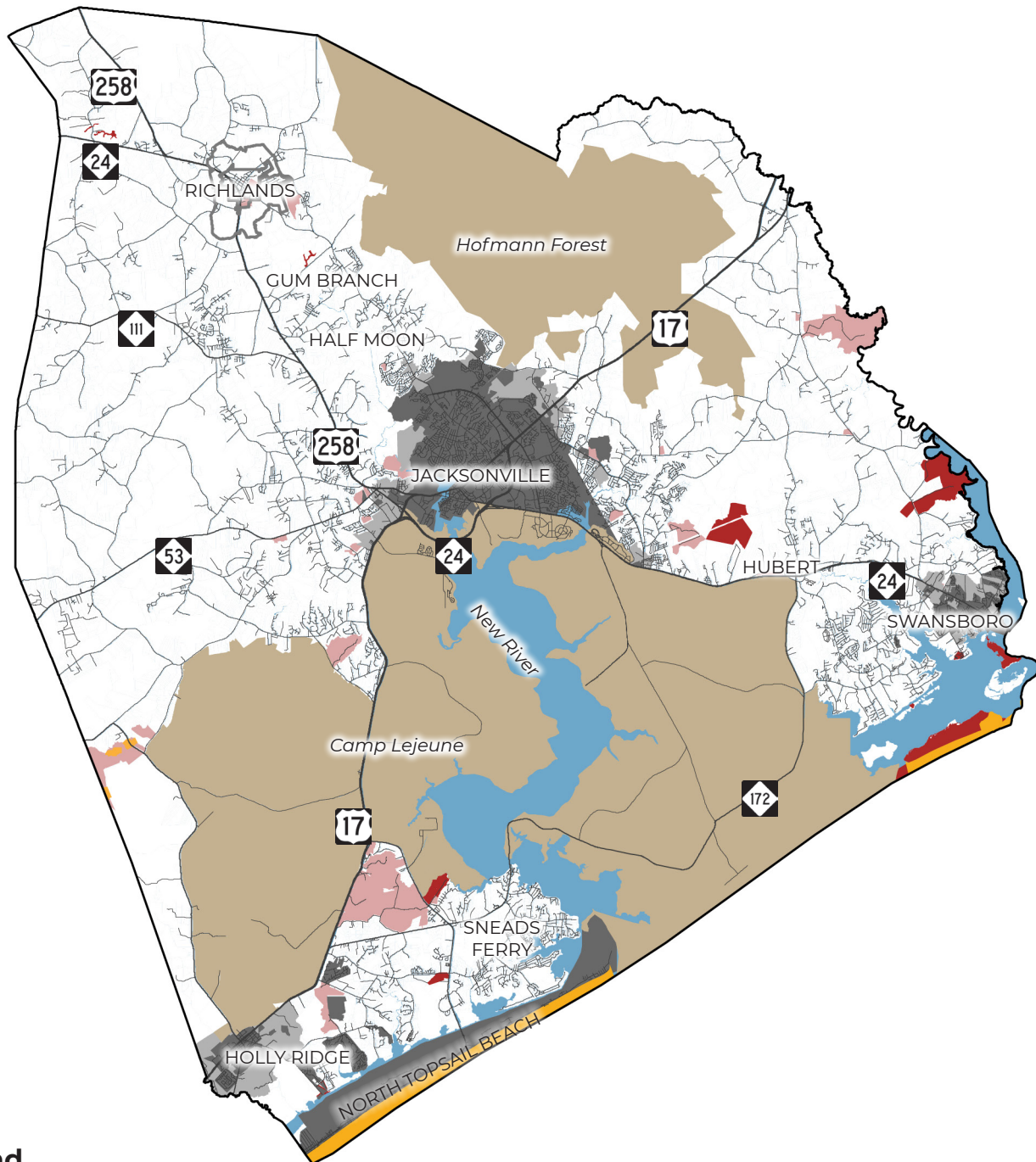
- Pocosin Road Flatwoods
- Pondspice Meadow
- Powerline Road Sandhill
- Salliers Bay Coastal Goldenrod Site
- Southwest Creek
- Spring Branch Limesinks
- Starretts Limesinks
- Verona Loop Flatwoods
- Wallace Creek Swamp

Biodiversity and Habitats

The Bureau of Land Management and the US Fish and Wildlife Service maintain data on biodiversity lands and critical habitat, as shown on the following page. The entirety of Onslow County's coastline is considered to be critical habitat based on this dataset. There are also multiple lands managed throughout the County for the purpose of biodiversity or for multiple uses.

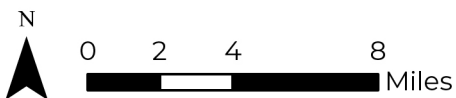
ESRI, an American multinational geographic information system software company and the world's leading supplier of GIS software, created a green infrastructure data set based on National Land Cover Data. The data follows methodology outlined by the Green Infrastructure Center Inc. and derives habitat scores from all "natural" land cover classes, excluding all "developed" and "agricultural" classes. The scores relate to the perceived ecological value of each core, to provide users with additional insight on the importance of each core area. The "Intact Habitat Core" map displays the most recent version of this data set for Onslow County. Great portions of the County, particularly on the western edge, have very high ecological ratings, as shown in shades of green.

» BIODIVERSITY LANDS AND CRITICAL HABITATS

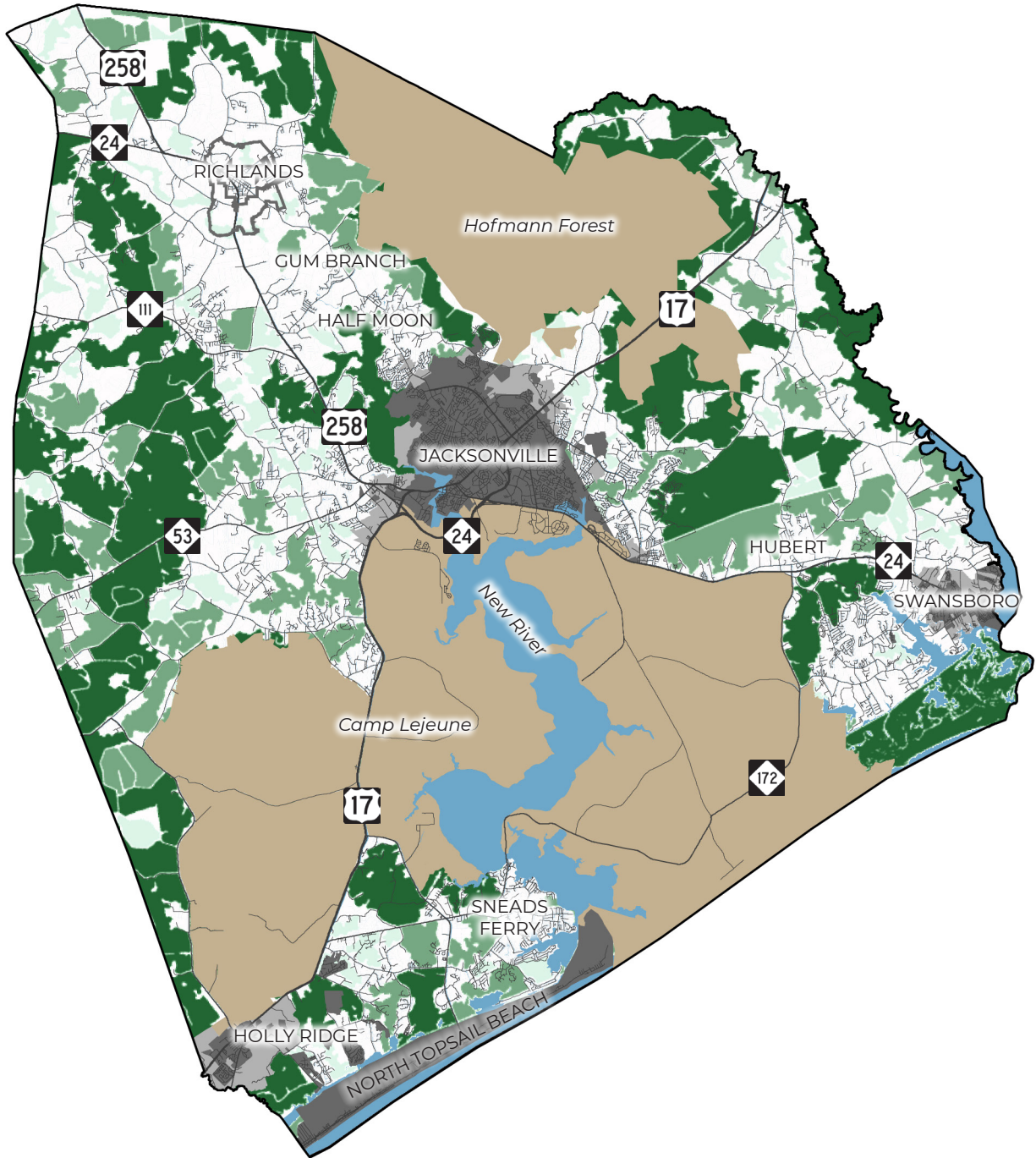


Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas
- Lands managed for biodiversity
- Lands managed for multiple uses
- Critical Habitats



Source: Bureau of Land Management and US Fish and Wildlife (2022)



Legend

- | | | | |
|--|---------------|--|-------------------|
| | Onslow County | | Ecological Rating |
| | Water | | Best |
| | Cities | | Better |
| | Roads | | Good |
| | Federal Areas | | |



Source: ESRI Green Infrastructure (2022)

Endangered Species

The North Carolina Natural Heritage Program maintains a list of threatened and endangered species for each county in the State. As of January 2023, there were 393 species considered to be either on a watch list, threatened, or endangered in Onslow County. Of these, 90 are considered threatened or endangered by the State or Federal government. These are listed in the tables on the following pages. The initial “T” stands for threatened species while the “E” represents endangered species. Though many of the State and Federal designations overlap, there are a number of species which are only considered threatened or endangered by one of the governments. The full list of species in the County can be obtained from the North Carolina Natural Heritage Program’s website (ncnhp.org).

Stones Creek Game Lands

The Stones Creek Game Lands sites are operated by the N.C. Wildlife Resources Commission (NCWRC). NCWRC manages over 2 million acres of land in the State of North Carolina to preserve ecosystems of high value and facilitate flood protection. Game Lands are an important tool to preservation of rare and endangered species and, therefore, their management is especially important. Through controlled burns, cycled draining of wetlands, and protection of stream buffers, the NCWRC helps to create conditions beneficial to healthy habitats. Game lands also serve as a recreational amenity to the community, providing space for hunting, fishing, geocaching, target shooting, hiking, and horseback riding. The Stones Creek Game Land is comprised of 3,450 acres. Priority species in the lands include white tailed deer, eastern bobwhite quail, wild turkey, and red-cockaded woodpeckers. Half of the land (50%) is plantation habitat, which is one of five primary habitats in the area.

Lynnwood Park Zoo

The Lynnwood Park Zoo, located in Jacksonville, is a veteran-owned and operated animal sanctuary. Opened in 1990, the sanctuary was established with the mission of connecting the public with wildlife through educational opportunities. The zoo also partners with Coastal Carolina Community College to offer an 18-week internship.

» THREATENED AND ENDANGERED SPECIES IN ONSLOW COUNTY

Source: North Carolina Natural Heritage Program (January 2023)

COMMON NAME	NORTH CAROLINA STATUS	FEDERAL STATUS
Shortnose Sturgeon	E	E
Atlantic Sturgeon	E	E
Branched Gerardia	T	NONE
American Alligator	T	T
Seabeach Amaranth	T	T
Mabee's Salamander	T	NONE
Henslow's Sparrow	E	NONE
Chapman's Three-awn	E	NONE
Savanna Indian-Plantain	E	NONE
Carolina Spleenwort	E	NONE
Silverling	E	NONE
Blue Water-Hyssop	T	NONE
Red Knot-Rufa Subspecies	T	T
Many-Flower Grass-Pink	E	NONE
Loggerhead Seaturtle	T	T
Golden Sedge	E	E
Piping Plover- Atlantic Coast Sub.	T	T
Green Seaturtle	T	T
Short-Awned Coreopsis	T	NONE
Carolina Sunrose	E	NONE
Eastern Diamondback Rattlesnake	E	NONE
Leconte's Flatsedge	T	NONE
Tennessee Bladder-Fern	E	NONE
Ringed Witch Grass	E	NONE
Blue Witch Grass	T	NONE
Hirsts' Panic Grass	E	NONE
Eaton's Witch Grass	E	NONE
Hairless Witch Grass	T	NONE
Venus Flytrap	T	NONE
Red-Cockaded Woodpecker	E	E
Gulfcoast Spikerush	T	NONE
Florida Spikerush	E	NONE
Little-Spike Spikerush	T	NONE
Viviparous Spikerush	T	NONE
Bay Boneset	E	NONE

COMMON NAME	NORTH CAROLINA STATUS	FEDERAL STATUS
Soft Milk-Pea	T	NONE
Gull-Billed Tern	T	NONE
Bald Eagle	T	BGPA
Southern Hognose Snake	T	NONE
Pine Barrens Treefrog	T	NONE
Thin-Wall Quillwort	T	NONE
Brown Bogbutton	T	NONE
Black Rail	T	T
Torrey's Pinweed	E	NONE
Kemp's Ridley Seaturtle	E	E
Pondberry	E	E
Yellow-Fruited Flax	T	NONE
Boykin's Lobelia	E	NONE
Golden-Crest	E	NONE
Flaxleaf Seedbox	T	NONE
Shrubby Seedbox	T	NONE
Rough-Leaf Loosestrife	E	E
Eastern Coralsnake	E	NONE
Northern Long-Eared Bat	T	E
Loose Water-Milfoil	E	NONE
Eastern Woodrat	T	NONE
Ironcolor Shiner	T	NONE
Mimic Glass Lizard	E	NONE
Bog Ragwort	E	NONE
Carolina Grass-of-Parnassus	T	NONE
Mudbank Crown Grass	E	NONE
Tricolored Bat	E	PE
Hairy Smartweed	E	NONE
Small Butterwort	T	NONE
Pineland Plantain	T	NONE
Yellow Fringeless Orchid	T	NONE
Shadow-Witch	T	NONE
Ornate Chorus Frog	E	NONE
Carolina Gopher Frog	E	NONE
Ivy Buttercup	T	NONE
Swamp Forest Beaksedge	T	NONE
Southern Beaksedge	T	NONE

COMMON NAME	NORTH CAROLINA STATUS	FEDERAL STATUS
Coastal Beaksedge	T	NONE
Tracy's Beaksedge	T	NONE
Small-Flowered Buckthorn	T	NONE
Chapman's Arrowhead	E	NONE
Grassleaf Arrowhead	E	NONE
Drooping Bulrush	T	NONE
Smooth-Seeded Hairy Nutrush	E	NONE
Shoreline Sea-Purslane	E	NONE
Wayne's Black-Throated Green Warbler	E	NONE
Spring-Flowering Goldenrod	T	NONE
Coastal Goldenrod	T	NONE
Giant Spiral Orchid	E	NONE
Common Tern	E	NONE
Cooley's Meadowrue	E	E
West Indian Manatee	T	T
Carolina Least Trillium	E	NONE
Cape Fear Threetooth	T	NONE
Dwarf Bladderwort	T	NONE

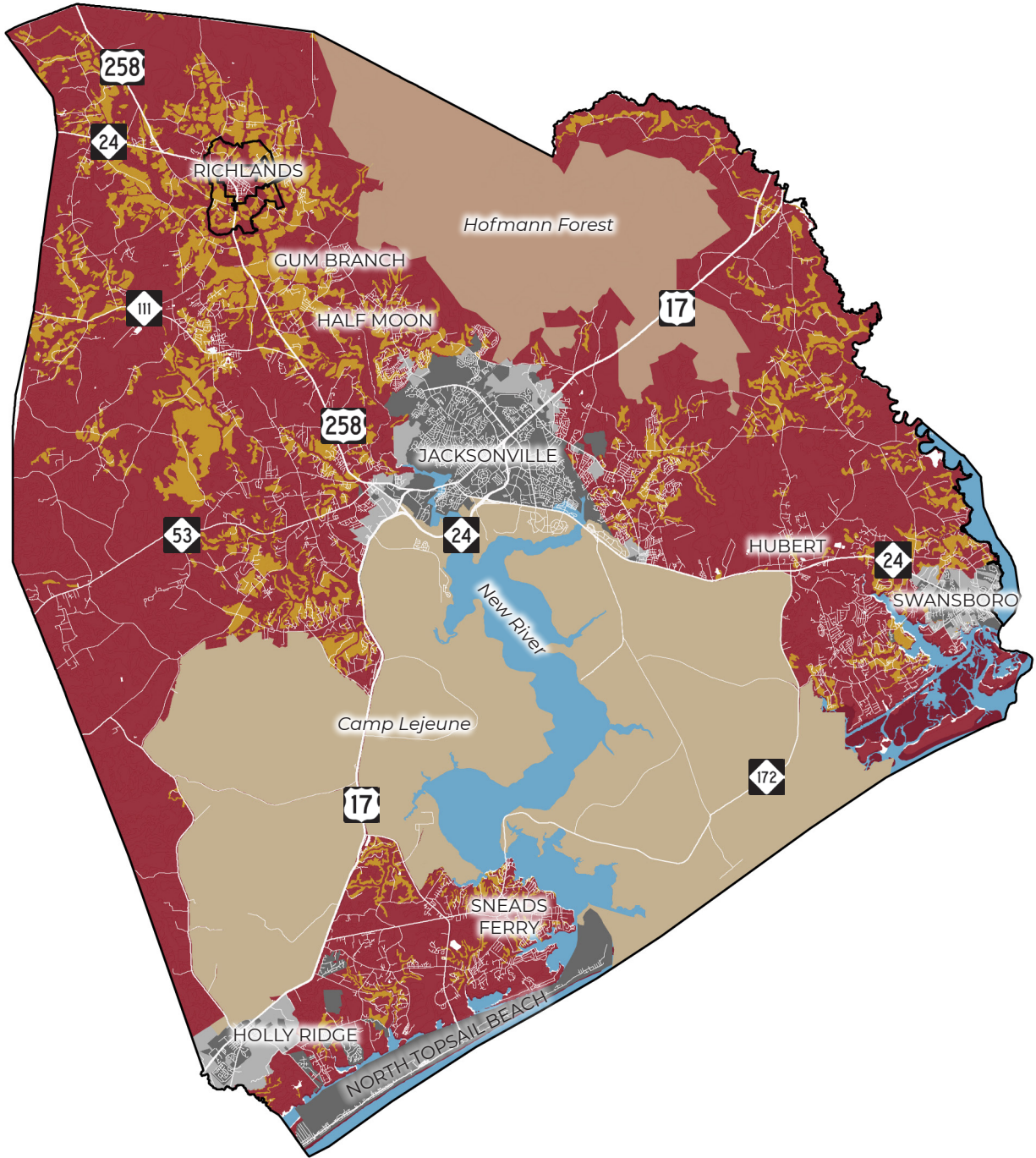
Soils

Healthy soils are essential for plant growth, human nutrition, and water filtration; supporting a landscape that is more resilient to the impacts of drought, flood, and fire. Soils help to regulate climate, and a number of soil factors explain potential developability of land, practical agricultural uses, and water filtration expectations. The map titled “Soils - Septic Tank Absorption Suitability” utilizes data from the United States Department of Agriculture (USDA) to identify soils which may have limitations for septic tank provision, based on their absorption characteristics. In shades of red and orange are areas in the County that have soils with limited absorption characteristics, meaning it would be difficult to develop septic tanks.

The second soils map goes a bit further to identify the drainage capacity of soils throughout the County. As can be seen, a significant portion of the County has soil which drains poorly. This is generally a characteristic of sandy soil types, and is a common trait in coastal areas. Unfortunately, these soils may limit development potential, and could cause drainage problems if not properly mitigated. As mentioned previously, stormwater regulations in the County are mandated by the State of North Carolina, who oversees stormwater permitting.

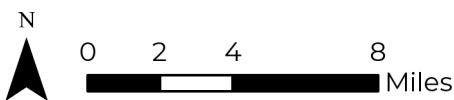
Topography

Elevations in Onslow County range from 40 feet below sea level to 140 feet above sea level. The map titled “Elevation” displays topography throughout the County, with the lowest elevations shown in blue and the highest elevations shown in red. The lowest elevations tend to occur along the coast, near the New River, and around other bodies of water. The highest elevations are in the most northwestern portion of the County, along NC-24.



Legend

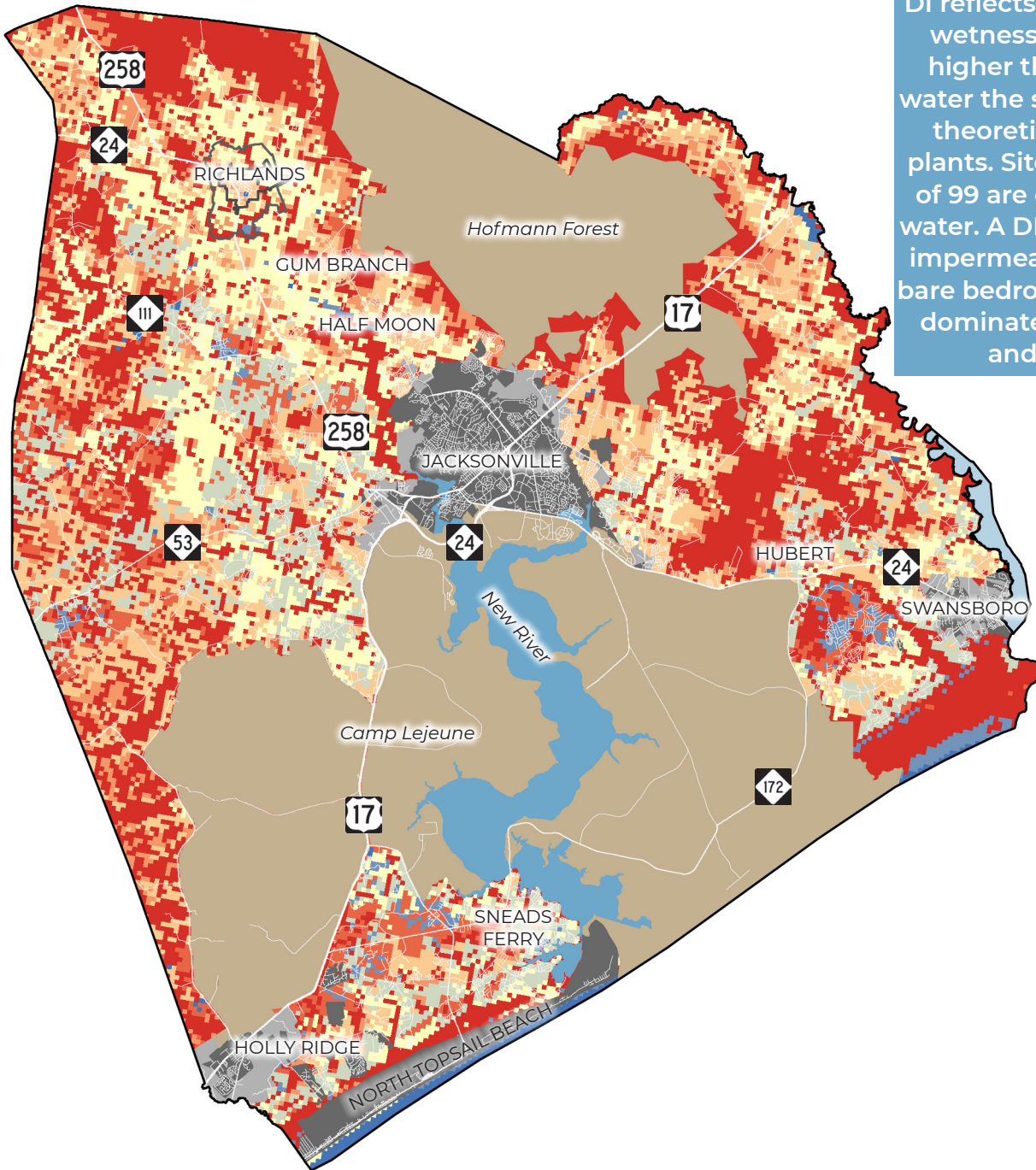
- Onslow County
- Water
- Cities
- Roads
- Very Limited
- Somewhat Limited









Source: USDA (2022)

» SOILS - DRAINAGE INDEX

DI reflects the soil's natural wetness condition. The higher the DI, the more water the soil can and does, theoretically, supply to plants. Sites with DI values of 99 are essentially open water. A DI of zero indicates impermeable surfaces like bare bedrock or urban areas dominated by pavement and buildings.



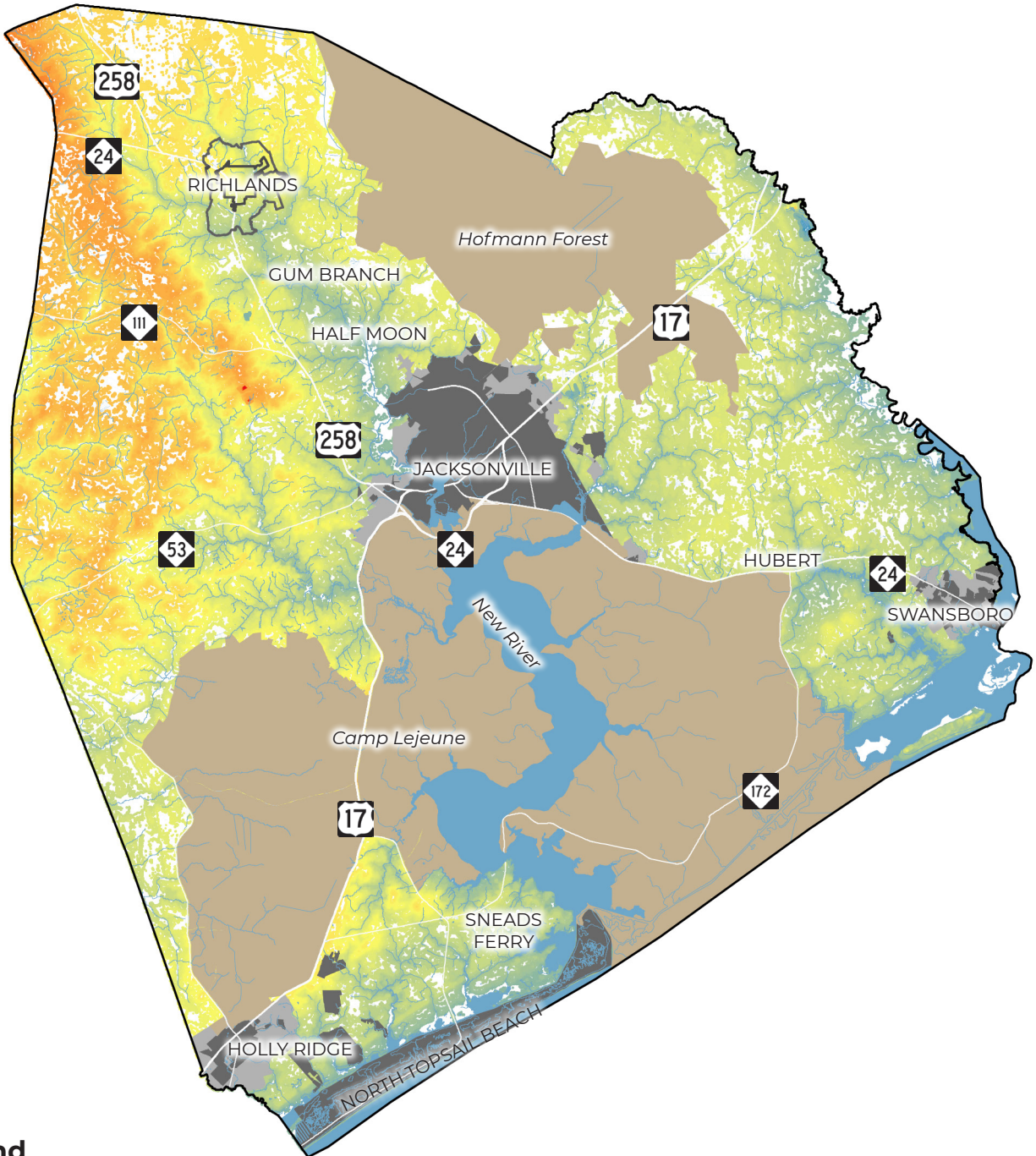
Legend

-  Onslow County
-  Water
-  Cities
-  Roads
- Drainage Index Value**
-  0 (No water capacity)
-  99 (High water capacity)



Source: USDA (2022)

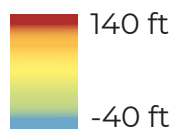
» ELEVATION



Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas

4' Elevation Contours



Source: NCOneMap (2022)

NATURAL HAZARDS

Shoreline Erosion

Erosion and accretion is a natural process in which shoreline is worn away (often by tides, wind, or other natural agents) (erosion), and moved elsewhere (accretion). In Onslow County, erosion and accretion has been occurring along Bear Island, North Topsail Beach, Brown's Island, and Onslow Beach. In 2020, rates of erosion ranged from -27.9 feet per year of erosion on Brown's Island to 25.9 feet per year of accretion on Bear Island. These rates are an overall decrease from 2013, when Brown's Island eroded -48.4 feet per year and Brown's Island experienced accretion of 33.2 feet per year.

Erosion is more widespread across the County than accretion, which is mostly concentrated at the inlets by Bear and Brown's Islands. The greatest amount of erosion occurs on the north side of the New River Inlet, and the Southern edges of Bear and Brown Inlet. Because most of the coastline is in North Topsail Beach and Camp Lejeune, it is not under the County's jurisdiction.

High Winds

High winds, particularly coming off the coast or associated with major storms, are a primary cause of erosion in North Carolina. According to the 2021 Southeastern North Carolina Regional Hazard Mitigation Plan, there were 0 reported high wind events in the County between 2014 and 2021. There were 15 thunderstorm wind events, three tropical storms, and two winter storms / weather events which may have contained wind during that same time period. The Southeastern North Carolina Regional Hazard Mitigation Plan provides a significant amount of data related to these and other impacts to Onslow County and the surrounding region.

Flood Hazard Areas

Primarily due to the presence of numerous water bodies, particularly the Intracoastal Waterway and the New River, there are a number of flood hazard areas in the County. The map on the following page displays areas with particularly concerning flood hazards: the 0.2% annual chance of flood, the 1% chance of annual flood, and the Coastal A Flood Zone.

The 0.2% annual chance of flood area is also known as the 500-year floodplain and the 1% annual chance of flood is also known as the 100-year floodplain or the base flood. The 100-year floodplain areas are of particular concern as climate change and sea level rise occur, and these areas tend to experience more frequent flooding.

In 2020, the Federal Emergency Management Agency (FEMA) established a new flood zone: the Coastal A Floodplain. This area is the strips of land located within a 1% annual chance of flood area and water-ward of the limit of moderate wave action (LIMWA), which is a line that dictates where 1.5 to 3 feet of water may be expected to accumulate in a significant flooding event. The Coastal A Floodplain is shown in orange on the flood hazard map and the LIMWA is shown as a red line. It can be seen that the entire coastal edge of the County, as well as the northeastern County edge and the areas around water bodies, are within flood hazard areas.

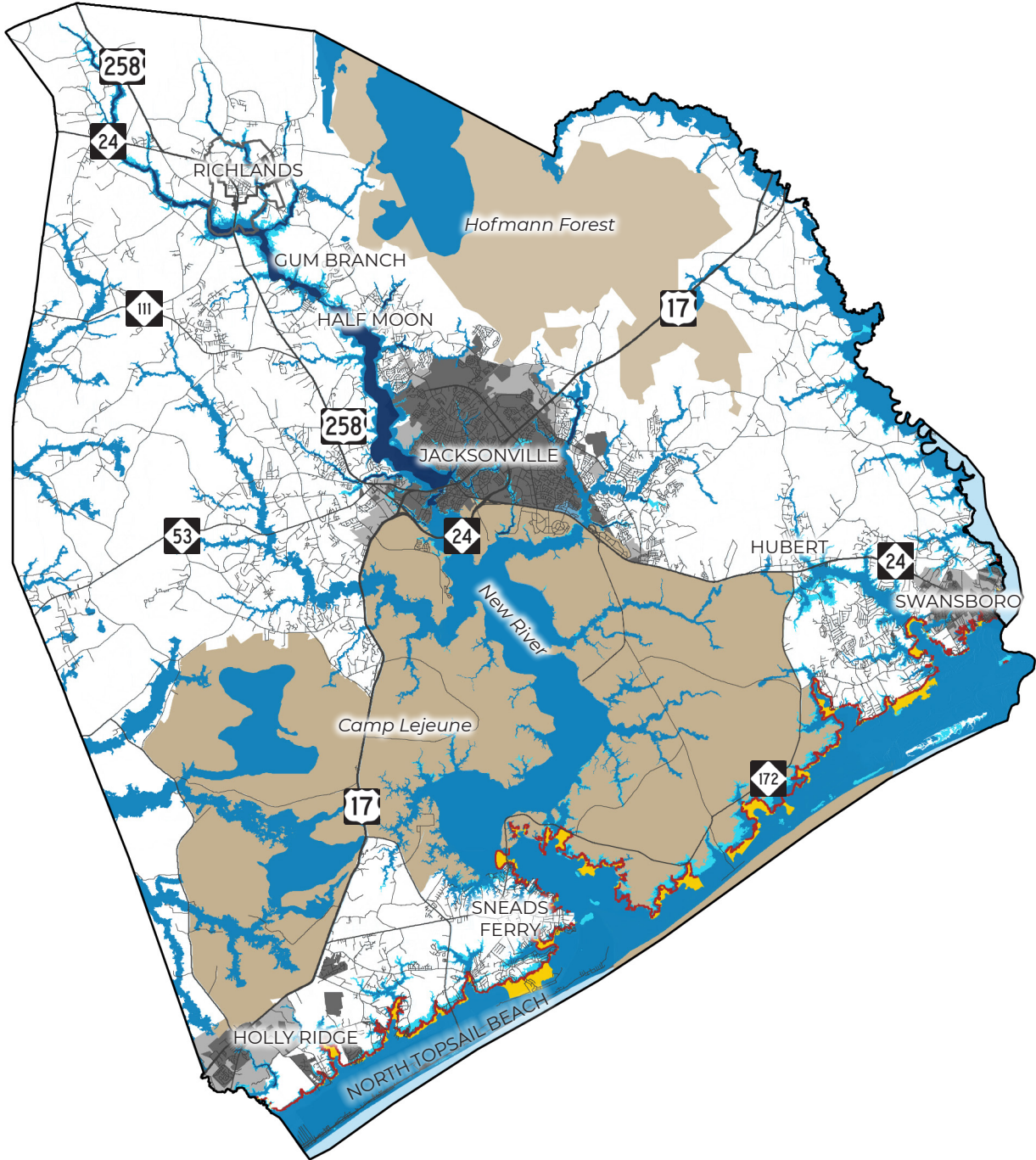
Storm Surge and Hurricanes

The storm surge model (SLOSH) maps display the expected amount of storm surge for varying levels of hurricanes. In the event of a category 1 hurricane, it is expected that much of the coastal floodplains will be under water. In the event of a category 3 hurricane, storm surges increase and get significantly far inland around the City of Jacksonville, the Town of Swansboro, and the Town of North Topsail Beach. A category 4 hurricane would move storm surge even further inland, affecting Sneads Ferry and areas around Half Moon. Lastly, a category 5 hurricane, the highest category, would result in greater amounts of flooding in these areas (20+ feet in many parts).

The “Natural Hazards” map displays all of the past hurricane tracks which have come through Onslow County. Though they are spread throughout the County, they are concentrated on the coast and in the City of Jacksonville. According to the 2021 South East North Carolina Regional Hazard Mitigation Plan, there have been 14 disaster declarations in Onslow County since 1996. The majority of these (11) were related to hurricanes. Since 2014, there have been three tropical storms, six flash floods, and one flood event reported in the County.

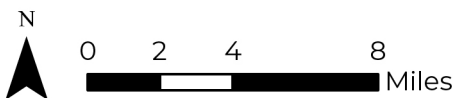
The hurricane evacuation routes in the County are primarily via the major routes of US-258, NC-53, NC-17, NC-111, and NC-24.

» FLOOD HAZARD



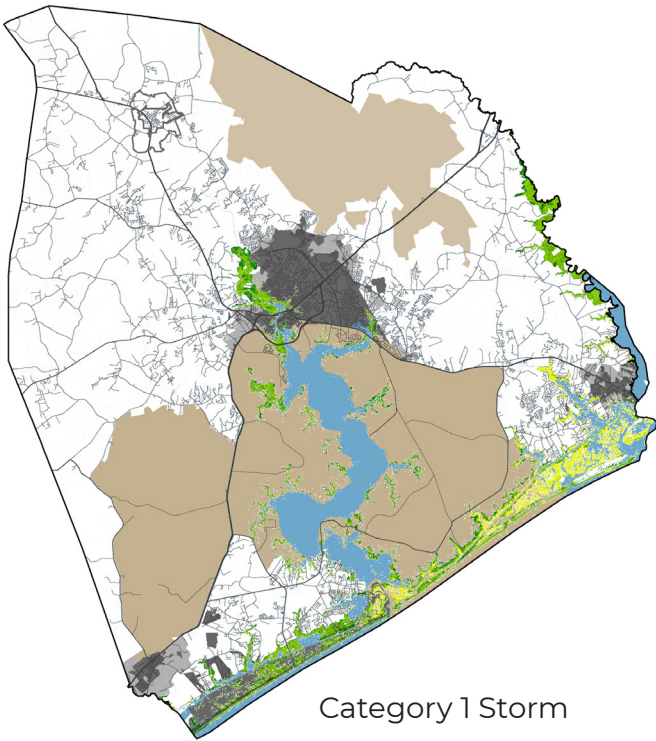
Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas
- Regulatory Floodway
- 0.2% Annual Chance of Flood
- 1% Annual Chance of Flood
- Coastal A Floodway
- Limit of Moderate Wave Action

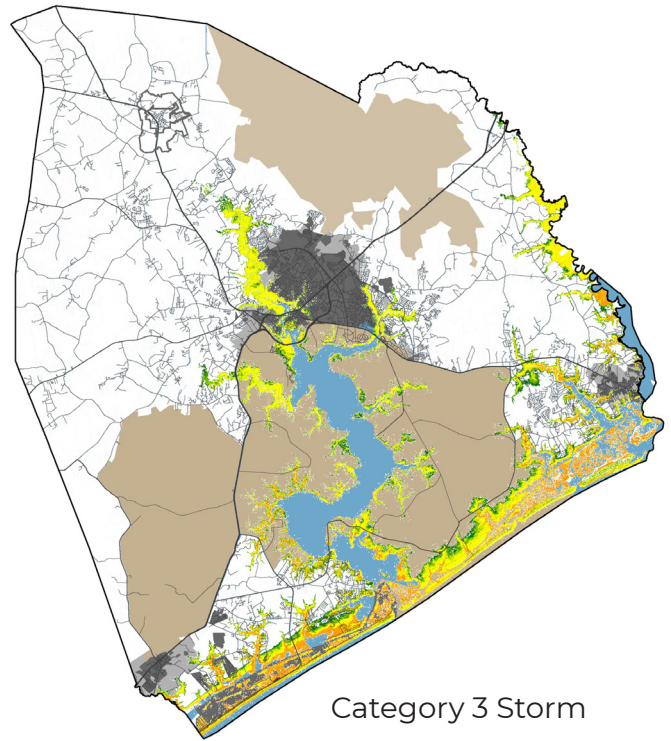


Source: FEMA (2022)

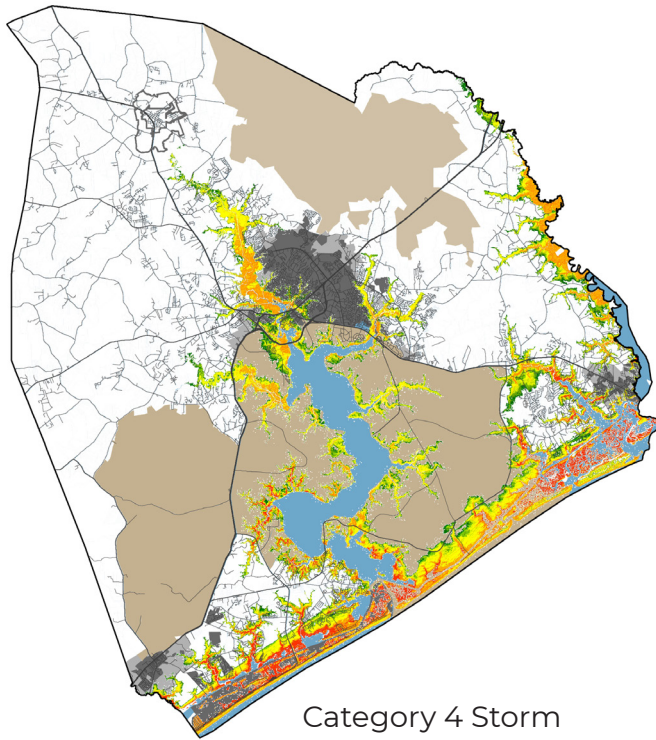
» **STORM SURGE MODEL (SLOSH)**



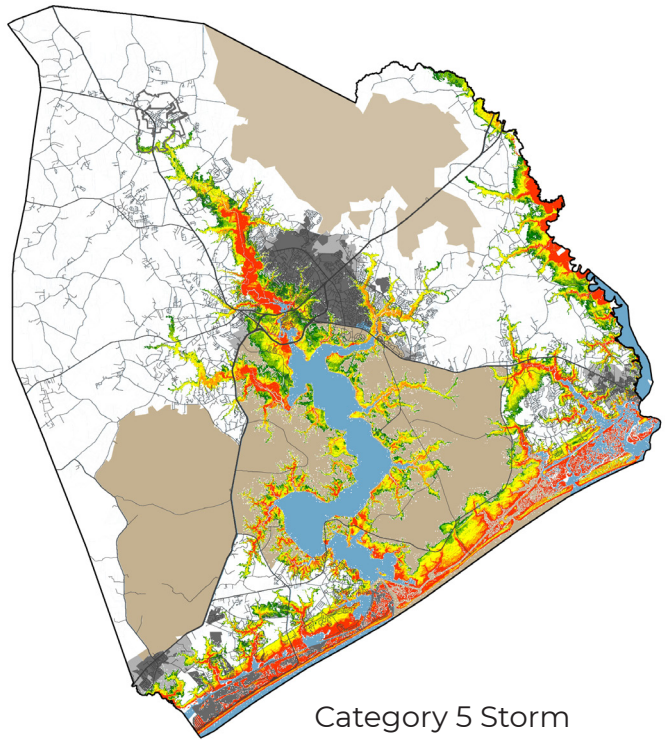
Category 1 Storm



Category 3 Storm









Category 4 Storm

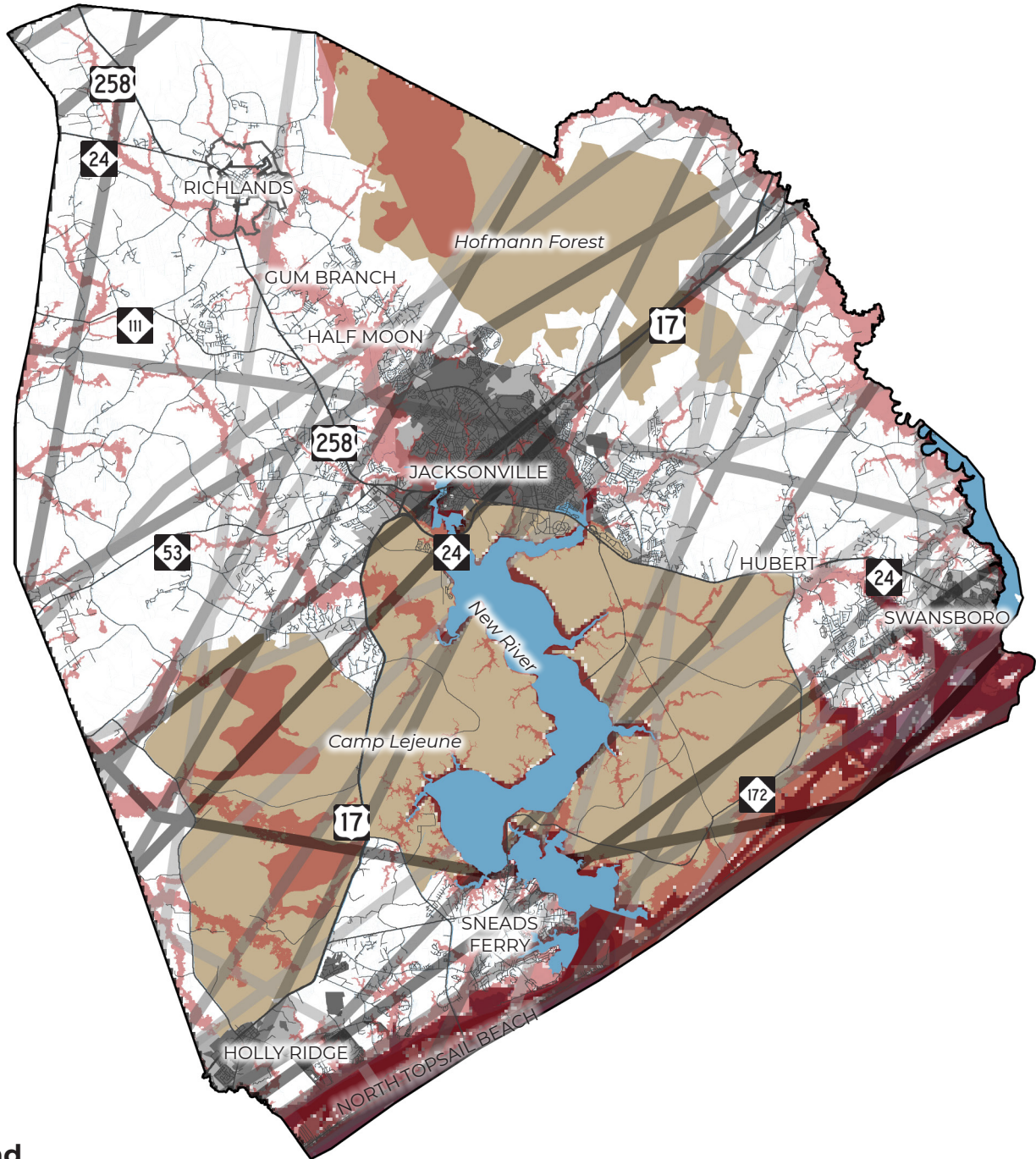


Category 5 Storm

Legend

-  Onslow County
-  Water
-  Cities
-  Roads
-  Federal Areas
- Water height above ground**

2 ft 20+ ft

Source: NOAA MOM Model (2022)



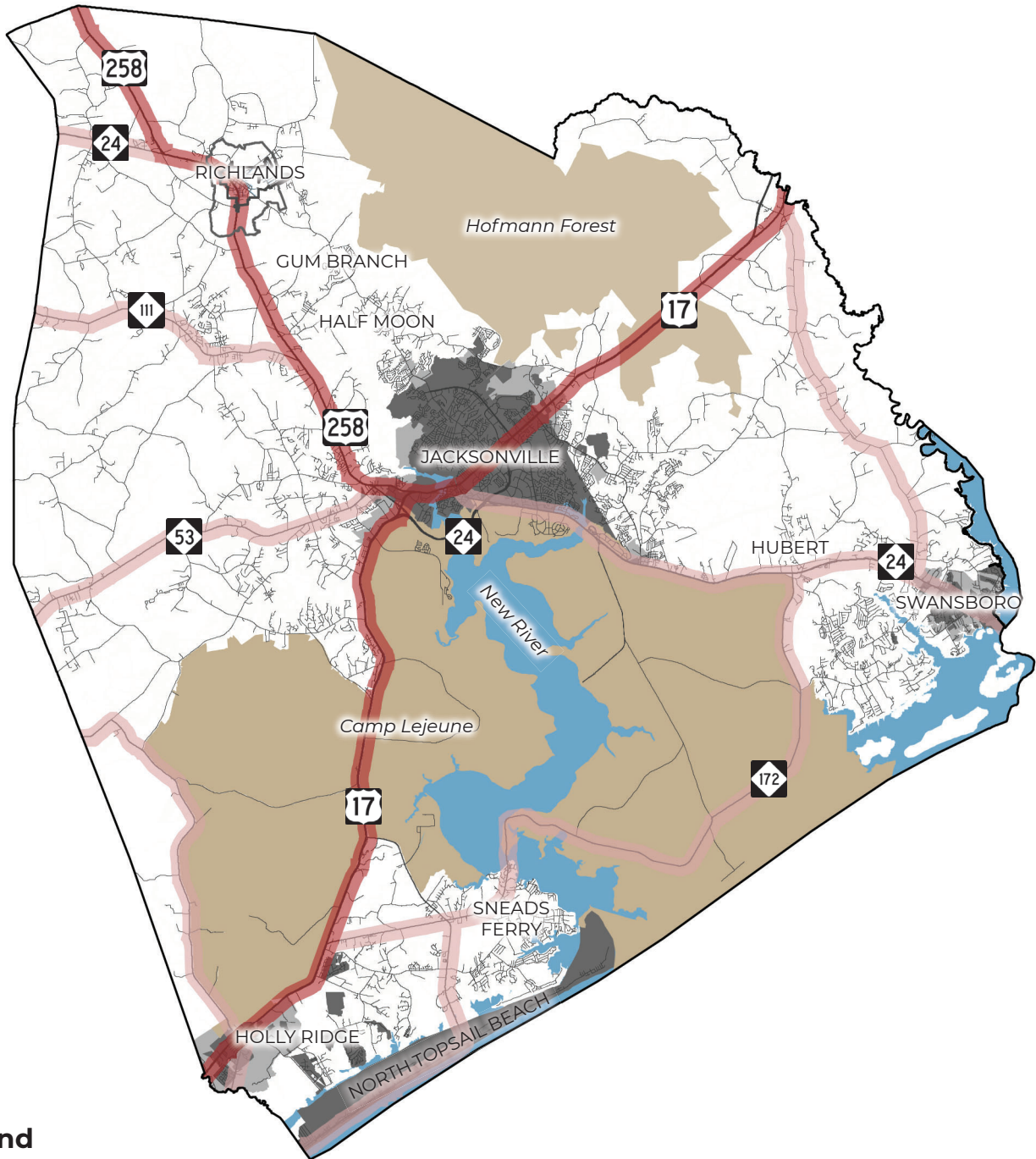
Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas
- Past Hurricane Paths
- High Wind Risk
- Flood Hazard Zones



Source: NCDOT (2020)

» HURRICANE EVACUATION ROUTES



Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas
- State Road
- Federal Road



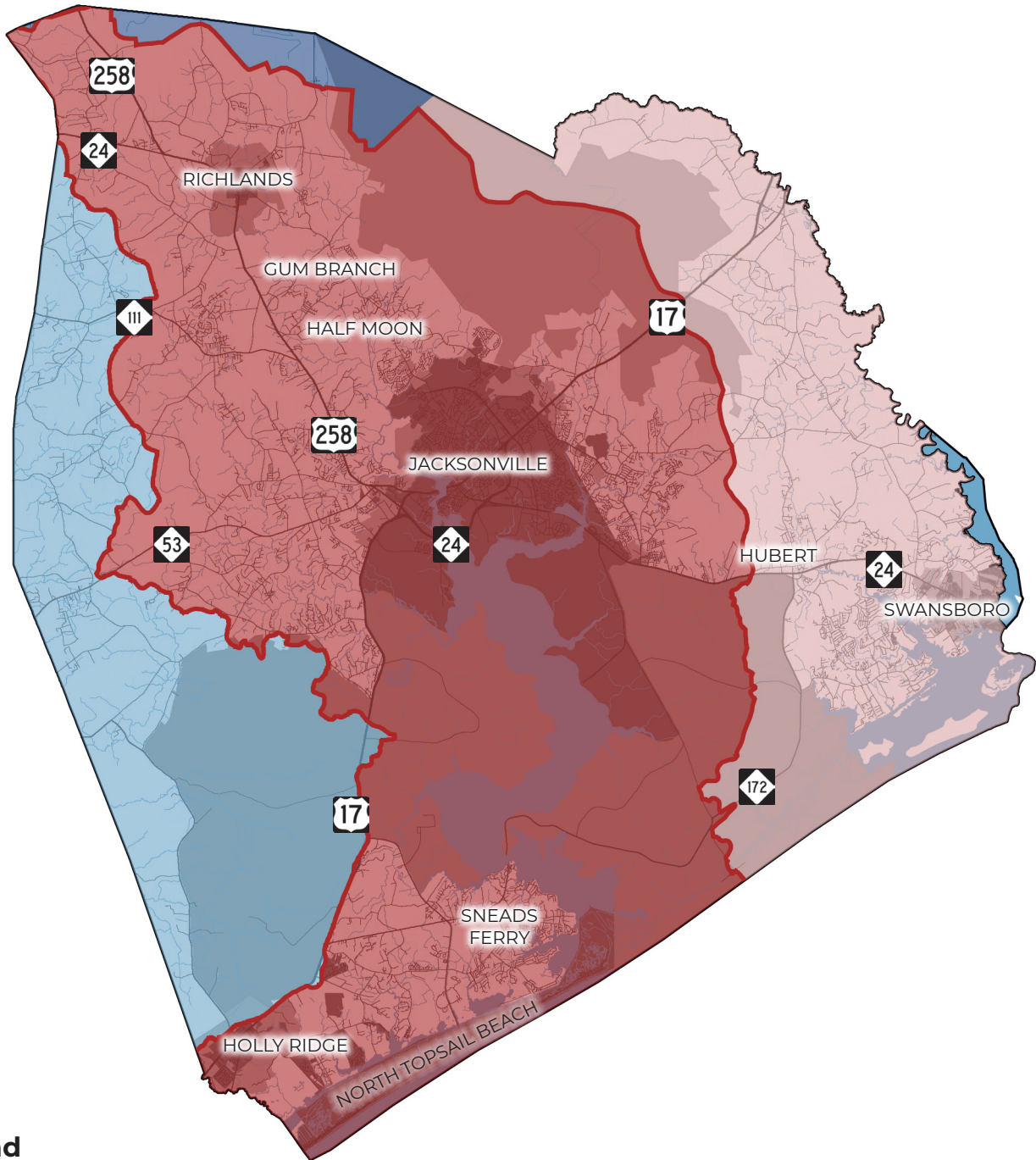
Source: NCDOT (2020)

Water Quality










The entire County is within the White Oak water basin. Within that basin, there are four watersheds in the County: the New River watershed, the White Oak River watershed, the Lower Neuse watershed, and the Northeast Cape Fear watershed. These are illustrated on the map on the following page. Watersheds provide information on how and where land drains, and when watersheds are sources of drinking water, the State regulates development to ensure it does not interfere with clean drinking water. However, none of the watersheds in Onslow County are water supply watersheds, therefore, there are not as stringent of watershed requirements. Regardless, maintaining clean water is essential to environmental and public health.

Surface Water Classifications

Surface water classifications are designations applied to surface water bodies, such as streams, rivers, and lakes, which define the best uses to be protected within these waters (for example: swimming, fishing, and drinking water supply). The North Carolina Department of Environmental Quality (NCDEQ) has classified many of the tributaries associated with the New River and the Intracoastal Waterway as either high quality waters, nutrient sensitive waters, or outstanding resource waters. High quality waters, which are primarily along the coast and in the southeastern part of the County, have been found to be excellent based on biological or physical / chemical characteristics or are primary nursery areas and other functional nursery areas designated by the Marine Fisheries Commission or the Wildlife Resources Commission. Nutrient sensitive waters, which applies to many of the New River tributaries in the northern portion of the County, are intended for waters needing additional nutrient management due to being subject to excessive growths of microscopic or macroscopic vegetation. The last category, outstanding resource waters, which are primarily found around North Topsail Beach and Swansboro, are a subset of high quality waters and is intended to protect unique and special waters that have excellent water quality and are of exceptional state or national ecological or recreational significance.



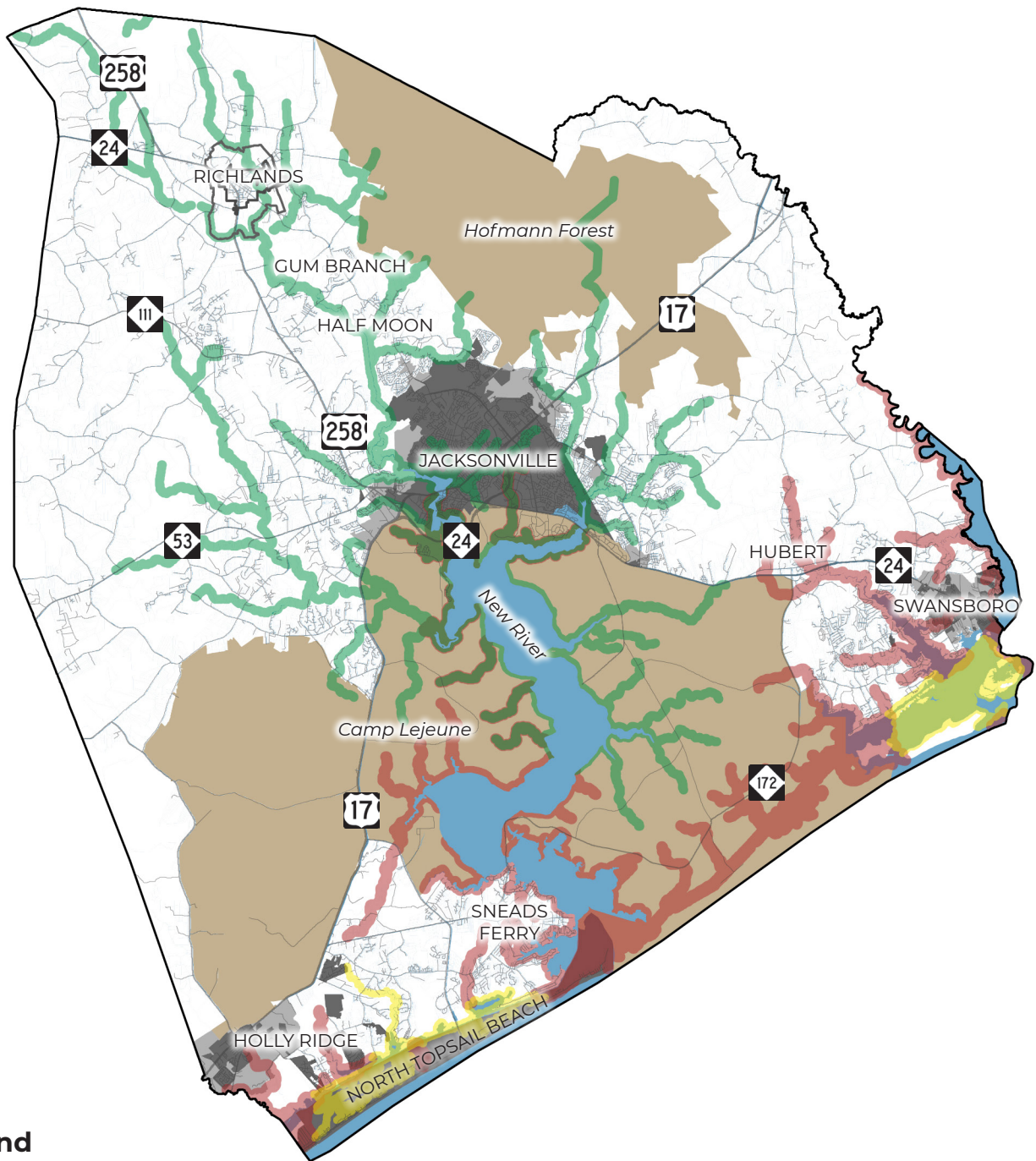
Legend

- | | |
|---|---|
|  Onslow County |  HUC- 8 Watersheds |
|  Water |  New River |
|  Cities |  White Oak River |
|  Roads |  Lower Neuse |
| |  Northeast Cape Fear |



Source: US Fish and Wildlife (2022)

» SURFACE WATER CLASSIFICATION



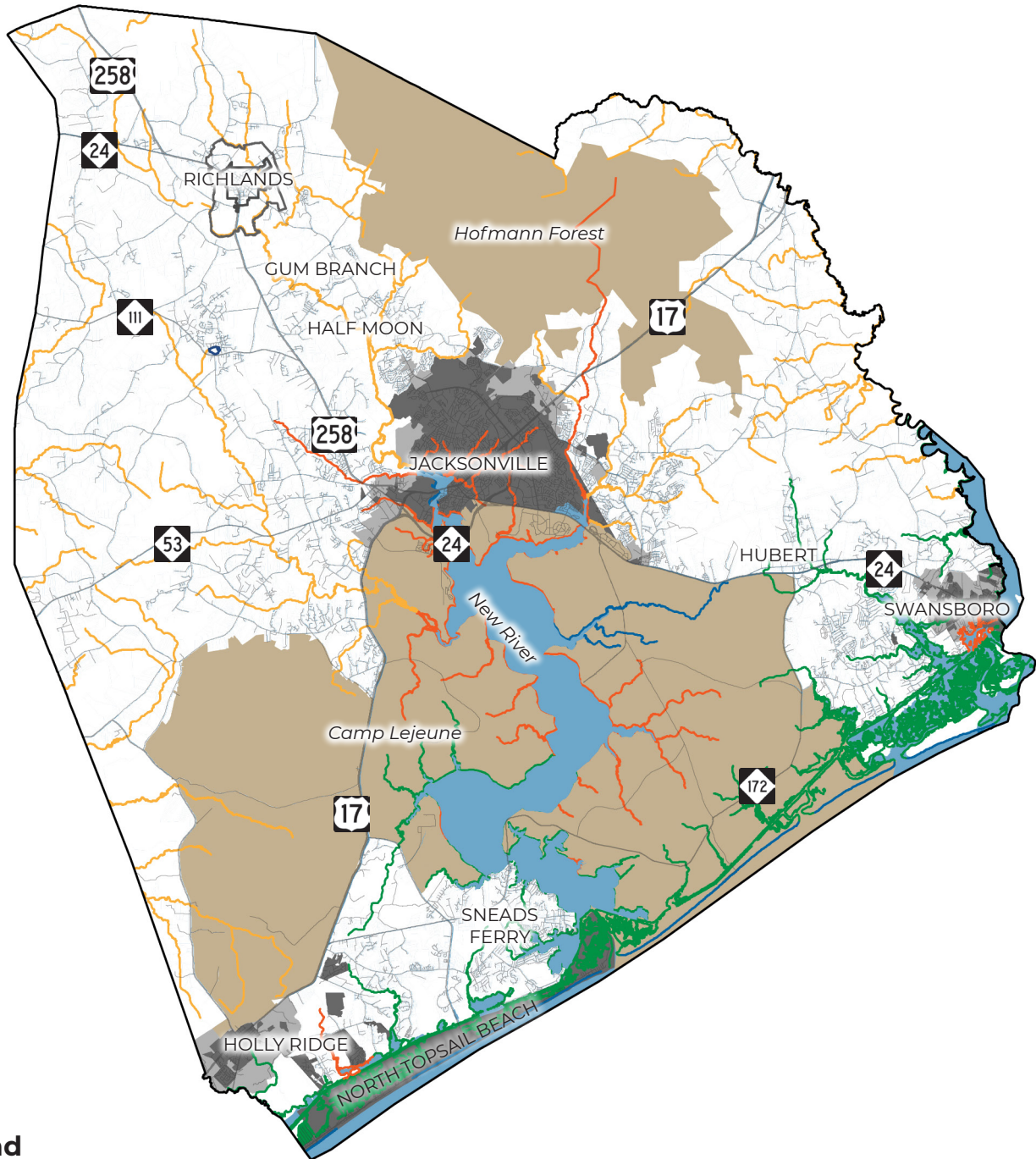
Legend

- Onslow County
- Water
- Cities
- Roads
- Rivers
- High Quality Waters
- Nutrient Sensitive Waters
- Outstanding Resource Waters



Source: NC One Map(2022)

» SURFACE WATER CLASSIFICATION - PRIMARY CONTACT



Legend

- Onslow County
- Water
- Cities
- Roads
- Rivers
- B: Recreation, Fresh Water
- SB: Recreation, Tidal Salt Water
- C: Aquatic Life, Fresh Water
- SC: Aquatic Life, Tidal Salt Water
- SA: Shellfishing, Tidal Salt Water



Source: NC One Map(2022)

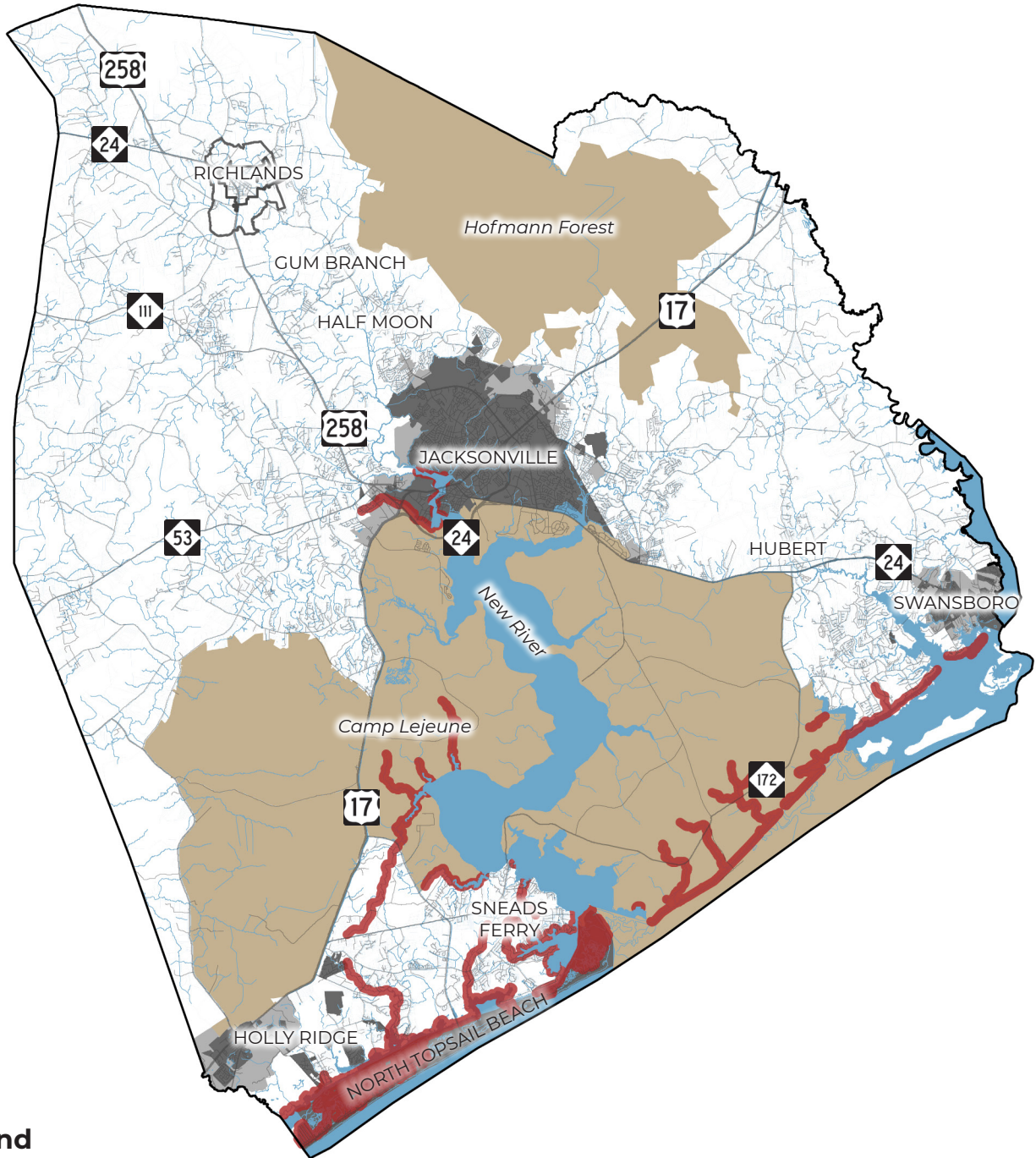
303(d) Impaired Waters

Every two years, NCDEQ reports an assessment of water quality throughout the State as required by the Clean Water Act. Bodies of water that do not meet water quality standards are considered to be impaired. Waters with a category 5 level of impairment are required to determine a Total Maximum Daily Load (TMDL) and are then included on the 303(d) list. A TMDL is a calculation of the maximum levels of contaminants that the water body can continue to receive while still meeting water quality standards. The goal of establishing TMDLs is to identify point and non-point sources of pollution, reduce the amount of these contaminants in the water, and eventually improve the water quality.

The White Oak River Basin has the following TMDLs for Fecal Coliform

- Bear Creek
- Queens Creek
- Southeast White Oak River Embayments
- Turkey Creek
- Virginia Creek
- White Oak River

The waterways within Onslow County on the 303(d) list are shown on the following map.



Legend

- Onslow County
- Water
- Cities
- Roads
- Rivers
- Impaired Waterways (303d)



Source: NCDEQ (2022)



LAND USE INFLUENCES





Overview

The Land Use Influences section covers existing land use, as well as factors which impact land use, to examine how land in the County is being used and to identify opportunities for changes in future development patterns. This includes an examination of land cover, intensity of development, and parcel size; as well as factors which influence these traits, such as economic development characteristics, transportation and utility infrastructure, environmental factors, and housing provision, amongst other attributes.

Existing Land Use

LAND USE DESCRIPTIONS

The following pages describe and illustrate the existing ways in which land is being used in Onslow County today. These uses are relatively generalized, in an effort to reduce confusion. The maps which follow show these land use categories throughout the County, with zoomed in contexts for each region.

Rural / Agricultural

Rural / agricultural is the primary land use in Onslow County. This category captures large parcels that are not designated for conservation, are zoned RA, and have a land value that is much higher than the value of any structure on the site. These areas may include a range of uses (mostly single family residential and agricultural), but are characterized by limited scale, rural development patterns.

Cemetery

Cemeteries are identified as any parcel which is designated as containing a cemetery or grave site. Cemeteries could also be considered open space or civic, but generally do not allow for any redevelopment opportunities.

Civic / Institutional

Civic and institutional uses include parcels that are publicly owned and/or provide a public resource. This includes uses such as government buildings, schools, and hospitals.

Commercial / Office

Commercial and office land uses describe any parcel which contains an office, commercial service, retail business, grocery store, or restaurant. These uses are mostly concentrated within the urbanized areas of the County and provide a range of goods and services.

Conservation / Natural

Conservation and natural areas include land that is zoned for conservation, as well as parcels that are classified as wetland, water, or woodland (which are generally natural or preserved). Hofmann forest and the game lands are included within this land use category.

Industrial / Mining

Industrial and Mining land uses include parcels that contain industrial buildings, such as warehouses, manufacturing and assembly plants; or areas that are designated for extraction of minerals or resources, such as sand mines and quarries.

Military

Military uses include land that is owned by the United States Military and that which is part of either the Camp Lejeune base or New River Air Station.

Mobile Home / RV

Mobile homes and RVs are residential lots that contain a mobile home or recreational vehicle (RV). This land use includes individual mobile homes and mobile home parks.

Multi-Family Residential

Multi-family residential uses contain apartments, condominiums, or other multi-family structures. As represented in the land use table, there are very few multi-family units in unincorporated Onslow County.

Single Family Residential

Single family residential uses contain either single family attached (duplex or townhome) or single family detached structures. This is the second highest land use category in the County, accounting for approximately 20% of the land.

Parks and Recreation

Parks and recreation include lands which contains a park, boat slip, golf course, or other recreational use. Though they consist of a small percentage of the overall land in the County, there are additional smaller scale open spaces which also supplement this use.

Septic Fields

Septic fields are parcels which has been designated solely for a nitrification use (in relation to a septic tank). There are likely additional septic fields outside of this category, though they are on lots which contain additional primary uses (such as a single family home).

Utility / Right of Way

Utility and right of way include parcels which are utilized as access roads or other transportation rights-of-way or for utility services, such as power lines.

Undeveloped / Vacant

Undeveloped and vacant land includes all parcels which are either unoccupied or do not contain a structure. These parcels have the highest potential for redevelopment and infill.

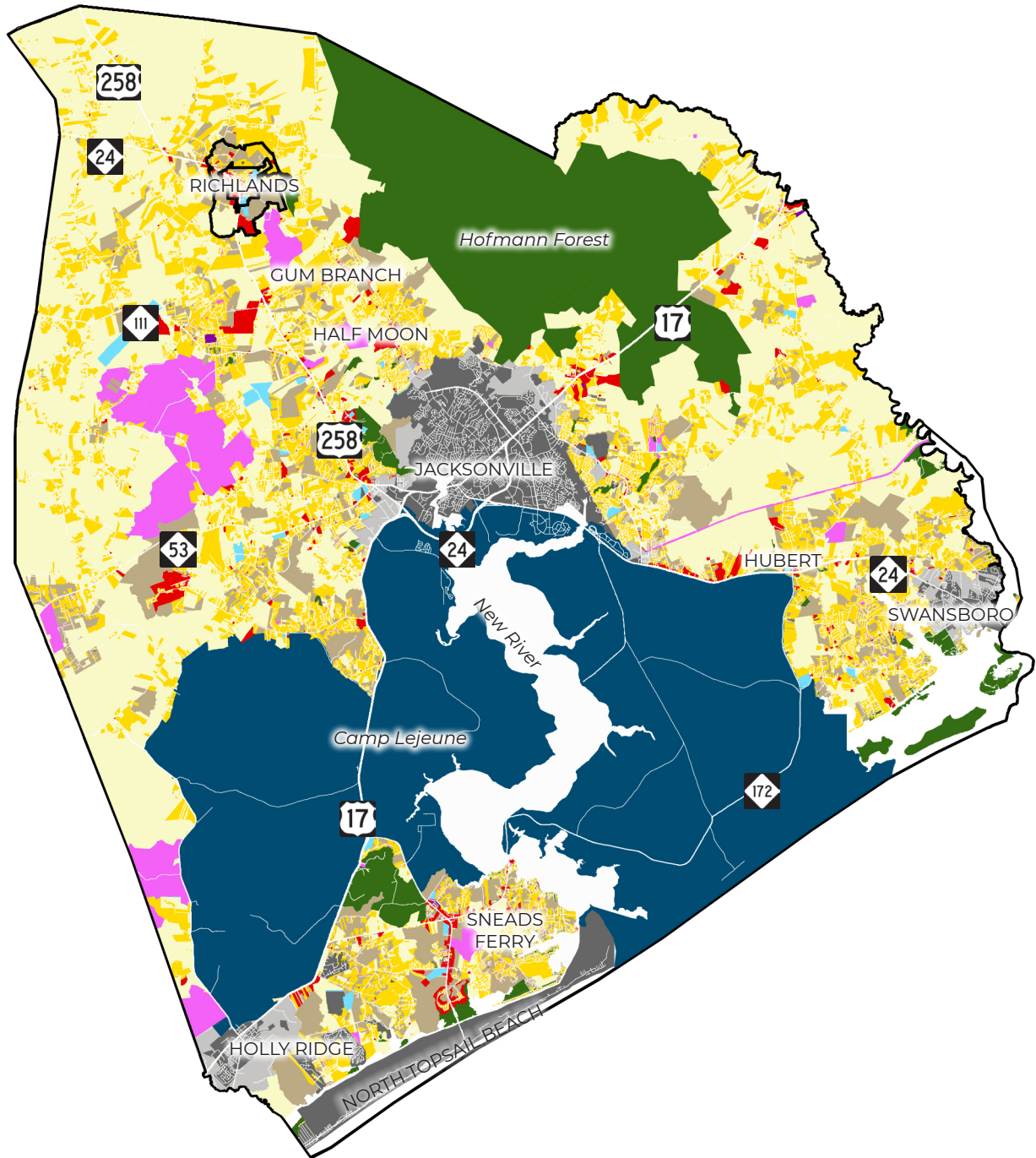
The table below details the percentage of the unincorporated areas and the total County areas which are dedicated to each existing land use category. It can be seen that the greatest land uses are rural / agricultural (52.1% of unincorporated Onslow County) and single family residential (21.1% of unincorporated Onslow County). Additional uses which occupy a large portion of the land in the County include vacant / undeveloped, mobile home / RV, and civic / institutional. In the entire County, there are very limited cemetery, multi-family residential, septic field, parks and recreation, and utility / ROW uses (as a portion of the total land area). Some of these uses are only small because they generally occur on smaller pieces of land (such as cemeteries).

» **EXISTING LAND USE TYPES**



Source: Onslow County and Benchmark Planning (2022)

	PERCENTAGE OF UNINCORPORATED ONSLOW	PERCENTAGE OF ONSLOW COUNTY
Civic / Institutional	4.1%	3.1%
Commercial / Office	2.3%	2.5%
Parks/ Natural	2.802%	13.003%
Industrial / Mining	0.05%	0.05%
Military	0%	24.5%
Mobile Home / RV	4.9%	3.1%
Multi-Family Residential	0.04%	0.2%
Single Family Residential	21.1%	14.5%
Rural / Agricultural	52.1%	31.8%
Utility / ROW/ Septic	1%	0.7%
Vacant / Undeveloped	11.6%	9.1%










» EXISTING LAND USE



Legend

-  Onslow County
-  Cities
-  ETJ

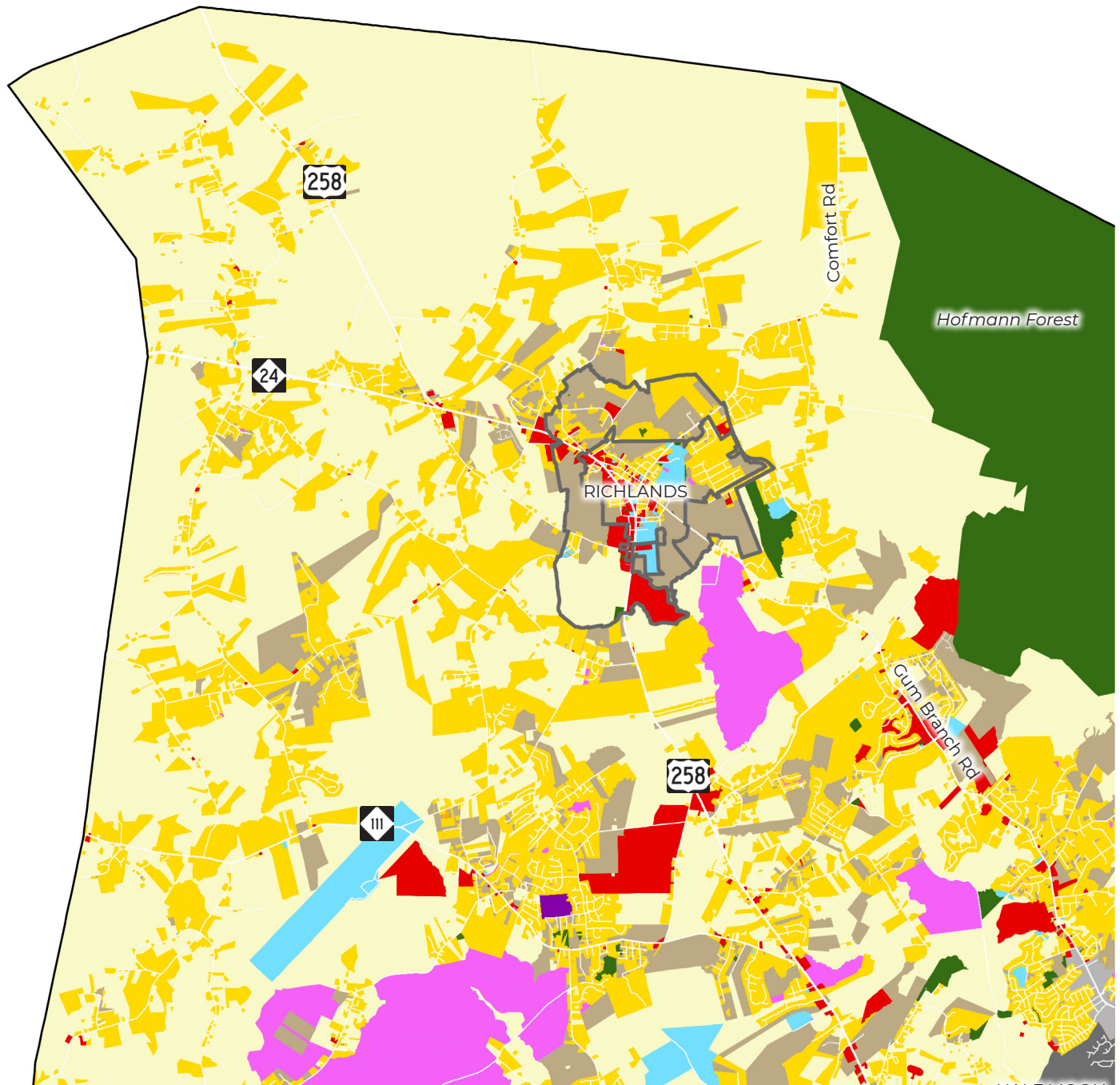
Existing Land Use

-  Public/ Institutional
-  Commercial
-  Parks and Natural Areas
-  Industrial / Mining
-  Military
-  Rural / Agricultural
-  Residential
-  Utility / ROW / Septic
-  Undeveloped



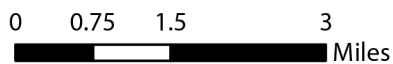
Source: Onslow County (2022)

» NORTHWEST REGION - EXISTING LAND USE



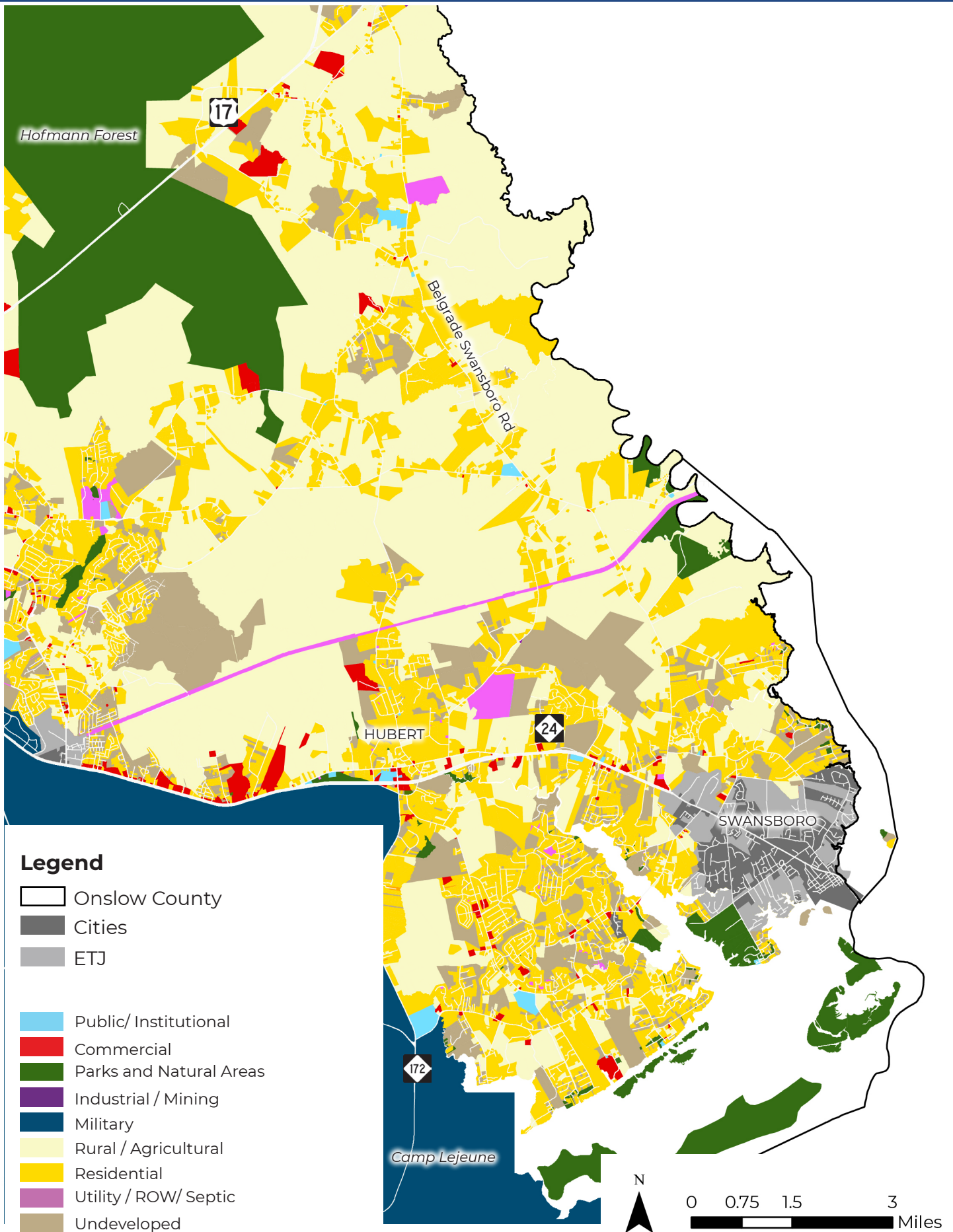
Legend

- Onslow County
- Cities
- ETJ
- Public/ Institutional
- Commercial
- Parks and Natural Areas
- Industrial / Mining
- Military
- Rural / Agricultural
- Residential
- Utility / ROW/ Septic
- Undeveloped

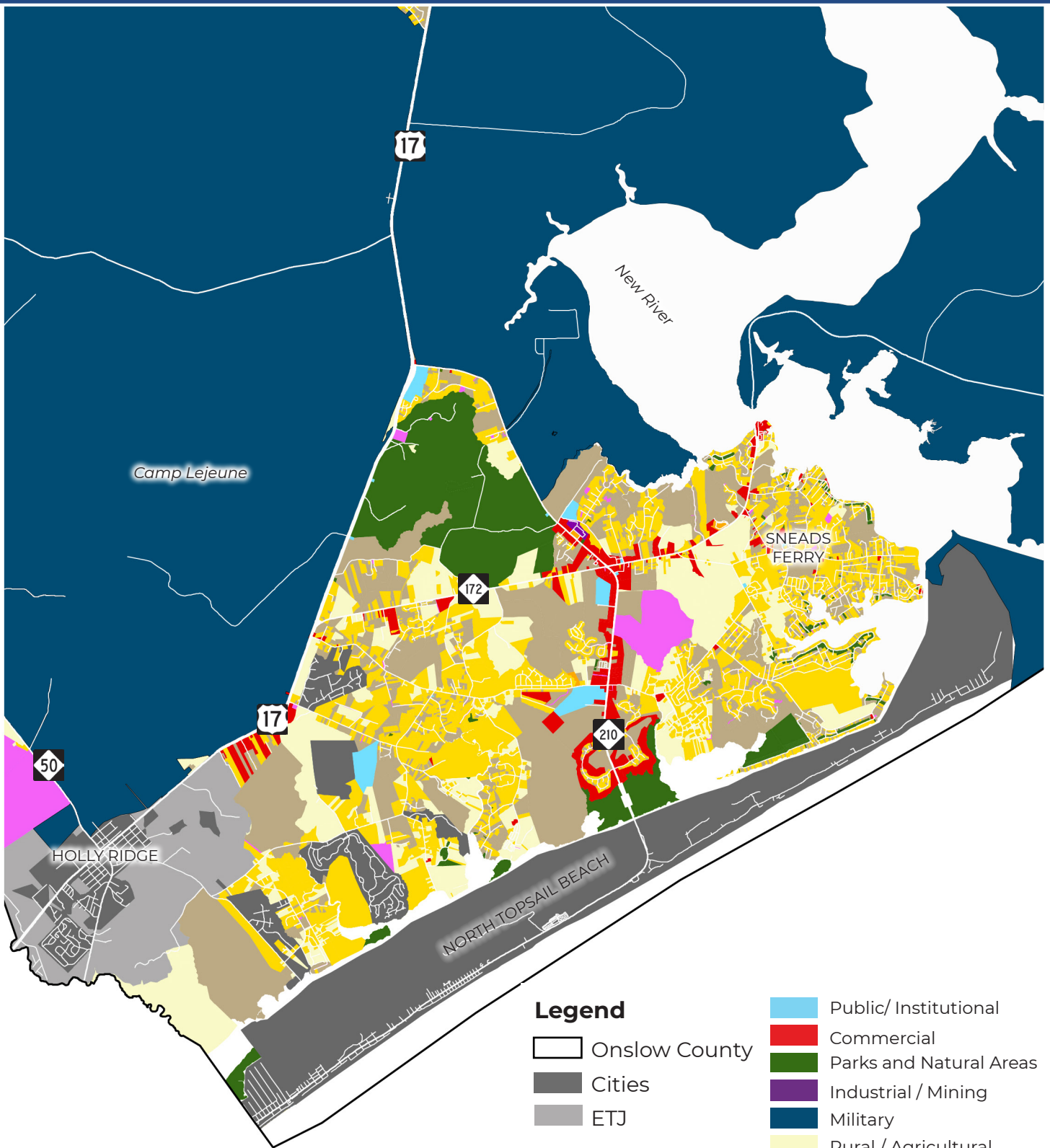


Source: Onslow County (2022)

» EAST REGION - EXISTING LAND USE



» SOUTH REGION - EXISTING LAND USE



Legend

- Onslow County
- Cities
- ETJ
- Public/ Institutional
- Commercial
- Parks and Natural Areas
- Industrial / Mining
- Military
- Rural / Agricultural
- Residential
- Utility / ROW/ Septic
- Undeveloped



0 0.75 1.5 3 Miles

Source: Onslow County (2022)

ZONING

There are twelve base zoning districts in Onslow County: Rural Agricultural (RA), Residential-20 (R-20), Residential-15 (R-15), Residential-10 (R-10), Residential-8 Manufactured Housing (R-8M), Residential-5 (R-5), Highway Business (HB), Community Business (CB), Office and Institutional (O-I), Heavy Industrial (H-IN), Light Industrial (L-IN), and Conservation (CON). All land within the County is assigned a base zoning district for the purpose of establishing the minimum standards for the use and development of property.

There are also eight overlay zoning districts, which are intended to modify the general regulations within a base zoning district based upon unique characteristics or impacts that have been determined to exist within a defined area or areas of the County. The overlay zoning districts are: Airport Overlay (AO), Flight Path Overlay (FPO), Golden Acres Overlay (GA), Military Coordination Overlay (MCO), Noise Attenuation Overlay (NAO), Sneads Ferry Commercial Overlay (SFCO), US 17 Thoroughfare Overlay (TO-17), and Working Waterfront Overlay (WWO). Most of these are reserved, with only the Flight Path Overlay (associated with air operations at Marine Corps Base Camp Lejeune and Marine Corps Air Station New River) and the Golden Acres Overlay (associated with the subdivision) in use.

The County has conditional zoning districts, which are intended to provide property owners with a means and method of establishing unique, site specific standards, for the use and development of land. Where approved, conditional zoning districts are identified with the suffix "CZ." Planned development districts are a subset of conditional zoning districts, intended for use in circumstances where the general standards of the County's Ordinance do not provide for the establishment or design of a master planned development. Where approved, planned development districts are identified with the suffix of "PDD."

The purpose of each base zoning district is listed below and on the following pages:

RA: Rural Agricultural

The purpose of this district is to maintain a rural development pattern that preserves the agricultural character of the county while accommodating limited low density single-family residential development and limited commercial uses that service the surrounding community. This district is also designed to protect rural areas from the intrusion of non-agricultural land uses that could create a nuisance, detract from the quality of life, and / or present a danger to the natural environment.

R-20: Residential

The purpose of this district is to accommodate low density, single-family, residential development in suburban areas of the County that have access to the utility and transportation infrastructure necessary to support development at a suburban scale and intensity. This district is further intended to protect residential neighborhoods from encroachment by incompatible uses and development patterns.

R-15: Residential

This district is similar to the R-20 district, though it is to accommodate moderate density, single-family, residential development. The primary difference is lot sizes. Where R-20 lots are permitted as small as 20,000 square feet, R-15 lots can be as small as 15,000 square feet.

R-10: Residential

The purpose of this district is to accommodate medium density, single-family and limited multi-family (up to 10 dwelling units per acre) residential development in urbanizing areas of the County that have access to the utility and transportation infrastructure necessary to support development at an urban scale and intensity. This district is to protect residential neighborhoods from encroachment by incompatible uses and development patterns.

R-8M: Residential

The R-8M district is very similar to the R-10 district. However, the R-8 district also permits manufactured housing. Lot sizes are also permitted to be slightly smaller in the R-8M district, as little as 8,000 square feet (as compared to 10,000 square feet in R-10).

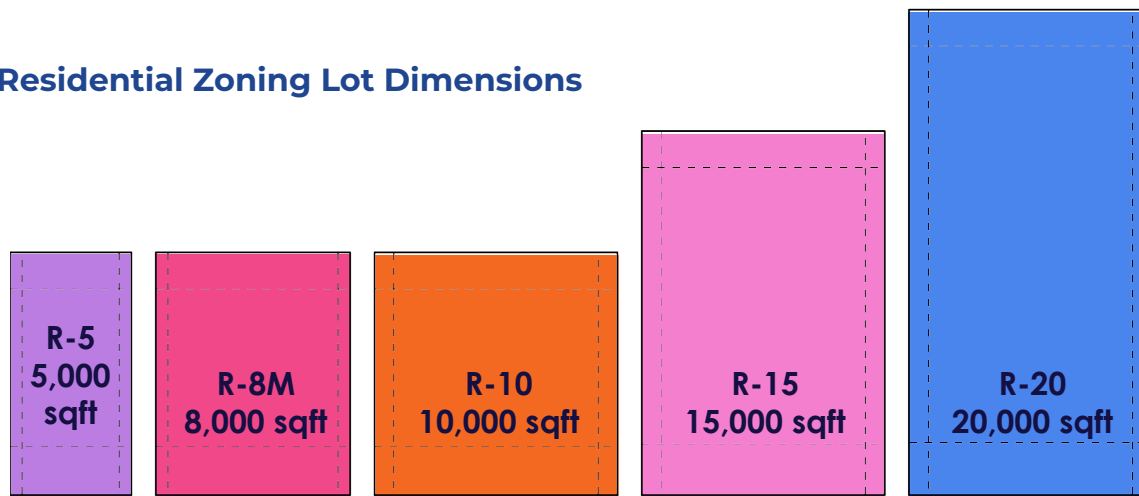
R-5: Residential

The R-5 district is also intended to accommodate high density, single-family and multi-family residential development in urbanizing areas of the County, with lots as small as 5,000 square feet. Additional standards differ between the various residential districts but lot sizes are the primary attribute in which to describe them.

CB: Community Business

The purpose of this district is to accommodate the establishment of small-scale retail and service uses that serve nearby neighborhoods and rural communities. This district also accommodates multi-family residential development at up to 10 dwelling units per acre.

Residential Zoning Lot Dimensions



HB: Highway Business

This district is to accommodate regional-scale commercial uses, fostering economic development along major highway corridors where there is sufficient transportation and utility infrastructure capacity to support such development. This district also accommodates multi-family residential development at up to 20 dwelling units per acre.

H-IN: Heavy Industrial

The purpose of this district is to provide locations for major industrial and / or manufacturing, processing, and assembly uses and to protect adjacent rural/residential areas from such land uses.

L-IN: Light Industrial

The purpose of this district is similar to the H-IN district, though the permitted uses are slightly different. This district is generally intended to foster less intensive uses.

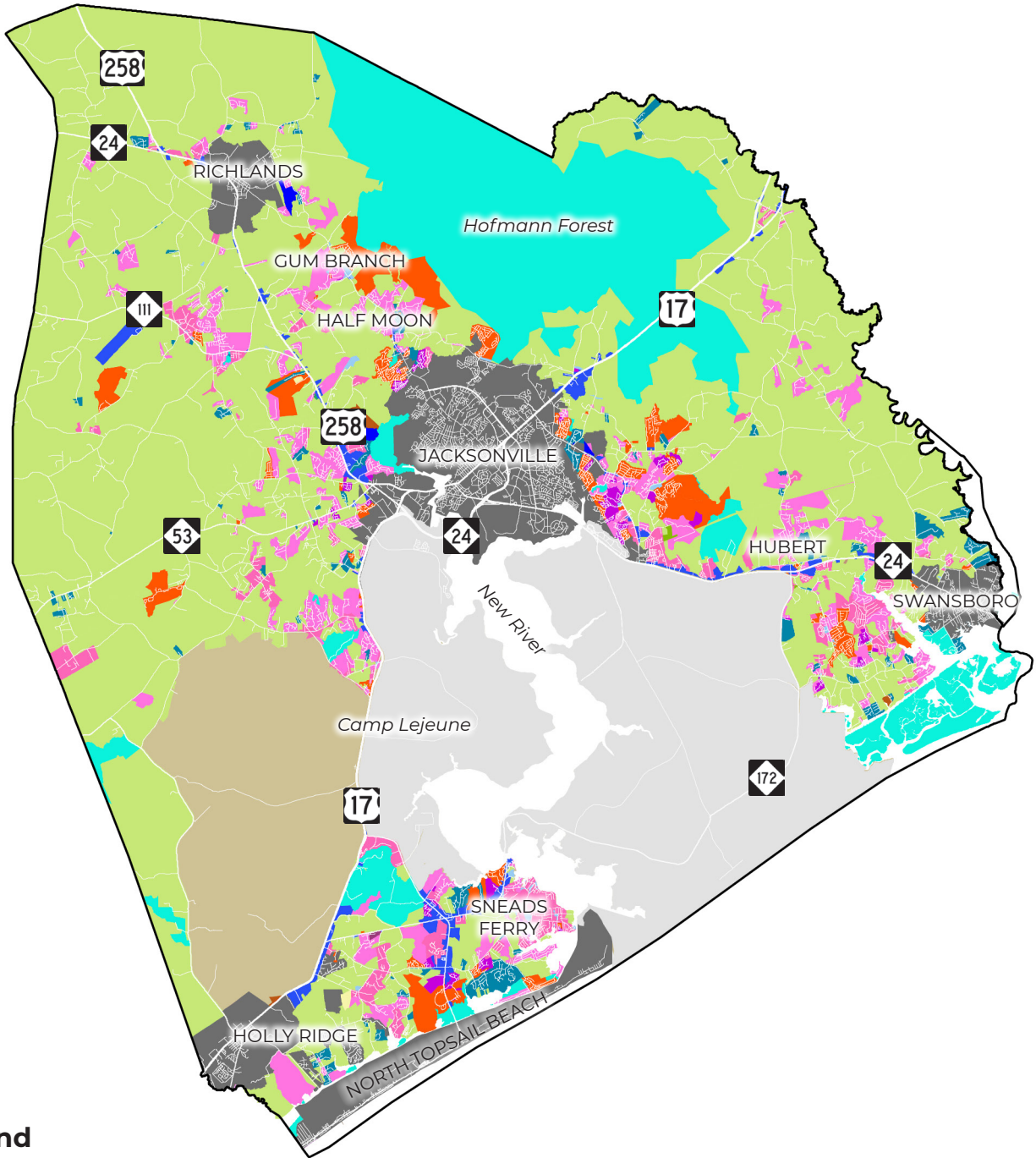
O-I: Office and Institutional

The purpose of this district is to accommodate public, civic, and professional service-oriented uses in locations that can support non-residential development, but which are not appropriate for higher intensity commercial uses, such as retail.

CON: Conservation

The purpose of this district is to preserve certain land and / or water areas that serve as wildlife refuges, possess natural beauty, are utilized for outdoor recreation purposes, provide needed open space, and are environmentally sensitive. Floodplains, coastal waters, wetlands and areas of environmental concern may be included in this district. Intensive use of this land for residential, commercial, or industrial purposes is not permitted.

» COUNTY ZONING (CURRENT)



Legend

- Onslow County
- Military Land
- Cities and ETJ
- Roads

Zone Code

- | | | | |
|---|--|--|--|
| CON | H-IN | RA | R-10 |
| HB | L-IN | R-20 | R-8M |
| CB | O-I | R-15 | R-5 |



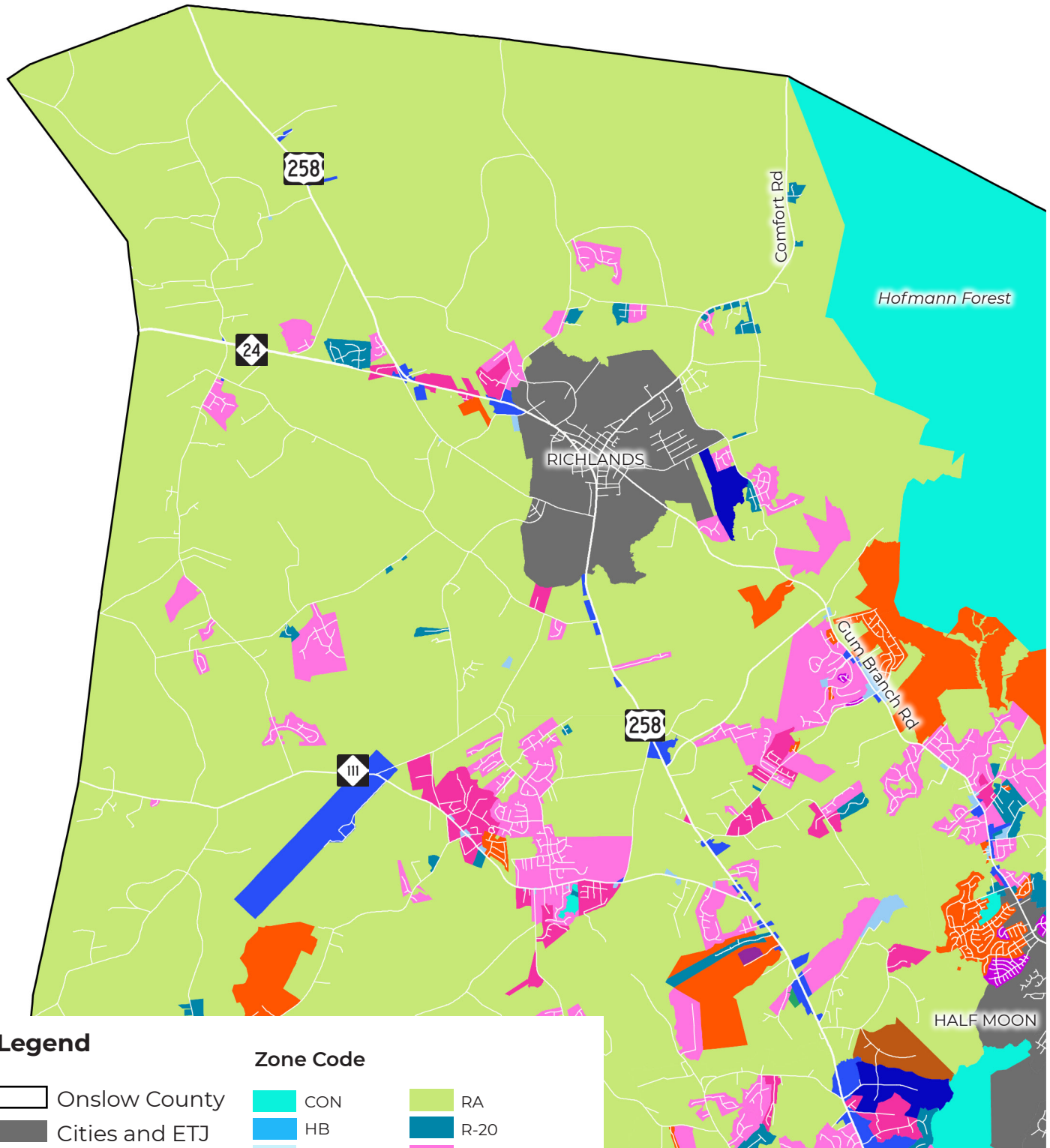
Source: Onslow County Official Zoning Map(2022)

» CURRENT COUNTY ZONING DISTRIBUTION

Source: Onslow County and Benchmark Planning (2022)

	TOTAL ACREAGE	PERCENTAGE OF COUNTY*
RA	210,117	64.1%
RA (CZ)	86	0%
R-5	2,095	0.6%
R-8M	10426	3.2%
R-8M (CZ)	1	0%
R-10	12,009	3.7%
R-15	20,757	6.3%
R-15 (GAO)	25	0%
R-20	5,863	1.8%
CB	628	0.2%
CB (CZ)	10	0%
HB	4,815	1.5%
HB (CZ)	34	0%
H-IN	427	0.1%
L-IN	10	0%
O-I	604	0.2%
O-I (CZ)	130	0%
CON	59,777	18.2%

*The distribution of zoning districts is exclusive of land within municipalities or under the jurisdiction of the US Marine Corps.



Legend

Onslow County
 Cities and ETJ

Zone Code

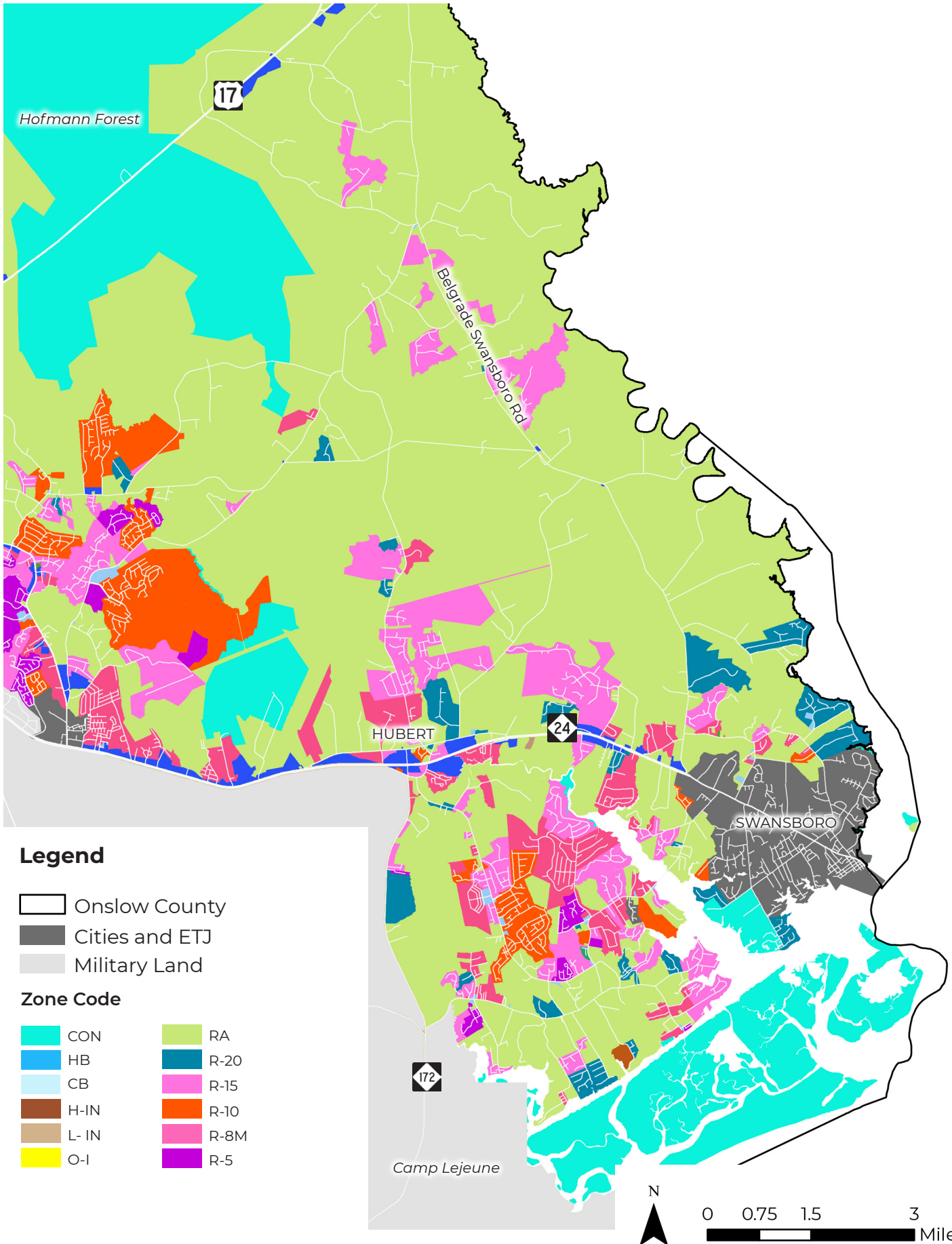
<p> CON</p> <p> HB</p> <p> CB</p> <p> H-1N</p> <p> L-1N</p> <p> O-1</p>	<p> RA</p> <p> R-20</p> <p> R-15</p> <p> R-10</p> <p> R-8M</p> <p> R-5</p>
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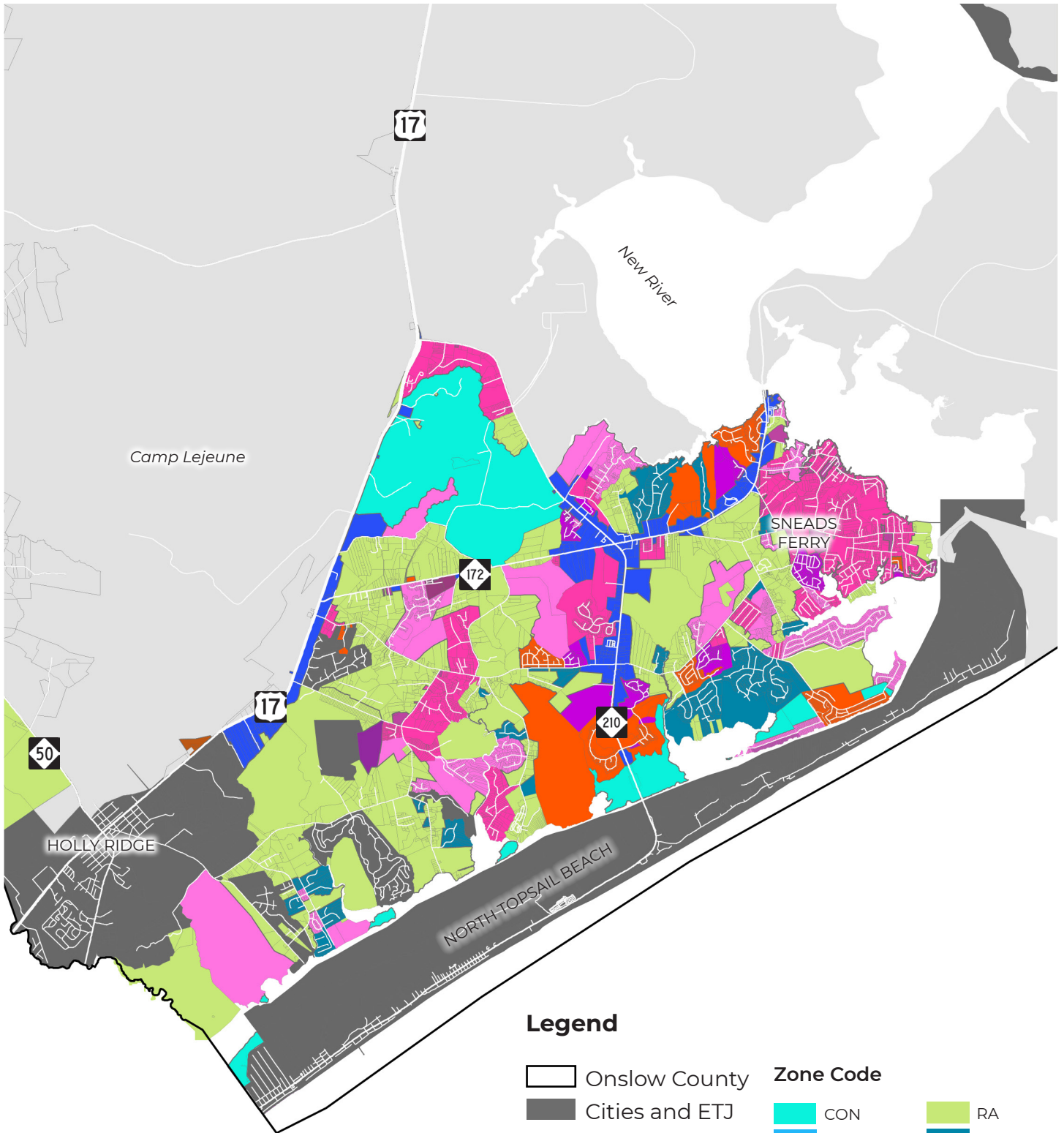
0 0.75 1.5 3 Miles

Source: Onslow County Official Zoning Map(2022)















» EAST REGION - ZONING

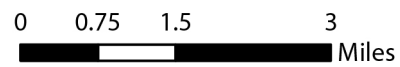


» SOUTH REGION - ZONING



Legend

 Onslow County	Zone Code	 RA
 Cities and ETJ	 CON	 R-20
	 HB	 R-15
	 CB	 R-10
	 H-IN	 R-8M
	 L- IN	 R-5
	 O-I	



Source: Onslow County Official Zoning Map (2022)

LAND COVER AND USE INTENSITY

Land Cover

The United States Department of Agriculture (USDA) utilizes satellite imagery to analyze land cover throughout the Country. This data classifies land based on development presence, crop land, and water to a very specific degree. It categorizes any type of pavement as “developed,” so roadways are often considered in this manner. A summarized version of USDA’s land cover data set is shown on the following page. It can be seen that large portions of the County are either agricultural, water areas, developed land, or wetlands. However, there are notable differences in land cover by region.

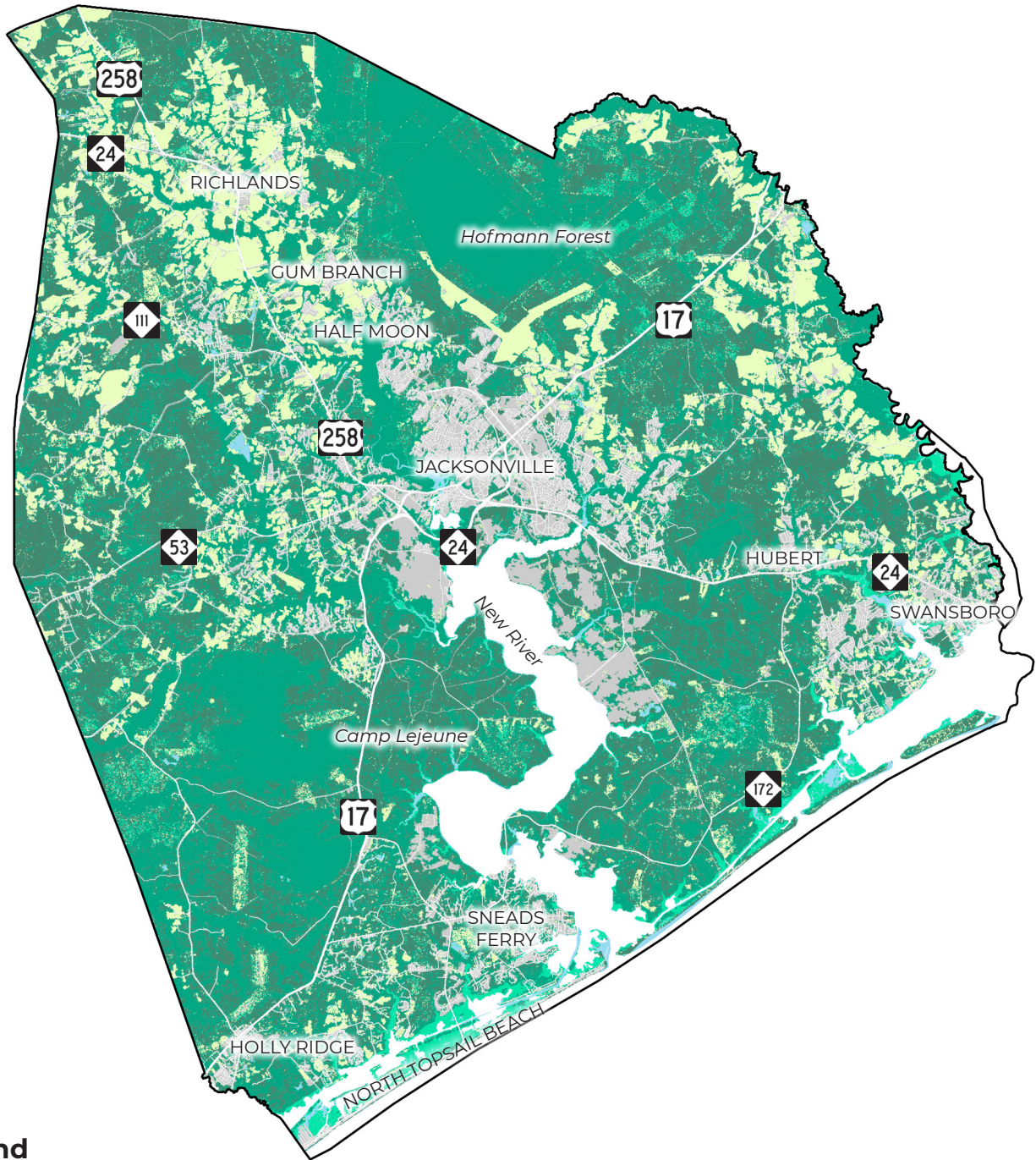
Large portions of the Northwest Region of the County are either wetlands or agricultural land. Development in this region tends to be concentrated along roadways, and forested areas are scattered.

The East Region of the County is slightly more developed than the Northwest Region, though it does have similar development patterns. Development is generally concentrated around roadways and in communities, and agricultural lands tend to be relatively buffered from development by the presence of forests. There are less wetlands in the East Region, and those that do exist tend to follow the Intracoastal Waterway and the New River.

Most of the South Region of Onslow County is either developed, water areas, wetlands, or forested (deciduous, grass, or evergreen). Very little of South Onslow County is either agricultural or bare earth. Similar to the East Region, wetlands in the South Region tend to be associated with bodies of water.

Land cover data is an important tool to understanding the extent, availability, and condition of lands in Onslow County through examining landscape patterns and characteristics. Land cover is based on an area’s naturally occurring state based on geology, soils, and climate ; however, natural disturbances such as flooding and fire as well as human activity such as development and deforestation will change these states. Land Cover in Onslow County is defined under six different categories as represented in the previous map. Large tracts of developed land define the urban areas such as Jacksonville and Swansboro. The majority of agricultural land is concentrated in the northern half of the County, specifically around the Richlands area. Wetlands and forest occupy the southern half of the county and is less suitable for future growth and development.

» EXISTING LAND COVER



Legend

- Onslow County
- Herbaceous Wetlands
- Upland Forest
- Open Water
- Agriculture/ Pasture
- Developed
- Wooded Wetland



Source: USDA (2022)

Parcel Size

There is a very broad range in parcel size throughout Onslow County, with a number of small parcels in developed areas and very large parcels in agricultural and rural areas. Overall, the average parcel size is 4.4 acres. This average was computed by excluding the municipalities, Hofmann Forest, and Camp Lejeune. The parcel size maps show the smallest parcels in shades of red, with the largest parcels in shades of green. It may be noted that the parcel size maps relate closely to the land cover maps, with a bit more detail on how land is subdivided, particularly in the clustered communities. Excluding Hofmann Forest and Camp Lejeune, most of the parcels in the County are less than 500 acres in size.

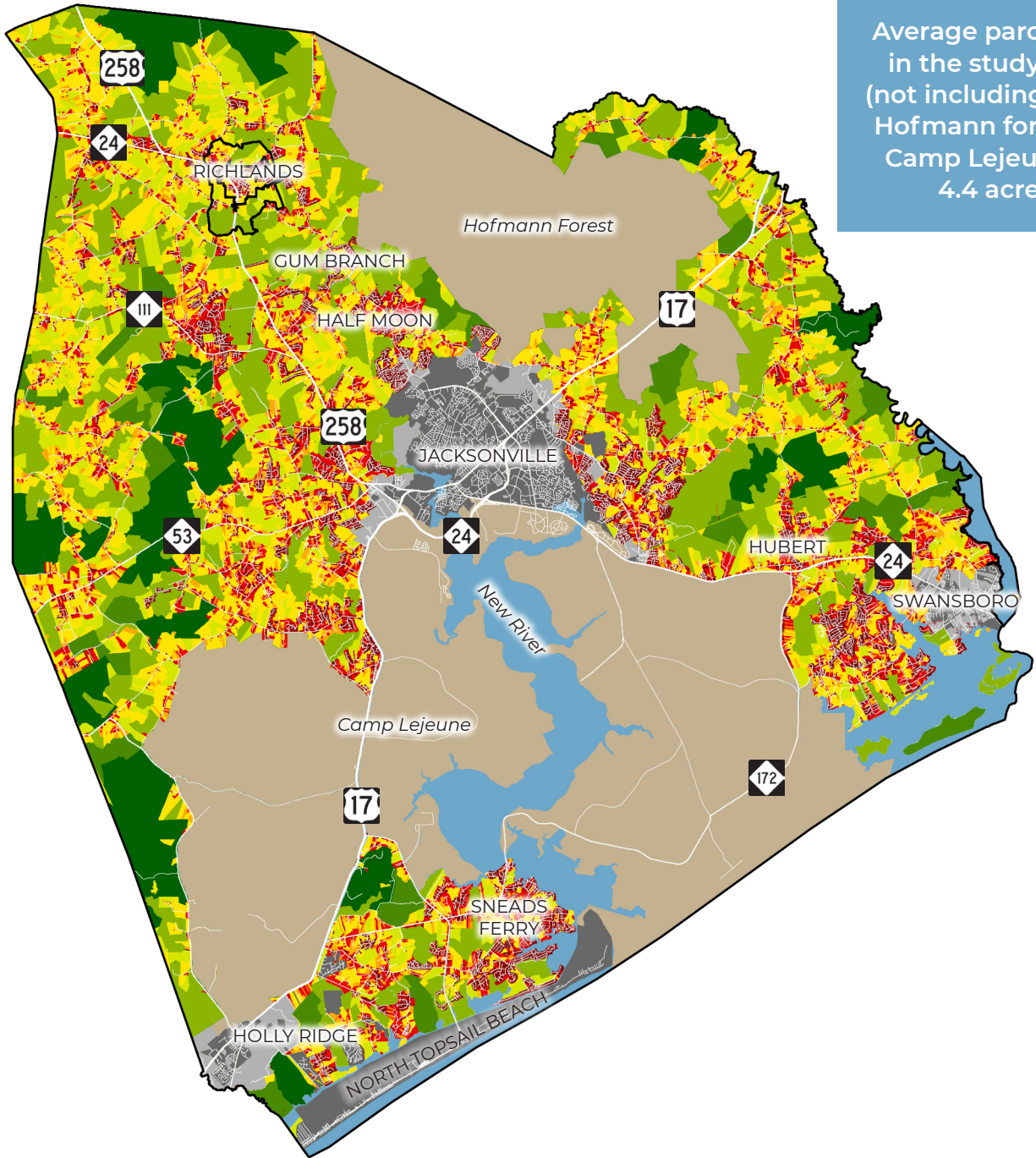
In the Northwest Region, most of the parcels smaller than one acre in size are concentrated along roads and in subdivisions. The size of lots generally tends to radiate outward, with lots getting larger the further you travel from a major roadway. There are a couple parcels greater than 500 acres in size, as shown in a medium green color. In addition to the Hofmann Forest, there are also a couple of properties greater than 1,000 acres in size (shown in dark green).

In the East Region, development appears to follow similar patterns as the Northwest Region, but is slightly more concentrated. There are not as many parcels between 100 and 500 acres, though there does appear to be a few more parcels greater than 500 acres in size. There are also a few parcels greater than 1,000 acres in size, in addition to Hofmann Forest. One of these large parcels is on the eastern edge of the County, near Hofmann Forest, and the other two are just north of Hubert and south of the Forest.

Much of the developed area in the South Region is concentrated in Sneads Ferry. Unlike other portions of the County, development in the South Region tends to be most dense on areas which have water access. There are still a few properties between 500 and 1,000 acres, as well as two parcels over 1,000 acres in size. The largest parcels are located just southeast of Holly Ridge and just south of Camp Lejeune.

» **PARCEL SIZE (ACREAGE)**

Average parcel size in the study area (not including cities, Hofmann forest, or Camp Lejeune) is 4.4 acres



Legend

- Onslow County
- Water
- Cities
- Roads

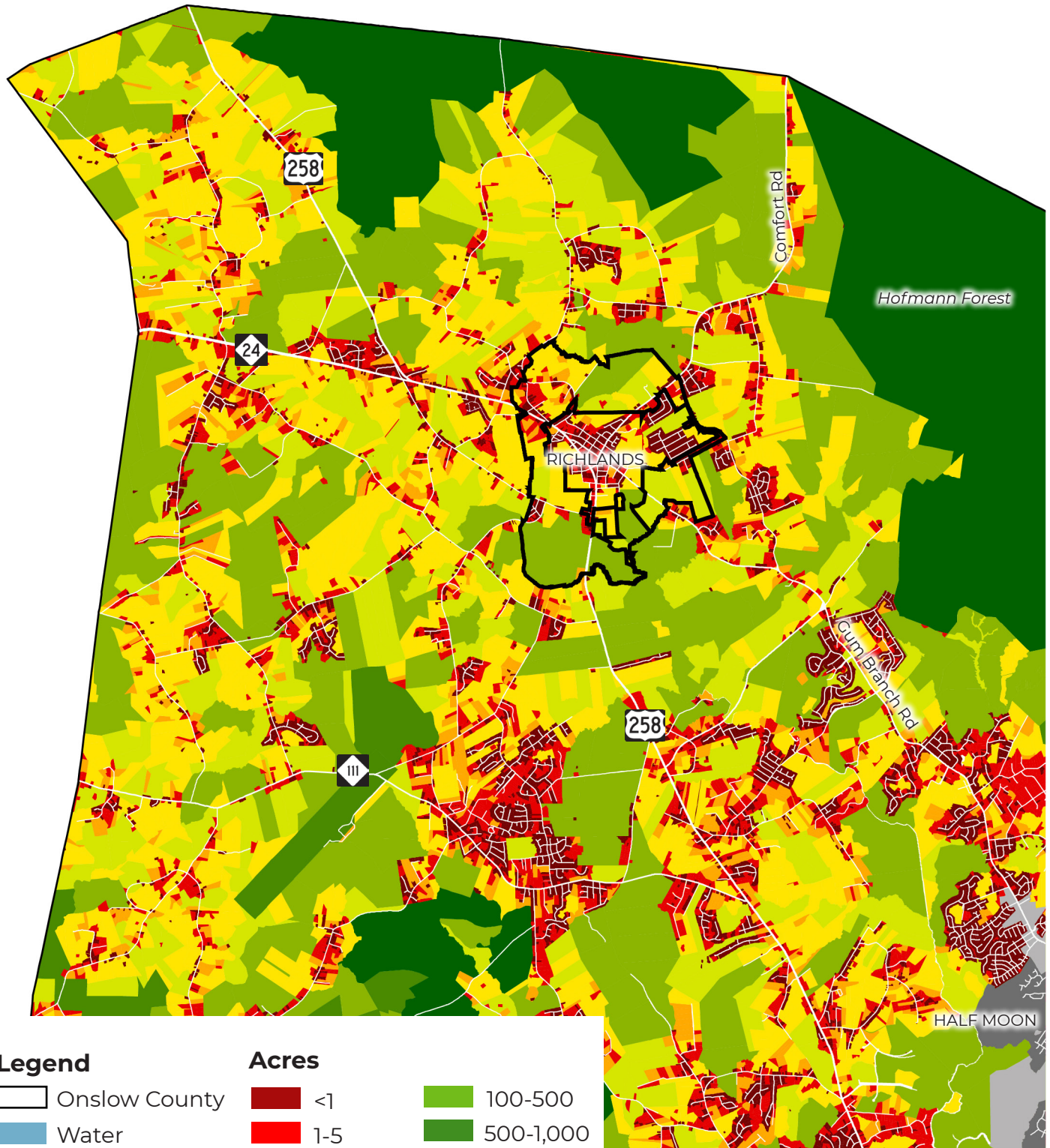
Acres

- <1
- 1-5
- 5-10
- 10-50
- 50-100
- 100-500
- 500-1,000
- >1,000



Source: Onslow County (2022)

» NORTHWEST REGION- PARCEL SIZE (ACREAGE)



Legend

- Onslow County
- Water
- Cities
- Roads

Acres

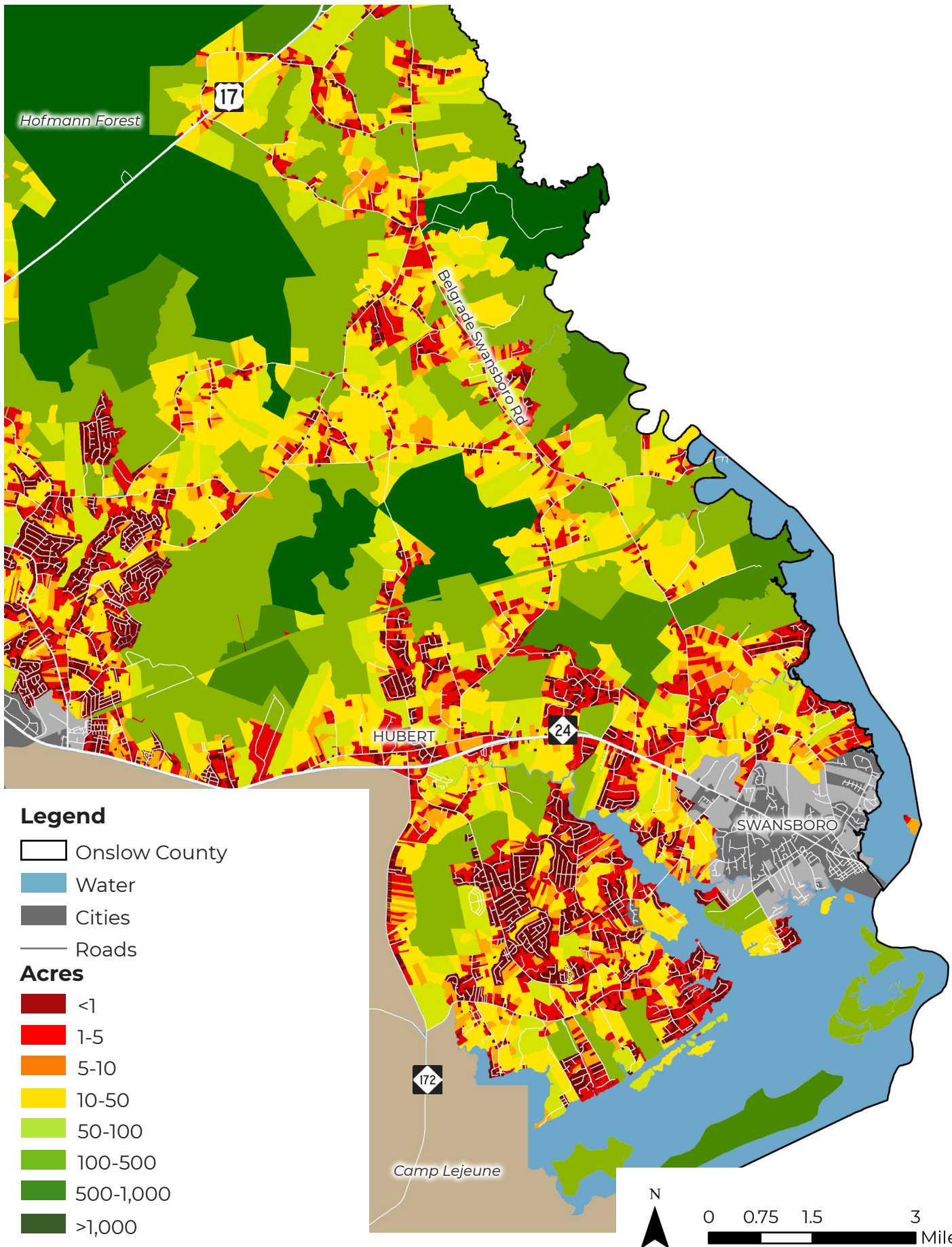
- <1
- 1-5
- 5-10
- 10-50
- 50-100
- 100-500
- 500-1,000
- >1,000



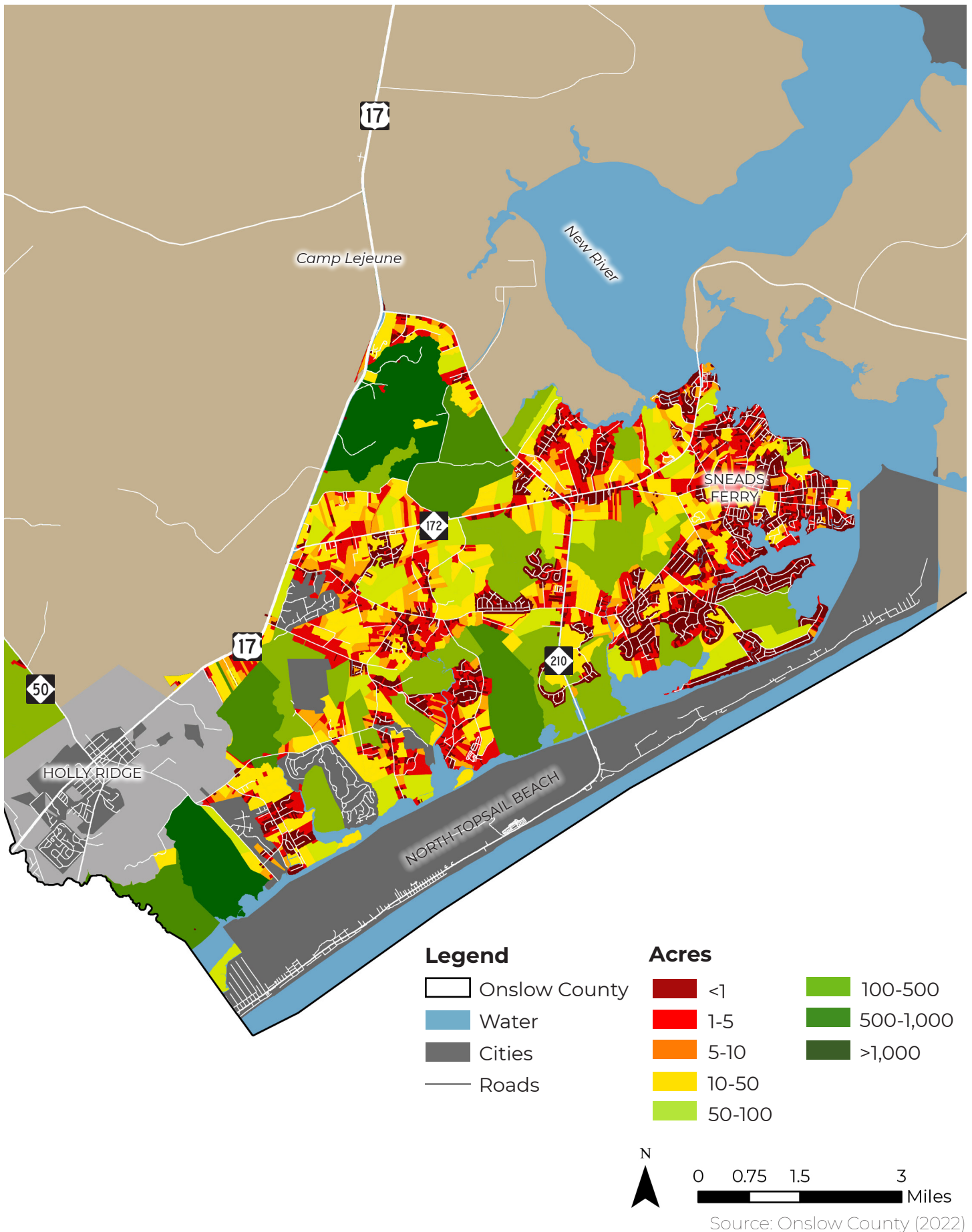
0 0.75 1.5 3 Miles

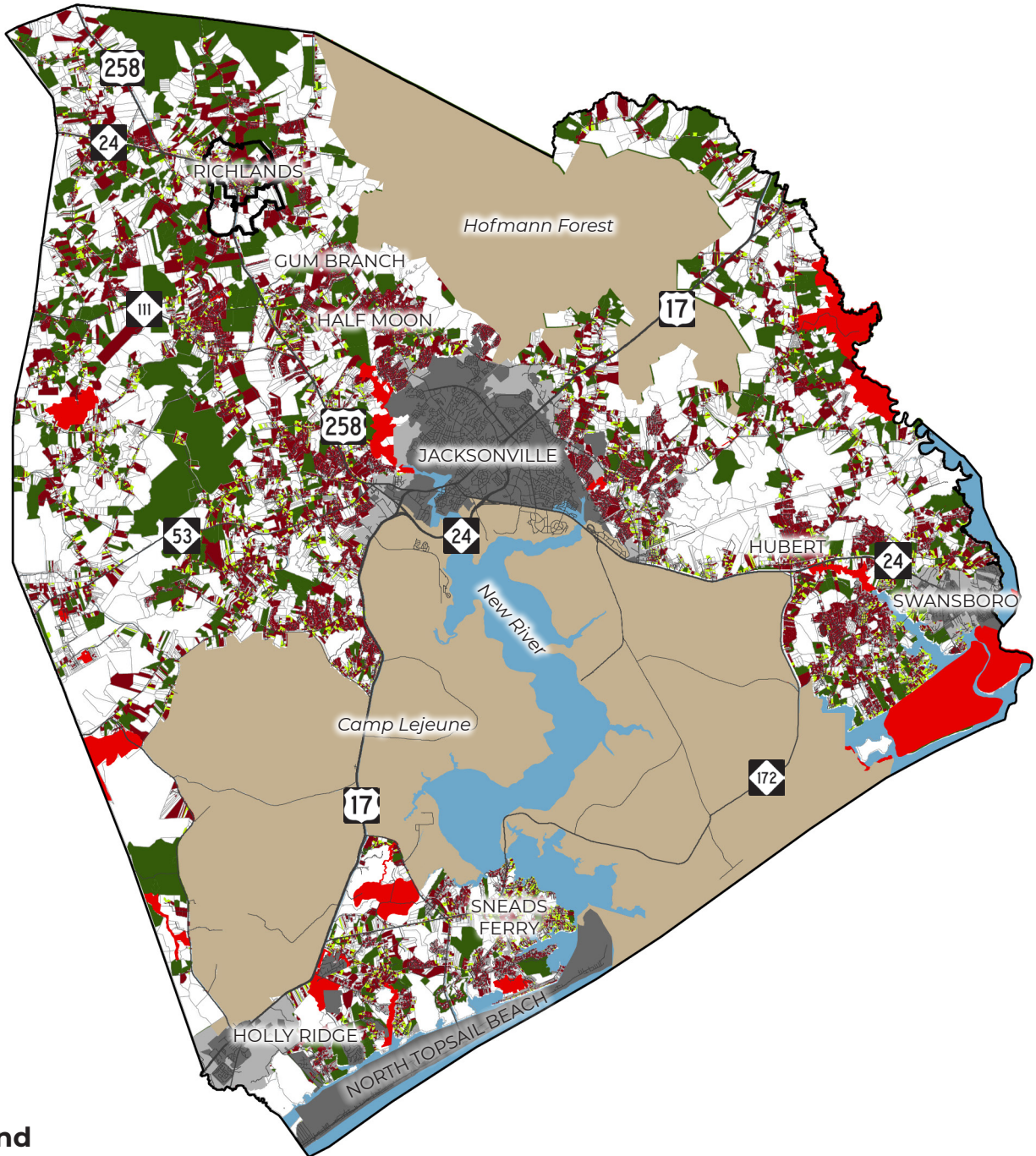
Source: Onslow County (2022)

» EAST REGION- PARCEL SIZE (ACREAGE)



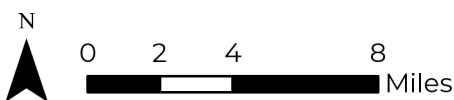
» SOUTH REGION- PARCEL SIZE (ACREAGE)





Legend

- Onslow County
- Water
- Cities
- Roads
- Protected Areas
- Developed
- Underdeveloped Small Parcels
- Underdeveloped Large Parcels
- Undeveloped / Vacant / Agricultural



Source: Onslow County (2022)

Development Status

The Development Status Map breaks down land as “protected areas,” which are areas that are either conserved open space or right-of-way; “developed,” meaning land where there are buildings with a value greater than the land value; “underdeveloped small parcels,” which are parcels less than 10 acres in size with buildings that are valued lower than the land value; “underdeveloped large parcels,” referring to parcels greater than 10 acres with low value buildings on them; and “undeveloped / vacant / agricultural” as land that does not have a structure and / or is used for agricultural purposes. There are limited protected areas, though those that do exist tend to be large in size. Developed and underdeveloped properties tend to be clustered along major roadways and near municipalities.

Land Use Influences

TRANSPORTATION

Transportation is essential to the movement of goods and people throughout the County. Like most counties of its size, Onslow County’s transportation network is largely dominated by public roadways which provide a place of travel for vehicular traffic. However, the transportation network includes public transportation, sidewalks, trails, and bicycle infrastructure. When analyzing future land uses throughout a community, it is also important to understand information about commutes, where and how people travel, and project impacts on the transportation network.

Land use and transportation are interdependent. Effective utilization of land stimulates urban activity, resulting in roads and other transportation facilities. At the same time, creating new roads or expanding existing ones increases the attractiveness of the land they pass through, promoting new urban facilities. Thus, as development occurs, land use and transportation must be carefully balanced.

Existing Roadway Conditions

Functional Road Classifications

The North Carolina Department of Transportation (NCDOT) defines roadways throughout the State by classifications which vary from principal arterial to local roads. Principal arterials should serve major centers of activity in metropolitan areas, operating as the highest traffic volume corridors and serving a high proportion of the total area travel. There are three subcategories of principal arterials: interstates, other freeways and expressways, and other principal arterials. The second highest road classification is minor arterials, which interconnect with and augment the principal arterial system. Minor arterials provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. The second lowest classification is collectors, which provide land access service and traffic circulation within residential neighborhoods, commercial areas, and industrial sites. Collector roads distribute traffic between arterials and destinations, and are further divided into minor and major collectors. Lastly, local roads are the lowest classification, primarily providing access to land with little or no through movement. They are often, though not always, owned by local governments or private entities.

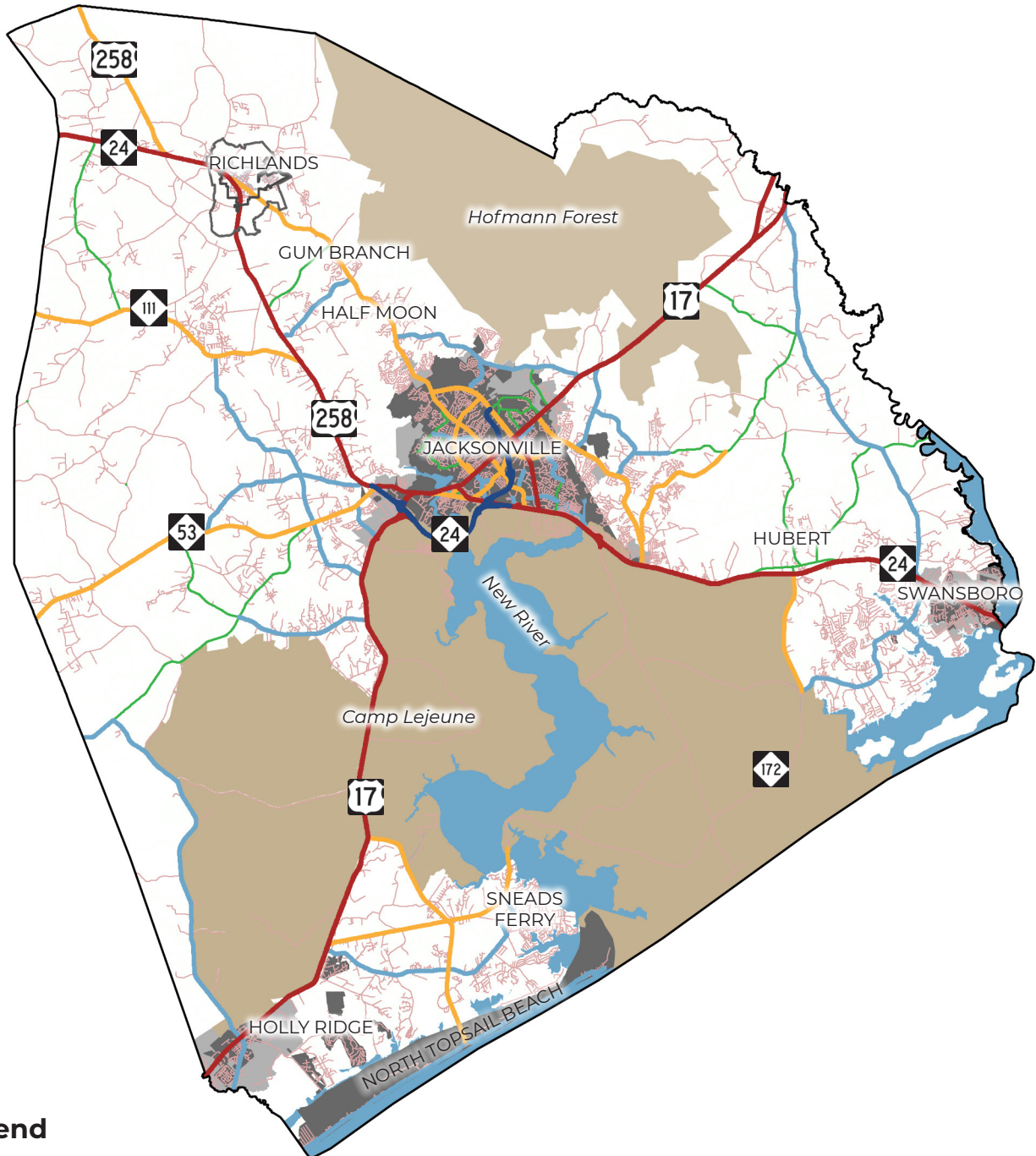
The map on the following page shows functional road classifications in Onslow County. Principal arterials, shown in dark blue and dark red, include NC-24, NC-172, US-17, and US-258. Minor arterials, shown in yellow include NC-111 and NC-53. Major collectors are shown in light blue, while minor collectors are shown in green. Lastly, the majority of roads are local roads, shown in pink.

Average Annual Daily Traffic

The NCDOT collects traffic count data on major roads each year. Traffic counts on major roads in 2020 are shown on the map titled “2020 Average Daily Traffic Count.” The greatest amount of traffic was experienced on the section of NC-24 just south of Jacksonville, where more than 35,000 vehicle trips occurred per day. This is followed by US-258 and US-17, which experienced between 20,000 and 35,000 trips per day. On the map, dark green road sections experienced less than 1,000 vehicle trips per day, and the shades of yellow and orange experienced a moderate amount of traffic.

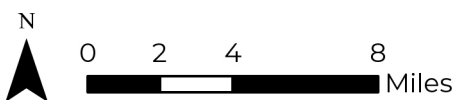
The NCDOT also collects data on truck traffic, as shown in the second traffic map. Generally speaking, those routes with the most vehicle traffic also experienced the most truck traffic. However, the amount of trucks traveling on the roads was much less, with between 3,000 and 5,000 truck trips occurring on NC-24 each day. The second highest trafficked roads, shown in red, experienced between 2,000 and 3,000 truck trips per day.

» ROAD CLASSIFICATIONS



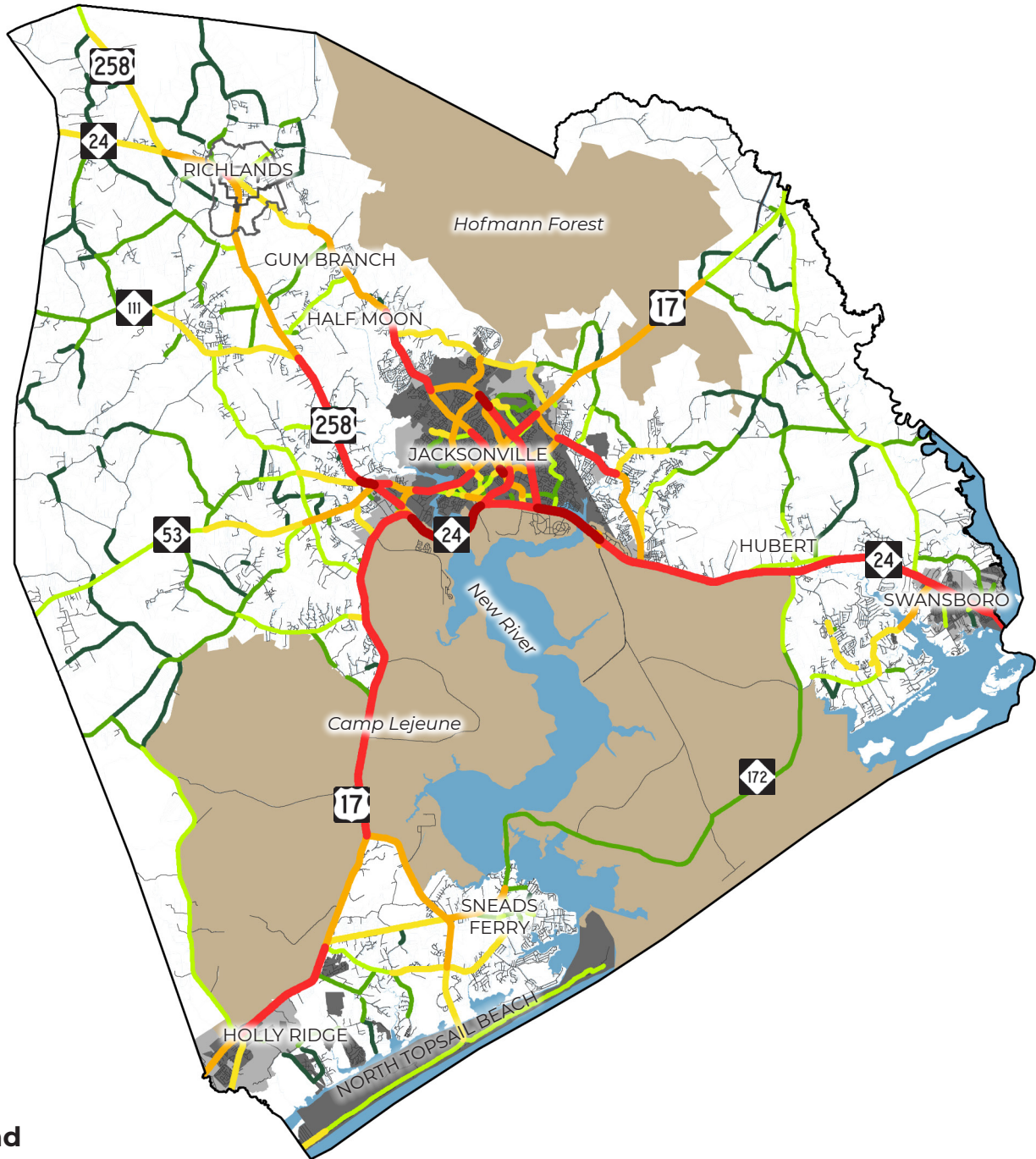
Legend

- Onslow County
- Water
- Cities
- Roads
- Principal Arterial- Freeway/ Expressway
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local Road



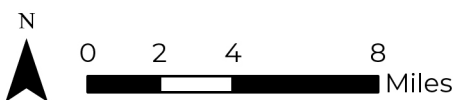
Source: NCDOT (2020)

» 2020 AVERAGE DAILY TRAFFIC COUNT



Legend

- | | | |
|---------------|----------------|----------------|
| Onslow County | 0-1,000 | 20,001- 35,000 |
| Water | 1,001- 2,500 | 35,001-50,000 |
| Cities | 2,501- 5,000 | |
| Roads | 5,001- 10,000 | |
| | 10,001- 20,000 | |



Source: NCDOT (2020)

» 2020 AVERAGE DAILY TRUCK TRAFFIC COUNT



Legend

- Onslow County
- Water
- Cities
- Roads
- 0- 250
- 251- 500
- 501- 750
- 751- 1,000
- 1,001- 2,000
- 2,001- 3,000
- 3,001-5,000



Source: NCDOT (2020)

Crash Statistics

The map on the following page displays vehicular crash statistics collected by NCDOT between 2015 and 2019. The intersections with the greatest number of crashes are shown with the largest red circles, and those with just a few crashes are shown with small circles. As seen, the greatest amount of crashes have occurred on roadways around, and particularly just north of, the City of Jacksonville. There were also a significant amount of crashes around Swansboro, Hubert, Richlands, and Holly Ridge. Generally, fewer crashes have occurred outside of major communities, in rural areas.

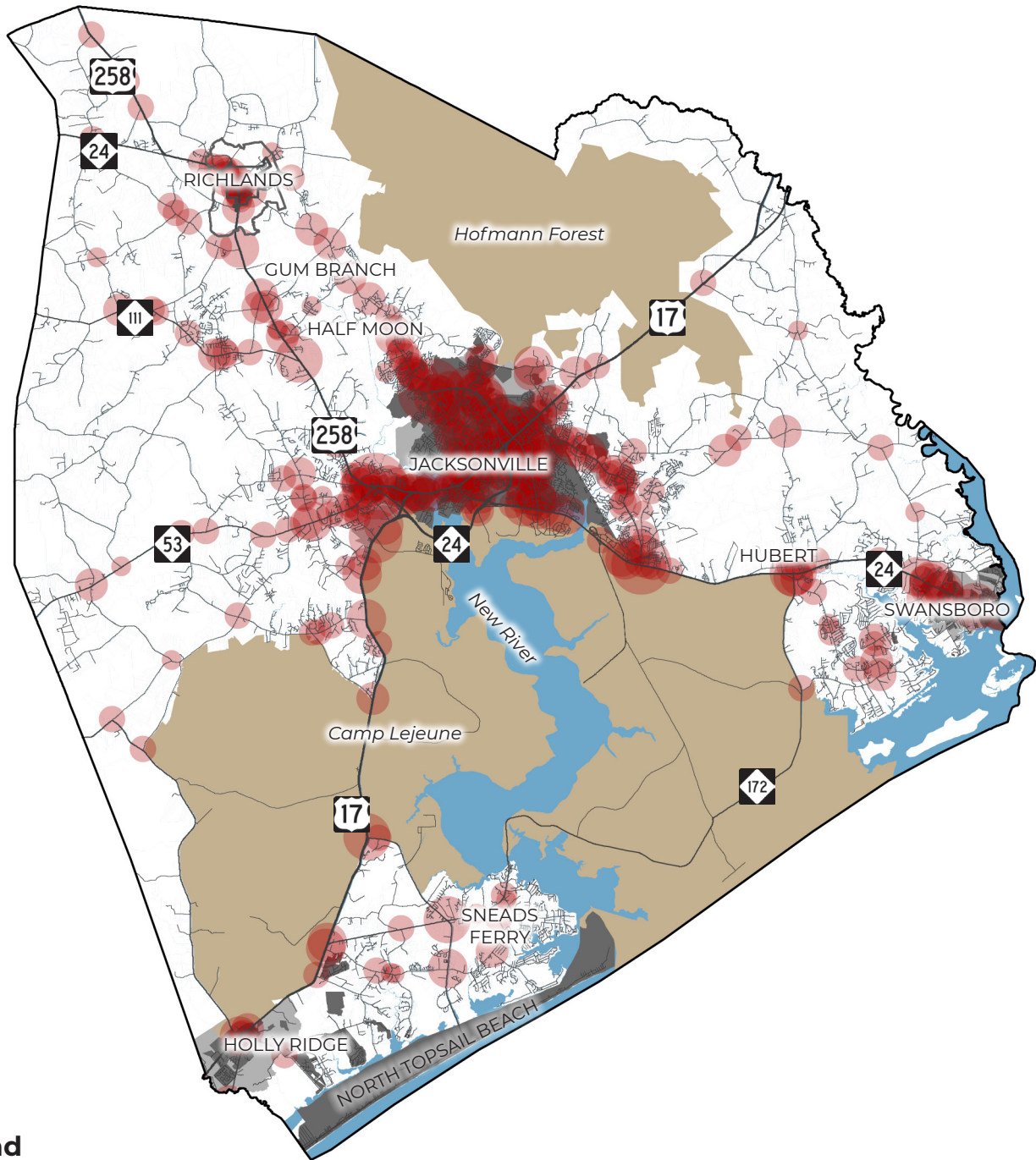
Roadway Improvements

The NCDOT maintains a State Transportation Improvement Program (STIP), which catalogs all of the planned transportation improvements in the State in the coming decade. The “Planned Transportation Improvements by Road Type” map displays those planned in Onslow County between 2024 and 2033.

The tables on the following pages detail these improvements, including the type of project, where they are located, and general descriptions of what will be done. A few major projects to note include the widening of US-17, with bypasses, north of Jacksonville to the New Bern bypass; a new interchange and associated improvements on US-17 to MCAS New River Main Gate; widening the Jacksonville Parkway Extension and adding a new location from NC-24 to US-17; and runway extensions at the Albert J. Ellis Airport.

Project Location	Number	Type	Description
Albert J. Ellis Airport	AV-5733, AV-5804, -05, and -06	Aviation	Design and construct runway, acquire land for roadway relocation and runway extension, extend runway 23 and taxiway a
SR 1308	BL-0073	Bike / Pedestrian	Construct sidewalk from NC-53 and Gum Branch Road to the City of Jacksonville
Downtown Jacksonville	EB-6012	Bike / Pedestrian	Construct multi-use path from Chaney Avenue to Wardola Drive in Jacksonville
SR 1509	B-5944	Highway	Replace bridge over Queen’s Creek
Onslow County	HL-0102	Highway	Unallocated carbon reduction program funds
US-17	R-2514A	Highway	Multi-lane section north of Jacksonville to south of Belgrade
SR 1702	U-4007A	Highway	SR 1308 (Bell Fork Road) to east of SR 1470 (Western Boulevard)
Jacksonville Pkwy	U-4007B	Highway	Country Club Road to SR 1470 (Western Boulevard)

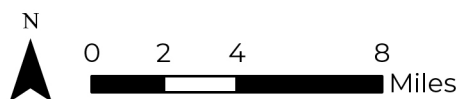
» VEHICULAR CRASHES BY INTERSECTION (2015-19)



Legend

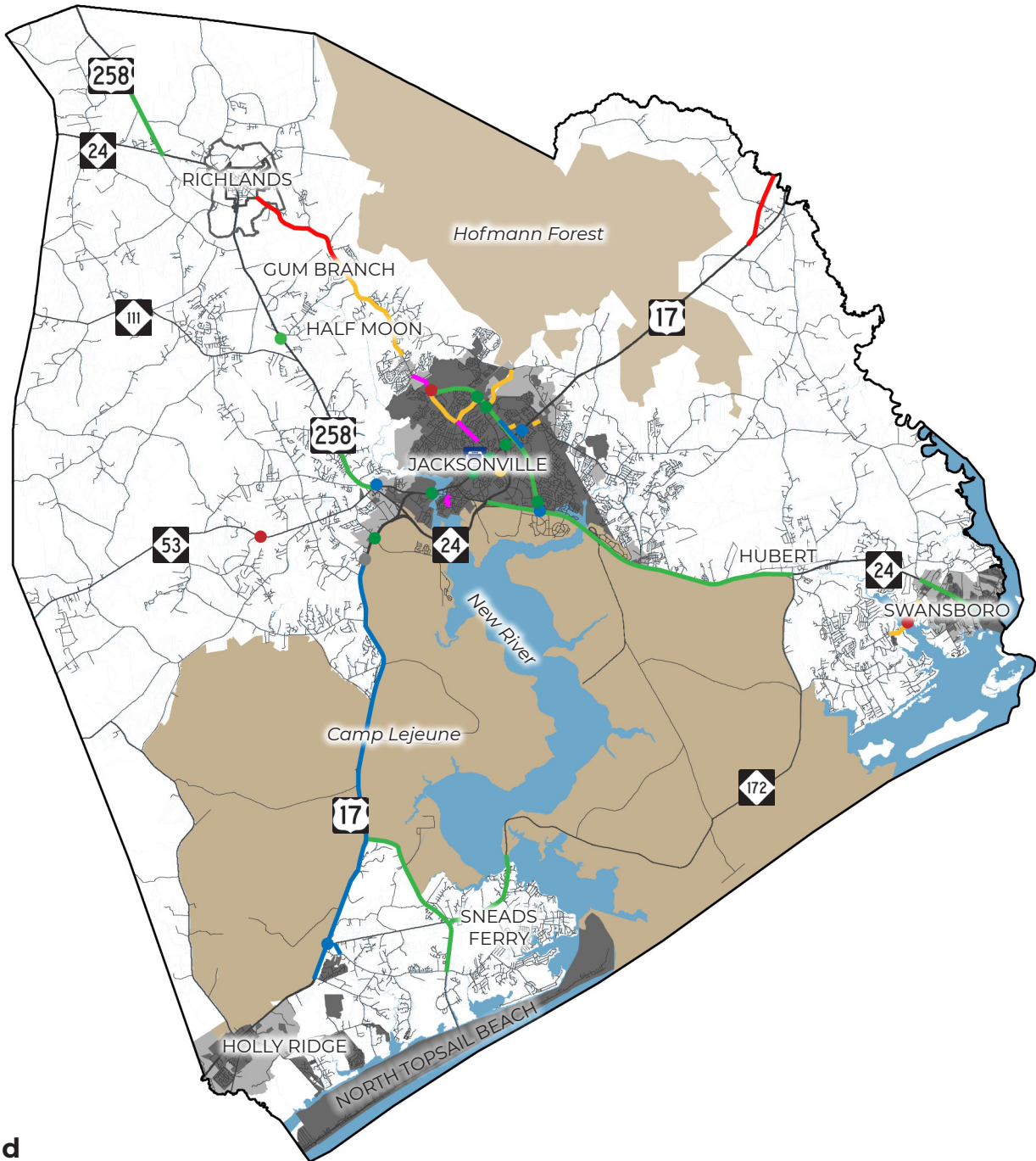
- Onslow County
- Water
- Cities
- Roads
- Rivers

- | | |
|---|---|
| <5 | 75-100 |
| 5-10 | 100-125 |
| 10-25 | 125+ |
| 25-50 | |
| 50-75 | |













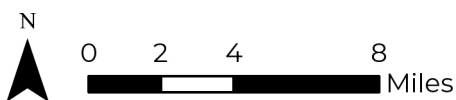
Source: NCDOT(2015-2019)

» STATE TRANSPORTATION IMPROVEMENT PLAN BY ROAD TYPE



Legend

-  Onslow County
-  Water
-  Cities
-  Roads
-  Rivers
-  State Highway
-  Regional Highway
-  Division Highway
-  Transition Highway
-  Division Bicycle and Pedestrian



Source: NCDOT STIP (2024-2029)

Project Location	Number	Type	Description
NC-24	HS-2003X	Highway	Install crosswalks with pedestrian signals and advance flashers at SR 1514 (Phillips Loop Road)
Various	W-5203REG	Highway	Rumble strips, guardrail, safety, and lighting improvements
NC 172	W-5602	Highway	Convert two lane roadway to three lane roadway with a two-way left turn lane from Camp Lejeune Gate to NC-210
US-17 Business	W-5803C	Highway	Upgrade traffic signal, pavement markings, and improve sight distance
NC-24	W-5803D	Highway	Upgrade pedestrian signals
NC-53	W-5803E	Highway	Upgrade traffic signal and add additional speed limit signs
NC-24	R-5885	Highway	Construct reduced conflict intersections (Belgrade-Swansboro Road to Front Street)
NC-24	R-5885A	Highway	Replace culvert east of West Shore Drive
SR 1509	R-5948	Highway	Widen roadway from Jones Road to SR 1565
US-17	U-4007	Highway	Add additional lanes and construct routes on new location in Jacksonville (US-17B to SR 1326)
US-17	U-4007C	Highway	Western Boulevard to Fairway Drive
US-17	U-4007D	Highway	Fairway Drive to Drummer Kellum Road
NC-53	U-4007E	Highway	NC-53 from US-17 to SR 2716
NC-24	U-5508	Highway	Upgrade intersection and drainage at NC-53
NC-24	U-5716	Highway	Convert at-grade intersection to interchange at US-258 (Richlands Highway)
US-17 Business	U-5728	Highway	Improve intersection with Bell Fork Road
US-17	U-5735	Highway	Construct interchange and associated improvements to MCAS New River Main Gate
US-17	U-5735A	Highway	Roadway improvements to Douglas Gate entrance
NC-53	U-5736	Highway	Construct access management improvements
US-258 / NC-24	U-5739	Highway	Construct reduced conflict intersections
NC-24	U-5741	Highway	Construct access management improvements
SR 2715	U-5787	Highway	Construct roadway on new location
NC-53	U-5789	Highway	Improve intersection with SR 2714
SR 2714	U-5791	Highway	Widen to multi-lanes, part on new location
SR 2714	U-5791A	Highway	NC-53 to SR 1324
SR 2714	U-5791B	Highway	SR 1324 to US-17
SR 1308	U-5793	Highway	SR 1322 to SR 1390
SR 1308	U-5793A	Highway	SR 1322 to SR 1324
SR 1308	U-5793B	Highway	SR 1324 to SR 1390

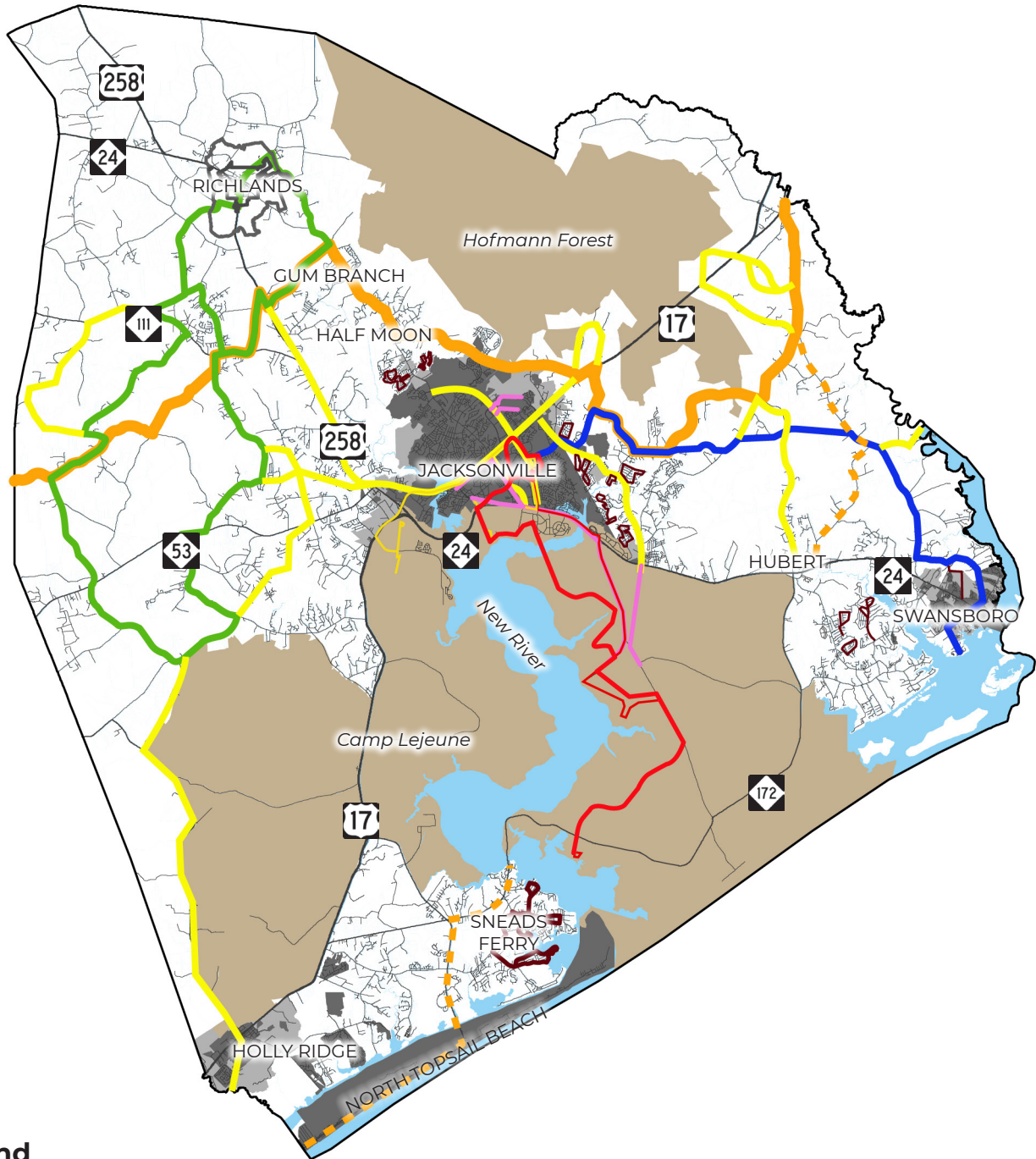
Project Location	Number	Type	Description
Commerce Drive Extension	U-5878	Highway	Construct roadway on new location (Commerce Drive to SR 1406)
Henderson Road	U-5903	Highway	Upgrade to reduced conflict intersections
NC-210	U-5949	Highway	Widen to multi-lanes, US-17 south of SR 1518
US-17 Business	U-5950	Highway	Improve intersection with SR 1336
US-17	U-5951	Highway	Upgrade at-grade intersection to partial interchange at US-17 Business
US-17	U-6065	Highway	Install super street with intersection improvements
NC-53	U-6081	Highway	Upgrade to reduced conflict intersections
Bell Fork Road	U-6082	Highway	Improve intersection with SR 1403
US-17	U-6107	Highway	Upgrade intersection with McDaniel Drive
US-258 / NC-24	U-6148	Highway	Improve intersection with SR 1329
SR 1308	U-6200	Highway	Upgrade reduced conflict intersections
NC-53	SF-4903F	Highway	Realignment and lane construction
SR 1308	U-4906	Highway	Widening in Jacksonville
SR 1308	U-5319	Highway	Improve intersection in Jacksonville
NC-53	W-5203U	Highway	Intersection improvements at SR 1336
Jacksonville Transit	TA-4943	Public Transit	Expansion bus - fixed route
Jacksonville Transit	TA-4944	Public Transit	Replacement bus - fixed route
Jacksonville Transit	TL-0001	Public Transit	Construct urban fixed route transfer facility
Jacksonville Transit	TL-0002	Public Transit	Construct pedestrian access and safety improvements
Jacksonville Transit	TS-5114	Public Transit	Safety and security
Jacksonville Transit	TT-4907	Public Transit	Technology
Jacksonville Transit	TO-4923	Public Transit	Operating assistance
Jacksonville Transit	TP-4908	Public Transit	Planning assistance
Jacksonville Transit	TP-5102	Public Transit	Planning assistance
Jacksonville Transit	TG-4952	Public Transit	Non-fixed route ADA paratransit
Jacksonville Transit	TG-5109	Public Transit	Preventative maintenance - fixed route
Jacksonville Transit	TG-5220	Public Transit	Mobility management
Jacksonville Transit	TG-5225	Public Transit	Routine capital
Jacksonville Transit	TG-5225C	Public Transit	Mobility management
Jacksonville Transit	TD-4904	Public Transit	Facility - transit center - downtown
Various	W-5203DIV	Highway	Rumble strips, guardrails, safety and lighting improvements
US-17	R-2514B	Highway	South of Belgrade to north of Maysville
US-17	W-5803B	Highway	Install shoulder rumble strips between New Hanover / Pender County Line and Mile Post 19.3

In addition to the projects included in the State Transportation Improvement Plan, the Jacksonville Urban Area Metropolitan Planning Organization (JUMPO) maintains a Metropolitan Transportation Plan (MTP) for the entire metropolitan area, which includes all of Onslow County. The MTP must be updated every four years and the most recent MTP was recently adopted in the fall of 2023. The MTP is used as a fiscally-constrained, long-term vision between the Comprehensive Transportation Plan (CTP) and funding in the State Transportation Improvement Plan (STIP). The planned improvements in Richlands and unincorporated Onslow County are displayed in the table on pages 116 and 117.

Multi-modal Transportation

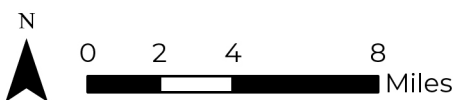
Despite Onslow County's rural nature, there are a number of bicycle and pedestrian connections in the study area. Designated bike routes are shown on the map to the left, and it can be seen that there are a number of trans-County routes, particularly in the northern portion of the County. Many of these are on-road routes, rather than separated bike or greenway lanes.

Jacksonville Transit provides fixed and express bus routes throughout the City of Jacksonville and area military bases. The Scarlett Express Route is the only route which provides service outside of the City and is shown on the map to the left. It provides service on and off Marine Corps Base Camp Lejeune and Camp Johnson, though some portions of the route require a valid Military ID. Given the rural nature of the County, bus connections outside of Jacksonville do not exist.



Legend

- | | | |
|---------------|-------------------|----------------------------|
| Onslow County | Multi-Use Trail | Bike Routes |
| Water | Express Bus Route | Ports of Call Route |
| Cities | | Former Ports of Call Route |
| ETJ | | Richlands Route |
| | | City to Sea Route |
| | | On-Road High Traffic |
| | | On-Road Low Traffic |



Source: JUMPO 2045 Long Range Transportation Plan (2020) and Jacksonville-Onslow Area Bike Map (2022)

2050 Metropolitan Transportation Plan Project List

SPOT ID	Mode	Project Category	Location	Description
H230528	Highway	Regional Impact	NC 53 from NC24 to Holly Shelter Rd	Widen to 4-lane median divided facility
H230530	Highway	Statewide Mobility	US 258 from Pony Farm Rd to Rhodestown Fire Dept Rd	Construct access management improvements
H140375	Highway	Regional Impact	NC 111 from Richlands Highway to Airport Rd	Upgrade roadway to 12' travel lanes with 4' FDPS and improved geometry at intersections.
H140365	Highway	Regional Impact	NC 111 from Richlands Highway to Gum Branch Rd	Construct continuation of NC 111 on new alignment to SR 1308 at existing SR 1324 intersection
H140427	Highway	Division Needs	SR 1130 from US 17 to NC 53	Widen existing roadway from US 17 to NC 53.
H150827	Highway	Statewide Mobility	US 17 from High Hill Rd to Onslow Pines Rd	Improve multiple intersections along corridor from SR1119 (High Hill Rd) to SR 116 (Onslow Pines Rd).
H171302	Highway	Division Needs	Ramsey from Gum Branch Rd to Jacksonville Pkwy	Upgrade to multi lane superstreet
A171138	Aviation	Regional Impact	OAJ - Albert J. Ellis Airport: Entrance Roadway Extension and Realignment	Construct new entrance road between the terminal area and NC 111. (3110)
A171141	Aviation	Regional Impact	OAJ - Albert J. Ellis Airport: Entrance Roadway Extension and Realignment	Construct new roadway to divert traffic away from the main terminal (3104)
A171145	Aviation	Regional Impact	OAJ - Albert J. Ellis Airport: Entrance Roadway Extension and Realignment	Construction a southern expansion of the GA Apron and site preparation. (4309)
A192048	Aviation	Regional Impact	OAJ - Albert J. Ellis Airport: Entrance Roadway Extension and Realignment	Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights project. (4310)

SPOT ID	Mode	Project Category	Location	Description
A192050	Aviation	Regional Impact	OAJ - Albert J. Ellis Airport: Entrance Roadway Extension and Realignment	This project will rehabilitate existing heavy aircraft pavement in the Terminal area. Milling and overlaying of asphalt and replacing joint sealant on PCC pavement. (4311)
Richlands				
H230531	Highway	Statewide Mobility	NC 24 from Kinston Hwy to Richlands Hwy	Construct a Green -T intersection.
H184405	Highway	Statewide Mobility	US 258/ NC 24 at West Frack Street	Install a traffic signal. Add a right turn lane from northbound US 258/NC 24 to W. Franck Street.
H193076	Highway	Statewide Mobility	US 258 from Koonce Fork Rd to S. Wilmington St	Upgrade signals to a closed loop system in Richlands.
B230191	Bicycle and Pedestrian	Division Needs	Onslow Street Multi-Use Path from E. Frack Street to Woodson St	Construct 1600 LF of sidewalk installation along one side of the street.
B230399	Bicycle and Pedestrian	Division Needs	Richlands Greenway from Cox Str to Richlands Steed Park	Construct a shared -use path along SR 2009 (Francktown Rd) from Cox St to Richlands Steed Park.

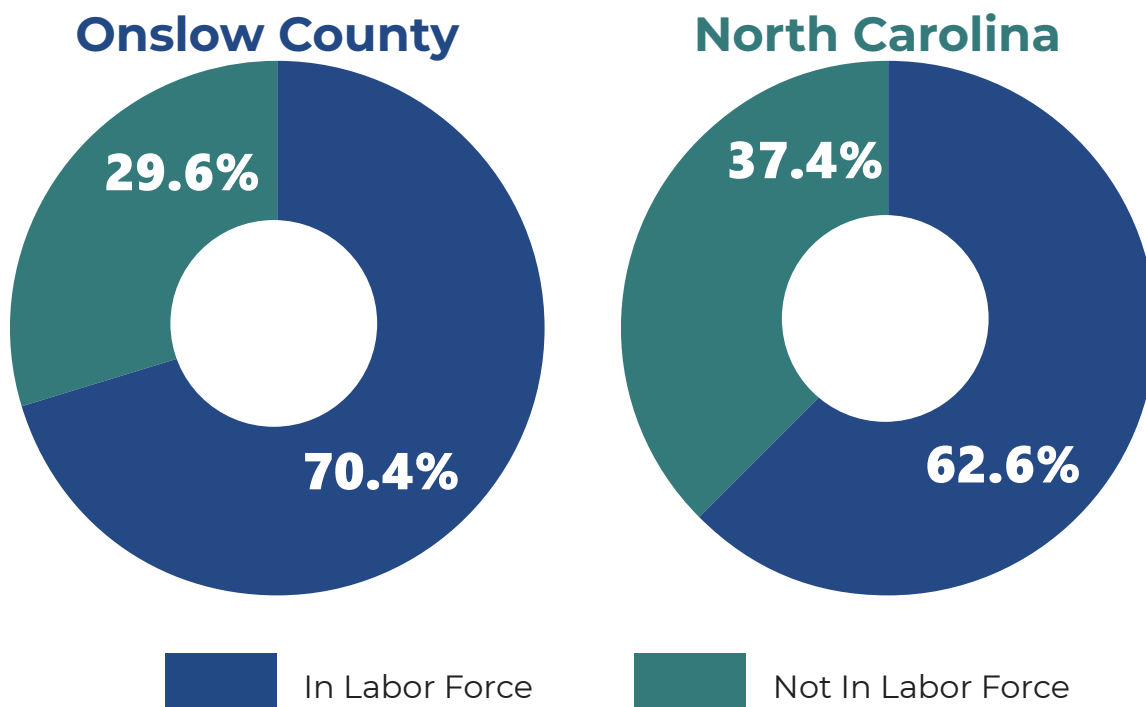
ECONOMY

Employment Trends

More than 70% of adults who live in Onslow County are in the labor force, which means they are either employed or seeking employment. This is about 8% higher than the State average, and is a positive economic factor. Approximately one-third of the those who are employed work in management, business, science, and arts occupations. Almost one-quarter work in sales and office positions and almost 20% work in service occupations.

» LABOR FORCE PARTICIPATION

Source: US Census Bureau, American Community Survey (2021)



» OCCUPATIONS IN ONSLOW COUNTY

Source: US Census Bureau, American Community Survey (2021)

OCCUPATION	PERCENT OF WORKFORCE
Management, Business, Science, and Arts	33.1%
Service	19.5%
Sales and Office	23.4%
Natural Resources, Construction, and Maintenance	12.3%
Production, Transportation, and Material Moving	11.7%

The primary industries in which residents are employed include educational services, health care, social assistance, retail trade, arts, entertainment, recreation, accommodations, food service, professional, scientific, management, and administration. There are a broad range of industries in which residents are employed, with no specific industry dominating the County's workforce.

The industry sectors least represented in the County include agriculture, forestry, fishing, hunting, mining, wholesale trade, information, finance and insurance, real estate, rental leasing, manufacturing, and other services.

According to ACS estimates for 2021, over 24% of the population in Onslow over the age of 16 is employed within the armed forces (36% of the labor force). Across the state of North Carolina, Construction, Professional, Scientific, and Technical Services, and Health Care/ Social Assistance are the top three military supported private industry sectors.

» **KEY INDUSTRY SECTORS IN ONSLOW COUNTY**

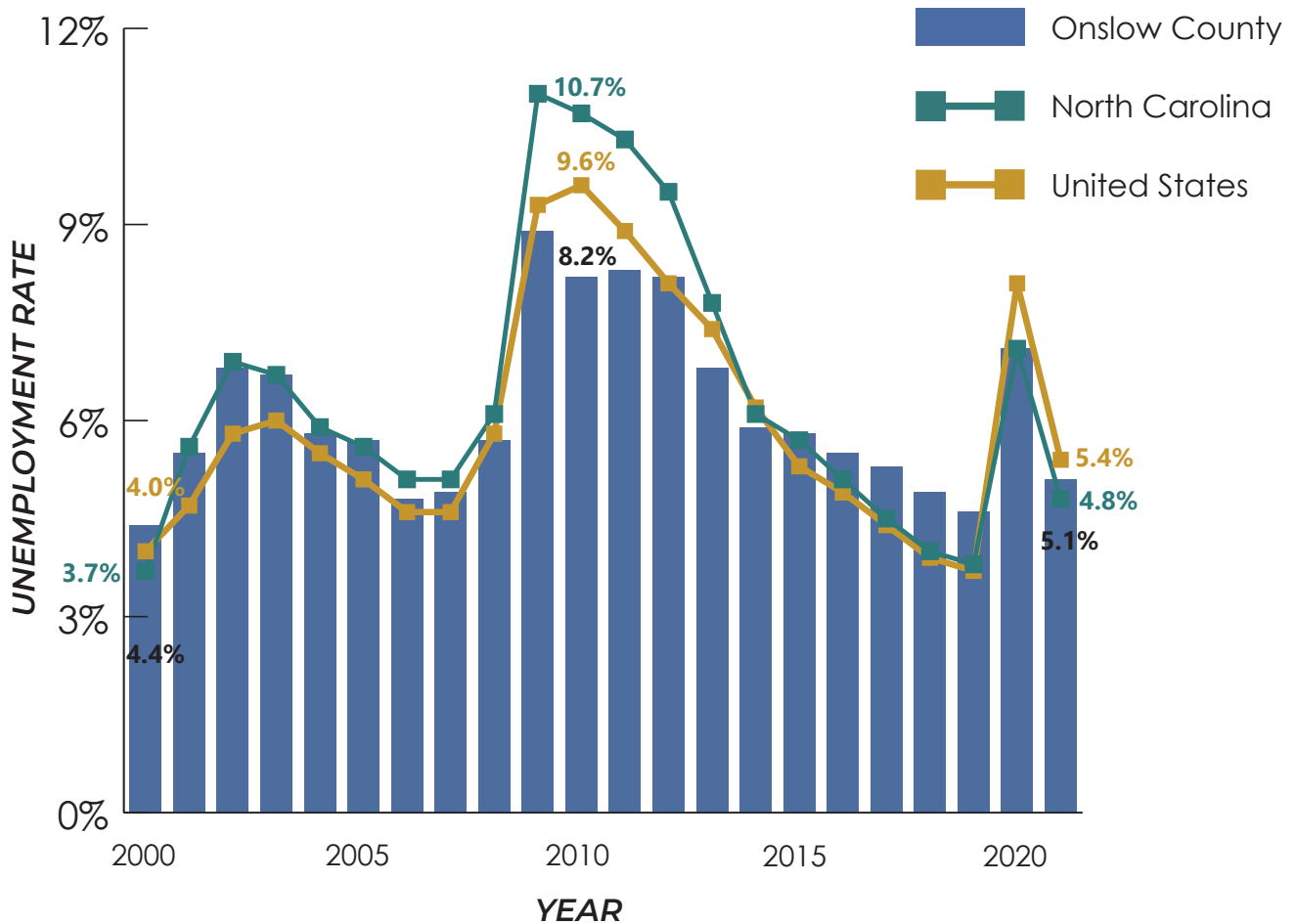
Source: US Census Bureau, American Community Survey (2021)

INDUSTRY SECTOR	PERCENT OF WORKFORCE
Agriculture, Forestry, Fishing, Hunting, and Mining	0.7%
Construction	8.8%
Manufacturing	4.3%
Wholesale Trade	1.9%
Retail Trade	14.8%
Transportation, Warehousing, and Utilities	5.4%
Information	2.1%
Finance and Insurance, Real Estate, Rental, Leasing	4.2%
Professional, Scientific, Management, and Administration	10.4%
Educational Services, Health Care, and Social Assistance	21.9%
Arts, Entertainment, Recreation, Accommodations, Food Service	12.0%
Public Administration	8.8%
Other Services	4.7%



» UNEMPLOYMENT RATES

Source: Federal Reserve Bank of St. Louis (2000 - 2021)



While more than 70% of residents are in the labor force, approximately 5% are unemployed. Historically, unemployment rates in the County have followed State and National trends. However, while the unemployment rates stayed below State and National levels between 2009 and 2014, they have skewed above the unemployment rates of North Carolina and the country over the last six years.

The United States Bureau of Labor Statistics (BLS) collects more detailed data on employment throughout the country. According to the BLS, there is a significant number of people employed in local and federal government industries in Onslow County. The tables on the following page provide employment and wage location quotients, which provide a factor on the number of people (employment) and the total allocated salaries (wage) to specific industries in a community, as compared to the average community in the United States. Essentially, wherever a location quotient is above 1.0, an industry has more people or salaries employed in Onslow County than in the average U.S. County. The higher the location quotient, the greater the number of people, or specialization, in each high level industry. Thus, the federal government industry employment location quotient of 6.39 indicates that there are more than six times as many federal government

» **ANNUAL GOVERNMENT EMPLOYMENT & WAGE LOCATION QUOTIENT**

Source: US Bureau of Labor Statistics (Onslow County, 2021)

HIGH - LEVEL INDUSTRY	EMPLOYMENT LOCATION QUOTIENT	WAGE LOCATION QUOTIENT
All Local Government Industries	1.40	1.84
All State Government Industries	0.59	0.57
All Federal Government Industries	6.39	6.83

» **ANNUAL PRIVATE EMPLOYMENT & WAGE LOCATION QUOTIENT**

Source: US Bureau of Labor Statistics (Onslow County, 2021)

HIGH - LEVEL INDUSTRY	EMPLOYMENT LOCATION QUOTIENT	WAGE LOCATION QUOTIENT
Total, All Industries	0.84	0.76
Service-Providing	0.92	0.81
Goods-Producing	0.48	0.51
Natural Resources and Mining	0.27	0.32
Construction	0.99	1.14
Manufacturing	0.20	0.18
Trade, Transportation, and Utilities	1.04	1.09
Information	0.26	0.16
Financial Activities	0.59	0.47
Professional and Business Services	0.84	0.68
Education and Health Services	0.56	0.74
Leisure and Hospitality	1.74	2.00
Other Services	0.90	1.17

employees in Onslow County than there are in the average U.S. County. This can primarily be attributed to the two military bases in the County. While local government employment is also high, the employment location quotient of 1.40 indicates that it is slightly above average but not more than twice as high as the average American county.

There are only two private industries in the County which have some level of specialization, and these are more subtle than the government quotients. Trade, transportation, and utilities; as well as leisure and hospitality are industries in which Onslow County has some specialization. However, there are two additional industry sectors which pay higher wages in the County (as a whole) than other U.S. counties. These include construction and other services.

While the Bureau of Labor Statistics data captures information on government industries, much of the American Community Survey data on employment excludes those in the military. However, Marine Corps Installations East (MCI East) provides details on the economic impacts of the Marine Corps installations in Onslow County.

Military Economic Factors

Marine Corps Base Camp Lejeune, Marine Corps Air Station New River, and Marine Corps Air Station Cherry Point are the three North Carolina bases in the East Marine Corps Installations. The first two of these are within Onslow County. Camp Lejeune is the oldest Marine Corps base within North Carolina and also the second largest military base in the State. The New River Marine Corps Air Station is the largest Marine Corp helicopter base on the East Coast.

In 2021, Camp Lejeune had a total population of 120,968 people. This included 36,948 active duty military, 8,965 reserve / guard, 73 USCG reserve, 5,496 civilians, 13,927 permanent contractors, 36,215 military family members, and 19,344 retirees. The total economic impact

» **MILITARY POPULATION - MARINE CORPS BASE CAMP LEJEUNE**

Source: Marine Corps Installations East (2021)

36,948

Active Military

36,215

Family Members

19,344

Retirees

13,927

Contractors

8,965

Reserve/Guard

5,496

Civilian

73

USCG Reserve

of Camp Lejeune, which includes salaries, construction, materials, supplies, services, and miscellaneous impacts, totaled \$3,264,264,802 in 2021.

Marine Corps Air Station New River had a total population of 17,070 in 2021; including 5,987 active duty military, 1,619 reserve / guard, 193 civilians, 411 permanent contractors, 6,319 military family members, and 2,541 retirees. The total economic impact of New River Station in 2021 was \$450,188,224.

Across the state, Onslow County is the top county for Department of Defense military contracting with \$2,199,124,881 for fiscal year 2020. Along with Cumberland county, these two counties account for 55% of all prime military contracting in North Carolina.



II MEF Headquarters Under Construction - 2022 (Photo Credit LCpl Zachary Zephir)

» **MILITARY POPULATION - MARINE CORPS AIR STATION NEW RIVER**

Source: Marine Corps Installations East (2021)

5,987

Active Military

6,319

Family Members

2,541

Retirees

1,619

Reserve/Guard

193

Civilian

411

Contractors

Commute Patterns and Employment Density

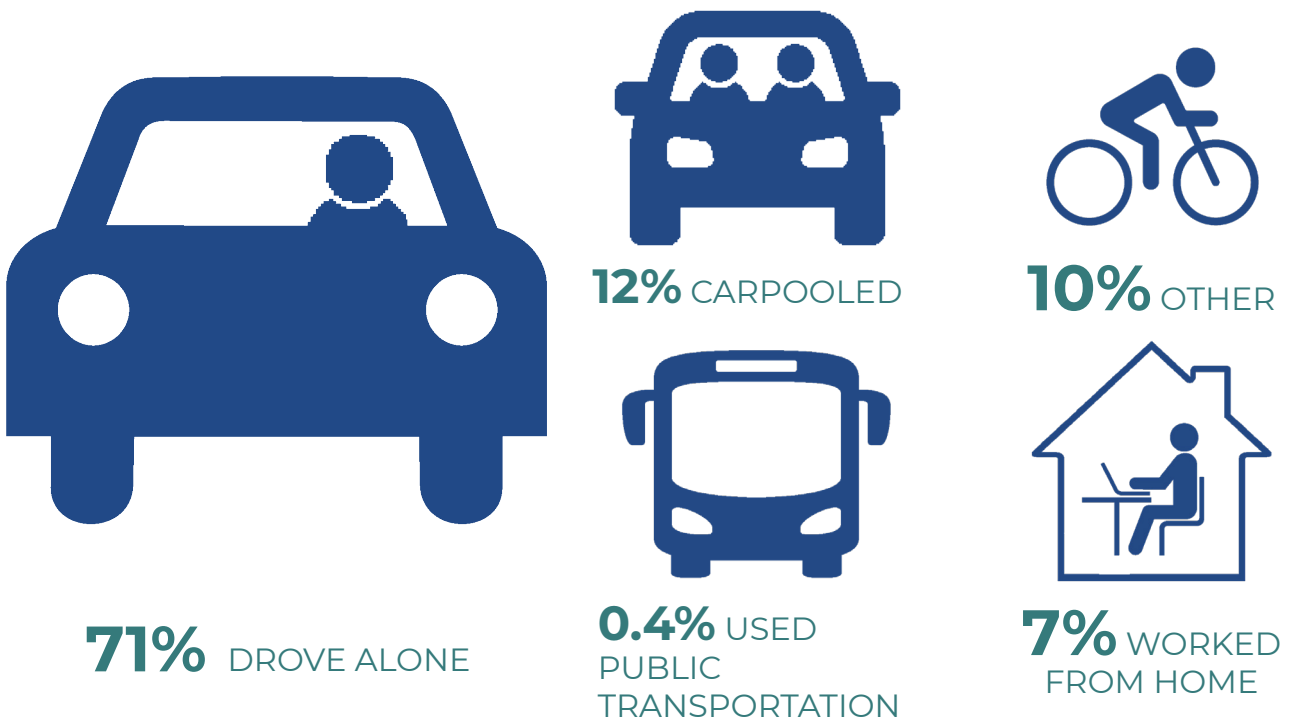
Almost 27,000 residents both live and work in Onslow County. A slightly greater number commute out of the County to work. Collectively, Onslow County residents commute an average of 22 minutes to work each day, which is a slightly shorter commute than the North Carolina average. The greatest number of residents commute to the City of Jacksonville, but there is also a concentration of residents commuting to Swansboro, Sneads Ferry, Emerald Isle, New Bern, Wilmington, and other communities in the region, as shown as red spots on the map titled “Where Residents of Onslow County Commute to Work.”

Almost 16,000 people commute from other places into Onslow County for work. The map on the previous page shows where all Onslow County employs live. It can be seen that many live in Jacksonville, Swansboro, Sneads Ferry, and Richlands. However, many also come from New Bern, Cedar Point, Surf City, Hampstead, and Wilmington. In many ways, residents and employees have reverse commutes, switching places during the work day.

More than 70% of residents drove alone to work, which is actually slightly below average. About 12% carpooled and 10% either walked or biked to work. Approximately 7% worked from home, and very few, 0.4%, used public transportation.

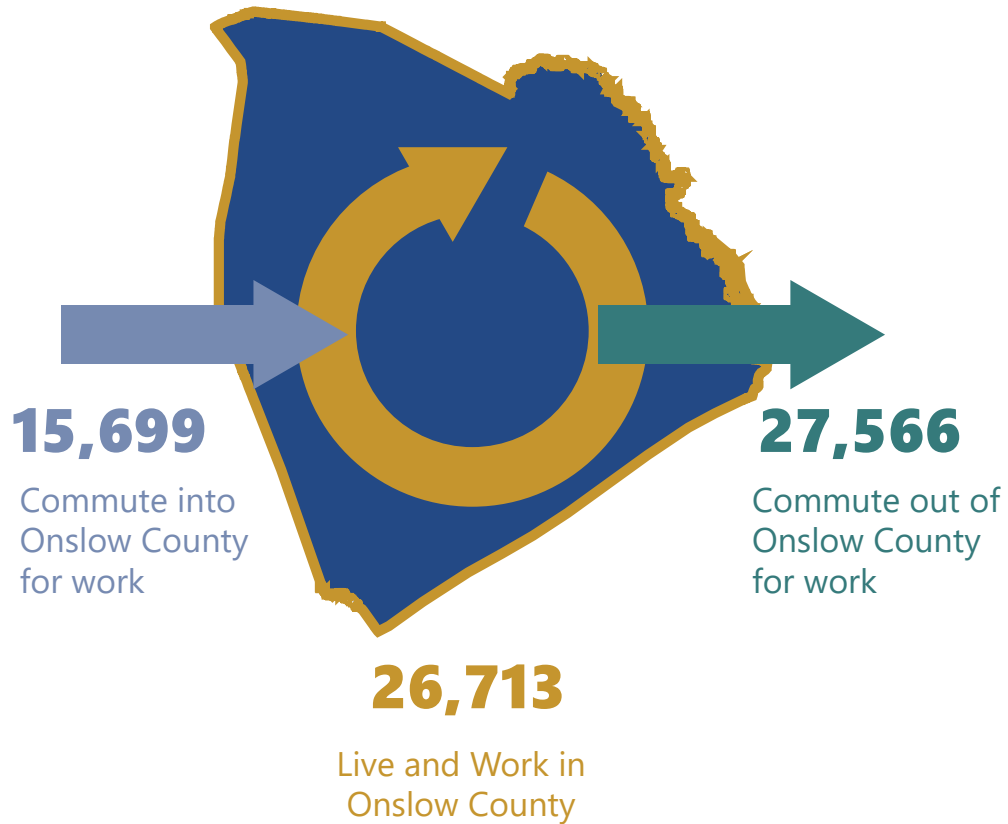
» MEANS OF TRANSPORTATION (CIVILIAN EMPLOYED POPULATION)

Source: US Census Bureau, American Community Survey (2021)



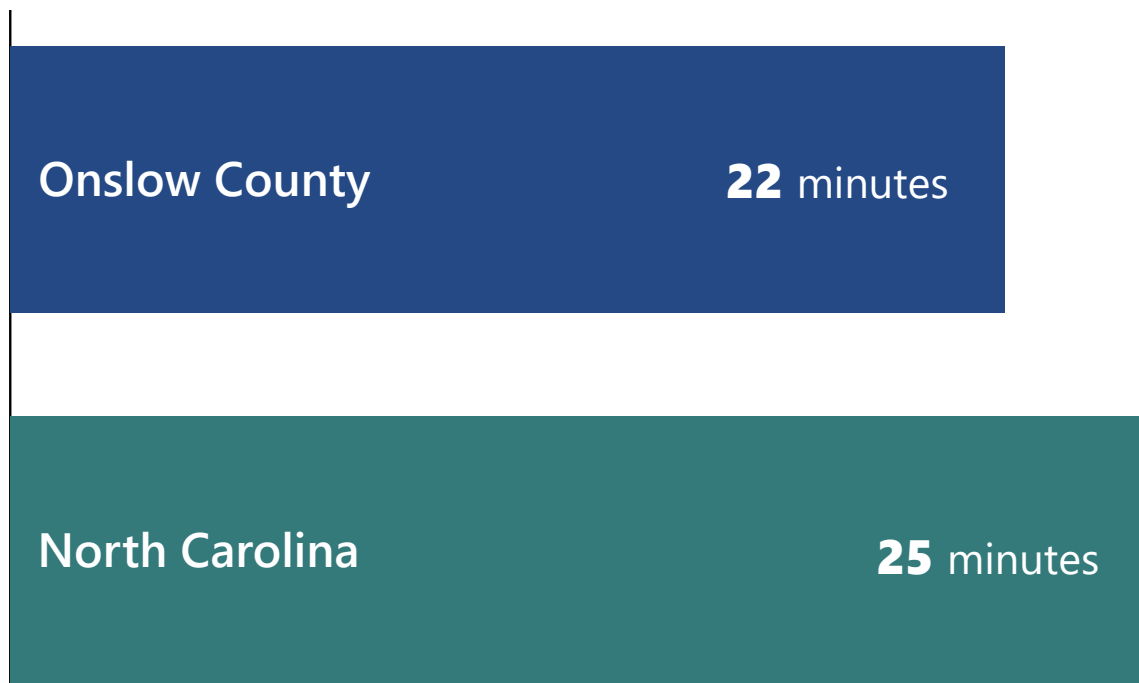
» EMPLOYMENT INFLOW AND OUTFLOW

Source: US Census Bureau, On The Map, 2019

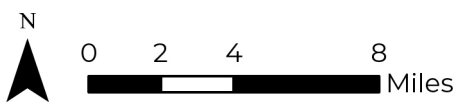
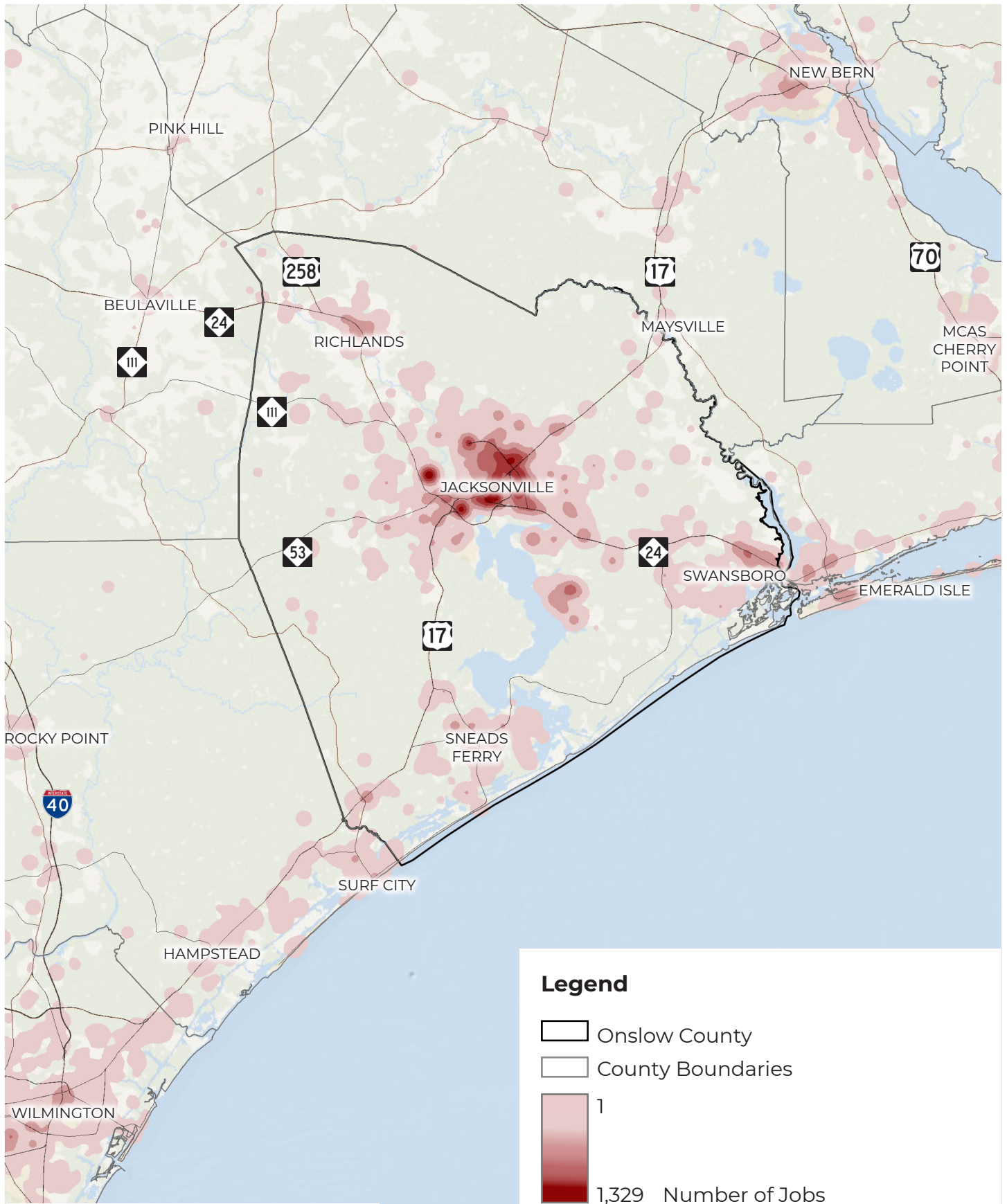


» COMMUTE TIMES

Source: US Census Bureau, American Community Survey (2021)

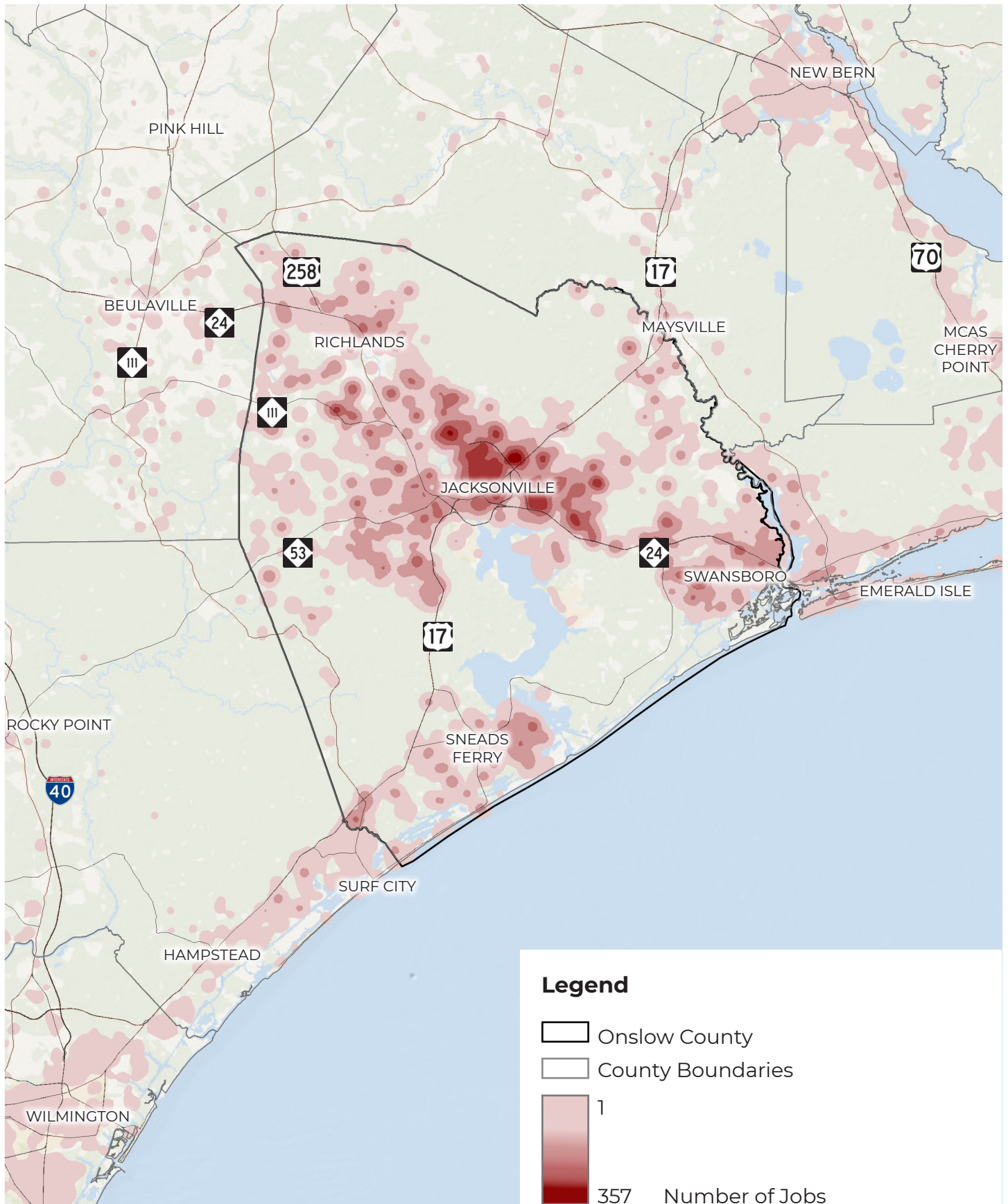


» WHERE RESIDENTS OF ONSLOW COUNTY COMMUTE TO WORK






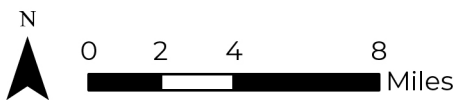
Source: OnTheMap (2019)

» WHERE WORKERS OF ONSLOW COUNTY COMMUTE FROM



Legend

-  Onslow County
-  County Boundaries
-  1
357 Number of Jobs



Source: OnTheMap (2019)

Economic Development

Jacksonville Onslow Economic Development

Jacksonville Onslow Economic Development (JOED) is a 501(c)6 non-profit organization that is a partnership of investors, businesses, individuals, and governments. JOED provides comprehensive economic development leadership in Onslow County, aiming to stimulate, encourage, and promote economic development through recruitment of new businesses, investment, new job creation, and assisting in the retention and expansion of existing business and industry. The organization provides consultation on local incentives, grant availability, workforce development, and product development; data on client specific demographics and community research; location assistance and site selection / relocation in Onslow County; introductions to the County's business and industry community; on-going assistance and support, and access to their Community Business Loan Fund..

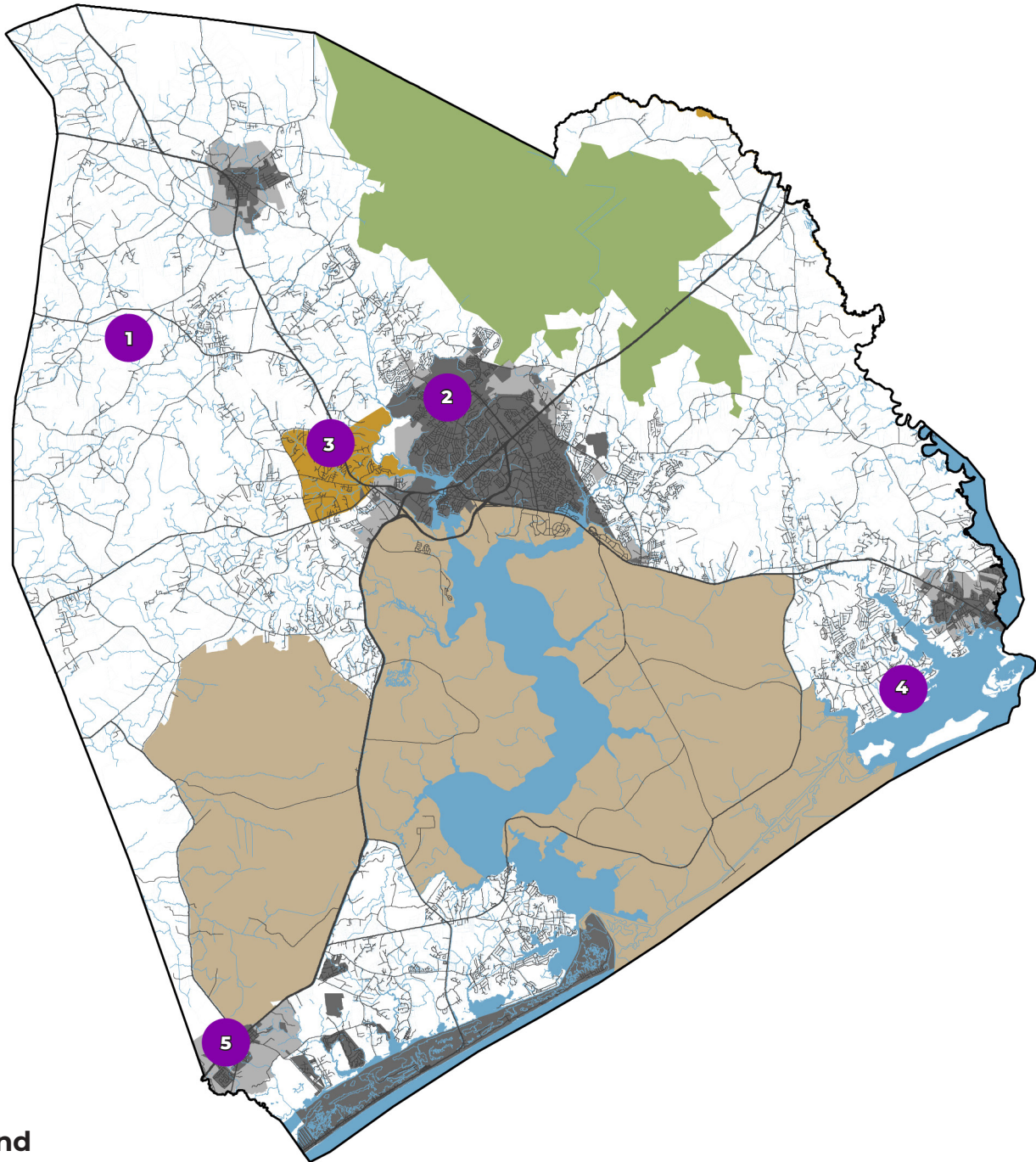
State Economic Development Organizations

The Economic Development Group at the North Carolina Department of Commerce serves as the primary liaison on economic development matters between the Governor's Office, Commerce, the Economic Development Partnership of North Carolina, and local and regional economic development organizations.





The Economic Development Partnership of North Carolina (EDPNC) is a non-profit public-private partnership focused on recruiting new businesses to the State, supporting the needs of existing businesses, connecting exporters to global customers, helping small business owners get started, and attracting tourists and visitors from all over the world. The EDPNC works closely with public and private sector partners at the State, regional, and local levels. They operate under a contract with the North Carolina Department of Commerce, while receiving additional financial support from the private sector.

The North Carolina Economic Development Association (NCEDA) is an organization with over 850 economic development professional and allies who recognize the value of effective economic development activities that recruit new investments in North Carolina's economy and that support growth in the State's existing businesses and entrepreneurial ventures. NCEDA provides a range of professional education and training, association networking opportunities, and advocacy of their interests through collaboration with the Economic Development Partnership of North Carolina, the North Carolina Department of Commerce, and the State legislature.







» ECONOMIC DEVELOPMENT AREAS



Legend

-  Onslow County
-  Water
-  Municipalities
-  Roads

Industrial Parks and Resources

-  *Albert Ellis Airport Park*
-  *Jacksonville Business Park*
-  *Burton Business and Industrial Park*
-  *Swanspoint Marine Industrial Park*
-  *Camp Davis Industrial Park*
-  Opportunity Zones



Source: JOEDNC (2022)

Industrial Parks

There are four major industrial parks located the County. These are shown on the map on the previous page and listed below:

- The Jacksonville Business Park, located between Western Boulevard and Gum Branch Road, is a 40 acre industrial site with water and sewer service. The site is part of Project Frontier, a regional stormwater remediation plan.
- Camp Davis Industrial Park (CDIP) is a growing industrial park, currently planning phase 3. The site is located along US Highway 17, with a direct route to the Port of Wilmington, and within 30 minutes to two national airport, making it a prime location for industrial uses.
- Swanspoint Marine Industrial Park is a 60 acre site, located between Swansboro and Camp Lejeune. The site contains over 170,000 square feet of marine industrial space, eight 80ft boat slips, and an outdoor boat yard with a 75 ton travel lift for boat maintenance.
- The Burton Business Park is located between Richlands and Jacksonville. The park is 735 acres and contains several lots ready for new business development.

Existing Major Industries

There are a number of major industries currently in Onslow County. These include:

- Atlantic Coast Trucking
- Biotest Pharmaceuticals Corp
- Blue Water Candy- Fishing Lures
- Cape Fear Precast- Concrete products
- Coastal Carolina Cutting Boards
- Coastal Enterprises of Jacksonville
- Coastal Swiss Precision/ Renewal Resources
- ContactUS- Digital Marketing
- Concentrix, Coastal Carolina
- Gulfstream Steel and Supply
- High Speed Gear
- J & J Snack Foods
- MSA- Respirators, Filter Cartridges, Fire Helmets, Fall Protection Equipment
- Omega World Travel- Central data processing
- Onslow Bay Boatworks
- Progressive Service Die Company- Coiling Dies, Fixtures, Industrial CNC Machining
- Southeastern Steel Construction
- Stanadyne LLC- Diesel Fuel Pump System
- Truss Builders of Holly Ridge
- US Watercraft- Commercial and Recreational Composite and welded aluminum and steel vessels
- Waterline Systems- World class sailboats
- Winter Custom Yachts

Tourism and Sports

Tourism in Onslow County is centered around the area's cultural history and coastline. The cultural history is represented in museums and memorials which are primarily centered on military traditions of the Marine Corps, as well as African-American heritage. The County's miles of beachline and availability of outdoor recreation such as kayaking, fishing, and boating are also a major tourism draw. The County tourism department, Only In Onslow, promotes Onslow County's shopping, history, nightlife, wineries, family activities, museums, parks, sporting events, and arts on their website and through an annual visitor's guide.

Sporting events in Onslow County are operated by the Jacksonville-Onslow Sports Commission (JOSC), a 501(c) 3 non-profit. The JOSC works closely with Only In Onslow, the Marine Corps, the Parks and Recreation Department, and the School System to help put on and attract sporting events throughout the County. JOSC hosts several annual events such as Fit4U, a fitness and health expo; Sledgehammer Beach Run, a race along North Topsail Beach; Freedom Fight, a regional boxing competition; East Coast Invitational Team Camp, a premier high school basketball team camp; and the New River Splash Festival, a triathlon and race along the New River. In 2021 - 2022, the JOSC hosted 43 community events, attracted 6,729 hotel room nights, and contributed \$2,028,833 in overall economic impact.



Onslow County's miles of beach front attract significant tourism dollars to the local economy.

HOUSING

Housing supply and household characteristics provide a lot of information about who is living where in a community. Housing data can also indicate trends in growth, helping to guide long range planning and future land use decisions. The following section provides some information about the household characteristics and housing factors in the County.

Households and Families

According to the 2021 American Community Survey, there are more than 69,000 households in Onslow County. The majority (almost 50,000 of these) are family households, meaning households where people are biologically or legally related to one another. While the average household size in the County is just over 2.6, which is fairly average, the average family size is approximately 3.07.

Though many of the households are families, the small average family size may be attributed to a limited number of families with children under the age of 18. About 38% of households are families with children; the remainder of family households being married couples or other adult relatives living together. More than 22% of households are people who live alone and about 6.9% are people over the age of 65 who live alone. The portion of households living alone, as well as the portion with people over the age of 65 living alone, is slightly below average. However, they do reduce the overall average household size.

» HOUSEHOLDS AND FAMILIES

Source: US Census Bureau, American Community Survey (2021)



69,246

TOTAL # OF HOUSEHOLDS



2.61

AVERAGE HOUSEHOLD SIZE



49,479

TOTAL # OF FAMILIES



3.07

AVERAGE FAMILY SIZE

» HOUSEHOLDS

Source: US Census Bureau, American Community Survey (2021)



22.3%
LIVING ALONE



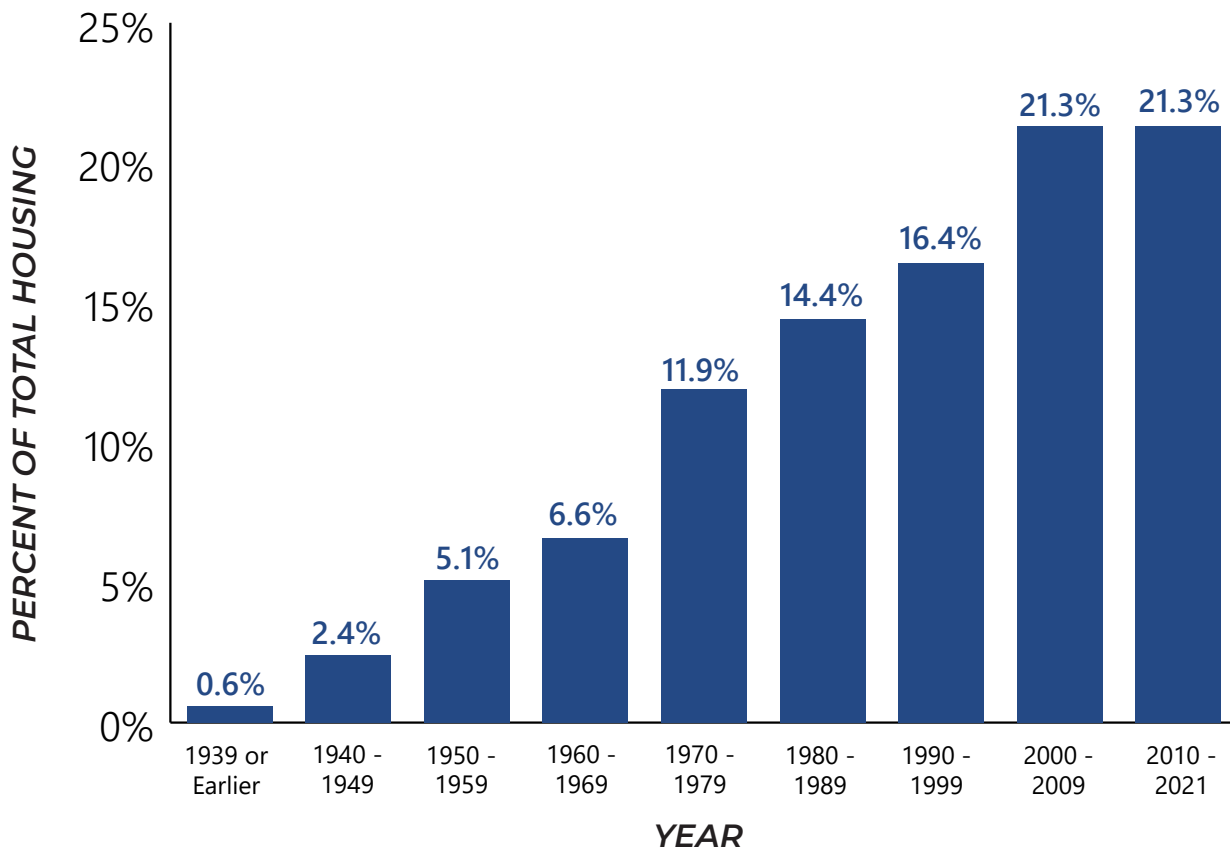
38.0%
FAMILY WITH
CHILDREN



6.9%
OVER 65
LIVING ALONE

» HOUSING STOCK AGE

Source: US Census Bureau, American Community Survey (2021)



Housing Age

More than 40% of the housing stock in the County has been built since 2000. Oddly, every decade since 1940, the County has seen a continual increase in the amount of housing being constructed. This continually, steady growth in housing is rare and may need to be further examined. Very little of the housing stock (3%) was built prior to 1950.

Property Value

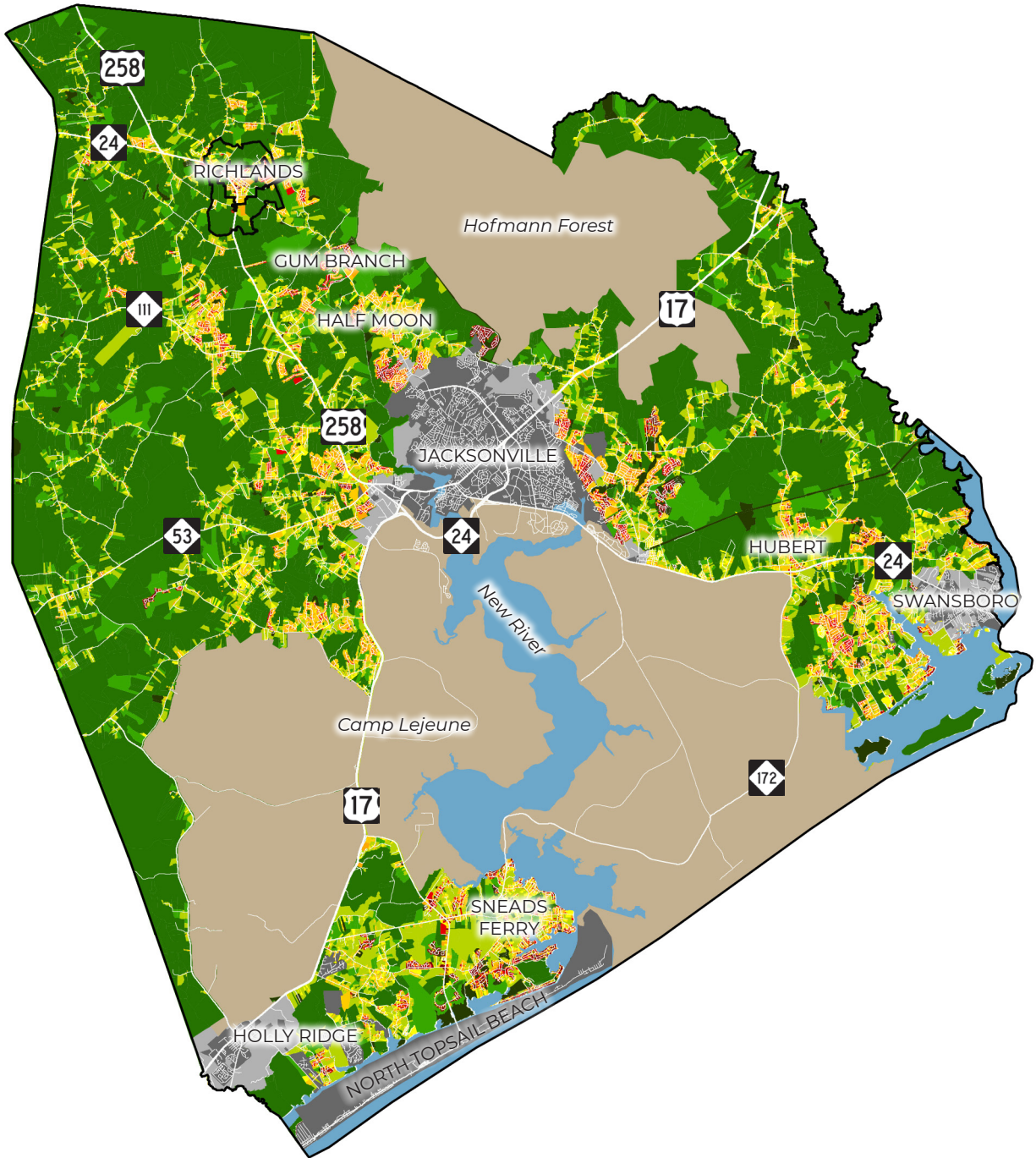
The maps on the following pages display property tax values of all parcels in the County (excluding those in municipalities, on military bases, or in Hofmann Forest). On the maps, shades of green indicate parcels worth the lowest value, while shades of red indicates those with the greatest value.

The most expensive parcels of land are located west of the City of Jacksonville, between NC-53 and NC-111. There are also some very expensive parcels near Half Moon, and between Sneads Ferry and Holly Ridge. There are a number of parcels worth more than \$1 million in the southern region of the County, between Camp Lejeune, the town of Holly Ridge, and Sneads Ferry. There are also properties worth more than \$1 million on the most northwestern edge of the County, and in various rural areas of the northwestern region. Properties on the coastal side of Swansboro, in the southern region, are also very expensive. Additionally, a number of scattered parcels in the southern region are worth more than \$1 million. There are also numerous parcels worth less than \$100 dollars, shown in dark green on the tax value maps. These are scattered throughout the County and vary significantly in terms of both size and location.





Home Value

The median home value in Onslow County (according to the 2021 American Community Survey) is \$174,300. This is approximately \$45,000 less than the median home value in the State of North Carolina. It should be noted that this value is below market value, which is generally greater and fluctuates more frequently. In fact, the median sold home price in Onslow County over the past 12 months (February 2022 - February 2023) ranged from \$244,869 (Zillow) to \$254,000 (Realtor.com). According to Rocket Homes, the median sale price (\$250,458) has increased by \$32,588 since January 2022. However, these online resources also estimate the average sale price in the State of North Carolina as \$50,000 higher than the County's, averaging around \$302,275 (per Zillow).










» ASSESSED TAX VALUE PER ACRE

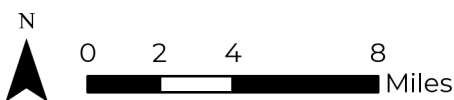


Legend

-  Onslow County
-  Water
-  Cities
-  Roads

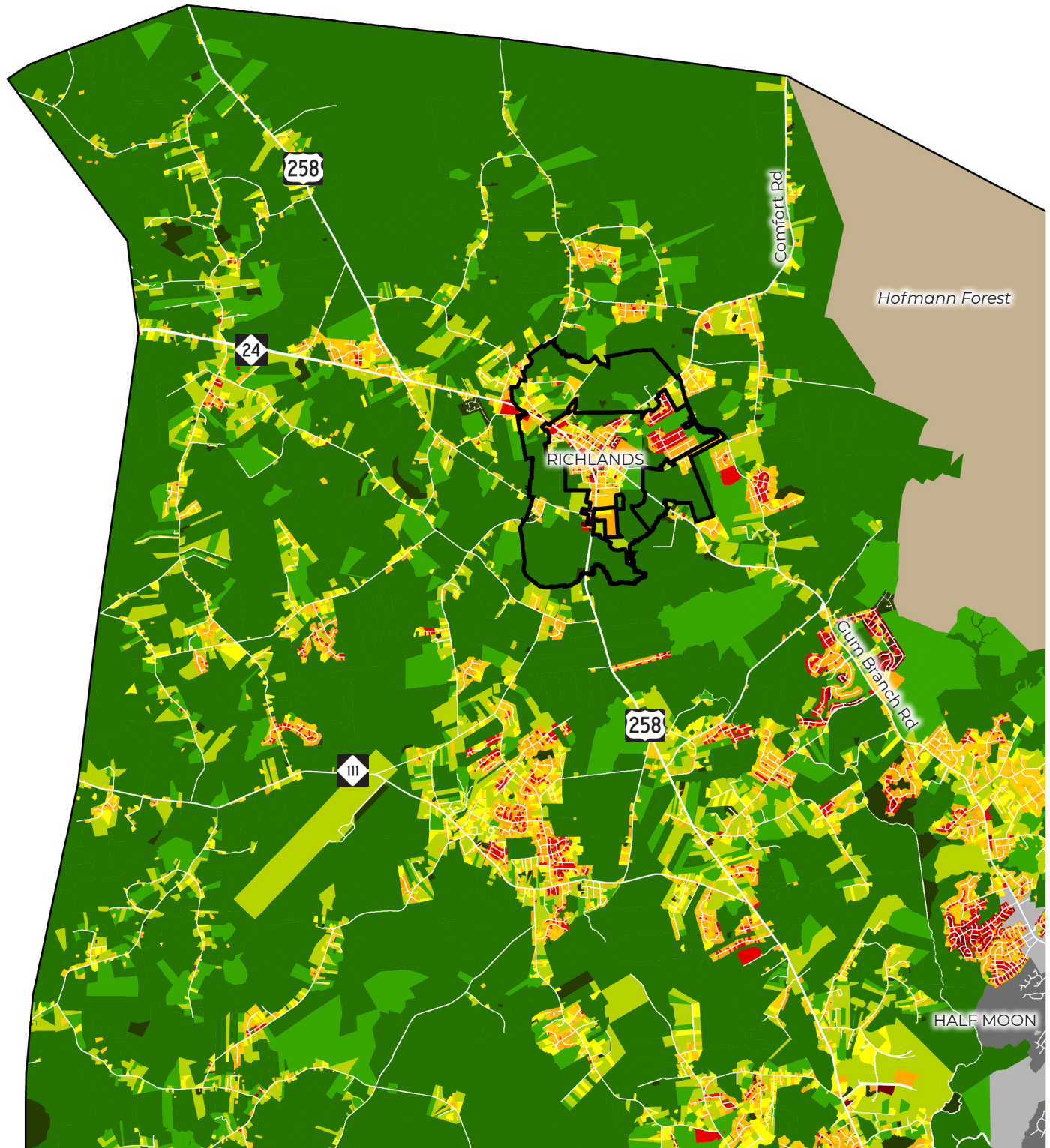
Tax Value / Acre

-  \$0-\$100
-  \$100 - \$5,000
-  \$5,000 - \$10,000
-  \$10,000 - \$50,000
-  \$50,000 - \$100,000
-  \$100,000 - \$250,000
-  \$250,000 - \$500,000
-  \$500,000 - \$750,000
-  > \$750,000



Source: Onslow County (2022)

» NORTHWEST REGION - ASSESSED TAX VALUE PER ACRE



Legend

- Onslow County
- Water
- Cities

Tax Value / Acre

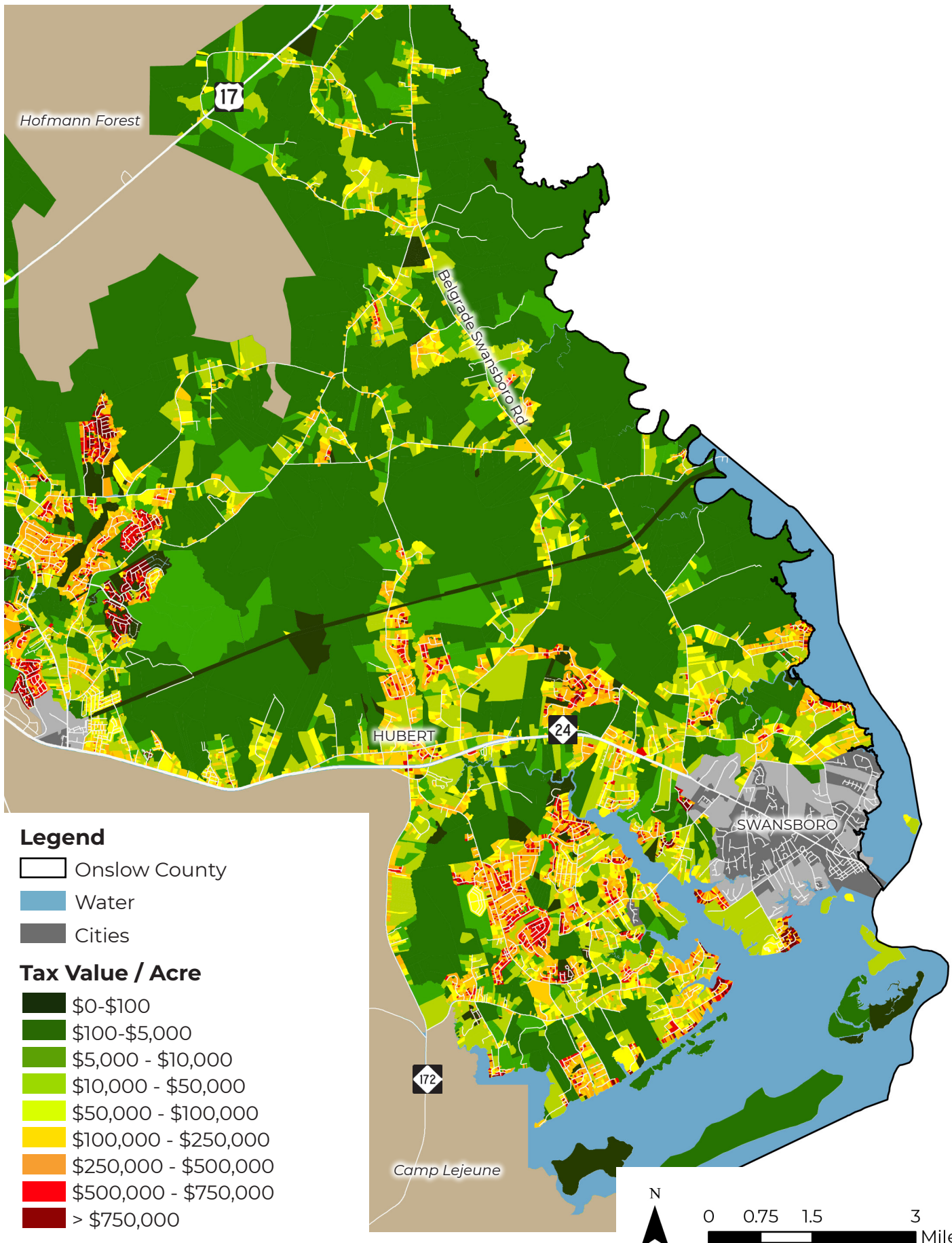
- | | | |
|--------------------|-----------------------|-----------------------|
| \$0-\$100 | \$10,000 - \$50,000 | \$250,000 - \$500,000 |
| \$100 - \$5,000 | \$50,000 - \$100,000 | \$500,000 - \$750,000 |
| \$5,000 - \$10,000 | \$100,000 - \$250,000 | > \$750,000 |



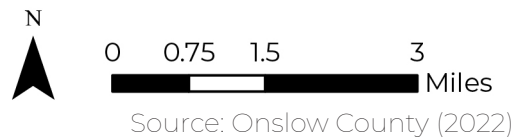
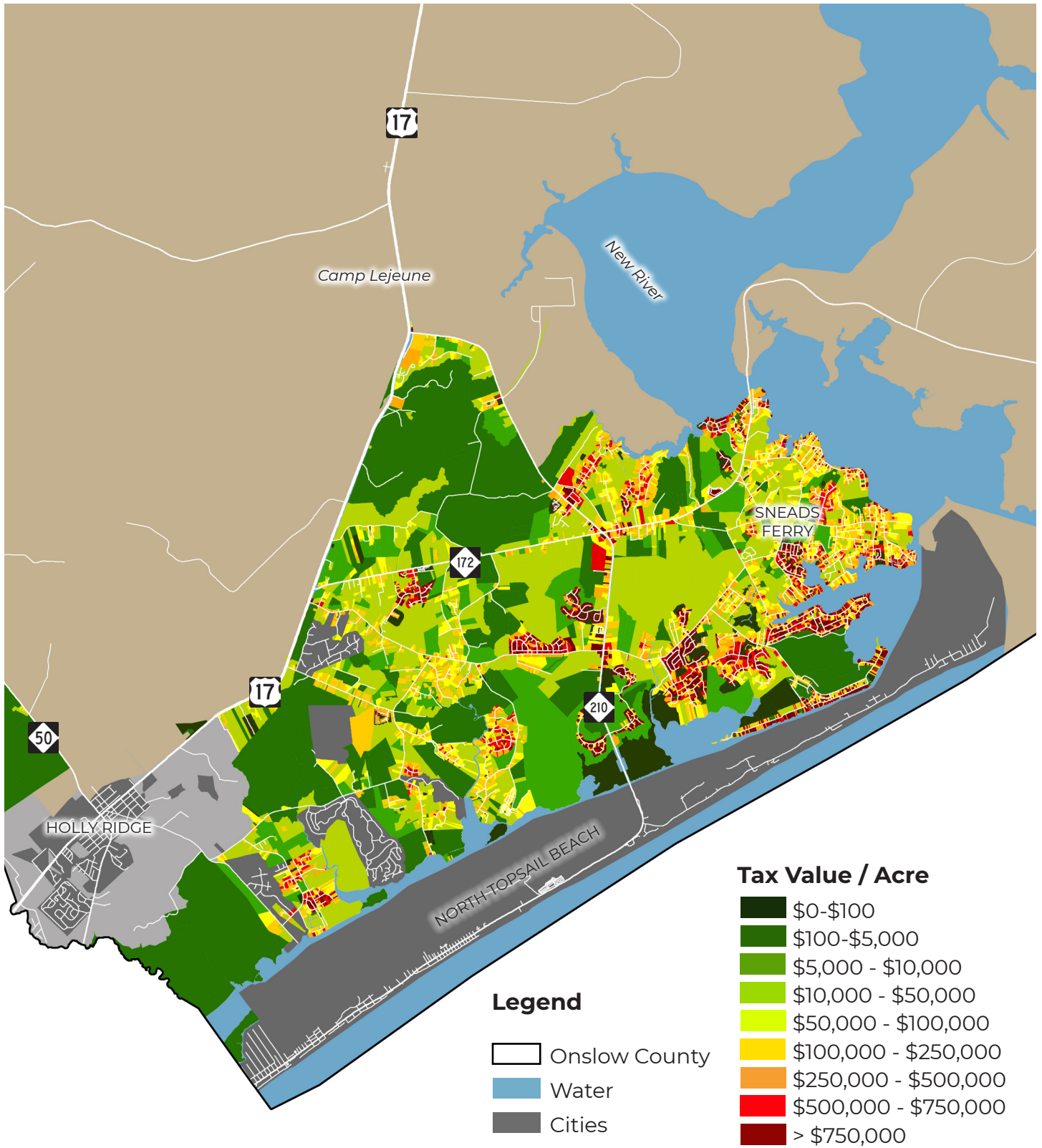
0 0.75 1.5 3
Miles

Source: Onslow County (2022)

» EAST REGION - ASSESSED TAX VALUE PER ACRE



» SOUTH REGION - ASSESSED TAX VALUE PER ACRE



Housing Types and Locations

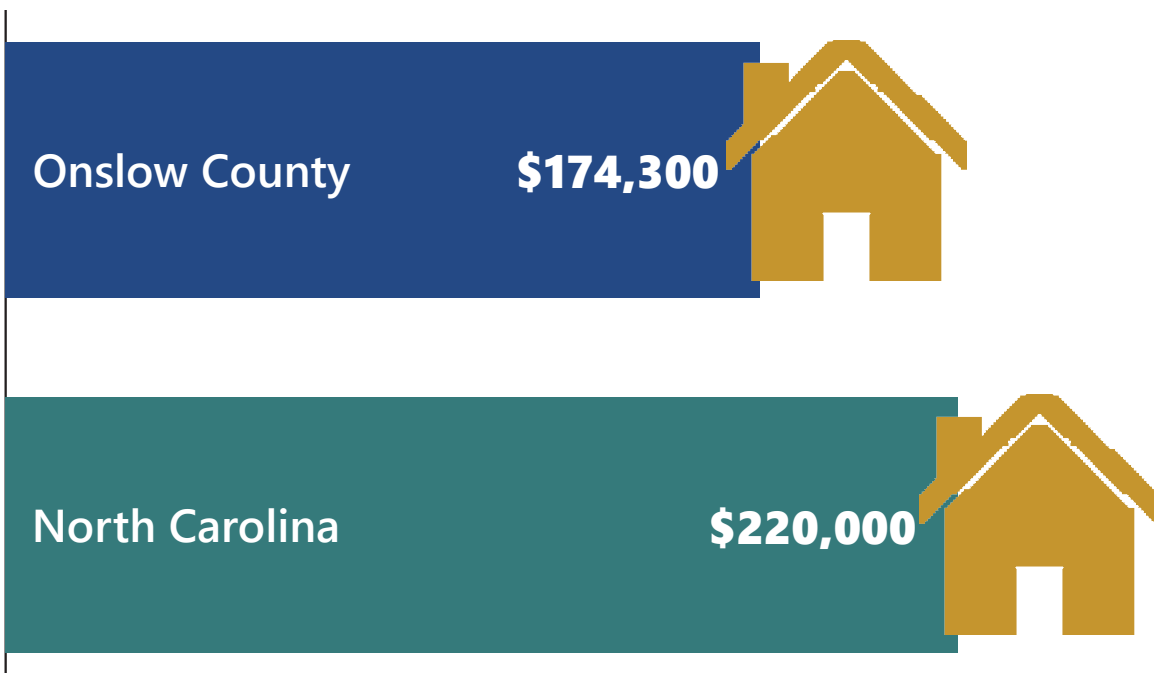
The majority (68%) of parcels in the County have a residential land use. This does not include municipalities, military bases, or Hofmann Forest. The maps on the following pages show where these residential parcels are located and why types of homes are located throughout the County. According to the County's parcel data, the majority (88%) of the residential buildings are single family homes. Approximately 12% are considered mobile homes and about 5% are either duplexes or townhouses.

The American Community Survey data from 2021 on housing stock types varies slightly from the County's parcel data. According to this dataset, about 62% of all housing units in the County are single-family (detached homes), while about 10% are single-family attached units (townhouses and condos). Approximately 13% are multi-unit buildings (apartments and duplexes), 14% are mobile homes, and very few are boats and RVs.

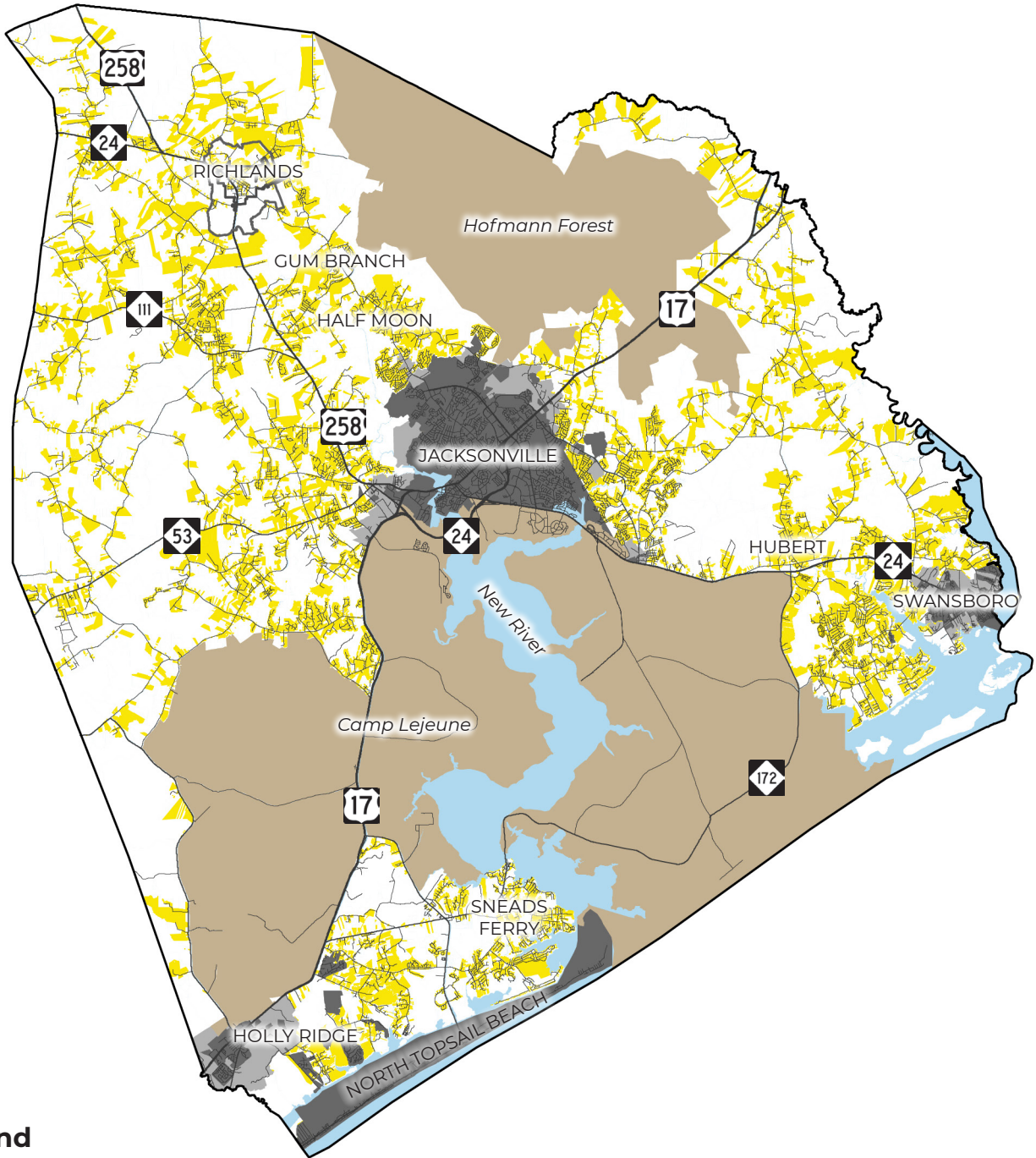
Another factor of residential development is subdivisions. Often, large scale residential development occurs through the subdivision of land, into what becomes neighborhoods. The map on the following page shows all of the subdivisions in Onslow County. The subdivision data may also illustrate areas which have not yet developed into residential neighborhoods but which have been divided into small lots to prepare for subdivision. It can be seen that a lot of the County's area is already subdivided for the purpose of residential development.

» **MEDIAN HOME VALUES (OWNER OCCUPIED UNITS)**

Source: US Census Bureau, American Community Survey (2021)



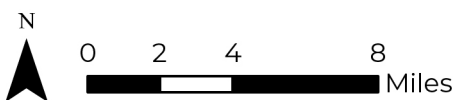
» RESIDENTIAL PARCELS WITH STRUCTURES



*68% of parcels
have residential
land use*

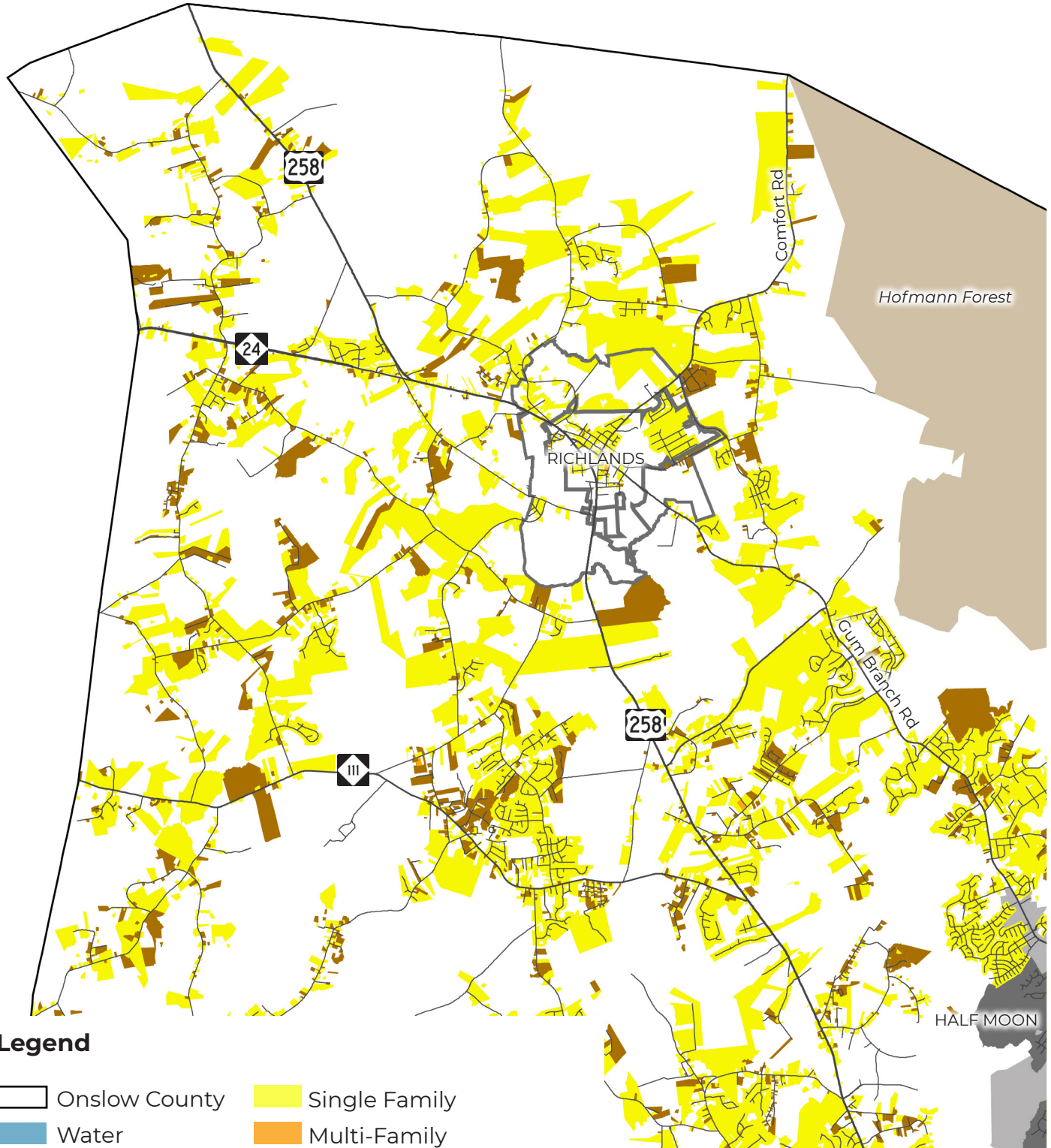
Legend

- Onslow County
- Residential Parcels
- Water
- Cities
- Roads



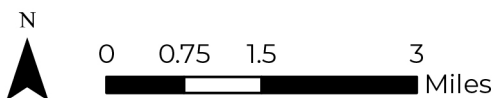
Source: Onslow County (2022)

» NORTHWEST REGION - RESIDENTIAL PARCELS WITH STRUCTURES



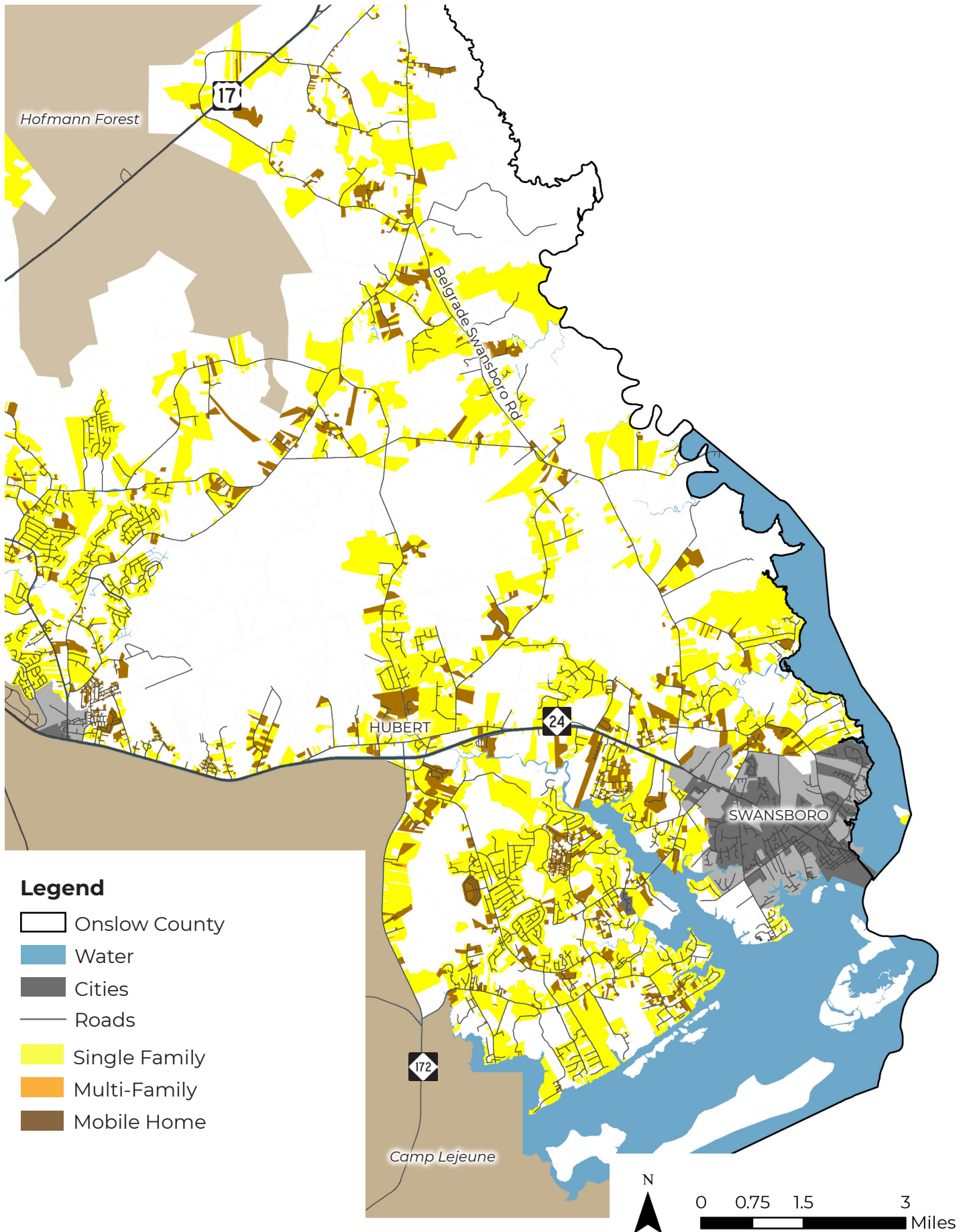
Legend

- Onslow County
- Water
- Cities
- Roads
- Single Family
- Multi-Family
- Mobile Home

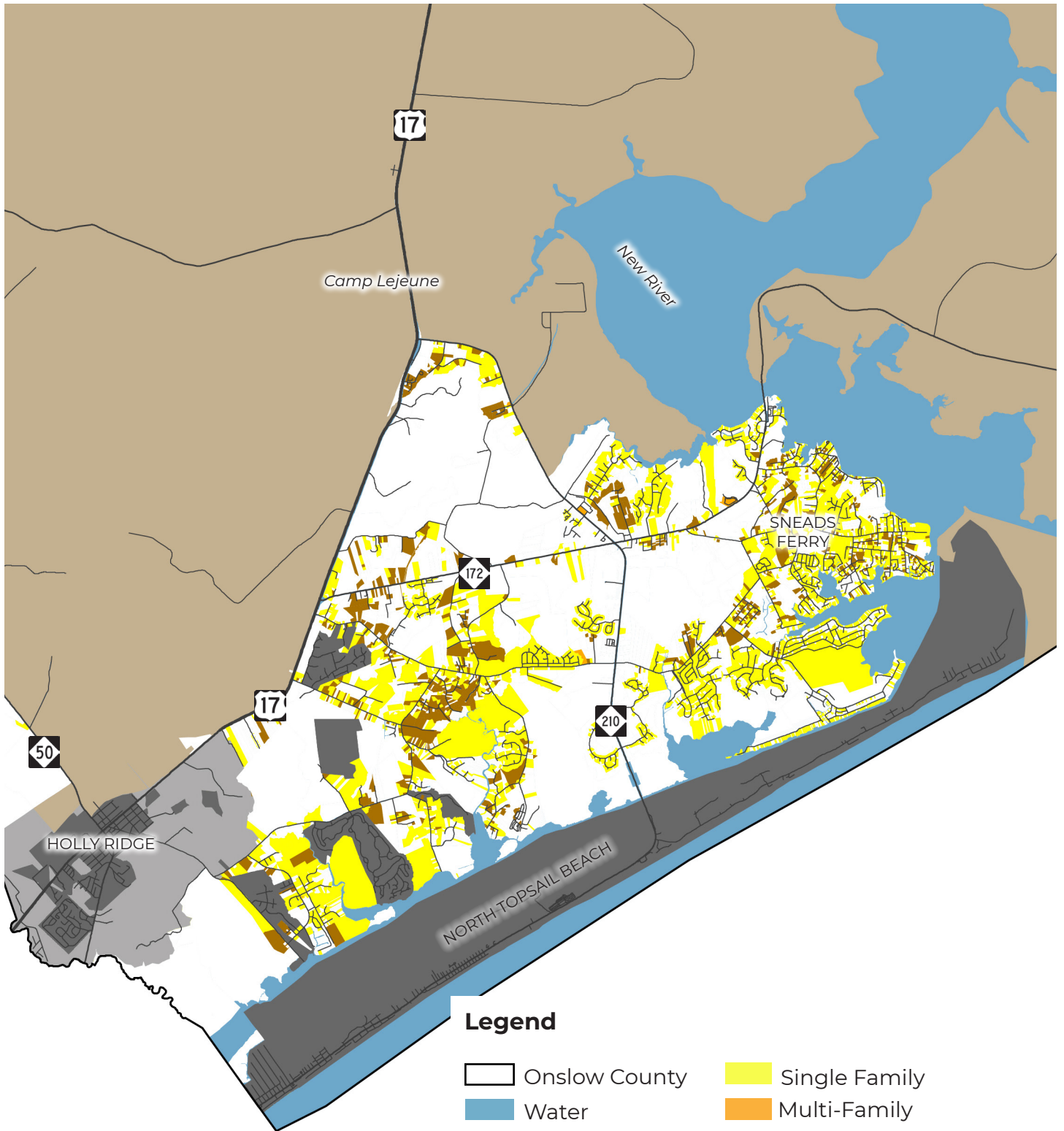


Source: Onslow County (2022)

» EAST REGION - RESIDENTIAL PARCELS WITH STRUCTURES



» SOUTH REGION - RESIDENTIAL PARCELS WITH STRUCTURES



Legend

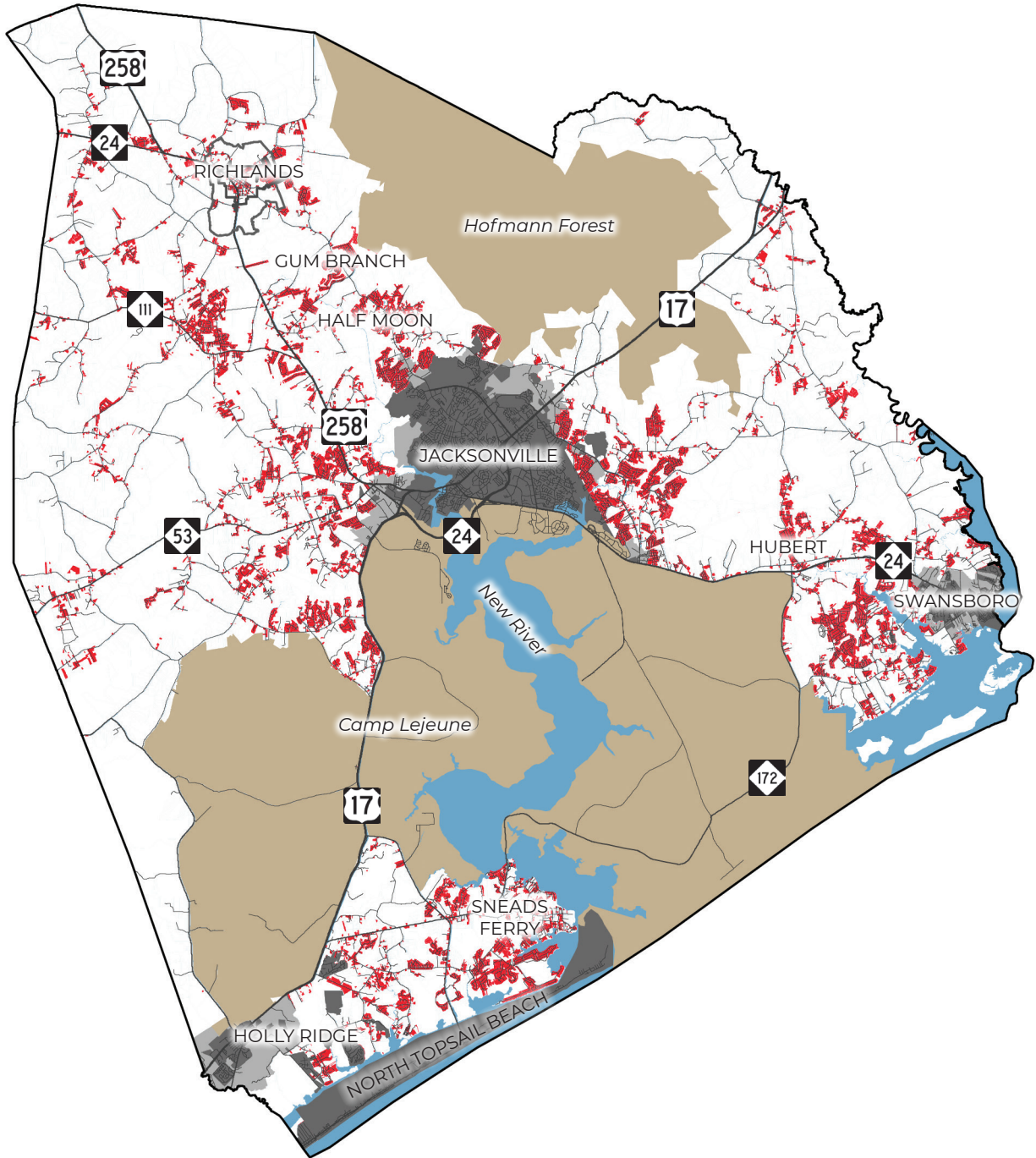
- Onslow County
- Water
- Cities
- Roads
- Single Family
- Multi-Family
- Mobile Home



0 0.75 1.5 3 Miles

Source: Onslow County (2022)

» SUBDIVISIONS



Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas
- Parcels within a Subdivision

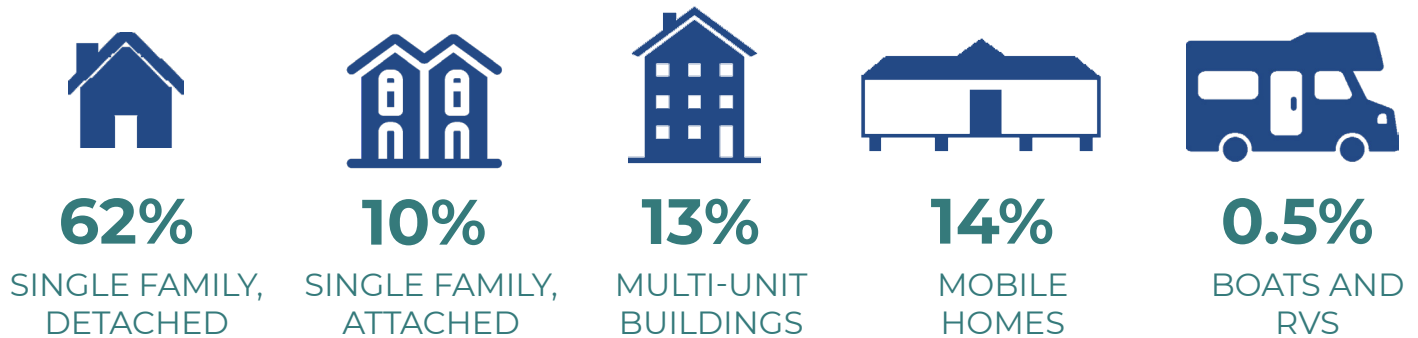


Source: Onslow County (2022)

Comparing the map of parcels with residential structures on them to the subdivision map, upcoming growth areas can be identified. These include the most northwestern edge of the County, much of the western edge of the County (particularly west of Camp Lejeune), areas east of Jacksonville and north of Hubert, and areas south of Camp Lejeune. Should all of this be developed as residential neighborhoods, more than 80% of the County's land will be dedicated to residential uses.

» **HOUSING STOCK**

Source: US Census Bureau, American Community Survey (2021)



Housing Tenure and Occupancy

Approximately 57% the housing units in Onslow County are occupied by their owners. This is slightly below the average owner-occupancy rate of the State, which is almost 66%. The high number of renters could potentially be related to the presence of coastal vacation homes, as well as military families who may be stationed at the base for short periods of time. In fact, a quick examination of seasonal rental sites, such as AirBnb, VRBO, and Flipkey, result in more than 1,000 short term rental units in Onslow County.

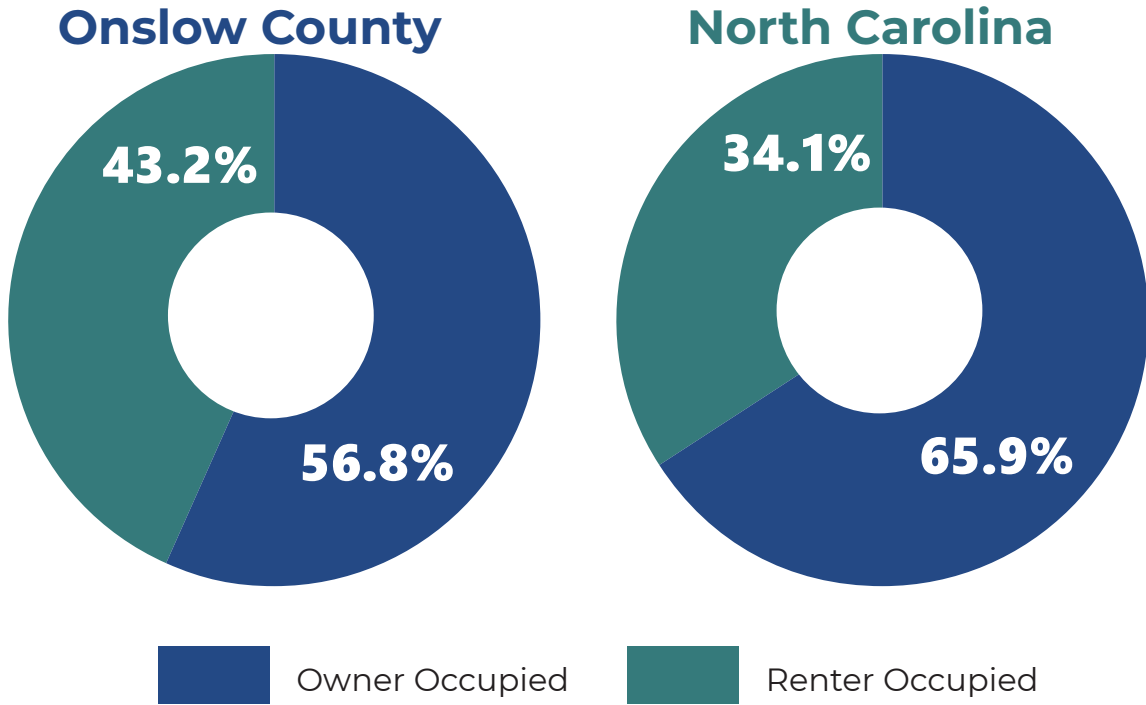
Approximately 83% of all housing units in the County are occupied, which is slightly less than the State average, but generally comparable. Typically, a vacancy rate above 5% does not indicate a demand for new housing. However, vacancies cited by the American Community Survey do include seasonal rental units, which contributes to almost one-third of all vacant units in the County.

Over the past decade, vacancy rates in the County have increased very slightly, while they have gone down slightly in the State. Again, this could be reflective of an increase in seasonal occupancy, rather than absolute vacancy.



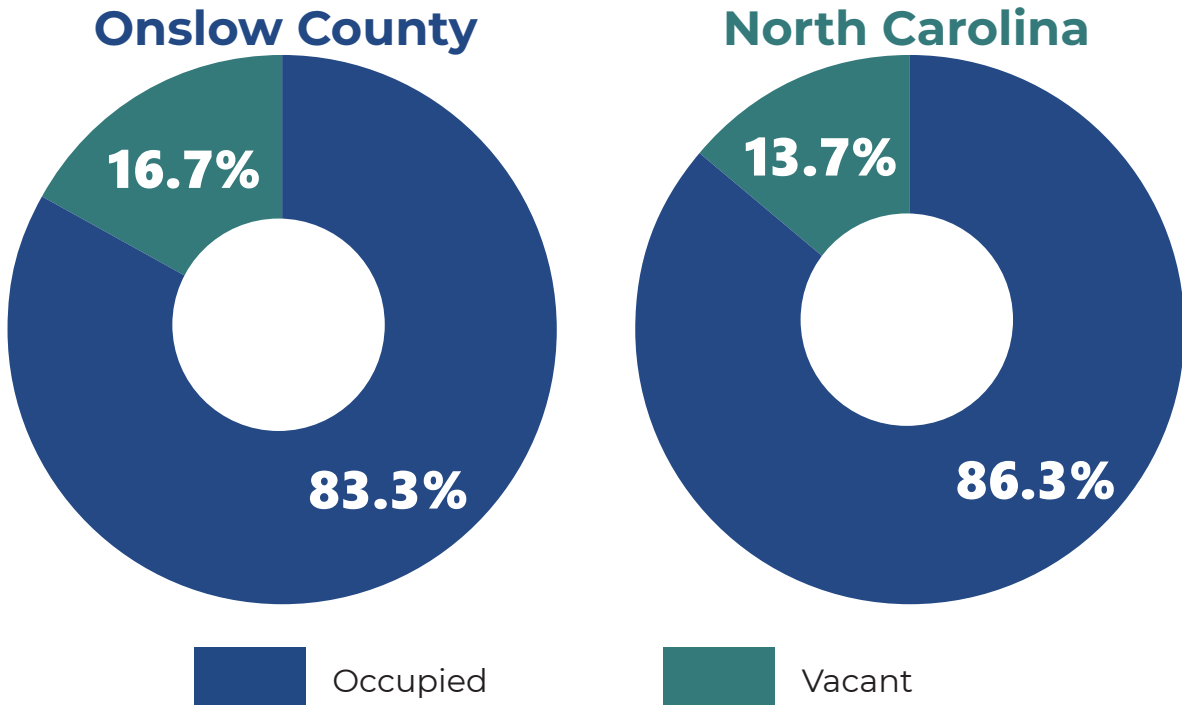
» **HOUSING TENURE**

Source: US Census Bureau, American Community Survey (2021)



» **HOUSING OCCUPANCY**

Source: US Census Bureau, American Community Survey (2021)



» HOUSING OCCUPANCY TRENDS

Source: US Census Bureau, American Community Survey (2011, 2021)

	ONSLow COUNTY		NORTH CAROLINA	
	2011	2021	2011	2021
Occupied	85.5%	83.3%	85.5%	86.3%
Vacant	14.5%	16.7%	14.5%	13.7%

Residential Building Permits

The map on the following page shows residential building permits obtained in the County between 2007 and 2020. The areas with the greatest residential development during this time include just east of the City of Jacksonville, between Hubert and Swansboro, in Sneads Ferry, around Gum Branch, and just southwest of Gum Branch.

Closer examination of the County’s growth from 2018-2022 based on development applications indicate that the majority of new developments coming into the County are single family subdivisions with an average of 123 lots. The second highest number of development proposals are for RV and campgrounds with an average of 95 RV lots per area. In the northern part of the County, the majority of development applications have been north east of Gum Branch towards Hofmann Forest and southwest of Richlands Road around Clearview School Road. Development applications and new subdivisions in the eastern part of the County are a little more spread out with concentrations between Piney Green and Hubert as well as near Bear Creek. The majority of new growth and development applications have been in the Southern part of the county across the area.

Housing Needs Assessment

The North Carolina Housing Coalition is a group of advocates seeking to bring together those interested in sharing best practices and improving public policy-making related to housing needs. The Coalition creates a housing needs assessment for each county in the State each year. According to the 2023 housing needs assessment for Onslow County, approximately 34% of residents are cost-burdened. Almost half of renters and

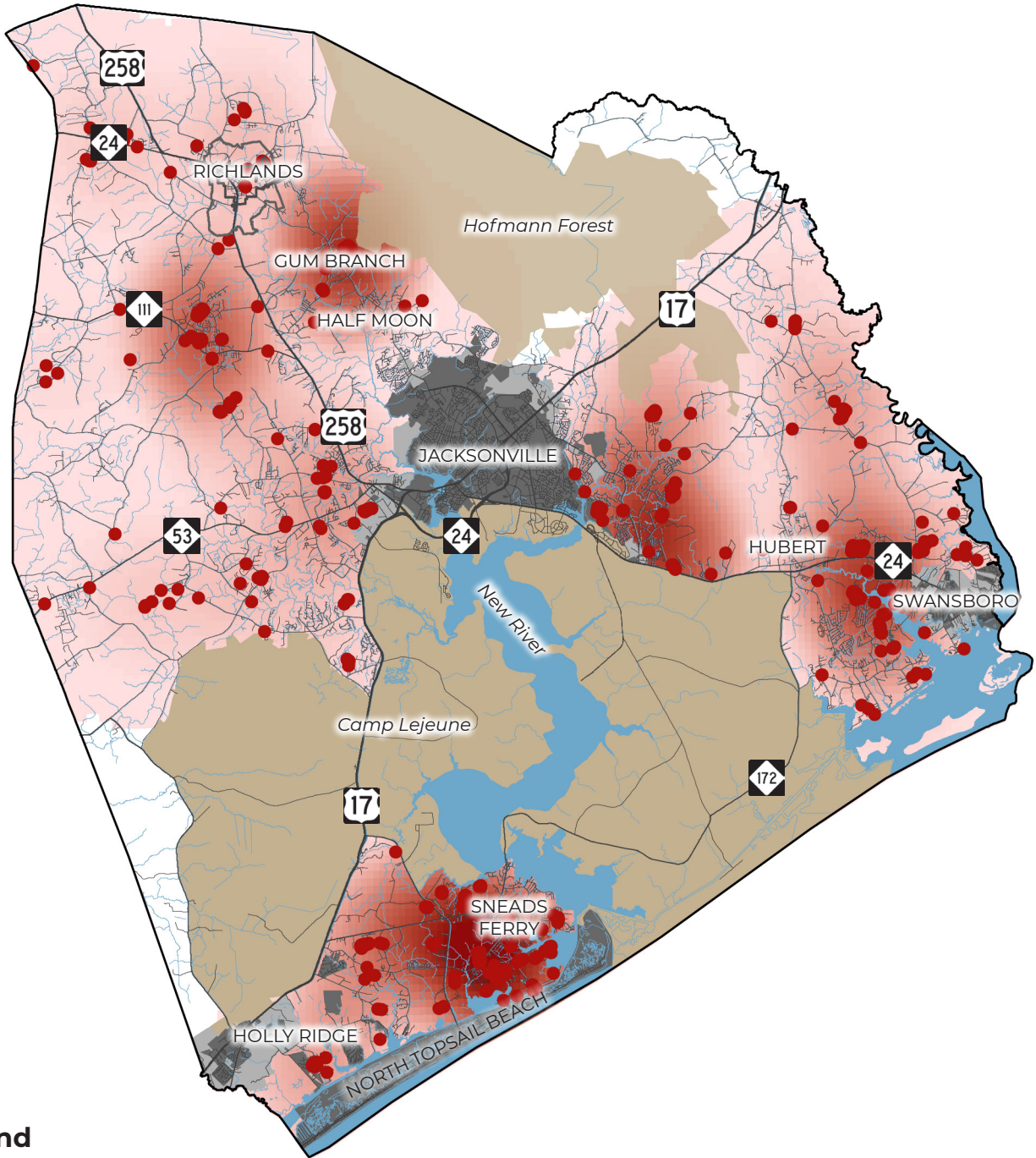
293


Foreclosures

1,021


Evictions

» 2007-2020 RESIDENTIAL BUILDING PERMITS ISSUED



Legend

- Onslow County
- Water
- Cities
- Roads
- Residential Building Permit
- 800
0 Building Permits per 1/4 mile



Source: Onslow County (2022)

one-quarter of homeowners in the County have difficulty affording their homes. In fact, 293 families faced a foreclosure this year, accounting for just over 3% of cost-burdened homeowners. More than 1,000 families, or more than 7% of renters, faced an eviction filing last year as well. However, the County ranks #76 out of 100 counties in the State for evictions of renter households, indicating that they have fewer evictions than other counties.

Housing Affordability

Another resource that examines housing affordability is the National Low Income Housing Coalition (NLIHC), which creates an annual “Out of Reach” report on housing affordability gaps across the country. According to the most recent report, from 2022, people who earn less than the median household and family incomes in Onslow County are typically not able to afford the average home in the County.

The tables on the following pages display aggregated data from the 2022 Out of Reach report for Onslow County, the State of North Carolina, and the United States. The first two tables are directly from the NLIHC report, while the following tables utilize the American Community Survey data for median household and family incomes in order to calculate the affordability spectrum within the County. The tables on page 96 use this information to determine the affordability gap based on the median home value, as listed in the 2021 American Community Survey. Homeownership affordability is calculated based on the affordable monthly mortgage costs equaling 30% of the respective income levels. The assumption that there was a \$0 down payment, 30-year mortgage, and 4.5% interest rate were included in the affordable home price calculation.

Based on this data, households who earns 80% of the median household income (\$43,498) or less would be approximately \$35,700 short of being able to afford the median home value in the County. Similarly, those who early 80% of the median family income (\$48,652) or less would be about \$14,800 short of being able to afford the average home in Onslow County. It is important to note that this analysis contains a number of assumptions and utilizes data that does not accurately capture market rates of housing. In reality, the housing affordability gap may in fact be slightly higher. However, this analysis does create a generally accurate depiction of the housing affordability gap rates in the County.

» HOUSING COSTS TO AFFORD 2-BEDROOM AT FAIR MARKET RENT (FMR)

Source: National Low Income Housing Coalition - Out of Reach 2022

	FY 22 HOUSING WAGE	2-BDR FMR	ANNUAL INCOME NEEDED	FULL TIME JOBS AT MIN. WAGE NEEDED
United States	\$25.82	\$1,342	\$53,699	2.4
North Carolina	\$19.18	\$997	\$39,897	2.6
Onslow County	\$16.85	\$876	\$35,040	2.3

» RENTAL AFFORDABILITY

Source: National Low Income Housing Coalition - Out of Reach 2022

	RENTER HOUSEHOLDS (2016-2020)	% OF HOUSEHOLDS (2016-2020)	ESTIMATED HOURLY MEAN RENTER WAGE (MRW) (2022)	MONTHLY RENT AFFORDABLE AT MEAN WAGE	FULL TIME JOBS NEEDED TO AFFORD 2-BDR
United States	43,928,837	36%	\$21.99	\$1,144	1.2
North Carolina	1,381,743	34%	\$19.00	\$988	1.0
Onslow County	30,273	46%	\$14.72	\$766	1.1

» MEDIAN HOUSEHOLD INCOME (MHI)

Source: Benchmark, American Community Survey (2021)

	MEDIAN HOUSEHOLD INCOME (MHI)	MONTHLY RENT AFFORDABLE AT MHI	30% OF MHI	MONTHLY RENT AFFORDABLE AT 30% MHI
United States	\$69,021	\$1,726	\$20,706	\$518
North Carolina	\$60,516	\$1,513	\$18,155	\$454
Onslow County	\$54,372	\$1,359	\$16,312	\$408

» MEDIAN FAMILY INCOME (MFI)

Source: Benchmark, American Community Survey (2021)

	MEDIAN FAMILY INCOME (MFI)	MONTHLY RENT AFFORDABLE AT MFI	30% OF MFI	MONTHLY RENT AFFORDABLE AT 30% MFI
United States	\$85,028	\$2,126	\$25,508	\$638
North Carolina	\$75,815	\$1,895	\$22,745	\$569
Onslow County	\$60,815	\$1,520	\$18,245	\$456

» **HOMEOWNER AFFORDABILITY BASED ON MHI - ONSLOW COUNTY**

Source: Benchmark, American Community Survey (2021)

	AFFORDABLE HOME PRICE	AFFORDABLE MONTHLY MORTGAGE	MEDIAN HOME VALUE	AFFORDABILITY GAP
50% MHI	\$72,600	\$680	\$174,300	- \$101,700
80% MHI	\$138,600	\$1,087	\$174,300	- \$35,700
100% MHI	\$182,800	\$1,359	\$174,300	+ \$8,500
120% MHI	\$227,000	\$1,631	\$174,300	+ \$52,700

» **HOMEOWNER AFFORDABILITY BASED ON MFI - ONSLOW COUNTY**

Source: Benchmark, American Community Survey (2021)

	AFFORDABLE HOME PRICE	AFFORDABLE MONTHLY MORTGAGE	MEDIAN HOME VALUE	AFFORDABILITY GAP
50% MFI	\$85,500	\$760	\$174,300	- \$88,800
80% MFI	\$159,500	\$1,216	\$174,300	- \$14,800
100% MFI	\$209,000	\$1,520	\$174,300	+ \$34,700
120% MFI	\$258,300	\$1,824	\$174,300	+ \$84,000

COMMUNITY INFRASTRUCTURE

As Onslow County continues to grow and develop, expanding community services and infrastructure will be essential. Capacity of existing infrastructure and projections for future expansions must be considered to ensure that all current and future residents have adequate numbers of schools, provision of utilities sufficient emergency management coverage, and access to parks and recreation opportunities.

Schools and Education

The Onslow County School District is the 11th largest district in the State of North Carolina, with over 28,000 students currently enrolled. The district has 41 educational facilities, including 22 elementary schools, 8 middle schools, 7 high schools, an early college high school, an early childhood development center, an alternative learning program, and the Eastern North Carolina Regional Skills Center. In 2021, the District also opened virtual elementary and virtual secondary schools to provide an online learning option for County residents. On average, the District has increased by more than 300 students each year, resulting in the development of two new elementary schools since 2021.

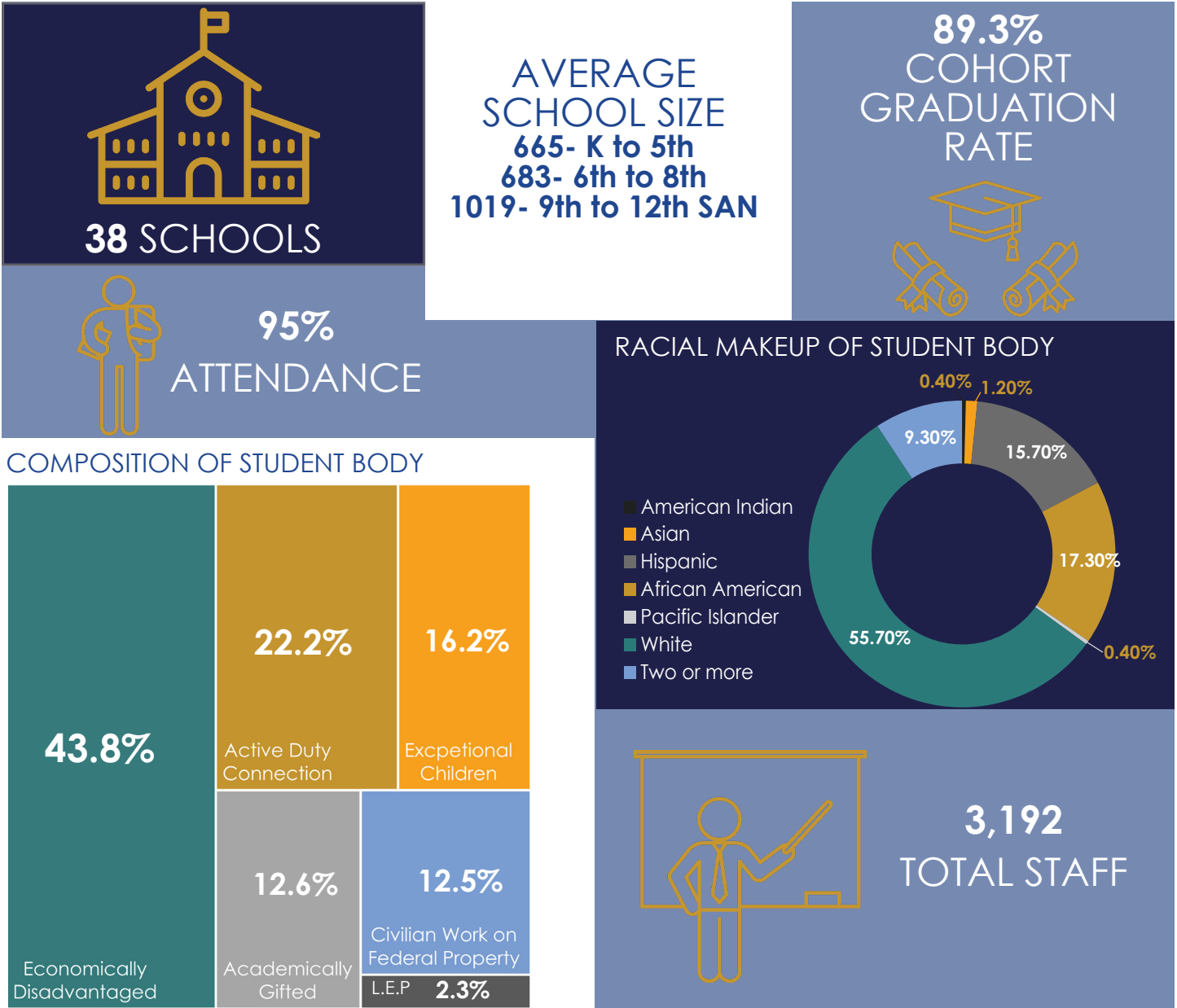
The elementary school districts, as well as the location of all schools are shown on the map on the following spread. A number of the schools are clustered together, particularly to provide elementary, middle, and high schools to the same communities. The greatest concentration of schools are in and around the City of Jacksonville, near Richlands, and near Swansboro. There are only three schools in the southern portion of the County, primarily because of Camp Lejeune's presence.

The most recent strategic plan for the Onslow County School District was for the 2016-2022 timeframe and a new plan is currently in development. In addition to the overall Onslow County School System Strategic Plan, each individual school develops a strategic plan each year; the most recent being for the 2021 - 2022 school year. Statistics from the 2021 strategic plan have been highlighted on the following page.

According to the Onslow County Schools Operational Capacity Analysis, which was completed in May of 2023, the entire school system is already at or over capacity. Based on their projected growth analysis, the school system will be over capacity by more than 5% by the 2028 - 2029 school year. The specific schools anticipated to be over capacity at this time are shown on the following page.

» SCHOOL DISTRICT DATA- ONSLOW COUNTY

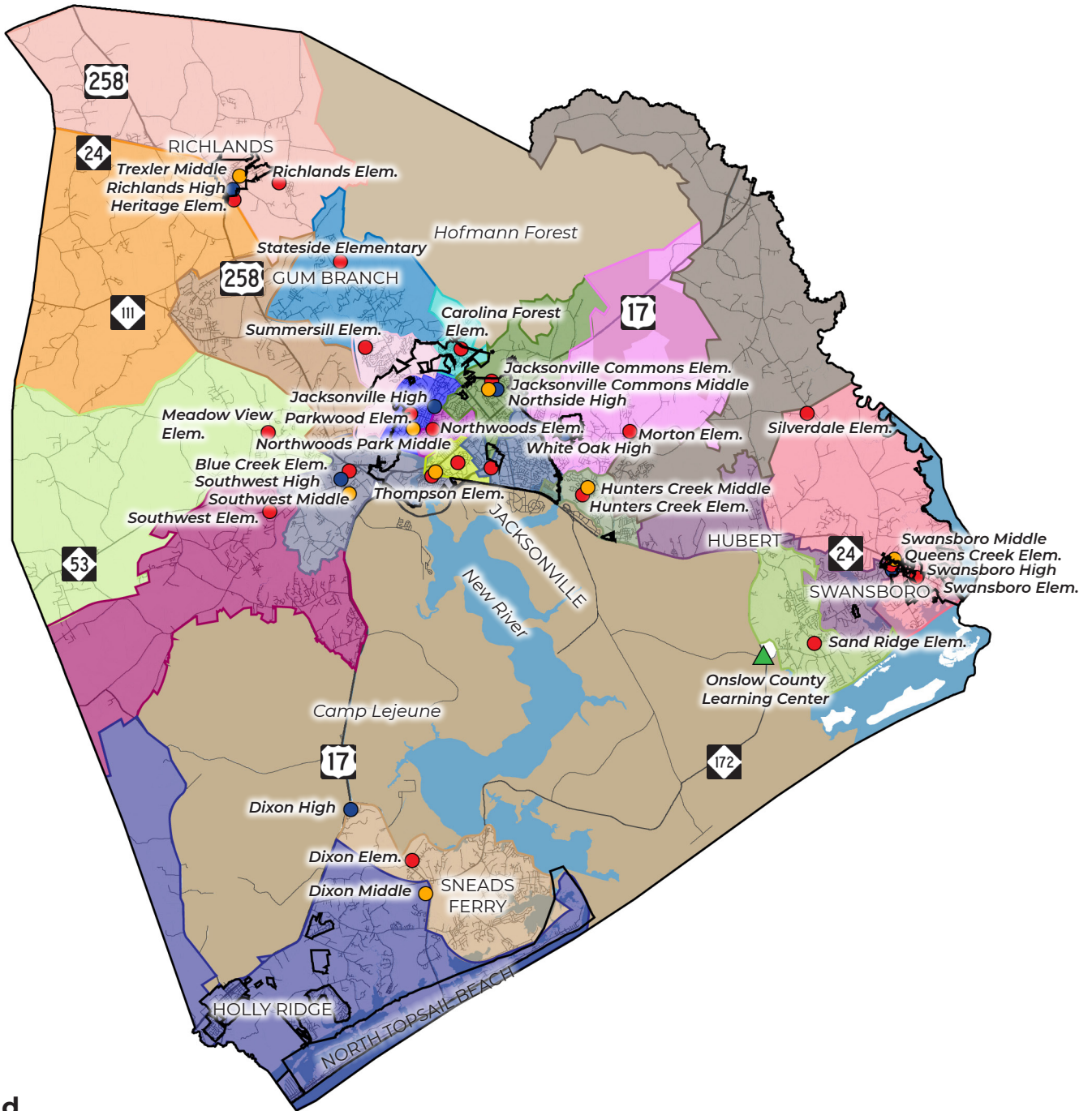
Source: Onslow County Schools Strategic Plan (2021) and School Report Cards (2022)



» SCHOOLS ANTICIPATED TO BE OVER CAPACITY BY 2028

Source: Onslow County Schools Out-Of-Capacity Table (May 7, 2023)

ELEMENTARY SCHOOLS				
Bell Fork	Clyde Erwin	Morton	Sand Ridge	Swansboro
Blue Creek	Dixon	Parkwood	Silverdale	Coastal
Carolina Forest	Hunters Creek	Queens Creek	Southwest	
MIDDLE SCHOOLS				
Dixon	Jacksonville Commons	Southwest Swansboro	Trexler	
Hunters Creek	New Bridge			
HIGH SCHOOLS				
Dixon	Jacksonville	Richlands	White Oak	



Legend

- Onslow County
- Water
- Cities

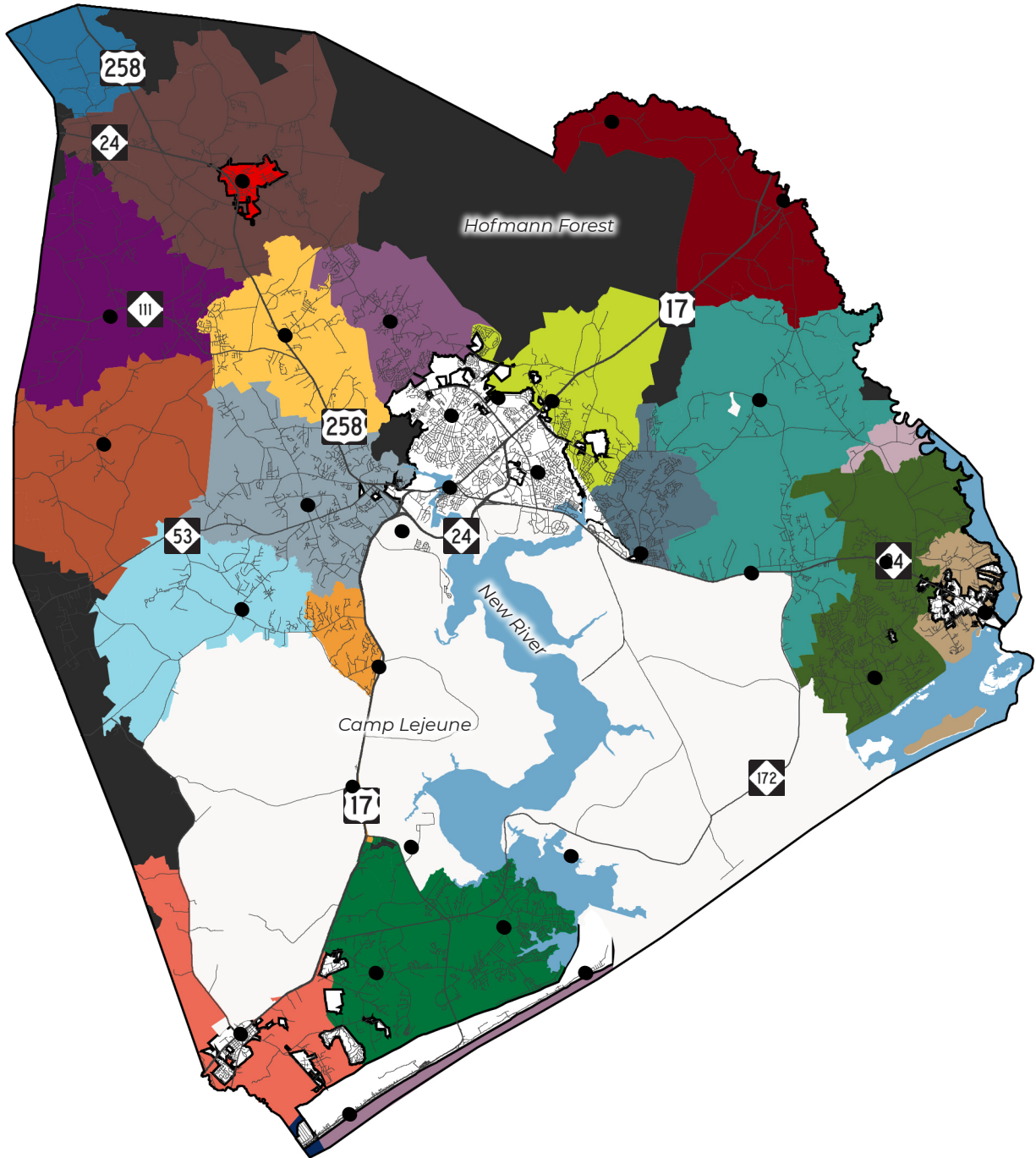
Elementary School Districts

- | | | |
|-----------------|----------------------|--------------|
| Richlands | Jacksonville Commons | Queens Creek |
| Heritage | Morton | Swansboro |
| Clearview | Silverdale | Sand Ridge |
| Stateside | Parkwood | Blue Creek |
| Summersill | Northwoods | Southwest |
| Carolina Forest | Clyde Erwin | Coastal |
| Meadow View | Bell Fork | Dixon |



Source: OCS (2022)

» FIRE RESCUE DISTRICTS



Legend

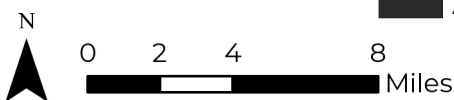
- Onslow County
- Water
- Cities and Lejeune
- Roads

● Fire Stations

- Hargetts Crossroad
- Northwest Onslow
- Back Swamp
- Piney Green
- Rhodestown
- Half Moon
- Nine Mile
- Southwest
- Areas of No Coverage

- Pumpkin Center
- Belgrade
- Hubert
- Western Carteret 12
- Northeast Onslow
- White Oak River
- Coastal
- Haws Run
- Verona

- South Onslow
- Turkey Creek



Source: Onslow County (2022)

Law Enforcement, Fire, and Emergency Services

The Onslow County Sheriff's Office is the primary law enforcement agency in the County. The City of Jacksonville also operates its own Police Department. The City's Department includes 130 sworn officers and 36 support staff who coordinate with the County Sheriff's Office. The Police Department also offers a variety of educational and outreach programs designed to help educate citizens and businesses on crime safety and prevention.

The Onslow County Emergency Services Department includes the E-911 Communications Center, the Emergency Management Office, Emergency Medical Services, and Fire Rescue Services. These agencies work together to provide the County with complete and unified emergency services. The Fire Rescue Division is comprised of emergency responders, a fire marshal, and volunteer fire and rescue agencies across the County. There are 18 volunteer fire departments (3 which include rescue capabilities) and four volunteer rescue squads. The Department provides fire protection, all types of rescue services, haz-mat incidents, as well as public education. The Fire Rescue Districts map shows the areas of service for each station.

» **CRIME STATISTICS - ONSLOW COUNTY**

Source: Onslow County Sheriff's Department (2023)

	2013	2015	2018	2021	2023	% CHANGE 2013-2023	10 YEAR AVERAGE
Larceny	278	215	245	171	134	-107%	213
Burglary	199	206	145	90	90	-121%	159
Vandalism/ Property Damage	163	180	138	100	89	-83%	142
Larceny from Vehicle	96	125	89	67	42	-129%	202
Stolen or Recovered Vehicle	23	21	23	34	39	+ 41%	28
Aggravated Assault	27	23	45	25	34	+ 21%	30
Stolen Vehicle	18	15	19	24	25	+ 28%	21
Rape	7	11	4	2	5	-40%	7
Arson	6	7	0	3	1	-500%	3
Homicide	3	2	1	0	1	-200%	1
Robbery	7	8	11	4	1	-600%	6
Overdose Deaths	0	0	6	5	0	0	2

Civic Facilities

The Onslow County Government Center is located off US-258, on the northwestern edge of the City of Jacksonville.

The County's Asset and Facility Management Department is responsible for planning, directing, and providing cost effective maintenance, repair, and minor construction for multiple facilities occupied by County employees. The Department also performs the installation and maintenance of the County's road name sign system.

Libraries

There are four locations within the Onslow County Public Library (OCPL) System: The Main branch in Jacksonville, Richlands Branch, Sneads Ferry Branch, and Swansboro Branch. The library system offers books, access to online resources, cultural and historical education, meeting rooms, classes and workshops, and interactive activities. The four branches arose from the OCPL Long Range Master Plan, which was completed in 2006. The plan outlined the number, size, and location for the libraries in order to serve the County over the next 25 years. A new long term facilities report should be completed in the next five years to ensure that the libraries continue to meet the needs of the community.

Museums

The County has several museums and memorials dedicated to preserving the history of the County. Lejeune Memorial Gardens in Jacksonville contains the Beirut Memorial and Vietnam Veterans Memorial connected by walkways and trees to honor soldiers who sacrificed their lives during their service. The Montford Points Marine Museum also has several exhibits honoring soldiers, including recognition of the first African American Marines who trained and served in World War II during segregation. This museum is part of the Jacksonville-Onslow African American Heritage Trail.

The Onslow County Museum in Richlands is an important civic facility displaying the History of the County. The museum offers both recurring and rotating exhibits, educational activities, virtual programming, and community events..

Morton's School Academy is a one room school house that first opened in 1880. The school house has been restored and converted into a museum in Swansboro. Onslow County Environmental Education Center is part of the Snead Ferry Library Branch. The center is designed to educate and engage all members of the community about the natural surroundings in Onslow County. Swansboro Area Heritage Center contains displays

about maritime artifacts, tobacco, cotton, and Colonial Swansboro. Zing Zumm Children's Museum is located in Jacksonville and is a 501 (c) non-profit. The museum is designed for children ages 0-10 and incorporates hands-on- learning experiences.

Jacksonville- Onslow African American Heritage Trail

The Jacksonville- Onslow African American Heritage Trail is a partner project between Onslow County Tourism, Onslow County Museum, and the Business Diversity Council of the Jacksonville Onslow Chamber of Commerce. The trail consists of 21 sites throughout the County that highlight the history and accomplishments of local African American leaders and communities through their history, arts, and culture. The sites are located in Jacksonville, Richlands, Swansboro, Sneads Ferry, and North Topsail Beach. The following sites are currently part of the trail:

AFRICAN AMERICAN HERITAGE TRAIL SITES

- Linda Richardson Memorial
- Georgetown High School
- Sandy Run Missionary Baptist Church
- Belgrade Community Association
- Verona Loop National Cemetery
- St. Julia Church
- Montford Point Marine Museum
- African American USO
- Kellumtown School
- Lilliam Parker Willingham
- Voting Rights Task Force
- Tyrone Willingham
- First Baptist Church of Belgrade
- Onslow County Museum
- Harrison Chapel
- Blooming Hill
- Edney Chapel
- Woodson Elementary
- Hammocks Beach State Park
- Little Zion African Methodist Episcopal Zion Church
- Ocean City Beach

Recreation

The Onslow County Parks and Recreation Department manages parks and recreation facilities, as well as athletic and other recreational programming. Operated by the County, there are nine parks, two paddle trails, two bicycle routes, four beach access points, and three municipal river access points. Three of the parks have baseball fields (one in each area of the County); five of the parks have basketball courts; four have football fields; two have disc golf courses; ten provide fishing access; and a number have horseshoe pits and jogging paths.

The map on the following page displays the recreation facilities operated by the County. According to the 2021 Parks and Recreation Master Plan, the County has 20 baseball/softball fields, 16 football/ soccer fields, 6 basketball courts, 14 tennis and pickle ball courts, 9 game courts, 7 playgrounds, 14 miles of trails, and 1 disc golf course. This does not include any municipal facilities which are owned and maintained by municipalities. The City of Jacksonville and North Topsail Beach both have their own parks and recreation facilities.

The following parks are operated by Onslow County:

- Deppe Park in Hofmann Forest - 102 acres
- Hubert By-Pass Park- 41 acres
- New River Waterfront Park - 1 acre
- Oakhurst Nature Park- 253 acres
- Onslow Pines Park - 60 acres
- Richland Steed Park- 50 acres
- Stump Sound Park - 56 acres
- Hines Farm Park and Stables (Future Facility)- 155 acres
- Big Branch Bike Park - 60 acres

Special Use Facilities

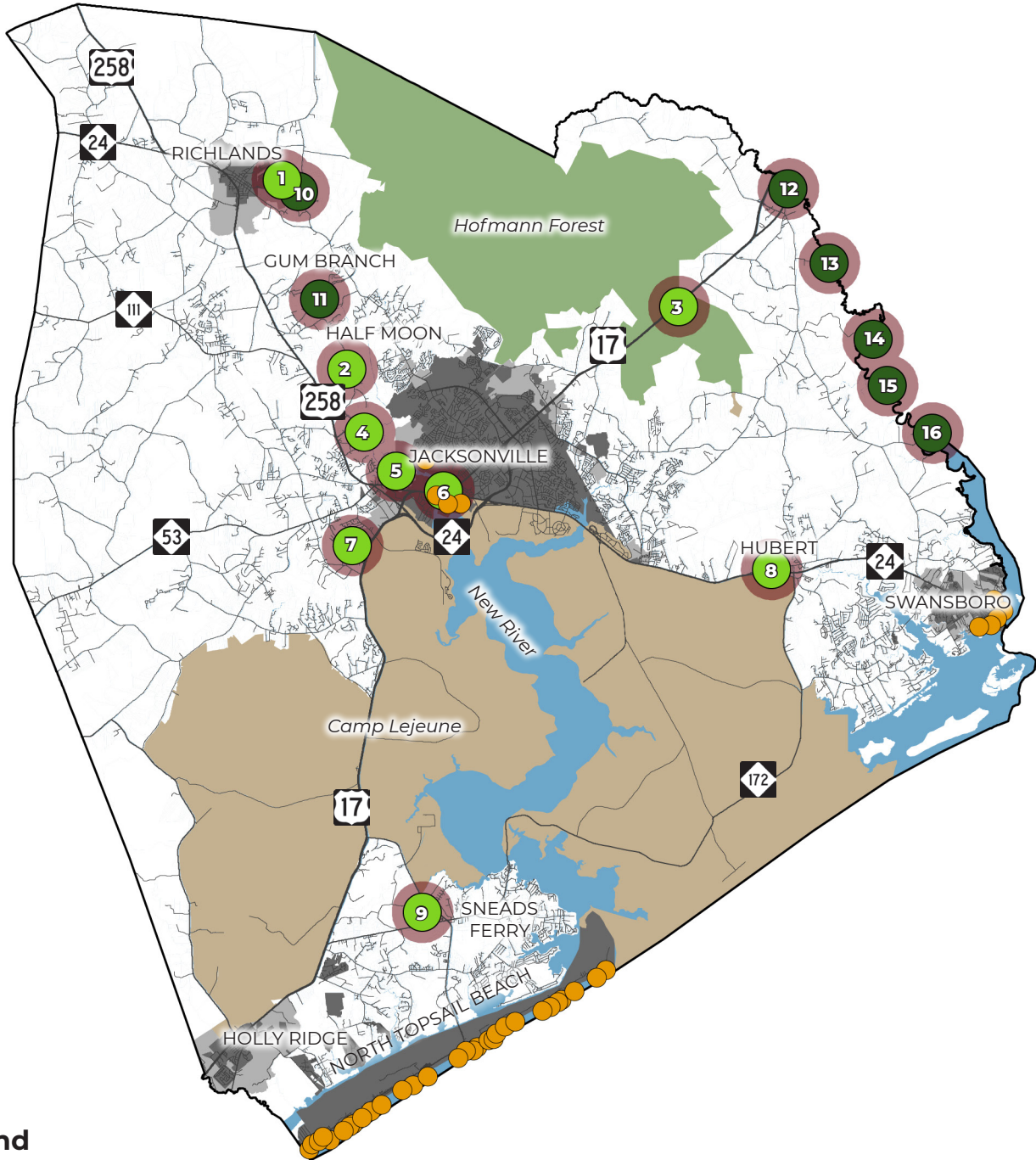
In addition to the parks and recreation facilities listed above, there is a special use facility for paddling in Onslow County.

- Paddle Trails: Cow Horn/ New River Paddling Trail and the White Oak River Paddling Trail

Beach Access Sites

Onslow County operates four public beach access sites with free parking and 13 public beach crosswalks to help safely bring visitors to the beach.

» PARKS AND RECREATION FACILITIES



Legend

- | | | | | | | | |
|--|---------------------|--|----------------------|--|------------------------------|--|----------------------------------|
| | Onslow County | | 1 Mile Access Buffer | | 4 Big Branch Bike | | 10 Natural Area |
| | Water | | Park | | 5 Oakhurst Nature | | 11 New River Richlands & Steed |
| | Cities | | 1 Richlands Steed | | 6 New River Waterfront | | 12 Henry McAllister Landing |
| | Parking Lot | | 2 Hines Farm | | 7 Onslow Pines | | 13 White Oak Campground Landing |
| | Public Beach Access | | 3 Deppe | | 8 Hubert Bypass | | 14 White Oak Dixon Field Landing |
| | | | 9 Stump Sound | | 15 White Oak Haywood Landing | | 16 White Oak River Long Point |



Source: Onslow County (2022)

FACILITIES OWNED BY OTHER GOVERNMENT ENTITIES

SCHOOL RECREATIONAL FACILITIES

1 Baseball Field
6 Basketball Courts
7 Cheer Programs
5 School Summer Programs

29 MUNICIPAL OWNED PARKS

Holley Ridge- 2
Richlands- 1
North Topsail Beach- 1
Sneads Ferry- 1
Jacksonville- 15
Swansboro- 8

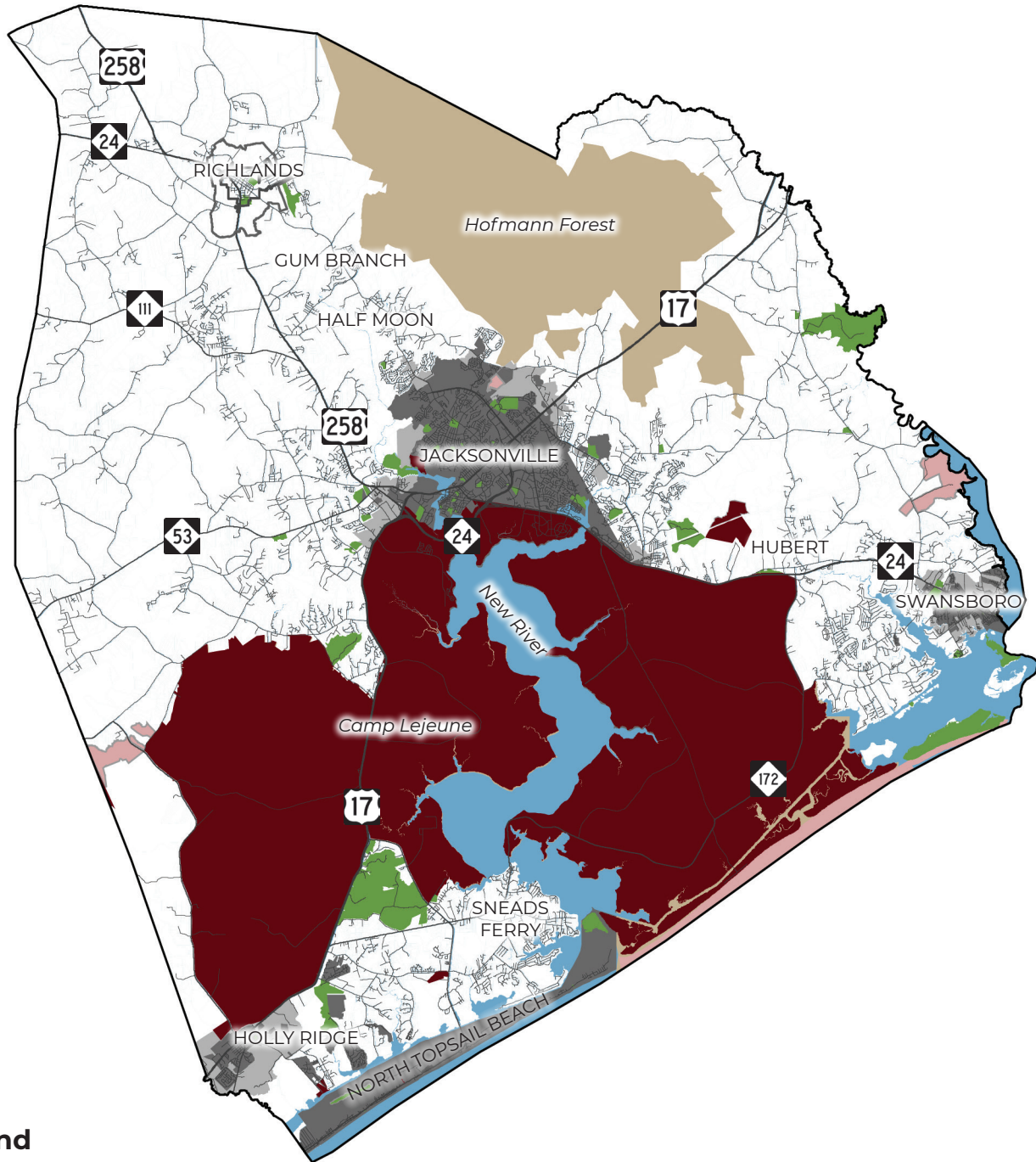
NATIONAL AND STATE FACILITIES

Camp Lejeune Marine Base Facilities
Croatan National Forest
Hammocks Beach State Park

Public Land and Water Access

There are a number of public water access natural resource sites in Onslow County, as shown in the map on the following page. While the New River is an exceptional resource, much of the access associated with it is closed, due to the presence of Camp Lejeune. However, there is open access to the New River where it meets the coast, just northeast of Sneads Ferry. Much of the coastline is open access, and there are a number of other open access areas, as shown in green. There are also a few limited access areas, shown in pink.

» PUBLIC ACCESS



Legend

- Onslow County
- Water
- Cities
- Roads
- Federal Areas
- Closed Access
- Restricted Access
- Open Access



Source: USGS (2022)

Water Service

The Onslow Water and Sewer Authority (ONWASA) is the primary water provider in the County outside of the City of Jacksonville. The organization is not directly affiliated with the County government, though they do have a close working relationship. ONWASA's water service areas and lines are shown on the following page.

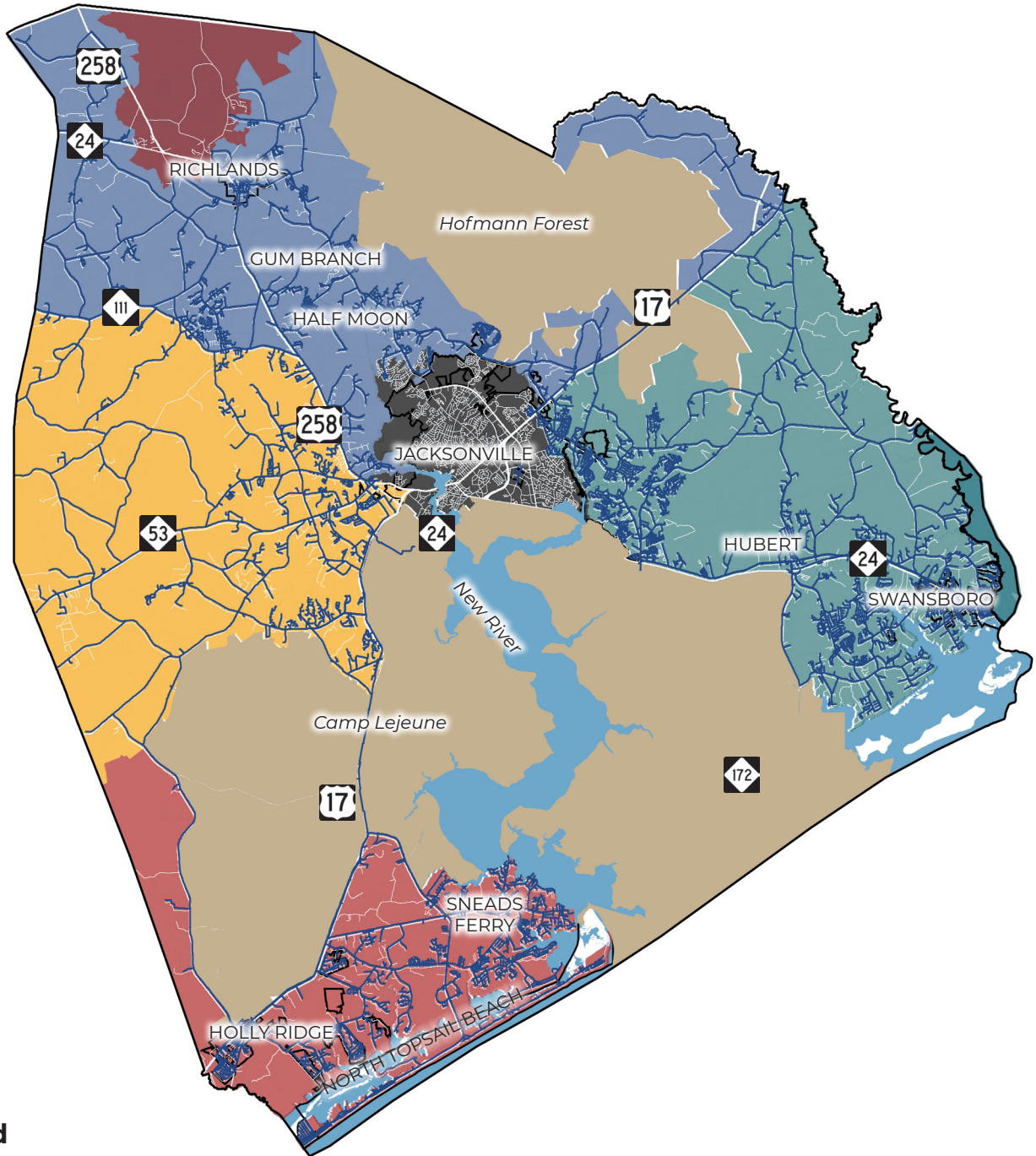
Annually, the Authority pumps 3,446,389,792 gallons of water and stores 16,050,000 gallons of water in clear wells and tanks and 14,417,037 gallons of water in underground pipes. ONWASA serves approximately 148,000 individual customers with 1,233 miles of water mains in a 445 square miles services area.

The City of Jacksonville maintains its own water distribution system, as does Camp Lejeune. Another private water utility, Northwest Onslow Water Associates provides water to a small service area north of Richlands, labeled as Northwest Water on the water service map.




Wastewater Service







ONWASA is also the primary wastewater (sewer) provider in the County outside of the City of Jacksonville. The Authority owns and maintains 192 miles of wastewater mains and treats 372,330,443 gallons of wastewater each year. Treatment facilities include the Holly Ridge Wastewater Treatment Plant, the Northwest Regional Water Reclamation Facility, the Summerhouse Wastewater Reclamation Facility. Some wastewater from the ONWASA collection systems is also treated by the City of Jacksonville and onboard Camp Lejeune at the French Creek WWTP.

The City of Jacksonville and the Town of Swansboro operate their own wastewater treatment systems, as does Camp Lejeune.

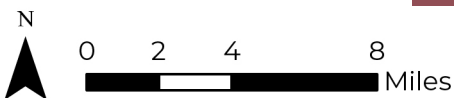


Legend

-  Onslow County
-  Water
-  Cities

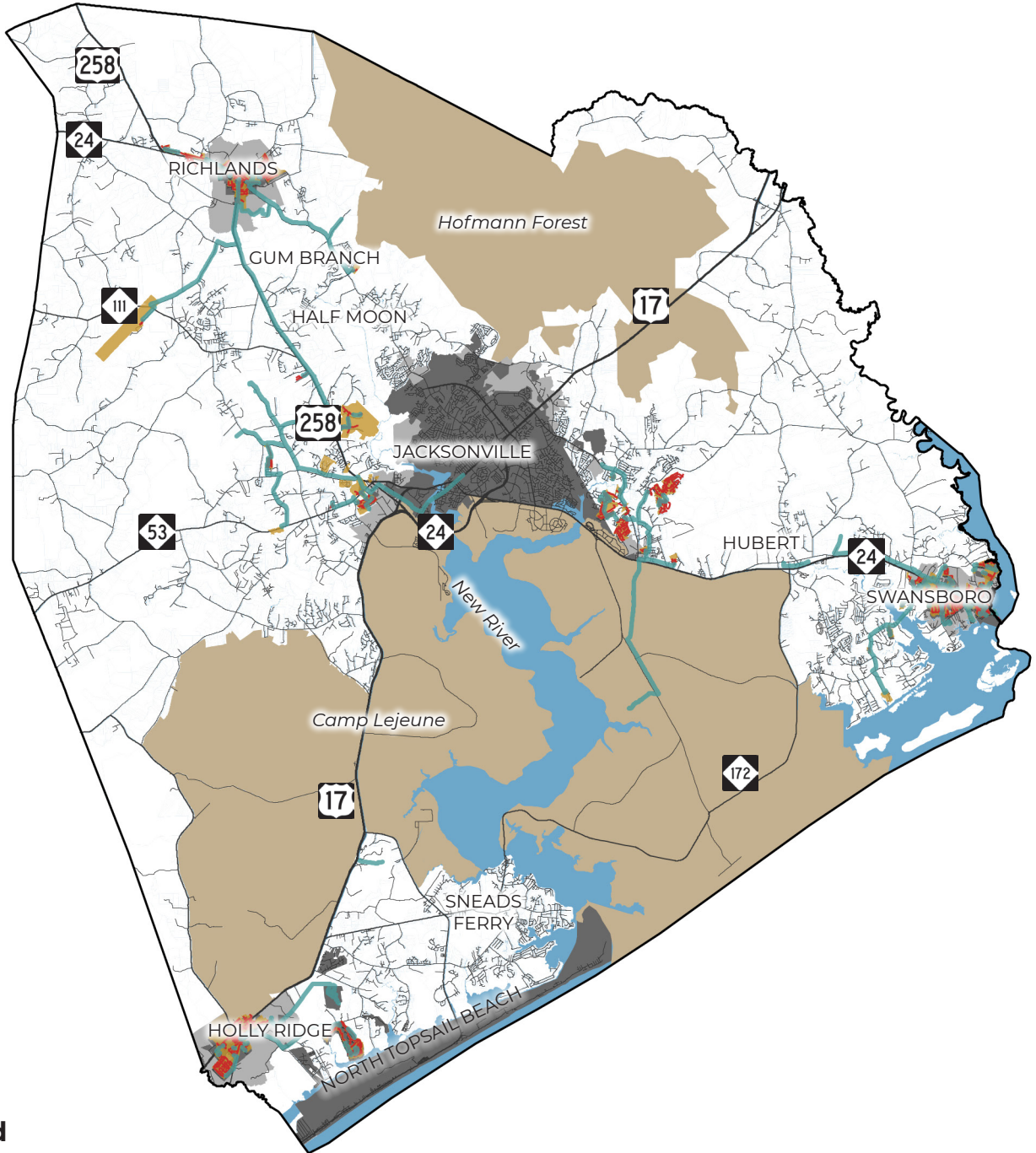
- Water Service Areas**
-  ONWASA- South
 -  ONWASA- Northwest
 -  ONWASA- Southwest
 -  ONWASA- Southeast
 -  Jacksonville Private System
 -  Northwest Water

 ONWASA Water Lines



Source: ONWASA (2022)

» SEWER SERVICE



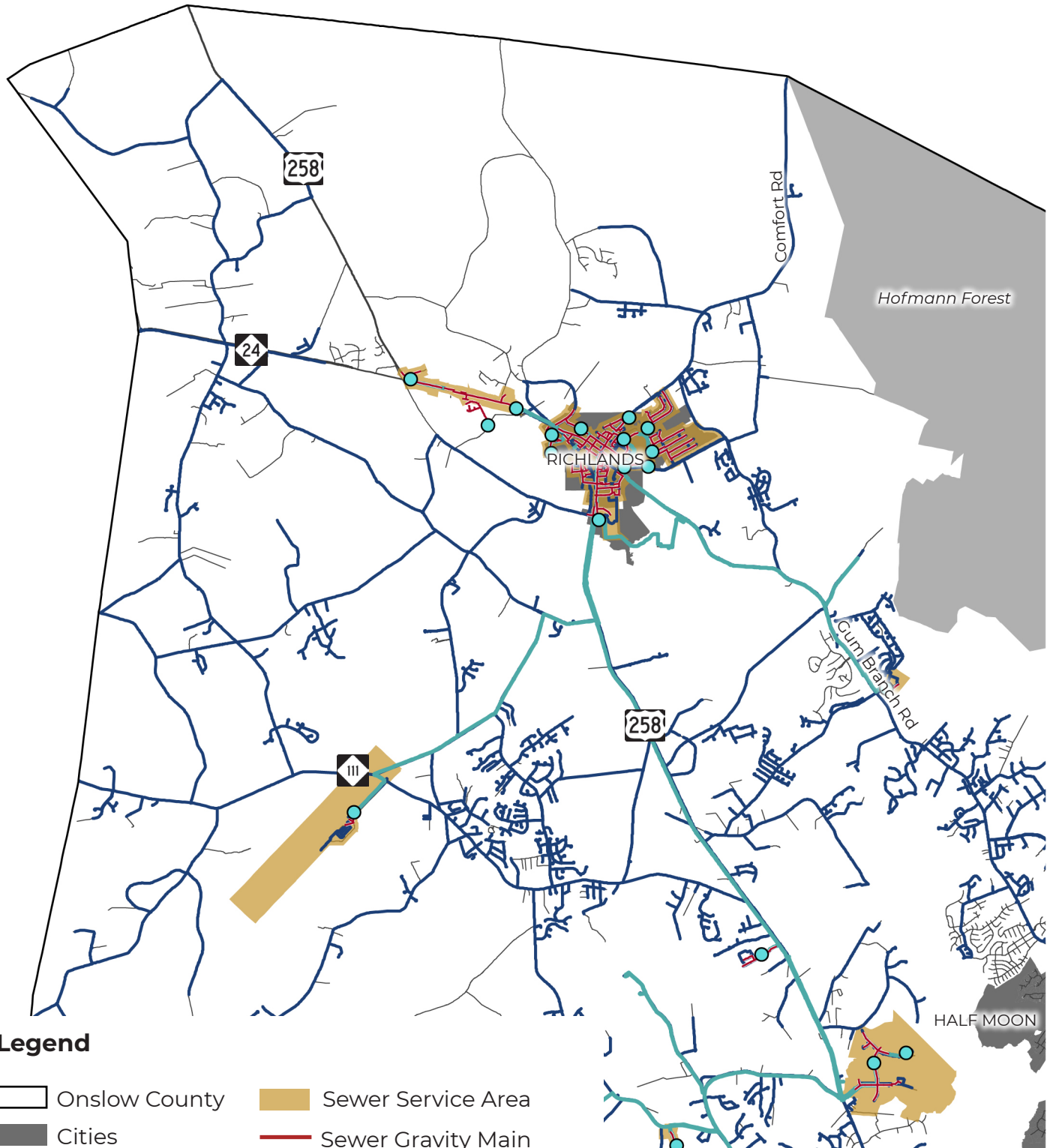
Legend

- Onslow County
- Water
- Cities
- Sewer Service Areas
- Gravity Main
- Force Main
- Lift Stations



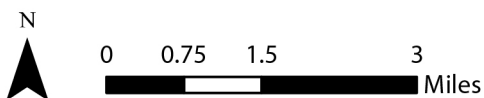
Source: ONWSA (2022)

» NORTHWEST REGION - WATER AND SEWER SERVICE



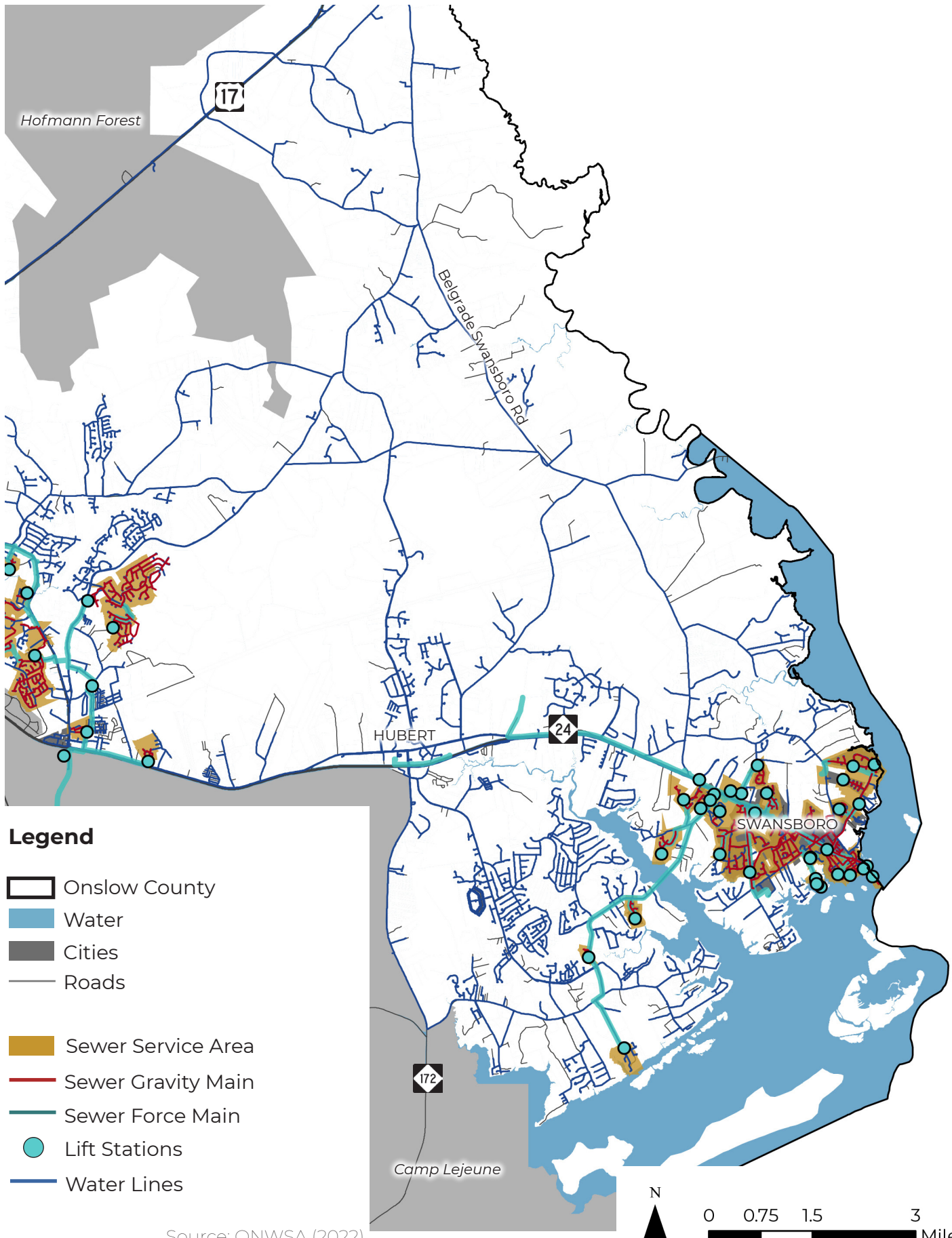
Legend

- Onslow County
- Cities
- Roads
- Sewer Service Area
- Sewer Gravity Main
- Sewer Force Main
- Lift Stations
- Water Lines



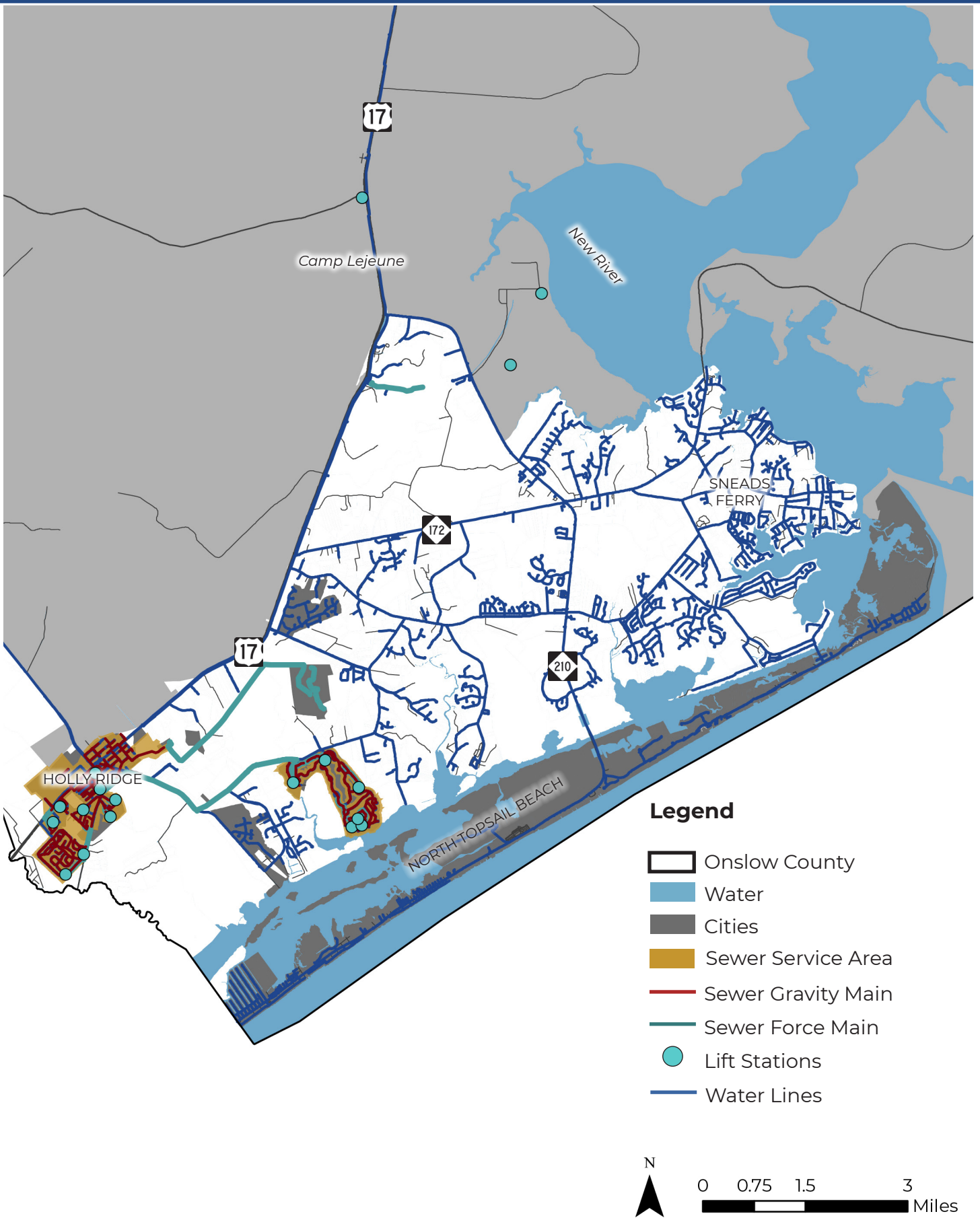
Source: ONWSA (2022)

» EAST REGION - WATER AND SEWER SERVICE



Source: ONWSA (2022)

» SOUTH REGION - WATER AND SEWER SERVICE



Source: ONWSA (2022)

Stormwater Infrastructure

The North Carolina Department of Environmental Quality (NCDEQ) requires that stormwater permits be issued for certain development sites in certain locations of the County. In fact, all subdivisions which meet certain criteria are subject to the NCDEQ Coastal Stormwater Rules. The County requires that all State stormwater permits be submitted through the development process. If stormwater management facilities are installed, the County requires that a property owners association be established with a declaration of covenants that provides for the funding of their perpetual operation and maintenance. The City of Jacksonville has its own stormwater management system.

Wellhead Protection Areas: A wellhead protection area is a surface and subsurface land area regulated to prevent contamination of a well or well-field supplying a public water system. The State of North Carolina oversees wellhead protection areas, though they were established under the federal Safe Drinking Water Act. As of December 6, 2022, there are two approved wellhead protection plans in Onslow County. This includes the

- Lauradale S/D, Plan number 139; Owned by the Scientific Water and Sewer Corp; 8/28/2014 (3 wells)
- Onslow Water and Sewer Authority; Plan Number 91; Owned by Onslow Water and Sewer Authority; 9/12/2005 (21 wells)

While wellhead protection plans are not required in the State of North Carolina, they are recommended as a tool to reduce the susceptibility of wells to contaminants.

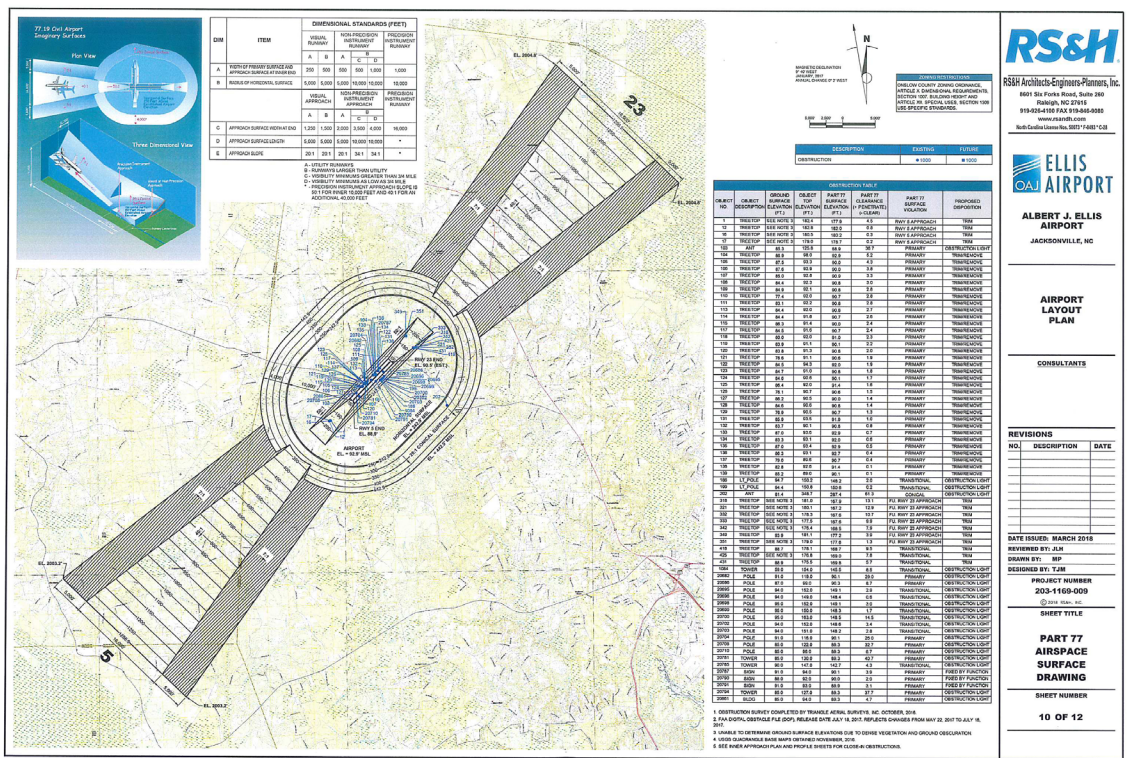
Albert J. Ellis Airport (OAJ)

Onslow County owns and operates the Albert J. Ellis airport in northwestern Onslow County between Richlands and Beulaville. The airport covers an area of 775 acres, and has a single asphalt paved runway (5/23) that is 7,100 feet long and 150 feet wide. The airport originally opened in February of 1971, and is served by two commercial airlines, Delta and American, with service to hubs in Atlanta and Charlotte, respectively. The passenger terminal, which opened in 2015 contains 67,000 square feet of floor area, and has three gates with jet bridges. An air traffic control tower was completed in 2018, and plans are underway to lengthen the runway to 8,000 feet.

With its proximity to MCAS New River and MCAS Cherry Point and relatively low civilian usage, the airport is frequently used by military aircraft for training. This additional capacity provides significant advantages to the Marine Corps aviation units in the region by extending the availability of training opportunities for pilots.

The County is actively working to leverage airport improvements to attract aviation related industries, particularly in the logistics field. The Airport is governed by the County Commission, and assisted by the Airport Advisory Commission, which serves in an advisory capacity to both the County Commissioners and the Airport Director.

There is not currently an airport zoning district in place to protect the local flight area around the airport from potential hazards or to preclude incompatible development around the airport, although such measures have been explored in the past.



Albert J. Ellis Airport Imaginary Surface (aviation obstruction safety) Diagram

IMPLEMENTATION PLAN



 **NSLOW**
HORIZON 2040
COMPREHENSIVE PLAN



Overview

The development of this Plan, and the intentions for the future of Onslow County are guided by an overarching vision, which describes the primary interest of the County. Within this vision are a series of planning themes, which are the community concerns and aspirations that came out of the initial planning process. These planning themes helped to direct the development of the vision, goals, and implementation strategies.

The goals and implementation strategies, as well as the future land use map, are intended to support both Onslow County's and the Coastal Area Management Act's goals. While all of the recommendations in this section of the Plan are intended to guide the development and use of land in the planning jurisdiction in a manner that achieves its goals for the community, those which are specific to the goals of CAMA are identified. Policies affecting areas of environmental concern (AECs) shall also be used in making CAMA permit decisions. The vision, planning themes (community concerns and aspirations), goals, and implementation strategies are all included in this section of the Plan. How they are organized is illustrated below.



Implementation Framework

VISION AND PLAN THEMES

The development of this Plan, and the intentions for the future of Onslow County are guided by an overarching vision, which describes the primary interest of the County. The vision for the future of the County is described as follows:

Onslow County will grow as a balanced community, respecting its natural resources, coastal heritage, rural culture, positive military influence, and diversified economy to create a community of choice in Coastal North Carolina.

The County's future will be guided by a collaborative effort of its citizens, businesses, local governments, military leaders, and service providers.

The vision for this Plan is the primary director of all recommendations. Beneath this vision is a set of themes, as mentioned on the previous page. The primary themes which fall underneath this vision can be briefly described as:



GOALS, OBJECTIVES, AND STRATEGIES

The goals of this Plan are guided by a set of related objectives; many of which tie directly to the plan themes identified on the previous page. The goals and objectives are a combination of those directly required by the Coastal Area Management Act (CAMA) and those identified as part of this planning process. Asterisks indicate those goals and objectives which are required by CAMA.

PLAN GOAL 1: LAND USE COMPATIBILITY*

Objective 1.1: Characterize future land use and development patterns; and establish mitigation criteria and concepts to minimize conflicts.*

- **Strategy:** Utilize the future land use map when considering any major development proposal, rezoning, or similar application for a change of land use or development.
- **Strategy:** Following the adoption of the plan, review the Official Zoning Map to identify areas of inconsistency with the Future Land Use Map and initiate administrative zoning map amendments, as appropriate.
- **Strategy:** Adopt airport compatibility zoning around Albert J. Ellis Airport and establish an overlay district that corresponds to the Part 77 Civil Imaginary Surfaces to prevent encroachment by tall structures that could pose a hazard to safe aerial navigation.

Objective 1.2: Proactively manage growth and guide new development to areas of the County with existing or planned infrastructure and services that have sufficient carrying capacity to minimize impacts to residents' quality of life.

- **Strategy:** Incorporate infrastructure and service impacts (transportation facilities, utilities, school capacity, police and fire protection, etc.) into the review of development proposals. Consider requiring minimum levels of service prior to plan approval.
- **Strategy:** Work with ONWASA, NCDOT, JUMPO, the Onslow County Board of Education, and other agencies to incorporate County growth plans into capital improvement plans.

Objective 1.3: Preserve the rural landscape through the protection of farms, forests, and other working lands, and by limiting suburban sprawl and large-scale development in rural areas through thoughtful growth management policies.

- **Strategy:** Consider implementing a “synthetic” Transfer of Development Rights program that would allow by-right residential density increases in designated growth areas in exchange for the dedication of permanent conservation easements in rural and agricultural areas.
- **Strategy:** Regulatory actions should protect existing agricultural and forestry operations from incompatible land uses.

- **Strategy:** Work with land trusts and the NC Department of Agriculture to help educate and encourage willing property owners to place working farms and timberland into conservation easements.
- **Strategy:** Work with the Agricultural Extension office to adopt the Enhanced Voluntary Agricultural District program to give farmers additional protection from potentially incompatible development.
- **Strategy:** Mandate the use of conservation subdivision design and increase minimum lot sizes in a manner that corresponds to the recommendations for the Agriculture and Forestry designated areas in the Future Land Use Map.
- **Strategy:** Adopt a Working Waterfront zoning overlay district for application to lands along estuarine shorelines to protect and encourage the ongoing use of these lands for traditional purposes.

Objective 1.4 Protect land, sea, and airspace that is critical to military training and operations from incompatible growth to ensure the long term sustainment of existing missions and the ability to accommodate future changes in mission and training requirements.

- **Strategy:** Establish the Military Coordination Overlay that is currently reserved within the Zoning Ordinance to ensure that statutorily mandated coordination is taking place within the designated 5-mile area.
- **Strategy:** Review and strengthen the Flight Path Overlay to align more closely with the land use and development standards needed to ensure that development within low level military aviation corridors is compatible with the assessed degree of risk.
- **Strategy:** Consider requiring military compatibility plat and deed disclosures in areas subject to military training and operational impacts, such as low level flight areas and areas subject to high noise exposure. Encourage engagement activities which enhance the level of community involvement and awareness of military community issues.
- **Strategy:** Work with Marine Corps Installations East and local land trust partners to identify and acquire land and conservation easements through the REPI program to help maintain compatibility in areas adjacent to critical military training areas.

Objective 1.5 Develop more detailed growth plans for portions of the County that are experiencing significant growth pressure.

- **Strategy:** Develop small area plans for areas encompassing lands classified as Urban Growth and Suburban Growth areas on the Future Land Use Map, as well as for the Waterside Community land use classification areas.
- **Strategy:** Implement the recommended detailed land use strategies and work to develop capital improvements to address deficiencies in transportation infrastructure and community facilities identified in the small area plans.

PLAN GOAL 2: INFRASTRUCTURE CARRYING CAPACITY*

Objective 2.1: Establish service criteria and ensure improvements minimize impacts to AECs and other fragile areas.*

- **Strategy:** Consult the map of AECs in this Plan when considering any development, special use permit, or rezoning proposal. Do not permit development which would negatively impact these sensitive environmental areas.
- **Strategy:** Continue to work with ONWASA and other utility providers to ensure that utility extension plans do not negatively impact environmentally sensitive areas. Water and sewer services should be concentrated within targeted service areas, where development densities make the provision of services economically efficient.

Objective 2.2: Provide high quality, efficient, and cost-effective services that meet the needs of all residents.

- **Strategy:** As development continues, assess the ability of County services to meet the needs of residents and businesses. Continually improve and expand services to enhance quality of life.
- **Strategy:** Work with external service providers and municipalities to ensure that those services outside of the County's immediate control meet the needs of residents and businesses. Particular attention should be given to improving and expanding fire protection, emergency management, and sheriff protection.
- **Strategy:** Local area requirements for solid waste collection and disposal shall continue to be anticipated through advanced, cooperative planning between the County, its municipalities, and area service providers. The County shall continue to pursue a variety of waste reduction strategies, including waste prevention, source reduction, recycling, reuse, and educational programs.
- **Strategy:** Support maintaining an effective signage and addressing system for all streets, roads, and highways.

Objective 2.3: Work with NCDOT and JUMPO to plan for, prioritize, acquire funding, and implement improvements to the local and regional transportation network. Establish criteria to mitigate the impacts of growth and build a safe and efficient network that supports economic development and mitigates increasing travel demand.

- **Strategy:** Work with NCDOT and JUMPO to prioritize the completion of enhancements to the NC-24 corridor from Jacksonville to Interstate 40.
- **Strategy:** Consider establishing a dedicated source of recurring funds for participation (local match) in critical safety and operational improvement projects.

- **Strategy:** Use traffic impact analyses to determine the proper improvements necessary to roadway infrastructure to accommodate new development.
- **Strategy:** Continue to integrate transportation planning with land use planning to ensure that proposed transportation improvements safely and compatibly meet demands from planned development.

Objective 2.4: Coordinate with the Onslow County School District to address educational needs throughout the County.

- **Strategy:** Work with the Onslow County Board of Education to address existing and projected school capacity issues. Identify opportunities to require the development of additional school facilities and prioritize funding for school improvements.
- **Strategy:** Ensure that the Onslow County Board of Education is involved in the development review process to assist with coordination on school capacity issues.
- **Strategy:** Support advanced planning for the location of new public schools. Such locations shall serve to reinforce compact growth rather than promoting sprawl in more rural locations. New elementary school locations shall be viewed as a cornerstone of the neighborhoods they are intended to service.
- **Strategy:** Encourage offers of land for the siting of new schools, particularly in conjunction with new development. Acceptance of such properties shall be based on approved criteria and cooperative planning with the County school administration.
- **Strategy:** Support site planning for traffic management and safety in the vicinity of public schools.
- **Strategy:** Support the mission of Coastal Carolina Community College in meeting the educational and job readiness requirements of area residents.
- **Strategy:** Support the efforts of the County Library System in fostering the development of a literate and well-informed resident population.

PLAN GOAL 3: NATURAL HAZARD AREAS*

Objective 3.1: Establish mitigation and adaptation concepts and criteria for development and redevelopment; minimize threats to life, property, and natural resources resulting from erosion, high winds, storm surge, flooding, or other natural hazards; and exceed standards established in Subchapter 7H.*

- **Strategy:** Review and improve development standards for properties within floodplains, along the coast, and in other likely hazard areas.
- **Strategy:** Consider requiring the delineation of Category 1-3 inundation areas on proposed subdivision plats, as identified in the NOAA storm surge model (SLOSH).
- **Strategy:** Only residential, commercial, and industrial development which meets 15A NCAC 7H use standards will be allowed in estuarine shoreline, estuarine water, and public trust areas.
- **Strategy:** Support coordinated efforts to preserve and protect the ecological and flood hazard benefits of freshwater wetlands, as protected under Section 404 of the Clean Water Act.

Objective 3.2: Ensure that the County is actively working to improve its ability to identify, mitigate, respond to, and recover from both natural and man-made hazards through the enactment of policies and development of institutional capacity that builds community resilience.

- **Strategy:** Implement the recommendations of the 2021 Southeastern North Carolina Regional Hazard Mitigation Plan.
- **Strategy:** Support beach municipalities in maintenance / protection of beaches, as well as shorelines under County jurisdiction, as a valuable natural resource.
- **Strategy:** Support reducing soil erosion, runoff, and sedimentation.
- **Strategy:** Support the provision of safe evacuation routes.

PLAN GOAL 4: WATER QUALITY*

Objective 4.1: Establish strategies and practices to prevent or control nonpoint source pollution and establish strategies and practices to maintain or improve water quality.*

- **Strategy:** Work with Marine Corps Installations East and other federal and state partners to monitor nonpoint source pollution that impacts the New River and estuarine waters. Work to reduce these impacts and develop mitigation strategies.
- **Strategy:** Support efforts to maintain and enhance the fishery waters, including water quality protection measures, nursery and habitat preservation, proper fisheries management and enforcement, aquaculture development, and artificial reef activities.

Objective 4.2: Protect the natural environment through policies and incentives that direct development away from environmentally sensitive areas.

- **Strategy:** Consult the map of AECs in this Plan when considering any development or rezoning proposal. Do not permit development which would negatively impact these sensitive environmental areas.
- **Strategy:** Continue to work with ONWASA and other utility providers to ensure that utility extension plans do not negatively impact environmental areas.
- **Strategy:** Consider amending the Subdivision Ordinance to require that all flood-ways, wetlands, and similar sensitive areas be maintained as common open space and not included within private lots.
- **Strategy:** Support efforts to maintain and enhance public and private gamelands, including habitat protection and management, and the proper management of hunting clubs and hunting activities.
- **Strategy:** Avoid undertaking any activity or approving any activity that would destroy remaining habitat for loggerhead turtle nesting.
- **Strategy:** Encourage initiatives at the local, state, or federal government level to manage barrier islands and related environmentally sensitive areas for the benefits of all.
- **Strategy:** Prevent irreparable harm to the long-term viability of valuable natural heritage sites in the County. If development should need to occur on these sites, seek to incorporate aspects which preserve and protect natural features.
- **Strategy:** Support forestation to maintain key wildlife species. Support commercial forestry activities, provided adverse impacts on natural resources systems are mitigated.
- **Strategy:** Mining activities that would jeopardize the short- or long-term viability of valuable natural resources or create hazardous conditions shall not be permitted.

PLAN GOAL 5: QUALITY OF LIFE

Objective 5.1: Work with regional partners and the development community to increase the availability of attainable housing in the County, particularly in close proximity to major employment centers.

- **Strategy:** Ensure that the County's development regulations do not unnecessarily constrain the development of new housing within designated Urban Growth areas.

Objective 5.2: Guide the expansion and improvement of services, community assets, and infrastructure that improves quality of life for Onslow County residents.

- **Strategy:** Continue to evaluate and improve the services offered by the County and its partners to ensure that it is meeting the demands of residents and businesses.
- **Strategy:** Support efforts to provide greater choice and lower airfares at Albert Ellis Airport, thereby increasing passenger volume and enhancing opportunities for continued improvements at the airport. Encourage ongoing efforts to improve roadway access to the airport.

Objective 5.3: Continue to work with constituent local governments, service providers, federal and state agencies, the military, and other partners to ensure adequate coordination on growth, community services, and other matters of mutual interest.

- **Strategy:** Ensure that ONWASA, NCDOT, and other agencies are included in the development review process.
- **Strategy:** Work with MCI-East, the City of Jacksonville, JUMPO, and other entities to identify opportunities for developing projects under the Defense Community Infrastructure Program and Defense Access Roads funding programs.

Objective 5.4: Work with local and state economic development entities to expand the availability of high-quality jobs and broaden the County's economic base.

- **Strategy:** Encourage the creation of employment centers by coordination with local and state economic development entities.
- **Strategy:** Work to develop new commerce parks in areas identified for economic development purposes on the Future Land Use Map. Consider proactively zoning these areas for that purpose.

Objective 5.5: Address access needs and opportunities, identify strategies to develop public access, and address provisions for all segments of the community (including persons with disabilities).*

- **Strategy:** Once completed, work to implement the recommendations of the Onslow County Parks and Recreation Master Plan. Ensure that improvements incorporate the needs of persons with disabilities.
- **Strategy:** Require all new development to provide adequate open space and recreation areas, including shoreline access, in proportion to the demand created by the development. This may be determined according to the number of dwelling units or the total acreage in the development.
- **Strategy:** Provide for the distribution of recreation and open space opportunities throughout the County.

Objective 5.6: Encourage and support efforts to protect cultural and historic resources.

- **Strategy:** Support the preservation of historic sites, buildings, written records, and oral history.
- **Strategy:** Support local, state, and federal efforts to protect historic properties within the County and to perpetuate its cultural heritage.
- **Strategy:** Encourage the development of the tourism and educational potential of the area's architectural, historic, and cultural resources.

PLAN GOAL 6: HIGH QUALITY DEVELOPMENT

Objective 6.1: Promote a broad range of housing types, styles, locations, price points, and amenities.

- **Strategy:** Encourage residential development to occur at densities appropriate for their location. Location factors that impact density include environmentally sensitive areas, sewage treatment available to the site, the capacity of water services, the capacity of public schools serving the site, and the proximity of the site to essential services.
- **Strategy:** Protect and rehabilitate existing neighborhoods, ensuring adequate housing that meets or exceeds minimum standards for health, safety, and welfare.
- **Strategy:** Encourage flexible land planning and development practices to create neighborhoods which better safeguard land, water, energy, and historic resources. Prioritize the location of residential developments with an emphasis on convenience to town or core-based services.
- **Strategy:** Encourage all residential development to accommodate / provide adequate infrastructure. New residential developments shall provide for the installation of paved public roadway and associated drainage infrastructure at the time of development.
- **Strategy:** Seek to accommodate the development and appropriate placement of a variety of housing types, including site-built homes, apartments, townhouses, accessory dwelling units, and manufactured homes.
- **Strategy:** Discourage residential strip development along primary roads. Flag lots shall not be permitted along primary roads unless justified by unusual or unforeseeable parcel or topographic constraints.
- **Strategy:** Support increasing usable open space in major subdivisions.
- **Strategy:** Do not support access to higher intensity development through an area of lower intensity development. For example, access to a multi-family development, major park facility, or other large traffic generator should not be permitted through a single-family residential neighborhood.

Objective 6.2: Ensure a wide range of commercial activities are available in appropriate locations throughout the County.

- **Strategy:** Support the preservation of commercial fishing access sites and the protection of commercial fishing activities and operations.
- **Strategy:** Water-dependent commercial uses should be allowed in areas of environmental concern, so long as they are consistent with State regulations.
- **Strategy:** Support a wide range of commercial development, so long as commercial activity occurs in nodes at major intersections (of a collector street or secondary street with a street of equal or greater size), rather than in strip commercialization along highways. Commercial and office development shall be encouraged to be located in mixed-use shopping centers and office parks to minimize strip development.
- **Strategy:** Encourage highway beautification and landscaping of commercial areas. Require attractive, environmentally beneficial landscaping by new commercial or office development, and in the rehabilitation and upgrading of existing developments.
- **Strategy:** Existing strip development shall be reduced and development standards should be more restrictive when redevelopment opportunities permit.
- **Strategy:** Support commercial forestry activities, provided significant adverse impacts on natural resource systems are fully mitigated. Such activities should be considered in accordance with the standards and recommendations of the US Forest Service. The County also advocates the voluntary participation of commercial forestry interests in the State of North Carolina's best management practice program for forestry management.

Objective 6.3: Encourage industrial and economic development in appropriate locations.

- **Strategy:** Support the recruitment and siting of environmentally compatible industrial uses in areas that are already similarly developed or in mixed-use industrial parks to minimize the sacrifice of prime agricultural lands for such development.
- **Strategy:** Industrial development shall not be located in areas that would diminish the desirability of existing and planned non-industrial areas, nor shall incompatible non-industrial uses be allowed to encroach upon existing or planned industrial sites.
- **Strategy:** Warehousing, storage, and distribution facilities shall have access to appropriate thoroughfares and shall be visibly buffered according to their location. Heavy industry should be separated from incompatible, non-industrial areas by natural or man-made features such as green belts, major transportation facilities, transitional land uses, and other suitable means.
- **Strategy:** Protected lands and natural heritage areas should be protected from negative impacts resulting from industrial development.
- **Strategy:** Support the reuse of existing and abandoned commercial and industrial sites in lieu of developing on valuable open land / undeveloped areas.
- **Strategy:** Encourage new and expanding industries and businesses which diversify the local economy, train and utilize a more highly skilled labor force, and increase per capita income.
- **Strategy:** Promote coordination of economic development resources among various local institutional agencies and seek regional cooperation and interaction among areas with shared economic interests.
- **Strategy:** Support a pro-business / pro-growth attitude, balanced by a concern for preserving the natural assets and quality of life factors that make the area attractive to visitors and permanent residents alike.

Tools for Managing Development

COMPREHENSIVE PLAN

The Comprehensive Plan is not a regulatory document, like the codes and ordinances described below. However, the Plan establishes the community vision, guides the implementation of major projects, and allocates resources. The Plan is implemented through code enforcement, infrastructure and redevelopment projects, and new private development. It should be consulted prior to any decision being made by Onslow County staff, Planning Board, and / or Board of Commissioners concerning land use and development. Specifically, the State of North Carolina requires that the Planning Board and Board of Commissioners consult the Comprehensive Plan every time a major development or rezoning is considered.

CODES AND ORDINANCES

The Onslow County Zoning Ordinance establishes standards for the orderly growth and development of Onslow County. The Ordinance includes provisions for building setbacks, buffer requirements, building height limits, density, and similar land use policies. The County also utilizes a Subdivision Ordinance to establish procedures and standards for the development and subdivision of land within the County's territory. The Minimum Housing Ordinance establishes standards that protect the health, safety, and welfare of residents by ensuring that rental properties are maintained in a safe and habitable condition. The County's Flood Damage Prevention Ordinance establishes standards to minimize public and private losses due to flood conditions within the flood-prone areas of the County. The final ordinance is the Solid Waste Management Ordinance, which regulates the storage, collection, and disposal of solid waste in the County. North Carolina also has mandatory statewide code enforcement, requiring structures meet State Building Code standards.

OTHER PLANS

In response to increased growth pressures, Onslow County and the Jacksonville Urban Area Metropolitan Planning Organization partnered with the Sneads Ferry community to develop a small area plan, the Sneads Ferry Community Plan, which developed a community vision tied to land use recommendations. Though not regulatory, this plan should also be consulted when considering development in the Sneads Ferry community.

Implementation Schedule

The implementation tables which follow provide more direction on the objectives and strategies in the previous section. There is a separate table for each goal, with objectives and strategies outlined in relation to the CAMA objectives and timeframes.

PLAN GOAL 1: LAND USE COMPATIBILITY*

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
Objective 1.1: Characterize future land use and development patterns; and establish mitigation criteria and concepts to minimize conflicts.*		
Strategy: Utilize the future land use map when considering any major development proposal, rezoning, or similar application for a change of land use or development.	LAND USE COMPATIBILITY	ONGOING
Strategy: Following the adoption of the plan, review the Official Zoning Map to identify areas of inconsistency with the Future Land Use Map and initiate administrative zoning map amendments, as appropriate.	LAND USE COMPATIBILITY	FY 2025
Strategy: Adopt airport compatibility zoning around Albert J. Ellis Airport, establish an overlay district that corresponds to the Part 77 Civil Imaginary Surfaces to prevent encroachment by tall structures that could pose a hazard to safe aerial navigation.	LAND USE COMPATIBILITY	FY 2026
Objective 1.2: Proactively manage growth and guide new development to areas of the County with existing or planned infrastructure and services that have sufficient carrying capacity to minimize impacts to residents' quality of life.		
Strategy: Incorporate infrastructure and service impacts (transportation facilities, utilities, school capacity, police and fire protection, etc.) into the review of development proposals. Consider requiring minimum levels of service prior to approval.	INFRASTRUCTURE CARRYING CAPACITY	FY 2026
Strategy: Work with ONWASA, NCDOT, JUMPO, the Onslow County Board of Education, and other agencies to incorporate County growth plans into capital improvement plans.	INFRASTRUCTURE CARRYING CAPACITY	ONGOING
Objective 1.3: Preserve the rural landscape through the protection of farms, forests, and other working lands, and by limiting suburban sprawl and large-scale development in rural areas through thoughtful growth management policies.		
Strategy: Consider implementing a “synthetic” Transfer of Development Rights program that would allow by-right residential density increases in designated growth areas in exchange for the dedication of permanent conservation easements in rural and agricultural areas.	LAND USE COMPATIBILITY	FY 2025 - 2026
Strategy: Regulatory actions should protect existing agricultural & forestry operations from incompatible land uses.	LAND USE COMPATIBILITY	ONGOING POLICY
Strategy: Work with land trusts and the NC Department of Agriculture to help educate and encourage willing property owners to place working farms and timberland into conservation easements.	LAND USE COMPATIBILITY	ONGOING

PLAN GOAL 1: LAND USE COMPATIBILITY* (Continued)

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
<p>Strategy: Work with the Agricultural Extension office to adopt the Enhanced Voluntary Agricultural District program to give farmers additional protection from potentially incompatible development.</p>	LAND USE COMPATIBILITY	FY 2028 - 2031
<p>Strategy: Mandate the use of conservation subdivision design and increase minimum lot sizes in a manner that corresponds to the recommendations for the Agriculture and Forestry designated areas in the Future Land Use Map.</p>	LAND USE COMPATIBILITY	FY 2025
<p>Strategy: Adopt a Working Waterfront zoning overlay district for application to lands along estuarine shorelines to protect and encourage the ongoing use of these lands for traditional purposes.</p>	LAND USE COMPATIBILITY	FY 2027 - 2028
<p>Objective 1.4 Protect land, sea, and airspace that is critical to military training and operations from incompatible growth to ensure the long term sustainment of existing missions and the ability to accommodate future changes in mission and training requirements.</p>		
<p>Strategy: Establish the Military Coordination Overlay that is currently reserved within the Zoning Ordinance to ensure that statutorily mandated coordination is taking place within the designated 5-mile area.</p>	LAND USE COMPATIBILITY	FY 2027
<p>Strategy: Review & strengthen the Flight Path Overlay to align more closely with the land use and development standards needed to ensure that development within low level military aviation corridors is compatible with the assessed degree of risk.</p>	LAND USE COMPATIBILITY	FY 2027
<p>Strategy: Consider requiring military compatibility plat and deed disclosures in areas subject to military training and operational impacts, such as low level flight areas and areas subject to high noise exposure. Encourage engagement activities which enhance the level of community involvement and awareness of military community issues.</p>	LAND USE COMPATIBILITY	FY 2028
<p>Strategy: Work with Marine Corps Installations East & local land trust partners to identify and acquire land and conservation easements through the REPI program to help maintain compatibility in areas adjacent to critical military training areas.</p>	LAND USE COMPATIBILITY	ONGOING
<p>Objective 1.5 Develop more detailed growth plans for portions of the County that are experiencing significant growth pressure.</p>		
<p>Strategy: Develop small area plans for areas encompassing lands classified as Urban Growth and Suburban Growth areas on the Future Land Use Map, as well as for the Waterside Community land use classification areas.</p>	LAND USE COMPATIBILITY	FY 2028 - 2035
<p>Strategy: Implement the recommended detailed land use strategies and work to develop capital improvements to address deficiencies in transportation infrastructure and community facilities identified in the small area plans.</p>	INFRASTRUCTURE CARRYING CAPACITY	FY 2028 - 2030

PLAN GOAL 2: INFRASTRUCTURE CARRYING CAPACITY*

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
<p>Objective 2.1: Establish service criteria and ensure improvements minimize impacts to AECs and other fragile areas.*</p>		
<p>Strategy: Consult the map of AECs in this Plan when considering any development, special use permit, or rezoning proposal. Do not permit development which would negatively impact these sensitive environmental areas.</p>	<p>NATURAL HAZARD AREAS</p>	<p>ONGOING POLICY</p>
<p>Strategy: Continue to work with ONWASA and other utility providers to ensure that utility extension plans do not negatively impact environmentally sensitive areas. Water and sewer services should be concentrated within targeted service areas, where development densities make the provision of services economically efficient.</p>	<p>NATURAL HAZARD AREAS</p>	<p>ONGOING</p>
<p>Objective 2.2: Provide high quality, efficient, and cost-effective services that meet the needs of all residents.</p>		
<p>Strategy: As development continues, assess the ability of County services to meet the needs of residents and businesses. Continually improve & expand services to enhance quality of life.</p>		<p>ONGOING</p>
<p>Strategy: Work with external service providers and municipalities to ensure that those services outside of the County's immediate control meet the needs of residents and businesses. Particular attention should be given to improving and expanding fire protection, emergency management, and sheriff protection.</p>	<p>INFRASTRUCTURE CARRYING CAPACITY</p>	<p>ONGOING</p>
<p>Strategy: Local area requirements for solid waste collection & disposal shall continue to be anticipated through advanced, cooperative planning between the County, municipalities, & area service providers. The County shall continue to pursue a variety of waste reduction strategies, including waste prevention, source reduction, recycling, reuse, & educational programs.</p>	<p>INFRASTRUCTURE CARRYING CAPACITY</p>	<p>ONGOING</p>
<p>Strategy: Support maintaining an effective signage and addressing system for all streets, roads, and highways.</p>		<p>ONGOING</p>
<p>Objective 2.3: Work with NCDOT and JUMPO to plan for, prioritize, acquire funding, and implement improvements to the local and regional transportation network. Establish criteria to mitigate the impacts of growth and build a safe and efficient network that supports economic development and mitigates increasing travel demand.</p>		
<p>Strategy: Work with NCDOT and JUMPO to prioritize the completion of enhancements to the NC-24 corridor from Jacksonville to Interstate 40.</p>	<p>INFRASTRUCTURE CARRYING CAPACITY</p>	<p>FY 2026 - 2030</p>
<p>Strategy: Consider establishing a dedicated source of recurring funds for participation (local match) in critical safety and operational improvement projects.</p>	<p>INFRASTRUCTURE CARRYING CAPACITY</p>	<p>FY 2028</p>

PLAN GOAL 2: INFRASTRUCTURE CARRYING CAPACITY* (Continued)

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
Strategy: Use traffic impact analyses to determine the proper improvements necessary to roadway infrastructure to accommodate new development.	INFRASTRUCTURE CARRYING CAPACITY	FY 2027
Strategy: Continue to integrate transportation planning with land use planning to ensure that proposed transportation improvements safely and compatibly meet demands from planned development.	INFRASTRUCTURE CARRYING CAPACITY	ONGOING POLICY
Objective 2.4: Coordinate with the Onslow County School District to address educational needs throughout the County.		
Strategy: Work with the Onslow County Board of Education to address existing and projected school capacity issues. Identify opportunities to require the development of additional school facilities and prioritize funding for school improvements.		ONGOING
Strategy: Ensure that the Onslow County Board of Education is involved in the development review process to assist with coordination on school capacity issues.		ONGOING POLICY
Strategy: Support advanced planning for the location of new public schools. Such locations shall serve to reinforce compact growth rather than promoting sprawl in more rural locations. New elementary school locations shall be viewed as a cornerstone of the neighborhoods they are intended to service.		ONGOING
Strategy: Encourage offers of land for the siting of new schools, particularly in conjunction with new development. Acceptance of such properties shall be based on approved criteria and cooperative planning with the County school administration.		ONGOING POLICY
Strategy: Support site planning for traffic management and safety in the vicinity of public schools.		ONGOING
Strategy: Support the efforts of the County Library System in fostering the development of a literate and well-informed resident population.		ONGOING

PLAN GOAL 3: NATURAL HAZARD AREAS*

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
<p>Objective 3.1: Establish mitigation and adaptation concepts and criteria for development and redevelopment; minimize threats to life, property, and natural resources resulting from erosion, high winds, storm surge, flooding, or other natural hazards; and exceed standards established in Subchapter 7H.*</p>		
<p>Strategy: Review and improve development standards for properties within floodplains, along the coast, and in other likely hazard areas.</p>	<p>NATURAL HAZARD AREAS</p>	<p>FY 2028</p>
<p>Strategy: Consider requiring the delineation of Category 1-3 inundation areas on proposed subdivision plats, as identified in the NOAA storm surge model (SLOSH).</p>	<p>NATURAL HAZARD AREAS</p>	<p>FY 2028</p>
<p>Strategy: Only residential, commercial, industrial development which meets 15A NCAC 7H use standards will be allowed in estuarine shoreline, estuarine water, and public trust areas.</p>	<p>NATURAL HAZARD AREAS, WATER QUALITY</p>	<p>ONGOING POLICY</p>
<p>Strategy: Support coordinated efforts to preserve and protect the ecological and flood hazard benefits of freshwater wetlands, as protected under Section 404 of the Clean Water Act.</p>	<p>NATURAL HAZARD AREAS, WATER QUALITY</p>	<p>ONGOING POLICY</p>
<p>Objective 3.2: Ensure that the County is actively working to improve its ability to identify, mitigate, respond to, and recover from both natural and man-made hazards through the enactment of policies and development of institutional capacity that builds community resilience.</p>		
<p>Strategy: Implement the recommendations of the 2021 Southeastern North Carolina Regional Hazard Mitigation Plan.</p>	<p>NATURAL HAZARD AREAS</p>	<p>ONGOING</p>
<p>Strategy: Support beach municipalities in maintenance / protection of beaches, as well as shorelines under County jurisdiction, as a valuable natural resource.</p>	<p>NATURAL HAZARD AREAS</p>	<p>ONGOING</p>
<p>Strategy: Support reducing soil erosion, runoff, and sedimentation.</p>	<p>NATURAL HAZARD AREAS</p>	<p>ONGOING POLICY</p>
<p>Strategy: Support the provision of safe evacuation routes.</p>	<p>NATURAL HAZARD AREAS</p>	<p>ONGOING</p>

PLAN GOAL 4: WATER QUALITY*

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
Objective 4.1: Establish strategies and practices to prevent or control nonpoint source pollution and establish strategies and practices to maintain or improve water quality.*		
Strategy: Work with Marine Corps Installations East and other federal and state partners to monitor nonpoint source pollution that impacts the New River and estuarine waters. Work to reduce these impacts and develop mitigation strategies.	WATER QUALITY	ONGOING
Strategy: Support efforts to maintain and enhance the fishery waters, including water quality protection measures, nursery and habitat preservation, proper fisheries management and enforcement, aquaculture development, artificial reef activities.	WATER QUALITY	ONGOING POLICY
Objective 4.2: Protect the natural environment through policies and incentives that direct development away from environmentally sensitive areas.		
Strategy: Consult the map of AECs in this Plan when considering any development or rezoning proposal. Do not permit development which would negatively impact these sensitive environmental areas.	NATURAL HAZARD AREAS, WATER QUALITY	ONGOING
Strategy: Continue to work with ONWASA and other utility providers to ensure that utility extension plans do not negatively impact environmental areas.	NATURAL HAZARD AREAS, WATER QUALITY	ONGOING
Strategy: Consider amending Subdivision Ordinance to require all flood-ways, wetlands, & similar sensitive areas be maintained as common open space and not included within private lots.	NATURAL HAZARD AREAS, WATER QUALITY	FY 2025
Strategy: Support efforts to maintain and enhance public and private gamelands, including habitat protection and management, and the proper management of hunting clubs and hunting activities.	NATURAL HAZARD AREAS	ONGOING
Strategy: Avoid undertaking any activity or approving any activity that would destroy remaining habitat for loggerhead turtle nesting.	NATURAL HAZARD AREAS	ONGOING POLICY
Strategy: Encourage initiatives at the local, state, or federal government level to manage barrier islands and related environmentally sensitive areas for the benefits of all.	NATURAL HAZARD AREAS, WATER QUALITY	ONGOING
Strategy: Prevent irreparable harm to the long-term viability of valuable natural heritage sites in the County. If development should need to occur on these sites, seek to incorporate aspects which preserve and protect natural features.	NATURAL HAZARD AREAS, WATER QUALITY	ONGOING
Strategy: Support forestation to maintain key wildlife species. Support commercial forestry activities, provided adverse impacts on natural resources systems are mitigated.	NATURAL HAZARD AREAS	ONGOING POLICY
Strategy: Mining activities that would jeopardize the short- or long-term viability of valuable natural resources or create hazardous conditions shall not be permitted.	NATURAL HAZARD AREAS	ONGOING POLICY

PLAN GOAL 5: QUALITY OF LIFE

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
<p>Objective 5.1: Work with regional partners and the development community to increase the availability of attainable housing in the County, particularly in close proximity to major employment centers.</p>		
<p>Strategy: Ensure that the County’s development regulations do not unnecessarily constrain the development of new housing within designated Urban Growth areas.</p>		FY 2025 - 2026
<p>Objective 5.2: Guide the expansion and improvement of services, community assets, and infrastructure that improves quality of life for Onslow County residents.</p>		
<p>Strategy: Continue to evaluate and improve the services offered by the County and its partners to ensure that it is meeting the demands of residents and businesses.</p>		ONGOING
<p>Strategy: Support efforts to provide greater choice and lower airfares at Albert Ellis Airport, thereby increasing passenger volume and enhancing opportunities for continued improvements at the airport. Encourage ongoing efforts to improve roadway access to the airport.</p>		FY 2029
<p>Objective 5.3: Continue to work with constituent local governments, service providers, federal and state agencies, the military, and other partners to ensure adequate coordination on growth, community services, and other matters of mutual interest.</p>		
<p>Strategy: Ensure that ONWASA, NCDOT, and other agencies are included in the development review process.</p>	INFRASTRUCTURE CARRYING CAPACITY	ONGOING POLICY
<p>Strategy: Work with MCI-East, the City of Jacksonville, JUMPO, and other entities to identify opportunities for developing projects under the Defense Community Infrastructure Program and Defense Access Roads funding programs.</p>	INFRASTRUCTURE CARRYING CAPACITY	ONGOING
<p>Objective 5.4: Work with local and state economic development entities to expand the availability of high-quality jobs and broaden the County’s economic base.</p>		
<p>Strategy: Encourage the creation of employment centers by coordination with local & state economic development entities.</p>		ONGOING
<p>Strategy: Work to develop new commerce parks in areas identified for economic development on the Future Land Use Map. Consider proactively zoning these areas for that purpose.</p>		FY 2030

PLAN GOAL 5: QUALITY OF LIFE (continued)

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
<p>Objective 5.5: Address access needs and opportunities, identify strategies to develop public access, and address provisions for all segments of the community (including persons with disabilities).*</p>		
<p>Strategy: Once completed, work to implement the recommendations of the Onslow County Parks and Recreation Master Plan. Ensure that improvements incorporate the needs of persons with disabilities.</p>	PUBLIC ACCESS	FY 2026 - 2040
<p>Strategy: Require all new development to provide adequate open space and recreation areas, including shoreline access, in proportion to the demand created by the development. This may be determined according to the number of dwelling units or the total acreage in the development.</p>	PUBLIC ACCESS	FY 2027
<p>Strategy: Provide for the distribution of recreation and open space opportunities throughout the County.</p>	PUBLIC ACCESS	ONGOING POLICY
<p>Objective 5.6: Encourage and support efforts to protect cultural and historic resources.</p>		
<p>Strategy: Support the preservation of historic sites, buildings, written records, and oral history.</p>		ONGOING POLICY
<p>Strategy: Support local, state, and federal efforts to protect historic properties within the County and to perpetuate its cultural heritage.</p>		ONGOING POLICY
<p>Strategy: Encourage the development of the tourism and educational potential of the area’s architectural, historic, and cultural resources.</p>		ONGOING POLICY

PLAN GOAL 6: HIGH QUALITY DEVELOPMENT

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
<p>Objective 6.1: Promote a broad range of housing types, styles, locations, price points, and amenities.</p>		
<p>Strategy: Encourage residential development to occur at densities appropriate for their location. Location factors that impact density include environmentally sensitive areas, sewage treatment available to the site, the capacity of water services, the capacity of public schools serving the site, and the proximity of the site to essential services.</p>	<p>LAND USE COMPATIBILITY, NATURAL HAZARD AREAS, INFRASTRUCTURE, WATER QUALITY</p>	<p>ONGOING POLICY</p>
<p>Strategy: Protect and rehabilitate existing neighborhoods, ensuring adequate housing that meets or exceeds minimum standards for health, safety, and welfare.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Encourage flexible land planning and development practices to create neighborhoods which better safeguard land, water, energy, and historic resources. Prioritize the location of residential developments with an emphasis on convenience to town or core-based services.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Encourage all residential development to accommodate / provide adequate infrastructure. New residential developments shall provide for the installation of paved public roadway and associated drainage infrastructure at the time of development.</p>	<p>INFRASTRUCTURE CARRYING CAPACITY</p>	<p>ONGOING POLICY</p>
<p>Strategy: Seek to accommodate the development and appropriate placement of a variety of housing types, including site-built homes, apartments, townhouses, accessory dwelling units, and manufactured homes.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Discourage residential strip development along primary roads. Flag lots shall not be permitted along primary roads unless justified by unusual or unforeseeable parcel or topographic constraints.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Support increasing usable open space in major subdivisions.</p>	<p>PUBLIC ACCESS</p>	<p>ONGOING POLICY</p>
<p>Strategy: Do not support access to higher intensity development through an area of lower intensity development. For example, access to a multi-family development, major park facility, or other large traffic generator should not be permitted through a single-family residential neighborhood.</p>		<p>ONGOING POLICY</p>

PLAN GOAL 6: HIGH QUALITY DEVELOPMENT (continued)

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
<p>Objective 6.2: Ensure a wide range of commercial activities are available in appropriate locations throughout the County.</p>		
<p>Strategy: Support the preservation of commercial fishing access sites and the protection of commercial fishing activities and operations.</p>	<p>PUBLIC ACCESS</p>	<p>ONGOING POLICY</p>
<p>Strategy: Water-dependent commercial uses should be allowed in areas of environmental concern, so long as they are consistent with State regulations.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Support a wide range of commercial development, so long as commercial activity occurs in nodes at major intersections (of a collector street or secondary street with a street of equal or greater size), rather than in strip commercialization along highways. Commercial and office development shall be encouraged to located in mixed-use shopping centers and office parks to minimize strip development.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Encourage highway beautification and landscaping of commercial areas. Require attractive, environmentally beneficial landscaping by new commercial or office development, and in the rehabilitation and upgrading of existing developments.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Existing strip development shall be reduced and development standards should be more restrictive when redevelopment opportunities permit.</p>		<p>ONGOING POLICY</p>
<p>Strategy: Support commercial forestry activities, provided significant adverse impacts on natural resource systems are fully mitigated. Such activities should be considered in accordance with the standards and recommendations of the US Forest Service. The County also advocates the voluntary participation of commercial forestry interests in the State of North Carolina’s best management practice program for forestry management.</p>		<p>ONGOING POLICY</p>

PLAN GOAL 6: HIGH QUALITY DEVELOPMENT (continued)

OBJECTIVES, AND STRATEGIES	CAMA OBJECTIVE	TIMEFRAME
Objective 6.3: Encourage industrial and economic development in appropriate locations.		
Strategy: Support the recruitment and siting of environmentally compatible industrial uses in areas that are already similarly developed or in mixed-use industrial parks to minimize the sacrifice of prime agricultural lands for such development.		ONGOING POLICY
Strategy: Industrial development shall not be located in areas that would diminish the desirability of existing and planned non-industrial areas, nor shall incompatible non-industrial uses be allowed to encroach upon existing or planned industrial sites.		ONGOING POLICY
Strategy: Warehousing, storage, and distribution facilities shall have access to appropriate thoroughfares and shall be visibly buffered according to their location. Heavy industry should be separated from incompatible, non-industrial areas by natural or man-made features such as green belts, major transportation facilities, transitional land uses, and other suitable means.		ONGOING POLICY
Strategy: Protected lands and natural heritage areas should be protected from negative impacts resulting from industrial development.	NATURAL HAZARD AREAS	ONGOING POLICY
Strategy: Support the reuse of existing and abandoned commercial and industrial sites in lieu of developing on valuable open land / undeveloped areas.		ONGOING POLICY
Strategy: Encourage new and expanding industries and businesses which diversify the local economy, train and utilize a more highly skilled labor force, and increase per capita income.		ONGOING POLICY
Strategy: Promote coordination of economic development resources among various local institutional agencies and seek regional cooperation and interaction among areas with shared economic interests.		ONGOING POLICY
Strategy: Support a pro-business / pro-growth attitude, balanced by a concern for preserving the natural assets and quality of life factors that make the area attractive to visitors and permanent residents alike.		ONGOING POLICY





FUTURE LAND USE STRATEGY



 **NSLOW**
HORIZON 2040
COMPREHENSIVE PLAN



Overview

The future land use strategy is the linchpin that brings together all of aspects of the CAMA Plan into a coherent development vision for Onslow County. The strategic guidance provided for the ongoing growth and development of the unincorporated areas of the County, as well as the Town of Richlands, is intended to provide elected officials, advisory boards, planning and management staff, developers, and residents with a clear and consistent framework that guides the community as a whole through the 2040 horizon year of the Plan.

For Onslow County government, following the adopted strategy will help to inform budgets, infrastructure investments, and the deployment of services as it meets the challenge of maintaining a high quality of life for residents and a friendly environment in which to do business. County planners will use the strategy to adopt and amend land use ordinances and determine the consistency of proposed zoning amendments. Affiliated agencies, like the Onslow County School District, will utilize the adopted strategy to identify areas where new schools might be necessary as they prepare long-range plans for schools.

Residents can use the adopted strategy to identify whether change may be coming to their community so that they can plan accordingly and advocate for positive growth that is consistent with their vision for their neighborhoods and surrounding areas. Developers and the business community will utilize the strategy to identify ideal locations for making investments in new housing and commercial developments that provide goods and services to new residents, while major employers and economic developers will utilize the strategy to identify potential locations for industrial development.

The implementation of the future land use strategy will help to set the County on the path to a future in which growth and development occurs in a well-planned manner that makes best use of the infrastructure investments that support it. Implementation will also help to safeguard the military assets that sit at the center of the County's economy and play a vital role in national defense by safeguarding compatibility with military training and operations. And, finally, implementation of the strategy will provide a greater degree of certainty to the community about the future of their communities, their neighborhoods, and their property.

Growth Strategy

The growth strategy for Onslow County is set forth in two complementary components, a future land use map and the land use classifications that are applied to the map. Eleven different land use classifications were developed to provide guidance on the appropriate designation of land throughout the County, with an eye toward focusing new growth in areas that can best support it via existing or planned infrastructure, as well as the compatibility of land with existing neighboring uses.

The County's growth strategy focuses urban growth around the City of Jacksonville and the Towns of Richlands and Swansboro, with suburban growth extending from these three urban centers, along major transportation corridors. Haphazard rural development, particularly in areas that lack necessary supporting infrastructure, is discouraged through land use policies that favor growth in the County's urban core and along higher capacity highway routes. Simultaneously, the strategy seeks to preserve the rural heritage of the County's significant agricultural areas and forests that have played a traditional role in the culture and economy of Onslow County, while also providing opportunities for people to reside in rural areas, if they desire. Special attention is given to preserving the integrity of the County's traditional working waterfronts and the communities that have depended on their viability for economic prosperity. Economic growth is promoted through the designation of a significant amount of land for future economic development purposes that will help to play a role in the diversification of the County's economy and bring new opportunities for working-age residents to live and work in Onslow County.

Major infrastructure, energy, and resource extraction assets are protected through special designation in the growth strategy and by directing potentially incompatible development away from these critical sites. This includes a specific land use protection strategy for the airport, which is, itself, a major economic asset. Of significant importance, the future land use map also includes protections for the military installations - seeking to provide a compatible environment in which the Marine Corps can continue to train and operate in a manner that is safe and consistent with its missions. Finally, by focusing growth toward the existing urbanized areas and supporting infrastructure, the strategy helps to maintain environmental quality and compatibility through the preservation of large areas of forestland, wildlife habitat, floodplains, marshlands, estuaries, and other critical environmental resources that are important to the health of the coastal ecosystem and the tourism economy.

The following pages provide more detail on the specific land use classifications that comprise the future land use strategy. They are followed by the future land use map, which serves as the geographic representation of the strategy.

Onslow County Future Land Use Map

FUTURE LAND USE CLASSIFICATIONS

The following is a summary of the different land use classifications that comprise the growth strategy as expressed through the Future Land Use Map. For each classification, there is a short statement of intent followed by a more thorough description of the classification. This is followed by a short land use and development summary that describes the envisioned regulatory aspects of each classification with regard to both residential and non-residential use and development in the area covered by the classification.

The application of the future land use classifications to the map is intended to designate the general geographic extent of each classification. To that end, the map should be used as a guide for the implementation of the County's growth strategy at the macro policy level. The delineation of boundaries between classifications on the map are not intended to be "lines in the sand" that cannot be crossed, but, rather, will require further interpretation as County staff, the Planning Board, and County Commissioners take further steps toward implementation of the growth strategy and utilize the map as they review development proposals, consider capital improvements, and plan for community services..

Agriculture and Forestry

Intent: Preserve and protect rural character and working lands while providing for limited low density residential development and nonresidential uses that support rural residents, agriculture, and forestry operations.

Description: Land designated with the Agriculture and Forestry future land use classification comprises the greatest share of privately held land within the County (exclusive of military lands). These rural areas of the County are generally most distant from municipalities and designated growth areas, tend to have limited transportation access compared to other areas of the County, and generally lack the type of public infrastructure that would make significant growth possible. These areas also represent Onslow County's heritage as a community that is focused on making use of its working lands for agricultural and forestry products.

While residential development is permitted in these areas, lot sizes should correspond to the rural character of the surrounding lands. To achieve this, the subdivision of land for residential use outside of major subdivisions should require lot sizes of greater than one acre, and conservation style development should be required to utilize the major subdivision process – with a significant requirement for open space dedication. Limited

convenience retail and businesses that serve the agricultural and forestry uses found in these areas are permitted at major intersections and along arterial roads.

Land Use & Development Summary:

Residential: Single family residential on parcels larger than one acre in size when outside of a major subdivision. Major subdivisions require the use of conservation / cluster design - gross density of one dwelling unit per acre or less.

Non-Residential: Agriculture and forestry are the primary uses. Uses supporting those industries are permitted, along with small retail, service, and civic uses that support rural residents; preferably located at crossroads.

Airport Compatibility Area

Intent: Protect the significant public investment and long-term viability of the Albert J. Ellis Airport through land use and development policies that prevent encroachment by incompatible development around the airport.

Description: The Airport Compatibility Area is applied to the future land use map for the purpose of identifying lands in proximity to Albert J. Ellis Airport (OAJ), where special consideration should be given to their compatibility with the hazards and impacts (i.e. noise) associated with their proximity to the airport. Manufacturing, warehousing, wholesaling, and similar uses, as well as open uses of land, are generally most compatible with proximity to a growing airport.

Any use that creates a hazard for aviation operations, such as tall structures, glare, emission of smoke or steam, wildlife attractants, and electronic interference, should be given significant scrutiny in this area to preserve and protect the airport's operations. Similarly, uses which attract large numbers of people should be prohibited in designated safety zones, and residential density should be limited to ensure that as few residents are exposed to aviation noise and other potential off-site impacts associated with a commercial airport that also accommodates a significant amount of military aviation training.

Land Use & Development Summary:

Residential: Single family residences at very low densities - less than one dwelling unit per acre outside of a major subdivision. Major subdivisions should only be allowed at very low net densities of less than one dwelling unit per acre.

Non-Residential: Industrial, warehousing, and logistics uses that have a nexus with the airport are encouraged around and adjacent to the airport. Retail, service, and lodging uses that support residents, workers and travelers are encouraged as well. Uses that concentrate large numbers of people should be situated outside of airport safety zones, and any use that creates a potential hazard to aviation should be prohibited.

Conservation Lands

Intent: Protect critical environmental resources and encourage the creation and ongoing use of parks, preserves, and other open spaces for outdoor recreation, hunting, and similar uses.

Description: The Conservation land use classification is intended to identify those lands within unincorporated Onslow County that are precluded from future development via their ownership by a conservation-oriented entity, legal restriction for use as working lands (farms and forestry), gamelands, parks, and preserves. Examples include Hammocks Beach State Park, Hofmann Forest, Stones Creek Gamelands, as well as many other properties containing significant acreage dedicated as parks, open space, or other preserved lands.

Land Use & Development Summary:

Residential: Limited single family residential uses on large tracts, where permitted by conservation easements, as well as hunting lodges and similar temporary housing associated with outdoor recreation.

Non-Residential: Low impact outdoor recreation uses, both public and private. Limited lodging and camping for temporary occupancy associated with outdoor recreation uses. Limited retail and service uses that support outdoor recreation, along with civic uses associated with environmental education and land conservation.

Economic Development

Intent: Identify and protect land that is ideally situated for the development of employment generating uses that will help to diversify the local economy and broaden the County's tax base.

Description: Land designated for Economic Development purposes has been identified in four separate areas of the County. These include the Burton Business and Industrial Park, land adjacent to the Camp Davis Industrial Park in Holly Ridge, land along either side of US-258 south of Richlands near the airport, and land along US-17 on the east side of the County just south of Maysville. While not specifically identified on this map due to its location within the Airport Compatibility Area, land adjacent and in close proximity to Albert J. Ellis Airport should also be considered for this purpose, if compatibly developed.

The US-258 and US-17 sites were identified based on their significant acreage assembly possibilities, relatively good highway access, and general lack of potential compatibility issues with nearby residential development. Given their size, these sites are intended to accommodate large scale employment generators that can help to expand and diversify the County's economic base and attract high-wage business sectors.

Land Use & Development Summary:

Residential: Residential use should be prohibited to encourage the flexible use of land for a wide variety of employment-generating development.

Non-Residential: These areas support a wide variety of employment generating development, including manufacturing, warehousing, logistics, research & development, office, and related support functions. The creation of cohesive “commerce parks” are encouraged to help attract new enterprises to shovel-ready sites.

Infrastructure, Energy, and Extraction

Intent: Identify major public and private infrastructure, energy production, and natural resource extraction uses to preserve their viability and limit encroachment from incompatible development.

Description: The Infrastructure, Energy, and Extraction land use designation is applied to large scale land uses that are potentially incompatible with large numbers of residential neighbors. Examples include wastewater plants along with associated spray fields and infiltration areas, quarries, landfills, and renewable energy generation sites. These uses can create off-site impacts, such as noise, odors, and similar issues that could be a nuisance to neighbors.

To the extent practical, lands surrounding these uses have been designated for agriculture and forestry use, as these are typically the most compatible neighbors, beyond other industrial uses. These uses also tend to be located, for the most part, in relatively rural parts of the County, which provides an inherent degree of protection. By maintaining compatibility with neighbors through appropriate zoning and other land use ordinances, Onslow County can help to protect these assets from encroachment that may interfere with their continued operation.

Land Use & Development Summary:

Residential: Residential use should be prohibited to prevent incompatible development around the primary uses in this classification. .

Non-Residential: Major public and private infrastructure, such as wastewater plants and infiltration areas, energy production, mining and quarrying, and similar uses..

Military

Intent: Identify lands that are under the ownership or control of the United States Marine Corps, including Camp Lejeune, Marine Corps Air Station New River, and all other satellite

and sub-installations for the purpose of ensuring the long-term viability of their use for military training and operations.

Description: The Military land use designation is applied to all lands under the ownership or control of the United States of America and occupied by US Marine Corps installations. These lands are outside of the land use jurisdiction of Onslow County. Military training and operations originating from or occurring upon military training lands and aviation facilities can create impacts in the surrounding community, while development in the community can create hazards for military training and operations. All development activity within five miles of the installation boundary, as well as all lands beneath low level military flight paths, should be reviewed for compatibility with the military training and operational missions.

Land Use & Development Summary:

Residential: Residential uses includes a wide variety of permanent housing for military personnel and their dependents in a range of settings from single-family neighborhoods, to townhomes and apartment style housing, barracks, and temporary housing for trainees.

Non-Residential: The military installations contain a wide variety of uses that directly support the military mission, including ranges and other training facilities, aviation facilities, as well as office, healthcare, quasi-industrial, warehousing, and similar support uses. The installations also contain a wide variety of commercial and service uses that support military service members and DoD civilians, such as commissaries, Navy Exchanges, and similar uses.

Municipality

Intent: Identify lands that are within the corporate limits of a municipal government and not subject to the jurisdiction of this CAMA Plan.

Description: The Municipality land use designation is applied to land that is within the corporate limits of one of the municipalities in Onslow County. These areas are outside of the land use jurisdiction of the County; however, the Town of Richlands is a participant in this CAMA plan. The overall Future Land Use Map identifies Richlands in this land use category, while most of the land in its extraterritorial jurisdiction is identified as “Suburban Growth.” A more detailed future land use map of Richlands is included in the Appendix.

Land Use & Development Summary:

Residential: Residential uses subject to the land use and development regulations of the municipality.

Non-Residential: Non-residential uses subject to the land use and development regulations of the municipality.



Rural Residential

Intent: Provide opportunities for low density single-family residential development in rural areas on the fringes of the County's suburban growth areas.

Description: Land designated with the Rural Residential future land use classification is intended to accommodate low density residential development in transitional areas outside of the Urban and Suburban growth areas. These areas are intended to be primarily residential in nature, with some small-scale convenience retail and service businesses located at major crossroads and along arterials. Residential development in these areas is not intended to exceed two dwelling units per gross acre, although conservation subdivisions are permitted to have suburban scale lot sizes while not exceeding the maximum density standard if supporting infrastructure is available.

These areas typically contain an existing base of large-lot single family development outside of the structure of major subdivisions, with homes typically situated along previously existing farm-to-market roads. Future subdivision of land along major collectors and arterials should only be permitted within major subdivisions where all lots have driveway access to internal streets.

Land Use & Development Summary:

Residential: Single family residential development at a density of up to two dwelling units per acre. Conservation subdivisions are encouraged and may have smaller lots where utility infrastructure is available to support it, provided that overall density does not exceed two dwelling units per acre.

Non-Residential: Limited retail and service uses at crossroads that directly serve nearby residents, as well as civic uses that serve the local community.

Suburban Growth

Intent: Provide opportunities for moderate density residential development and supporting non-residential development on the fringes of municipalities and their associated urban growth areas, as well as along major transportation corridors.

Description: The Suburban Growth future land use classification is applied to those areas that are comprised of both existing suburban scale development, as well as sufficient land resources to accommodate additional growth and compatible infill development. The future state of Suburban Growth areas is intended to be inclusive, primarily, of single-family residential development and supporting suburban scale auto-oriented commercial development. Net residential density in these areas is typically four dwelling units per

acre or greater, depending on the availability of supporting infrastructure. Commercial development that supports neighboring residential development is typically situated along arterial roads or in the immediate vicinity of primary intersections along collector roads. Future subdivision of land along major collectors and arterials should only be permitted within major subdivisions where all lots have driveway access to internal streets.

Land Use & Development Summary:

Residential: Single family residential development, primarily within major subdivisions, at densities of 4 - 5 dwelling units per acre or greater, depending on the availability of utilities. Conservation subdivision design is encouraged, but not required. Suburban growth areas also accommodate a limited amount of attached single family (townhome) and multi-family developments at densities of 8 - 10 dwelling units per gross acre, either as standalone projects or included in mixed residential developments.

Non-Residential: Commercial uses that support neighborhoods in Suburban Growth areas are typically found along arterials and at major intersections - typically in the form of small to medium sized shopping centers and commercial strip development. These areas accommodate some larger and more intensive civic uses that serve surrounding neighborhoods. Employment generating uses outside of retail and service businesses are generally limited, although some professional offices or small office parks may choose to locate in these areas ahead of future urbanization.

Urban Growth

Intent: Designate lands for urban scale growth in areas that are in close proximity to municipalities where infrastructure and services are available to facilitate higher density residential development and more intensive commercial development.

Description: This future land use classification is applied in areas immediately around municipalities where current land use patterns are comprised of higher density residential uses, large scale or high intensity commercial uses, and densely developed commercial or mixed-use corridors. This land use classification is also applied to immediately adjacent undeveloped or less intensively developed land where further growth, or infill development, at an urban scale and density is anticipated and supported by public infrastructure.

Much of the Urban Growth classification is applied to areas within the extraterritorial jurisdictions (ETJ) of Jacksonville and Swansboro, or lands that were previously in an ETJ. Due to the scale and intensity of development contemplated in the Urban Growth areas, prospective developers should consider annexation into the relevant municipality to ensure that they have access to urban services, if needed.

Land Use & Development Summary:

Residential: A wide range of residential development is accommodated, with single family neighborhoods developed at densities of 6 - 8 dwelling units per acre, while townhome and multifamily development is generally in excess of 12 dwelling units per acre; constrained primarily by utility and transportation capacity.

Non-Residential: These areas have the most wide ranging and intensive mixture of commercial uses, including major regional scale developments. Major civic uses serving the County or region are found in these areas, along with major employment generating uses, other than industrial uses.

Village

Intent: The intent of the Village land use classification is to carry forward the preferred land use strategy of the Sneads Ferry Community Plan.

Description: The Village future land use classification is applied to the areas that generally encompass the designated “Village Center” and “Traditional Neighborhood” place types that were used to define the preferred land use strategy for the core area of the 2015 Sneads Ferry Community Plan. Commercial development and higher density residential land uses are focused in the plan’s Village Center place type, which is centered on the intersection of NC Highway 210 and NC Highway 172, as well as areas south and east of the intersection along those main thoroughfares. The supporting Traditional Neighborhood place type, which is primarily residential in nature, is applied to areas adjacent to the Village Center, with the intent that there be multi-modal transportation integration between the core Village Center and surrounding neighborhoods to allow for a range of travel options for residents to move between their homes, commercial areas, and civic amenities.

Land Use & Development Summary (from Sneads Ferry Community Plan) :

Traditional Neighborhoods: The Traditional Neighborhoods place type includes a variety of housing types, residential densities, goods, and services supported by a multi-modal transportation network. The design and scale encourage active living and allow residents to live, work, shop, and play within a walkable community.

Village Center: The Village Center place type includes predominantly retail, office, and service related uses. To a lesser extent, attached housing (townhomes) and multifamily residential uses can be integrated vertically or horizontally in the site. Walkable, integrated design allows residents and visitors to park once and provides connectivity to adjoining neighborhoods. The design and scale encourage active living and allow residents to live, work, shop, and play within a walkable community

Waterside Community

Intent: Facilitate the continuation of traditional land use and development patterns in communities located along Onslow County's estuarine shorelines and promote place-based economic development by protecting working waterfronts.

Description: The Waterside Community land use classification is intended to identify those areas of unincorporated Onslow County that have a significant land use nexus with the traditional working waterfronts and estuarine areas that are on the land side of the Intracoastal Waterway and marshes that separate the mainland from barrier islands. The areas designated as Waterfront Communities include Sneads Ferry on the New River in the southern part of the County, lands along the Intracoastal Waterway south of Sneads Ferry, and lands on the west side of Queens Creek near Swansboro in the eastern part of the County. Similarly situated land located immediately around Swansboro is excluded from this designation, as it is designated as Urban and Suburban Growth areas.

The preservation of working waterfronts in the Waterside Communities should be of primary importance, and enforceable through a Working Waterfronts Overlay. Low density residential development should occur in areas which preserve open space and limit impacts from stormwater on the health of estuaries. Intensive residential and commercial development that generates significant traffic impacts should be limited to areas with direct access to arterial roads.

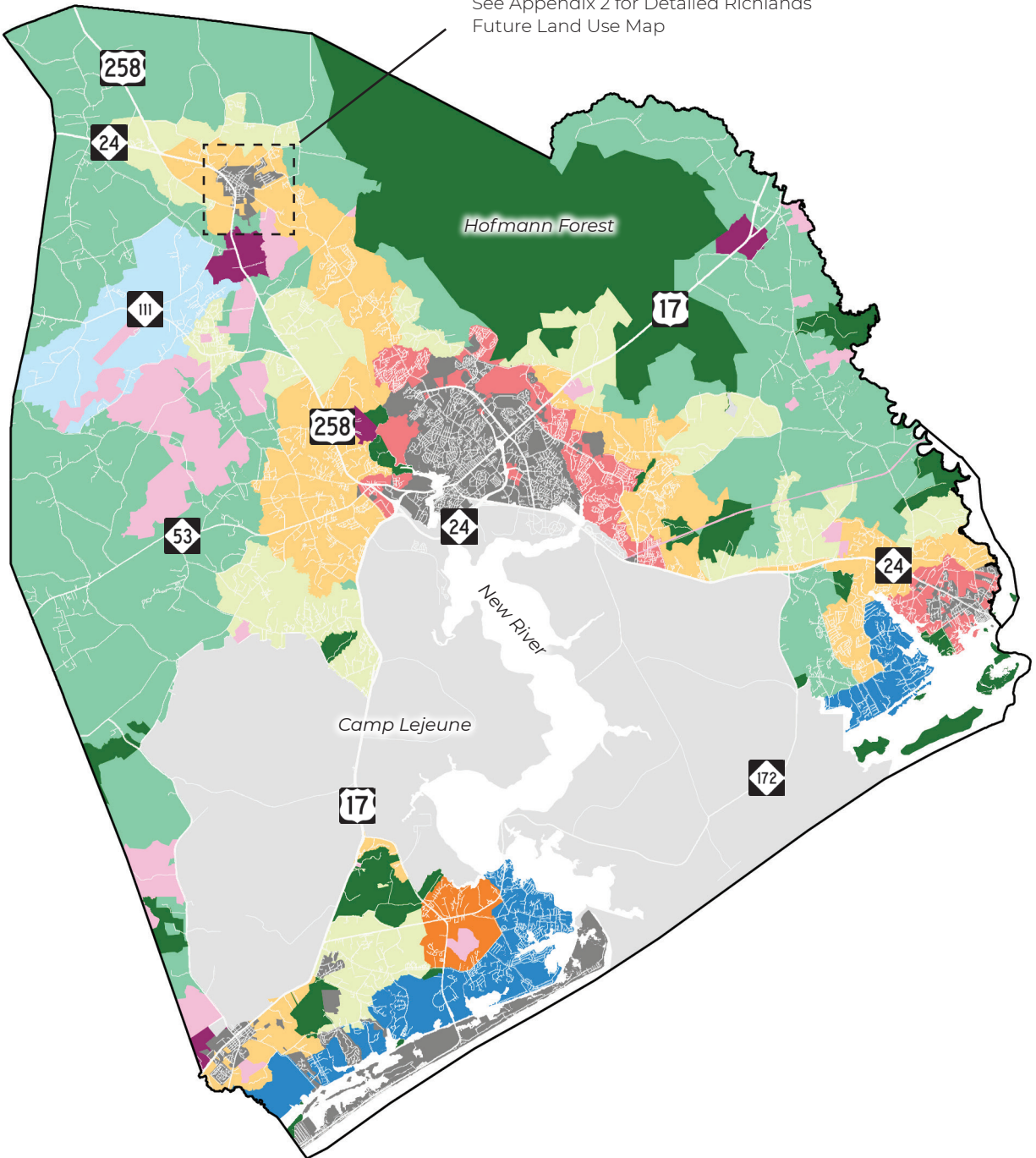
Land Use & Development Summary:

Residential: Primarily detached single family residences and small multi-family structures on individual lots that are consistent with historic waterside development trends.

Non-Residential: Small commercial and service uses serving coastal neighborhoods and supporting tourism, along with working waterfronts that support fishing and recreational boating, excluding large scale marinas. Some small civic uses such as churches and other community focused uses.

» FUTURE LAND USE MAP


See Appendix 2 for Detailed Richlands Future Land Use Map



Legend

 Onslow County
 Roads

 Agriculture & Forestry
 Airport Compatibility Area
 Conservation Lands
 Economic Development
 Infrastructure, Energy, and Extraction
 Military

 Municipality
 Rural Residential
 Suburban Growth
 Urban Growth
 Village
 Waterside Community

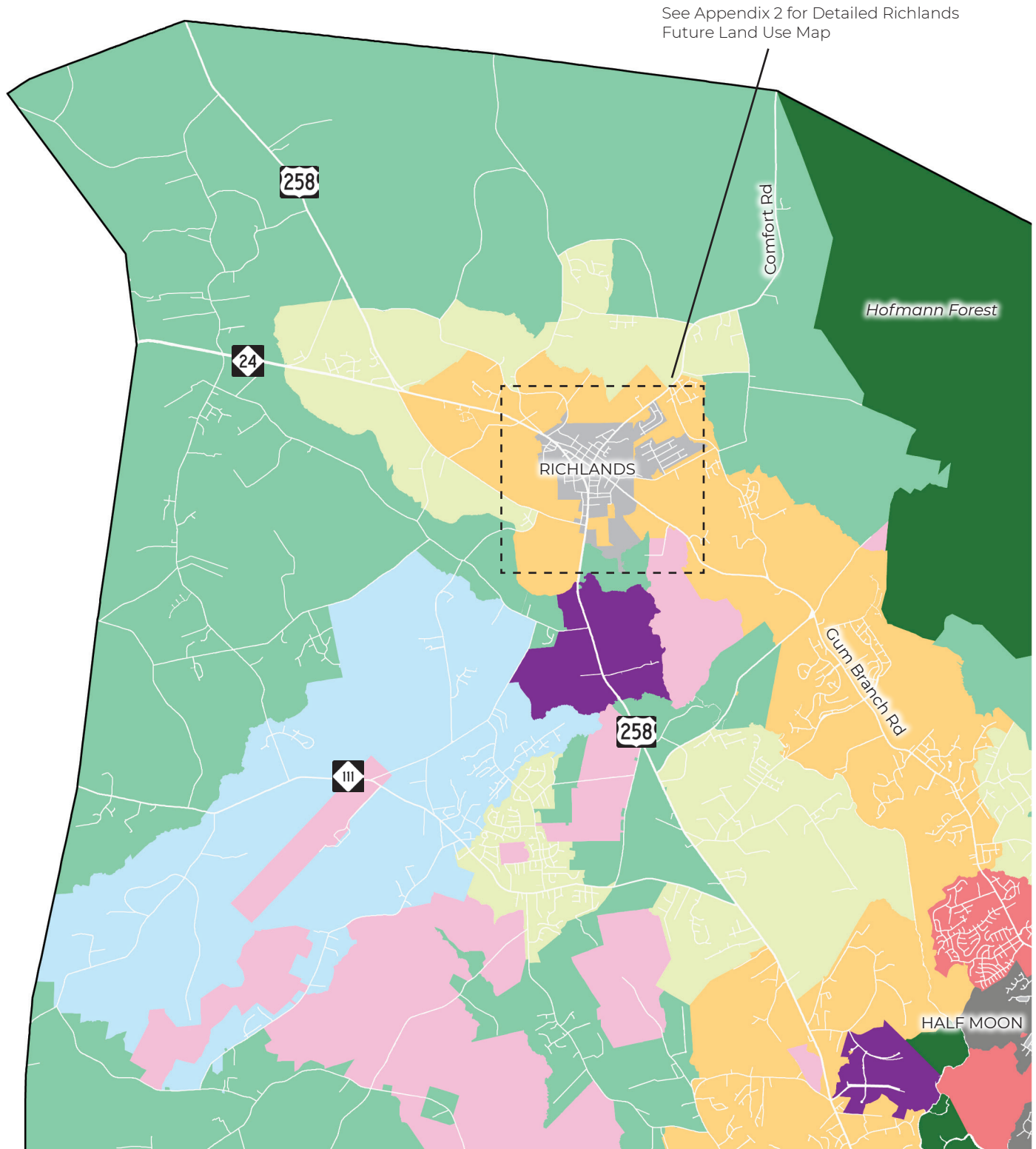


» **FUTURE LAND USE DISTRIBUTION**

	TOTAL ACREAGE	PERCENTAGE OF COUNTY*
Agriculture & Forestry	128,432	36.7%
Airport Compatibility Area	12,025	3.4%
Conservation Lands	61,584	17.6%
Economic Development	3,486	1.0%
Infrastructure, Energy, and Extraction	17,798	5.1%
Municipal	21,031	6.0%
Rural Residential	37,142	10.6%
Suburban Growth	39,541	11.3%
Urban Growth	10,831	3.1%
Village	3,450	1.0%
Waterside Community	14,390	4.1%

*The distribution of future land use classifications is exclusive of land under the jurisdiction of the US Marine Corps that is designated as “military” on the Future Land Use Map

» NORTH REGION - FUTURE LAND USE



Legend

Onslow County
Roads

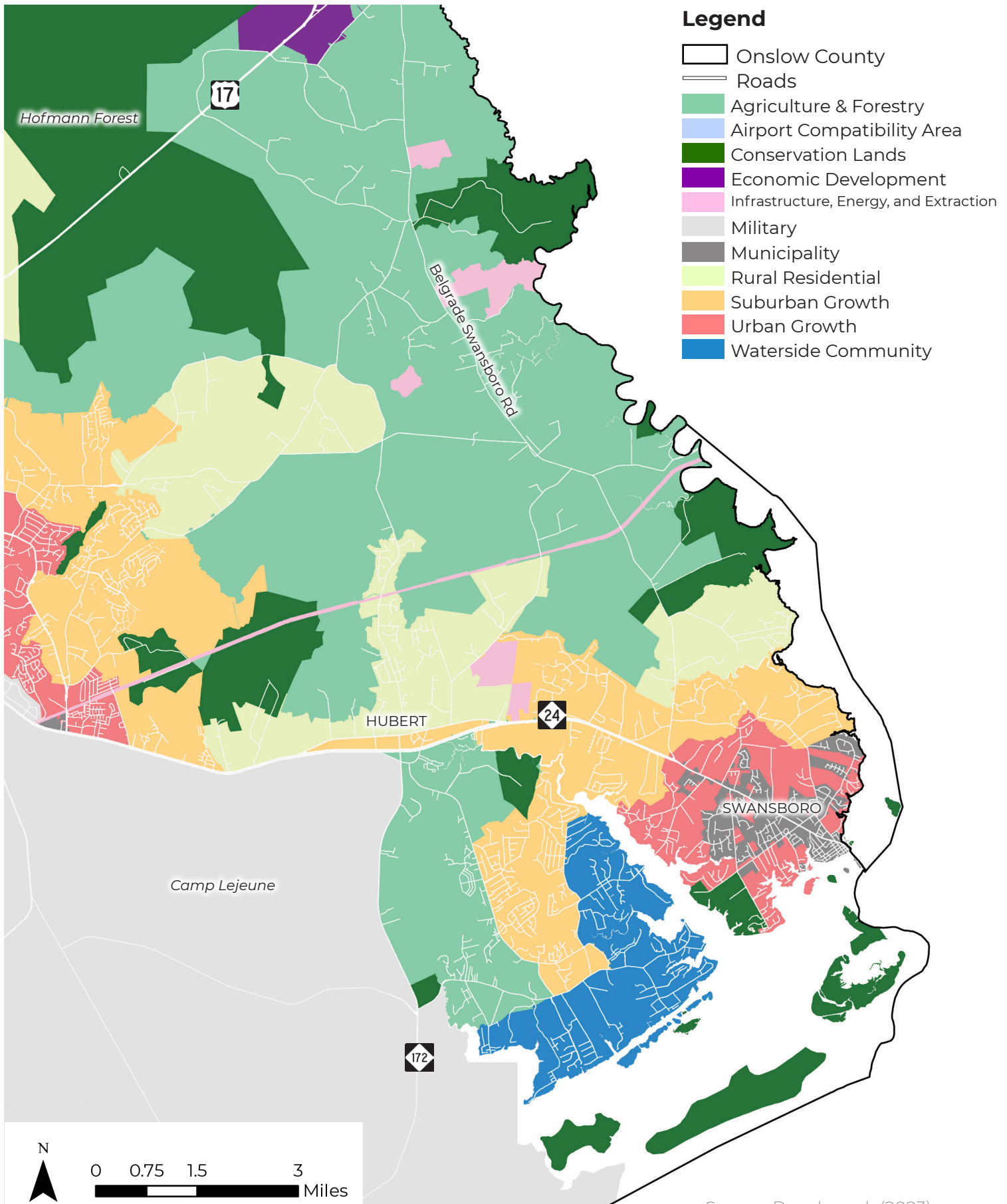
- Agriculture & Forestry
- Airport Compatibility Area
- Conservation Lands
- Economic Development
- Infrastructure, Energy, and Extraction
- Military
- Municipality
- Rural Residential
- Suburban Growth
- Urban Growth
- Waterside Community



0 0.75 1.5 3 Miles

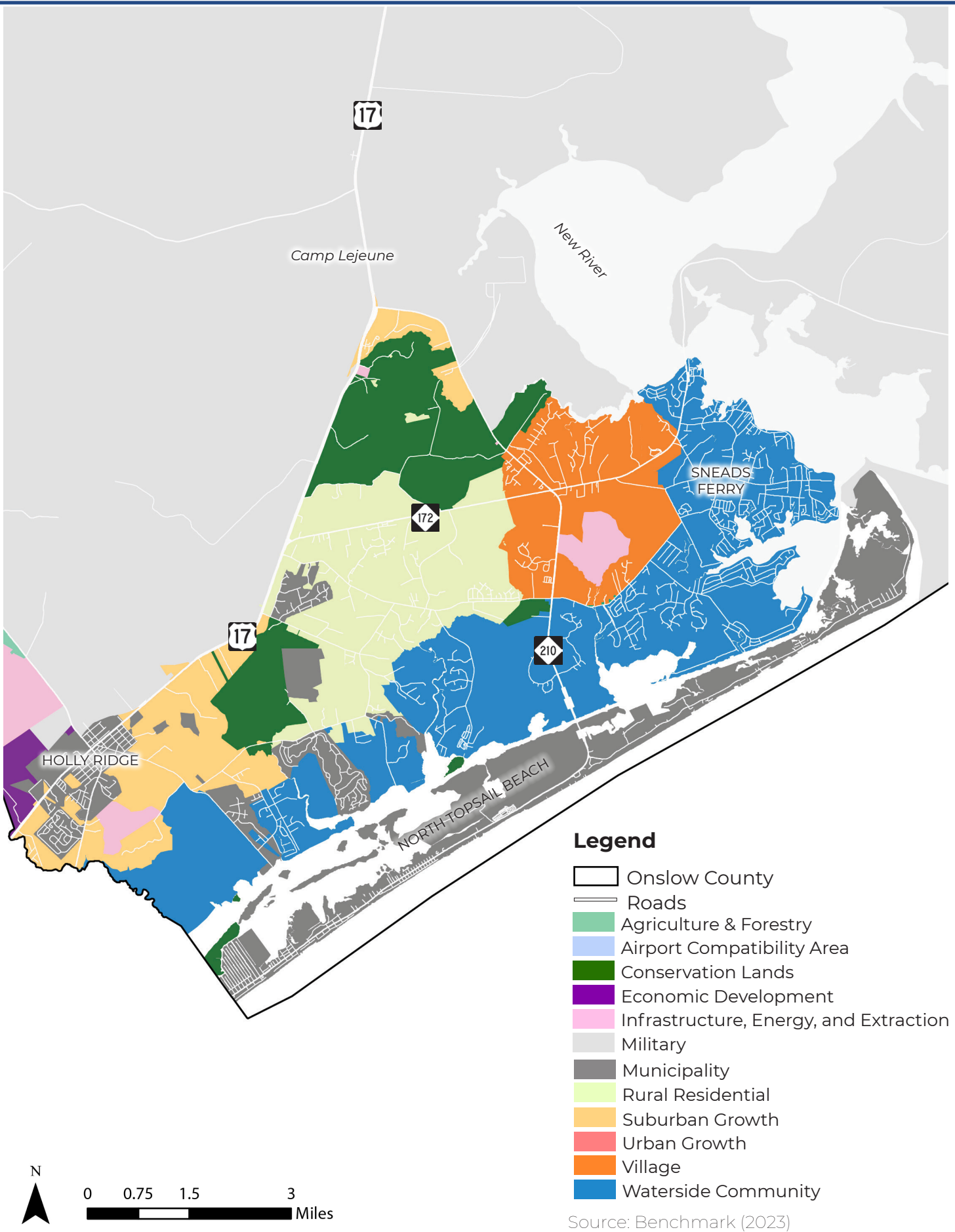
Source: Benchmark (2023)

» EAST REGION - FUTURE LAND USE



Source: Benchmark (2023)

» SOUTH REGION - FUTURE LAND USE



APPENDICES





Appendix 1: CAMA Matrix

MATRIX FOR LAND USE PLAN ELEMENTS - 15A NCAC 7B.0702	PAGE REFERENCE(S)
Organization of the Plan	
<ul style="list-style-type: none"> Matrix that shows the location of the required elements as set forth in this Rule 	196 - 200
Community Concerns and Aspirations	
<ul style="list-style-type: none"> Description of the dominant growth-related conditions that influence land use, development, water quality, and other environmental concerns in the planning area 	164
<ul style="list-style-type: none"> Description of land use and development topics most important to the future of the planning area, including: <ul style="list-style-type: none"> Public Access Land Use Compatibility Infrastructure Carrying Capacity Natural Hazard Areas Water Quality 	165 - 175
Community Vision	
<ul style="list-style-type: none"> Description of the general physical appearance and form that represents the local government's plan for the future. It shall include objectives to be achieved by the plan and identify changes that may be needed to achieve the planning vision. 	164
Existing and Emerging Conditions	
Population, Housing, and Economy	
Discussion of the following data and trends:	
<ul style="list-style-type: none"> Permanent population growth trends using data from the two most decennial Censuses 	19 - 24
<ul style="list-style-type: none"> Current permanent and seasonal population estimates 	19 - 22
<ul style="list-style-type: none"> Key population characteristics including age and income 	24 - 30
<ul style="list-style-type: none"> Thirty-year projections of permanent and seasonal population in five-year increments 	22
<ul style="list-style-type: none"> Estimate of current housing stock, including permanent and seasonal units, tenure, and types of units (single-family, multifamily, and manufactured) 	123 - 142
<ul style="list-style-type: none"> Description of employment by major sectors and community economic activity 	109 - 122
Natural Systems	
Description of natural features in the planning jurisdiction to include:	
<ul style="list-style-type: none"> Areas of Environmental Concern (AECs) as set forth in Subchapter 15A NCAC 07H 	34 - 43
<ul style="list-style-type: none"> Soil characteristics, including limitations for septic tanks, erodibility, and other factors related to development 	55 - 57

Natural Systems (CNTD.)

Description of natural features in the planning jurisdiction to include:

<ul style="list-style-type: none"> Environmental Management Commission (EMC) water quality classifications and related use support designations 	65 - 70
<ul style="list-style-type: none"> Division of Marine Fisheries (DMF) shellfish growing areas and water quality conditions 	44 - 45
<ul style="list-style-type: none"> Flood and other natural hazards 	59 - 64
<ul style="list-style-type: none"> Storm surge areas 	60 - 62
<ul style="list-style-type: none"> Non-coastal wetlands, including forested wetlands, shrub-scrub wetlands, and freshwater marshes 	38 - 40
<ul style="list-style-type: none"> Water supply watersheds or wellhead protection areas 	65 - 66, 160
<ul style="list-style-type: none"> Primary nursery areas 	44 - 45
<ul style="list-style-type: none"> Environmentally fragile areas, such as wetlands, natural heritage areas, areas containing endangered species, prime wildlife habitats, or maritime forests 	32 - 54
<ul style="list-style-type: none"> Additional features or conditions identified by the local government 	-

Environmental Conditions

Discussion of environmental conditions within the planning jurisdiction to include an assessment of the following conditions and features:

<ul style="list-style-type: none"> Status and changes of surface water quality; including: <ul style="list-style-type: none"> Impaired streams from the most recent Division of Water Resources (DWR) Basin Planning Branch Reports Clean Water Act 303(d) List Other comparable data 	65, 69 - 70
<ul style="list-style-type: none"> Current situation and trends on permanent and temporary closures of shellfish waters as determined by the Report of Sanitary Survey by the Shellfish Sanitation and Recreational Water Quality Section of the DMF 	44 - 45
<ul style="list-style-type: none"> Areas experiencing chronic wastewater treatment malfunctions 	-
<ul style="list-style-type: none"> Areas with water quality or public health problems related to non-point source pollution 	69
<ul style="list-style-type: none"> Areas subject to recurrent flooding, storm surges, and high winds 	42, 59 - 63
<ul style="list-style-type: none"> Areas experiencing significant shoreline erosion as evidenced by the presence of threatened structures or public facilities 	42
<ul style="list-style-type: none"> Environmentally fragile areas (as defined in Part (c)(2)(A)(ix) of this Rule) or areas where resources functions are impacted as a result of development 	34 - 54
<ul style="list-style-type: none"> Natural resource areas that are being impacted or lost as a result of incompatible development. These may include, but are not limited to the following: coastal wetlands, protected open space, and agricultural land 	-

Existing Land Use and Development

<ul style="list-style-type: none"> • MAP of existing land use patterns <ul style="list-style-type: none"> ○ Description of existing land use patterns ○ Estimates of the land area allocated to each land use category ○ Characteristics of each land use category 	<p>72 - 78</p>
<ul style="list-style-type: none"> • MAP of historic, cultural, and scenic areas designated by a state or federal agency or by the local government <ul style="list-style-type: none"> ○ Descriptions of the historic, cultural and scenic areas 	<p>15 - 18, 46 - 48, 149</p>

Community Facilities

Evaluation of existing and planned capacity, location, and adequacy of community facilities to include:

<ul style="list-style-type: none"> • MAP of existing and planned public and private water supply service areas <ul style="list-style-type: none"> ○ Description of existing public and private water supply systems to include: <ul style="list-style-type: none"> - Existing condition - Existing capacity - Documented overflows, bypasses or other problems that may degrade water quality or constitute a threat to public health as documented by the DWR - Future water supply needs based on population projections 	<p>154 - 159</p>
<ul style="list-style-type: none"> • MAP of existing and planned public and private wastewater service areas <ul style="list-style-type: none"> ○ Description of existing public and private wastewater systems to include: <ul style="list-style-type: none"> - Existing condition - Existing capacity - Documented overflows, bypasses, or other problems that may degrade water quality or constitute a threat to public health as documented by the DWR - Future wastewater system needs based on population projections 	<p>154 - 159</p>
<ul style="list-style-type: none"> • MAP of existing and planned multimodal transportation systems and port and airport facilities <ul style="list-style-type: none"> ○ Description of any highway segments deemed by the NCDOT as having unacceptable service as documented on the most recent NCDOT Transportation and/or Thoroughfare Plan ○ Description of highway facilities on the current thoroughfare plan or current transportation improvement plan ○ Description of the impact of existing transportation facilities on land use patterns ○ Description of the existing public stormwater management system ○ Identification of existing drainage problems and water quality issues related to point source discharges of stormwater runoff 	<p>96 - 105</p>

MATRIX FOR LAND USE PLAN ELEMENTS - 15A NCAC 7B.0702	POLICY CITATION(S)	PAGE REFERENCE(S)
Future Land Use		
Policies		
<ul style="list-style-type: none"> • Policies that exceed the use standards and permitting requirements found in Subchapter 7H, State Guidelines for Areas of Environmental Concern 	-	-
Policies that address the Coastal Resources Commission’s (CRC’s) management topics:		
Public Access Management Goal: <i>Maximize public access to the beaches and the public trust waters of the coastal region.</i>		
The planning objectives for public access are local government plan policies that:		
<ul style="list-style-type: none"> • Address access needs and opportunities 	Objective 5.5	172
<ul style="list-style-type: none"> • Identify strategies to develop public access 	Objective 5.5	172
<ul style="list-style-type: none"> • Address provisions for all segments of the community, including persons with disabilities 	Objective 5.5	172
<ul style="list-style-type: none"> • For oceanfront communities, establish access policies for beach areas targeted for nourishment 	-	-
Land Use Compatibility Management Goal: <i>Ensure that development and use of resources or preservation of land balance protection of natural resources and fragile areas with economic development, and avoid risks to public health, safety, and welfare.</i>		
The planning objectives for land use compatibility are local government plan policies that:		
<ul style="list-style-type: none"> • Characterize future land use and development patterns 	Objective 1.1	165, 179 - 194
<ul style="list-style-type: none"> • Establish mitigation criteria and concepts to minimize conflicts 	Objective 1.2, 1.3, 1.4, 1.5	165 - 166
Infrastructure Carrying Capacity Management Goal: <i>Ensure that public infrastructure systems are sized, located, and managed so the quality and productivity of AECs and other fragile areas are protected and restored.</i>		
The planning objectives for infrastructure carrying capacity are local government plan policies that:		
<ul style="list-style-type: none"> • Establish service criteria 	Objective 2.1	167
<ul style="list-style-type: none"> • Ensure improvements minimize impacts to AECs and other fragile areas 	Objective 2.1	167
Natural Hazard Areas Management Goal: <i>Conserve and maintain barrier dunes, beaches, floodplains, and other coastal features for their natural storm protection functions and their natural resources giving recognition to public health, safety, and welfare issues.</i>		
The planning objectives for natural hazard areas are local government plan policies that:		
<ul style="list-style-type: none"> • Establish mitigation and adaptation concepts and criteria for development and redevelopment, including public facilities 	Objective 3.1	169
<ul style="list-style-type: none"> • Minimize threats to life, property, and natural resources resulting from erosion, high winds, storm surge, flooding, or other natural hazards 	Objective 3.1	169

MATRIX FOR LAND USE PLAN ELEMENTS - 15A NCAC 7B.0702	POLICY CITATION(S)	PAGE REFERENCE(S)
Future Land Use (CNTD.)		
Policies		
<ul style="list-style-type: none"> • Policies that exceed the use standards and permitting requirements found in Subchapter 7H, State Guidelines for Areas of Environmental Concern 	-	-
Policies that address the Coastal Resources Commission’s (CRC’s) management topics:		
Water Quality Management Goal: <i>Maintain, protect, and, where possible, enhance water quality in all coastal wetlands, rivers, streams, and estuaries.</i>		
The planning objectives for water quality are local government plan policies that:		
<ul style="list-style-type: none"> • Establish strategies and practices to prevent or control nonpoint source pollution 	Objective 4.1	170
<ul style="list-style-type: none"> • Establish strategies and practices to maintain or improve water quality 	Objective 4.1	170
Future Land Use Map		
<ul style="list-style-type: none"> • MAP of future land uses that depicts the policies for growth and development and the desired future pattern of land use and development with consideration given to natural system constraints and infrastructure <ul style="list-style-type: none"> ◦ Descriptions of land uses and development associated with the future land use map designations 		188 - 204
Tools for Managing Development		
<ul style="list-style-type: none"> • Description of the role of plan policies, including the future land use map, in local decisions regarding land use and development 		176
<ul style="list-style-type: none"> • Description of the community’s development management program, including local ordinances, codes, and other plans and policies 		176
Action Plan and Implementation Schedule		
<ul style="list-style-type: none"> • Description of actions that will be taken by the local government to implement policies that meet the CRC’s management topic goals and objectives, specifying fiscal year(s) in which each action is anticipated to start and finish 		163 - 187
<ul style="list-style-type: none"> • Identification of specific steps the local government plans to take to implement the policies, including adoption and amendment of local ordinances, other plans, and special projects 		163 - 187





Appendix 2: Richlands

OVERVIEW

The Town of Richlands, located in northwestern Onslow County, is adopting the Onslow County Comprehensive CAMA Plan as its own. Though an incorporated community, Richlands coordinates growth and development closely with the County and has always been included in the County's comprehensive plans. As much of the Plan's background information focuses on Onslow County as a whole, this appendix provides information specific to the Town of Richlands.

COMMUNITY CHARACTERISTICS

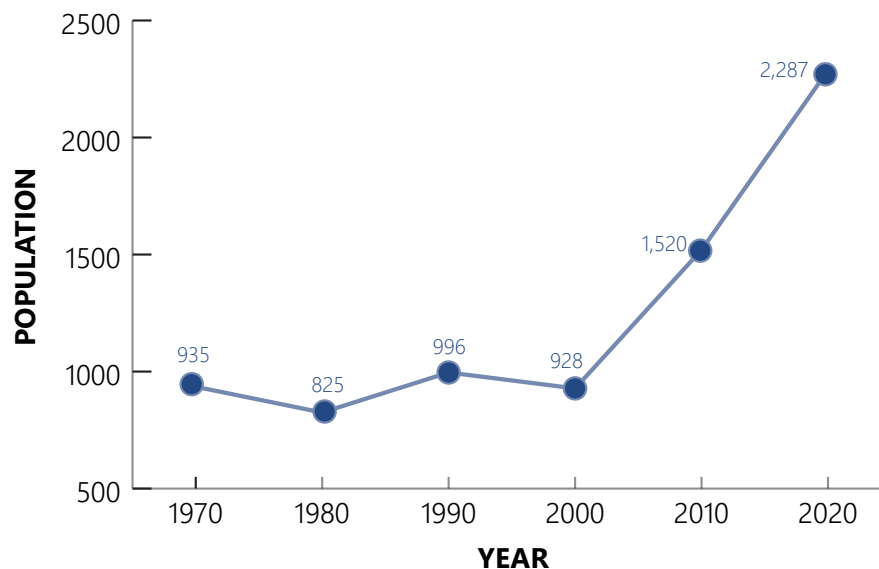
Population and Age

According to the most recent Census (2020), the Town of richlands is 2,287. This is a considerable increase from its previous populations, as shown below. In fact, the American Community Survey estimates the Town's population to be even higher, around 2,700.

Given the significant subdivision development that has occurred in the Town in recent years, it is likely that the population is in fact closer to 2,700. Given the rural and agricultural nature of the Town and its surroundings, there is still potential for the Town to continue growing in the coming years.

» POPULATION

Source: US Census Bureau, United States Census (1970 - 2020)



The median age in Richlands is just 27.7, which is comparable to the County's median age of 26.9 and notably lower than the State's median age of 39.0. While the Town's median age is partially skewed by a number of residents in their 20s and 30s, it is largely influenced by the number of children (36% of the Town's population).

Socio-Economic Characteristics

While the portion of the Town's residents who have completed a graduate or professional degree is higher than that of the County's the overall portion of residents who have completed any type of college degree is lower. More than 70% of the Town's residents have either not attended or not completed a college degree.

The median household income of Richlands residents is \$54,231. This is very similar to that of Onslow County as a whole (\$54,372) but lower than the State (\$60,516). According to the most recent American Community Survey, 426 residents are estimated to be in poverty in Richlands (15.7% of the total population). This is slightly higher than the County's poverty rate of 13.3%. More than 100 children and almost 300 adults in total are estimated to be in poverty. 60 of these adults are over the age of 60 years old.

» EDUCATION COMPARISONS (% OF 25+ POPULATION)

Source: US Census Bureau, American Community Survey (2021)

	RICHLANDS	ONSLow COUNTY
No High School Degree	7.6%	8.2%
High School Graduate (includes equivalency)	32.5%	29.6%
Some College, No Degree	30.3%	26.4%
Associates Degree	6.3%	10.9%
Bachelor's Degree	12.0%	17.0%
Graduate or Professional Degree	11.3%	7.9%

ENVIRONMENTAL INFLUENCES

Fragile Areas of Environmental Concern

There are a few biodiversity areas within the Town, particularly on the most southern edge of Richlands Highway and along Squires Run Creek on the northeastern edge of Town. However, these are not recognized by the Coastal Area Management Act as areas of environmental concern, or AECs. The Coastal Area Management Act does recognize coastal wetlands as areas of environmental concern, and there are a number of coastal wetlands which cross Richlands' jurisdiction. The largest coastal wetlands follow the southern boundary of the Town's extraterritorial jurisdiction (ETJ), and cut diagonally across the eastern edge of Town. There are no other areas of environmental concern within Richlands or its extraterritorial jurisdiction.

Primary Nursery Areas

There are some prohibited shellfish growing areas in the New River, flowing all the way up to the edge of the Town's ETJ, but there are no shellfish growing areas within the Town itself or within its extraterritorial jurisdiction.

Biodiversity and Habitats

There is no critical habitat within the Town's jurisdiction, according to the Bureau of Land Management and the US Fish and Wildlife Service. However, ESRI, an American multinational geographic information system software company and the world's leading supplier of GIS software, developed a data set which rates the perceived ecological value of areas throughout the United States. According to ESRI's "Intact Habitat Core" map, there are a few good habitat areas within the Town's ETJ. These good habitat areas generally follow the wetlands in the extraterritorial jurisdiction, shadowing the southern boundary of the Town's ETJ and cutting diagonally across the eastern edge of the ETJ.

Soils

The majority of soil within Town is extremely limited in terms of its ability to provide absorption septic tank systems. The ETJ's septic tank absorption is moderately limited. Much of the Town and its ETJ has a moderate water capacity, with some ability to absorb runoff, excluding a few areas near wetlands.

Topography

While the highest elevations in the County are just west of Richlands, the Town and its ETJ are generally low lying, with elevations ranging from -20 to 80 feet. The lowest elevations follow streamlines, with the highest elevations occurring in the northern portion of the Town and its ETJ, particularly around Richlands Highway.

Natural Hazards

The most significant natural hazards in Richlands and its extraterritorial jurisdiction are related to flood hazard zones. The flood zones generally parallel the wetlands in the Town's jurisdiction, with the most significant flood zone running along the southern edge of the Town's extraterritorial jurisdiction. There is another large flood zones which cuts diagonally across the eastern side of the Town and its ETJ.

Given its distance from the coast, Richlands has limited impacts from hurricane storm surge. However, between two and five feet of storm surge could reach the southern boundary of the Town's ETJ in the event of a category 5 hurricane. According to historical records only one hurricane has directly impacted the Town, and it ran north-south along the eastern edge of the Town's jurisdiction. In the event of a hurricane or other major storm, the State recognizes US-258 and NC-24 as evacuation routes.

Surface Water Classifications

The entire Town and its ETJ are within the New River Watershed. The major streams in the Town's jurisdiction are recognized as nutrient sensitive waters, which means they need additional nutrient management due to being subject to excessive growths of microscopic or macroscopic vegetation. However, none of these waters are considered to be impaired.

LAND USE INFLUENCES

Existing Land Use

With the exception of the most extreme edges, the majority of the Town is developed, largely for residential purposes. Commercial activity is concentrated along Richlands Highway, with some extending along W Franck Street. Public and institutional uses are concentrated along the southern edge of Richlands Highway, as well as on the northeastern edge of Town (Trexler Middle School). There are some residential, commercial, and institutional uses in the extraterritorial jurisdiction, but a large portion of the ETJ is considered to be undeveloped or rural / agricultural.

The majority of the Town is considered to be developed, as is a decent portion of the northern ETJ. There are some underdeveloped areas in the Town and ETJ, and much of the southern ETJ is either undeveloped, vacant, or agricultural.

Transportation

US-258 / Richlands Highway is a principal arterial and the major transportation route in the Town. NC-24 is another major route, and is classified by NCDOT as a minor arterial. According to the traffic count data collected by NCDOT in 2020, more than 5,000 trips take place on these two roadways each day. The highest amount of traffic occurs on the southern side of US-258, and ranges between 10,000 and 20,000 trips per day. Between 1,000 and 2,000 trucks travel along Richlands Highway each day, but only around 501 -750 continue onto US-258 north of the Town.

The majority of crashes which occur in the Town and its ETJ occur along Richlands Highway, with significant concentrations in Town. According to the most recent State Transportation Improvement Plan (2024 - 2033), the only improvement planned in Richlands' jurisdiction is the widening of Gum Branch Road from west of Mills Fields Road to east of Ramsey Road in Jacksonville. This project is currently under construction.

Economy

Almost two-thirds of the Town's population over the age of 16 is in the labor force. Exactly half of the over-16 population is employed in the civilian labor force while 6.6% are unemployed and 9% are in the armed forces. Just over one-third of the population over the age of 16 is neither working nor actively looking for employment (not in the labor force).

Of those who are employed, most (78%) commute alone to work. Approximately 6% carpool and 6% walk, while more than 7% work from home. The average commute time is 36.8 minutes. The largest employment industries are educational services, healthcare, and social assistance (22.2%); wholesale trade (18.9%); arts, entertainment, recreation, accommodations, and food services (12.7%); and professional, scientific, management, and administrative (11.0%).

Housing

There are 824 households in the Town of Richlands, 527 of which (64%) are families. Both the average household size of 3.3 people and the average family size of 4.3 people are larger than the average household and family sizes in the County. About 45% of all households in the Town include at least one child under the age of 18 and almost one-quarter of households include someone over the age of 65.

According to the most recent American Community Survey, the majority of housing units (84%) are single family, detached units. Just over 1% of housing units are mobile homes and the remainder of the housing units are either duplexes or some type of multi-family unit. The majority of the Town's housing stock was built between 2000 and 2019 (60%), though about 330 units were built before then.

The majority of homes (92%) are occupied. This is greater than the overall occupancy rate of Onslow County (83.3%). Of those occupied units, about 60% are owner-occupied and about 40% are renter-occupied, which is similar to the housing tenure of Onslow County as a whole. The median home value of owner-occupied homes is \$178,300, which is slightly higher than the median home value of Onslow County. As noted in the housing section of the Plan, this value is notably lower than the market value, which is estimated by Zillow, Realtor.com, and Rocket Homes as around \$250,000.

Community Infrastructure

There is one elementary school (Heritage Elementary), one middle school (Trexler Middle), and one high school (Richlands High) within the Town limits. Richland Elementary School is also just outside the Town, and over half of the Town is actually zoned for Richlands Elementary. The most southwestern portion of the Town is within the Heritage Elementary School District. According to the North Carolina School Report Cards website, both Heritage and Richlands Elementary scored a D in 2022. Trexler Middle School also scored a D and Richlands High School scored a C. While Trexler Middle School met its academic growth range last school year, the other three schools did not.

The Town of Richlands has a Police Department that is located inside of Town Hall. In addition to the Police Chief, there are seven full-time sworn officers, two part-time officers, and auxiliary officers who serve the Town. The Department is community-oriented and offers a range of programs including an explorer program, crime prevention, drug prevention education, and community watch programs. The Richlands Police Department works closely with the Onslow County Emergency Services Department, which includes the E-911 Communications Center, the Emergency Management Office, Emergency Medical Services, and Fire Rescue Services. EMS Station 10 is within the Town and is connected to the Richlands Volunteer Fire Department. The Town is within the Northwest Onslow Fire Rescue District.

The Richlands Branch of the Onslow County Library System is in the center of Town, as is the Onslow County Museum. Venters Park and the Richlands Community Building are two recreational facilities provided in and by the Town, both of which can be rented out by residents. The Richlands Steed Park, which is operated by Onslow County Parks, is just outside of Town, as is the Cow Horn Landing Paddle Trail.

The entire Town is within the ONWASA - Northwest water service area and water service is readily available throughout Richlands' jurisdiction. While there is sewer service within the Town, only the central portion of the municipality and the major roadway corridors are within ONWASA's sewer service area.

Future Land Use Map

The Town of Richlands and its ETJ is depicted on the overall County Future Land Use Map, but given the more general nature of that map, and the relatively small size of the Town, a separate Future Land Use Map is included here for use by the Town as it implements its growth and development plans. The area depicted on the Town's map is inclusive of the corporate limits and ETJ only. While the County map depicts the Town's planning and zoning jurisdiction as being primarily in the "Municipality" and "Suburban Growth" land use classifications, the map presented here is more specific in the classifications that it assigns - primarily to give the Town more guidance and support in helping to determine the consistency of proposed rezonings. The following is a summary of each of the Town-specific future land use classifications, followed by the Town's Future Land Use Map.

Civic

This classification is intended to accommodate major civic and institutional uses in Town. Examples include schools, Town, and County facilities. This classification has been generally applied to properties in the community that are currently used for one of these purposes.

Commercial

The Commercial classification is applied primarily to areas located along the US Highway 258 / NC 24 corridor that runs along the west side of the Town. This classification is intended to support the ongoing use, development, and redevelopment of a wide range of retail and service uses that support the Town and surrounding rural communities.

Conservation

This classification has been applied to areas of the Town's jurisdiction that have significant environmental constraints that likely preclude significant development. These areas are not parcel-specific, so properties may fall within both the Conservation classification as well as another classification.

Downtown

The Downtown land use classification is applied to the traditional central business core of the Town. Situated at the heart of the original grid street network, this area contains historic commercial buildings developed in a typical small town urban development pattern. This area is primarily commercial in nature, but its immediate surroundings include a number of residences. Small scale retail and service uses are most appropriate for this area.

Suburban Residential

This land use classification is intended to support single family residential development at a density of up to 4 dwelling units per acre in growth areas outside of the Town's traditional core. These areas are also intended to accommodate attached single family development (townhomes) at slightly higher densities - either as standalone projects or integrated into mixed residential developments.

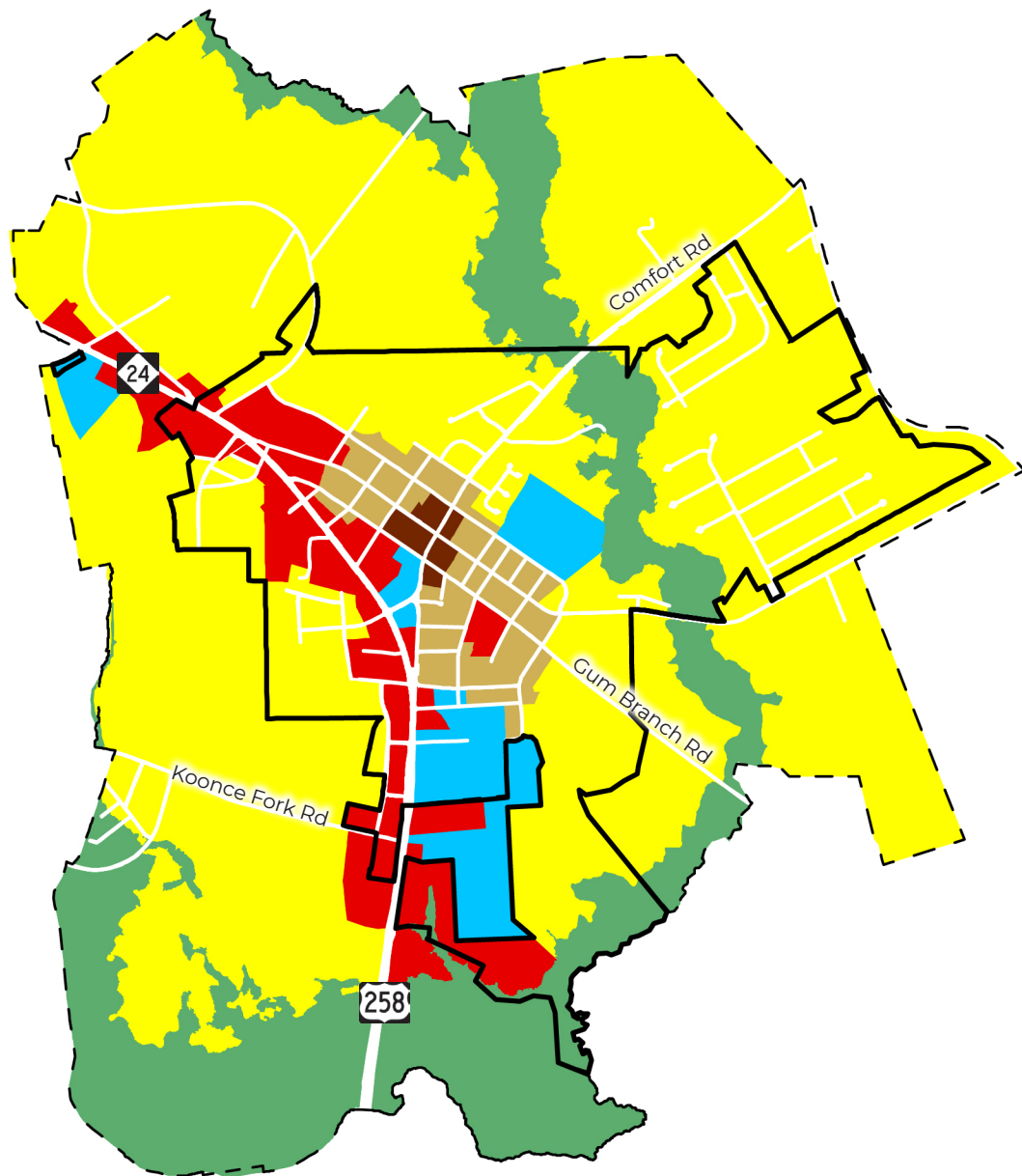
Town Residential

The Town Residential land use classification is applied to the areas of town that surround the downtown core and extend outward along the original grid street network. This area is primarily residential in nature, with single family homes on a variety of lot sizes, as well as some more recent infill development consisting of small attached residences. Future development and redevelopment within the Town Residential area should be consistent with historic development patterns, setbacks, and uses to maintain the character of the area while supporting a vital downtown core at its center.

» FUTURE LAND USE DISTRIBUTION

	TOTAL ACREAGE	PERCENTAGE OF COUNTY*
Civic	145.5	4.1%
Commercial	310.4	8.8%
Conservation	722.9	20.5%
Downtown	16.1	0.5%
Suburban Residential	2,215.1	63.0%
Town Residential	107.9	3.1%

» TOWN OF RICHLANDS FUTURE LAND USE MAP



Legend

- Town of Richlands
- Zoning Jurisdiction (ETJ)
- Civic
- Commercial
- Conservation
- Downtown
- Suburban Residential
- Town Residential





 **NSLOW**
HORIZON 2040
COMPREHENSIVE PLAN