ONSLOW COUNTY SCHOOLS 200 BROADHURST ROAD JACKSONVILLE, NC 28540 INTEGRATED PLANNING FOR SCHOOL AND COMMUNITY (IPSAC)

2020 LAND USE STUDY FINAL REPORT

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Executive Summary

In the spring of 2020, Onslow County Schools commissioned the Operations Research and Education Lab (OREd), based at the Institute for Transportation Research and Education (ITRE) at North Carolina State University, to evaluate the residential, commercial, and industrial developments approved within Onslow County. Through evaluation of the supplied development inventories and municipal and county stakeholders, OREd will construct a student growth projection model accounting for development and buildout time periods.

Land Use Study | Onslow County

In spring of 2020, OREd met with community leaders and planning officials from Onslow County and its towns to discuss its current and future residential developments in relation to school facility planning. The rapid residential growth throughout the county is attributable to the current and future growth of Camp Lejeune.

The near-term economic development potential of Onslow County is significant. Informants noted that the United States Marine Forces Special Operations Command (MARSOC) will be rapidly expanding as the United States Marine Corps (USMC) consolidates California operations to Camp Lejeune. This consolidation is expected to bring around 1,200 senior level marines and their dependents to Onslow County. This projected growth has sparked large scale residential developments throughout the county. Currently, there are 17 developments in Onslow County that contain over 100 residential units to be constructed by 2035. Moreover,

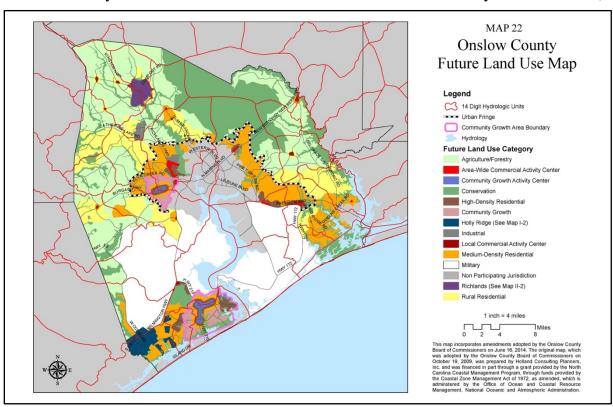


Figure 1: Onslow County Future Land Use

Source: onslowcountync.gov

the Onslow County Land Use Study presents a dynamic state of development factors that suggest the future of Onslow County lies in the operational decisions of Camp Lejeune.

Overview

School systems nationwide are facing difficult planning challenges due to fluctuating student populations and aging school infrastructure. These challenges are shared by the communities that fund buildings and renovation projects. The Operations Research and Education Laboratory (OREd) has developed a system of Integrated Planning for School and Community (IPSAC) that uniquely integrates community and regional data, ten-year economic and demographic forecasts, land use studies, digitized pupil and school location files, and mathematical optimization algorithms.

The integrated planning system is comprised of multiple data-driven processes including:

- Land Use Study
- Enrollment Forecasting
- Out-Of-Capacity Analysis
- School Location Optimization Scenarios
- Attendance Boundary Optimization and Redistricting

This report documents findings from the Onslow County Schools Land Use Study. The Land Use Study outlined in this report includes two components: Community Interviews and Geographic Information Systems (GIS) analysis.

Community Interviews

Discussions with planners, town managers, mayors, utility works, chambers of commerce, economic development officials, and the North Carolina Department of Transportation, etc. allow OREd to compose an impression of future growth for the study area. These critical interviews engage the community to participate in the articulation of infrastructure development plans (transportation, water, and sewer), recent subdivision permits, residential zonings, land available for development, and comprehensive plans developed by local government agencies.

GIS Analysis

OREd also performs spatial analyses based on GIS parcel data using state-of-the-art ArcGIS software. This GIS analysis provides quantitative data concerning available parcels and subdivision lots that then can be used to identify areas of future growth. Student demographic analysis can also be conducted at this stage to better understand socio-economic compositions that may influence school assignment decisions.

Through the combination of community interviews and data-intensive GIS analysis, OREd forecasts school population growth at the individual school attendance boundary level. The culminating deliverable of this analysis is the Out-of-Capacity table, which projects school membership at the school level over a ten-year period.

Introduction

The Onslow County Schools Land Use Study draws information together through a selection of key informants, community stakeholders, and planning officials that were interviewed in March and April of 2020. Additional information was gathered through conference calls, emails, public planning documents, and demographic information provided by the United States Census Bureau.

This report is organized in a comprehensive topical framework that depicts an overall snapshot of growth within the county. This includes both new land uses (developments) and economic generating activities, such as transportation and infrastructure investments. The development of residential land alongside commercial and industrial predicts areas of growth within the county that are likely to experience change in the years to come.

History

The area that is today known as Onslow County was first inhabited by the Siouan Indians (Mazzocchi, 2006). It's believed the area of Onslow County was first explored in the 16th century by Italian explorer Giovanni da Verrazzano (United States Marine Corps, 2020). In addition to Verrazzano, it's also believed that Sir Walter Raleigh and John White explored the Onslow County region in the late 16th century (United States Marine Corps, 2020). It wasn't until the early 18th century that European settlers of German, Scottish, Swiss, French, Welsh, and English decent settled in the area (Mazzocchi, 2006, Onslow County, 2020). Onslow County was formed from New Hanover county in 1734 and was named after Arthur Onslow, a prominent member of the British House of Commons (Mazzocchi, 2006). The City of Jacksonville was incorporated in 1843 and named after President Andrew Jackson (Mazzocchi, 2006).

Onslow County and the City of Jacksonville underwent many changes in the early 1940s with the construction of the United States Army's Camp Davis in 1940 and the United States Marine's Camp Lejeune in 1941 (Onslow County, 2020). These deep military roots give Onslow County and the City of Jacksonville a rich history of being a strong military community in North Carolina, much like the roots and culture that is well known with Fort Bragg in Fayetteville, North Carolina (Mazzocchi, 2006).

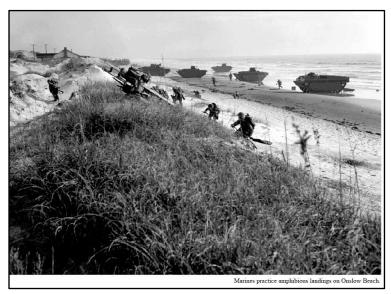


Figure 2: Marines Training at Onslow Beach

Today

Onslow County is still tied

Source: lejeune.marines.mil
to its military roots by being home to Camp Lejeune and New River Air Station. According to
2018 ACS estimates, 29.1% of the population 16 years of age and older are employed by local,

state, and federal agencies. While much of this could encompass local municipal and county offices and/or NCDOT employees, 29.1% is a much higher percentage in comparison to North Carolina's other major metropolitan areas (Class of Worker by Sex for the Civilian Employed Population 16 Years and Older, 2018). Onslow County is much higher in comparison to Wake County where 13.8% of the population 16 years of age and older are employed with local, state, and federal agencies (Class of Worker by Sex for the Civilian Employed Population 16 Years and Older, 2018). This high percentage of local, state, and federal employment is attributable to the presence of the United States Marines and Camp Lejeune. Similar trends can be seen in Cumberland County, another large county oriented around the military, where 23.2% of the population 16 years of age and older are employed with local, state, and federal agencies (Class of Worker by Sex for the Civilian Employed Population 16 Years and Older, 2018). While much of the economy is based around this military population, Onslow County has made efforts to employ new industrial opportunities within its two designated opportunity zones and its ready-for-development industrial parks.

Onslow County and its nearby neighboring counties have become major tourist destinations for North Carolinians. Areas like North Topsail Beach and Swansboro boast ample opportunities for family beach vacations. Onslow County is also home to Hammocks Beach State Park, a popular destination amongst outdoor enthusiasts.



Figure 3: Kayakers at Hammocks Beach State Park

Source: North Carolina State Parks

The Land Use Interviews

The Land Use Study is comprised of interviews with local practitioners and stakeholders that can help contextualize the quantitative data available to OREd staff. Moreover, while OREd's capabilities with historical/archived school enrollment data have been consistently precise in their estimations over the past twenty years, future-oriented information is critical to ensuring the accuracy of school enrollment projections. This can only be achieved through conversations with local practitioners and stakeholders.

Strategic Purpose and Goal of Land Use Studies

The purpose of the land use interviews is to gain a better understanding of what developments (residential, commercial, industrial, and economic) are taking place as of March and April of 2020, as well as residential and commercial developments that are either expected or planned to occur in the near future (one to five years).

Questions included in the Land Use Study interviews that are relevant to school enrollment and planning projections are below:

With regard to residential development:

- Can you share the locations of new or upcoming subdivisions?
- Are these developments scattered throughout the school district or concentrated?
- What is the pace of residential development?
- Has that number been increasing, and if so, at what rate?
- Is that number expected to increase, and if so, at what rate?

With regard to commercial and industrial development:

- Have any new major employers recently opened a facility in the school district?
- Are any new employment facilities that would bring new families to the area expected to open in the next year or so?

The tables on the following page outline the direction that is taken with the key informant interviews. *Figure 4* outlines the concepts and ideas OREd wishes to discuss with interviewees, as well as anticipated results and materials. *Figure 5* is a list of names and affiliations of OREd's interviewees.

Interview Topics	Anticipated Materials & Results	
County and City/Town Planning Department(s)		
Residential, industrial and commercial development in progress and/or planned for the future		
Development trends		
Status of development currently in progress (% of approved units that are now built, by subdivision	Zoning ordinance	
Price range of units in subdivisions currently under development)	Comprehensive planSummary of subdivision permits	
Mobile home parks		
Building moratoria in existence or planned		
Impact fees (if any)		
Economic Deve	lopment Commission	
Industrial and commercial development in progress and/or planned for the future		
Economic bases of the county/city	County/local municipal economic development information	
Development trends and locations	Largest employers	
Economic development policies	Employers that have recently located to/moved from	
Employment trends	the county, etc.	
Infrastructure available/required for future needs		
Water / Sewer / Electric / Other Utilities		
Current location of water/sewer, and utility lines		
Current capacities of water and sewer treatment plants and planned expansions	Maps of current water/sewer, and other utility lines	
NCDOT D	istrict Engineer:	
Planned highway expansion/construction in the county, and information on other transportation modes as appropriate	Current and anticipated TIP projects, projects not included in the TIP that NCDOT believes are high priorities for action of Anticipated Results	

Figure 4: List of Anticipated Results

	Name	Title		
	County Leadership and Planning			
Onslow County	Jessica Rhue	County Planning Director		
Onslow County	Angie Manning	Land Use Administrator		
Onslow County	Ronald (Hank) Beswether	ick Central Permitting Supervisor		
	Municipal Leadership			
City of Jacksonville	Jeremy Smith	Senior Planner		
Town of Swansboro	Jennifer Ansell	Planner		
Town of Holly Ridge	Nathan Rhue	Planner		
Town Richlands	Greg Whitehead	Town Manager		
	Community Stakeholders			
Onslow County Water and Sewer	Jeffery Hudson	Executive Director		
Pluris Utilities	Randy Hoffer	Regional Manager		
City of Jacksonville	Jason Miles	Senior Civil Engineer		
Trevor Carroll	NCDOT	Engineering Supervisor III		
Anthony Prinz	Transportation Services Dir	ector JUMPO		
Mark Sutherland	Jacksonville Onslow Econo Development	omic Executive Director		
Joe Ramirez	Director, Training Resour	ces Camp Lejeune		

Figure 5: List of Interviewees

Key Demographic Trend and Status Indicators

According to 2018 American Community Survey (ACS) estimates, Onslow County's population was just over 197,683 (ACS Demographic and Housing Estimates, 2018). From the 2010 ACS estimates to 2018, Onslow County's population saw a 10.15% increase (ACS Demographic and Housing Estimates, 2010 & 2018). As seen in *Figure 6*, the female population has been consistently lower than that of males. From the 2010 ACS estimates, there were over 12,000 fewer females than males, and that gap grew to nearly 19,500 by 2018 estimates (ACS Demographic and Housing Estimates, 2010 & 2018).

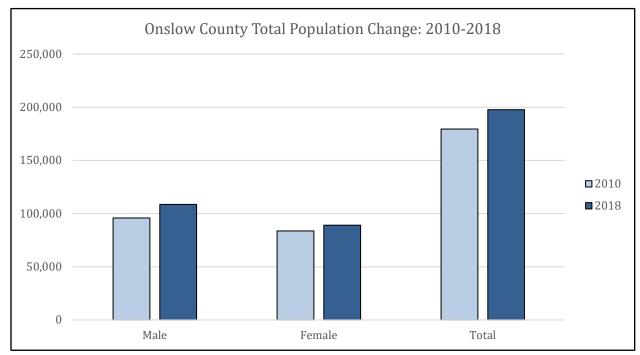


Figure 6: Onslow County Population Change

Many of North Carolina's counties have seen growth in population numbers from 2010 to 2018. This is mainly due to people relocating from other parts of the country in search for cheaper home values and a higher quality of life. This, in conjunction, with Onslow County's everchanging population of military personnel brings larger growth numbers.

Age

Looking at Onslow County's population by age group allows researchers to see fluctuations in population over time. According to ACS estimates, it appears that Onslow County's population is greying as the latter age groups (65 & Older) have grown by 31% since 2010 (ACS Demographic and Housing Estimates, 2010 & 2018). This 31% increase is the largest increase seen in Onslow County's age group comparison. Greying populations is a common trend that researchers have seen in North Carolina. Onslow County's school-age group (5-19) is the second largest growing age group. This group grew by over 15% from 2010 to 2018 (ACS Demographic and Housing Estimates, 2010 & 2018). Lastly, the Under 5 age group did lose about 500 (-2.7%) people from 2010 to 2018; however, this is another common trend that

researchers have seen in North Carolina (ACS Demographic and Housing Estimates, 2010 & 2018).

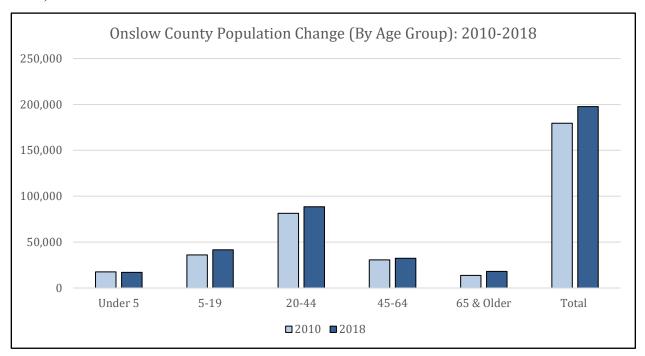


Figure 7: Onslow County Population Change By Age

Race and Ethnicity

For comparison purposes, OREd analyzed Onslow County's demographic composition to two other counties in North Carolina. Cumberland County was chosen for the comparison. While Cumberland County has about 135,000 more people than Onslow County, Cumberland County was chosen in order to compare Onslow County to another county in with a strong military presence. Additionally, Wake County was included in the comparison to see how Onslow County's demographic numbers compare to an urban setting and to the home of the capital of North Carolina.

Seen in *Figure 8*, Onslow County has lower diversity rates in comparison to its Cumberland County counterpart. Onslow County has a much higher White population than both Cumberland and Wake County (ACS Demographic and Housing Estimates, 2018). Onslow County's demographic profile is more similar to Wake County's profile as both counties White population is 74% and 64%, respectively (ACS Demographic and Housing Estimates, 2018). Onslow County contains the lowest population of African Americans at 14%. Wake County is comprised of 20% African Americans, and Cumberland County contains the highest portion of African Americans at 37% (ACS Demographic and Housing Estimates, 2018). Onslow County falls behind with the Asian population as it's comprised of 2% Asians, while Wake County and Cumberland County contain 7% and 3% Asians, respectively (ACS Demographic and Housing Estimates, 2018). Lastly, Onslow County contains 2% of "Other" population, whereas Wake County and Cumberland County contain 4% and 3%, respectively (ACS Demographic and

Housing Estimates, 2018). This could be due to a number of reasons, such as Hispanic communities and people who identify as multiple races.

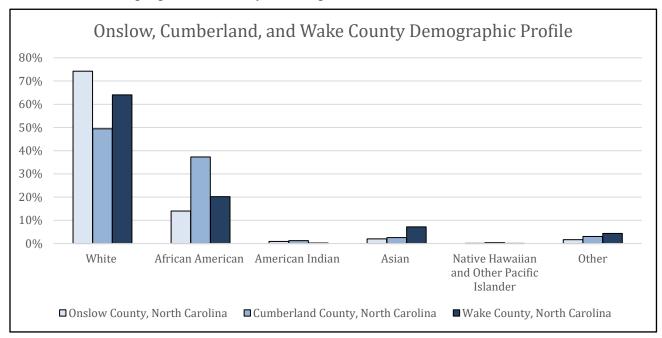


Figure 8: Onslow County Demographic Profile Comparison: County Level

When comparing Onslow County to North Carolina and United States, *Figure 9* shows that Onslow County's diversity rates closely resemble the United States' profile. Regarding the portion of the population that Whites comprise, Onslow County (74%) is slightly higher than North Carolina (68%) and the United States (72%) (ACS Demographic and Housing Estimates, 2018). Onslow County closely resembles the African American population when comparing to the United States. Onslow County is comprised of 14% African Americans while North Carolina and the United States contain 21% and 13%, respectively (ACS Demographic and Housing Estimates, 2018). Again, Onslow County contains fewer people of Asian descent, as the county is comprised of 2% Asians (ACS Demographic and Housing Estimates, 2018). The United States holds the highest percent of Asians at 6% and North Carolina trails at about 3% (ACS Demographic and Housing Estimates, 2018). Lastly, Onslow County's Other population is lower than the state and national level as Onslow County is made up of 2% Other while North Carolina and the United States are 3% and 5%, respectively (ACS Demographic and Housing Estimates, 2018).

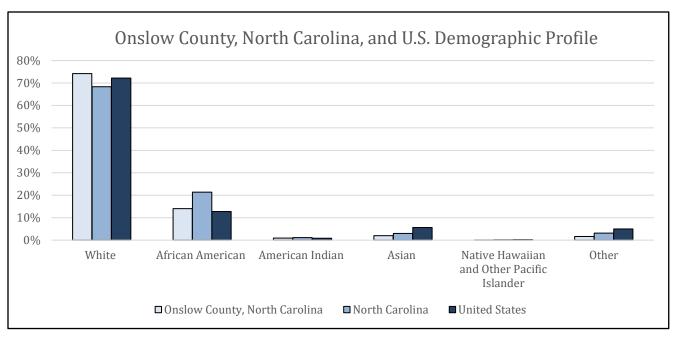


Figure 9: Onslow County Demographic Profile Comparison: State and National Level

Veterans

According to 2018 ACS estimates, of the 112,606 people over 18 years of age in Onslow County, 25,331 (22.5%) were veterans of the U.S. Armed Forces (Veteran Status, 2018). 2018 reports a slightly lower number of veterans in comparison to 2010. Of the 100,544 people over the age of 18 in 2010, 21,491 (21.3%) were veterans of the U.S. Armed Forces (Veteran Status, 2010).

The United States Marine Corps' Camp Lejeune acts as a small city within Onslow County. Between active duty, family members, civilians, and retirees, Camp Lejeune adds over 100,000 people to the area's population (Military Installations, 2020). As previously mentioned, interviews with local informants lead researchers to believe this number will only continue to rise over the next decade.

In the early 1940s, it was decided that the New River area of Onslow County was an ideal location for a new United States Marine Corps training facility (Military Installations, 2020). The two nearby ports of Morehead City and Wilmington made this decision especially easy as Camp Lejeune acts as a major Navy and Coast Guard command, in addition to a Marine Corps command (Military Installations, 2020). Today, Camp



Figure 10: Camp Lejeune Sign

Source: WRAL

Lejeune, in conjunction with satellite locations and air bases, is home to the largest concentration military personnel in the world. The location of Camp Lejeune allows the military to train in many different atmospheres: woodlands, beaches, and sea operations (Military Installations, 2020)

Universities

Coastal Carolina Community College is Onslow County's college degree option. In 1965, Coastal Carolina Community College opened as Onslow Industrial Education Center after approval from the State Board of Education (Coastal Carolina Community College, 2020). The first classes offered were focused on the trades: welding, masonry, auto mechanics, air conditioning and refrigeration, and nursing (Coastal Carolina Community College, 2020). The success of these programs lead the Onslow County community to support a tax increase to continue funding the Onslow Industrial Education Center. In 1967, Onslow Industrial Education Center received institute status and became the Onslow Technical Institute. Success continued for the Onslow Technical Institute by seeing a student population jump between 1968 and 1969 from 281 students to 1,142. By



Figure 11: Coastal Carolina Community College

Source: NC Community Colleges

1970, the institute was granted community college status and became Coastal Carolina Community College (Coastal Carolina Community College, 2020).

Today, Coastal Carolina Community College offers 13 AAS degree options that range from culinary studies to dental hygienics (Coastal Carolina Community College, 2020). Additionally, the school offers many different transfer programs for students who seek to move on to higher education at surrounding universities. Coastal Carolina Community College provides excellent benefits to local military personnel and their families. In the spring of 2017, it was reported that 340 active duty military and 1,129 veterans were enrolled in its programs (Coastal Carolina Community College, 2020).

Employment and Income

North Carolina Department of Commerce Local Area Unemployment Statistics (LAUS) data showed that as of July 2020 8.3% (5,298) of Onslow County's 64,183 civilian labor force were unemployed (2020). Compared to North Carolina's unemployment rate of 8.5% during the same time, Onslow County's rate is marginally lower than the state (North Carolina Department of Commerce, 2020). At the time of this study, North Carolina and many of its counties were grappling with the impact of COVID-19. The COVID-19 pandemic lead to unprecedented unemployment rates across the state and country, and COVID-19 is the main culprit for the unusually high 8.3% unemployment rate for July 2020. *Figure 12*, pulled from NC's Department of Commerce LAUS data, shows that Onslow County's unemployment rate is typically around 4.7%.

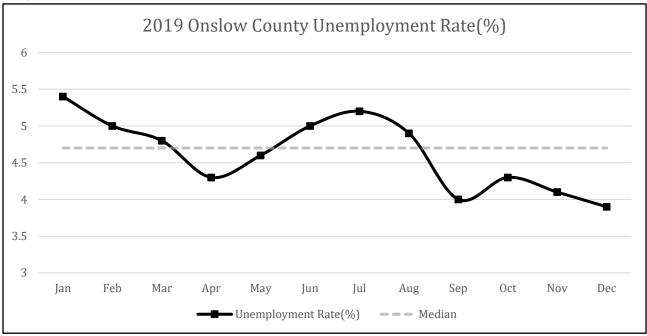


Figure 12: Onslow County Unemployment Rate

NC Department of Commerce data also showed that the median household income for Onslow County was \$49,634 in 2017 (2020). This is slightly lower than the states median household income of \$52,797 for the same year (2020). Moreover, Onslow County's cost of living (86.7) is 3.9 points lower than that of the state (90.6) and 13.3 points lower than the U.S. baseline of 100 (Best Places, 2020). These details can be seen in *Figure 13*.

Cost of Living

Onslow County's and North Carolina's measurement on the cost of living is derived from several factors that comprise the Cost of Living score indicated in *Figure 13*. Factors include the costs of groceries, healthcare, housing, median home cost, utilities, and transportation, as collected by MIT's Living Wage Calculator. Average living wage in Onslow County for 1 adult with 0 children is \$11.76 (Glasmeier, 2020). For reference, the living wage represents the rate at which one person can fully support himself or herself, including expenses.

Indicator	Onslow County	North Carolina
Estimated Percent Population Change 2010-2018 (U.S. Census)	10.15%	8.6%
Unemployment Rate - July 2020 (NC Dept. of Commerce – "Local Area Unemployment Statistics")	8.3%	8.5%
Median Household Income – 2017 (NC Dept. of Commerce – "Income")	\$49,634	\$52,797
Persons in Poverty – 2018 (U.S. Census)	15.6%	14%
Cost of Living (Best Places)	86.7	90.6
Living Wage – Hourly (MIT Living Wage Calculator – 1 Adult)	\$11.76	\$11.98

Figure 13: Onslow County Cost of Living Statistics

Employment Preparation

Of Onslow County's population 16 years and over, 109,876 people (72% of population) are employed in the civilian labor force (Employment Status, 2018). The largest portion of the labor force (20.6%) falls in the \$50,000 to \$74,999 wage bracket (Income in the Last 12 Months, 2018). Of the population age 25 years and older, 16.4% have a bachelor's degree, and of the population who is 25 years and older, 30% have a high school diploma as the highest educational attainment (Educational Attainment, 2018).

Employment Sector

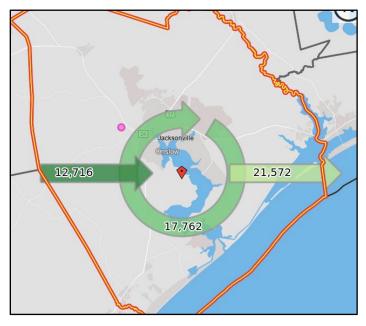


Figure 14: Onslow County Inflow/Outflow of Jobs

Onslow County has a healthy Inflow/Outflow of jobs. As seen in *Figure 14*, about 58% of people who live in Onslow County also work in Onslow County (U.S. Census Bureau, 2020). Having a higher number of community members living and working inside of the county bodes well for the county's economy, due to more income staying and circulating in the county.

Onslow County's economic base is comprised of a broad, diverse collection of employment sectors. These employment sectors include Retail Trade (18.6%), Accommodation and Food Service (17.3%), Health Care and Social Assistance (11.5%), Waste Management and Remediation (10.8 %), Construction (7%), and many others

(U.S. Census Bureau, 2020). Details of Onslow County's industry rankings can be seen in *Figure 15*.

Major Employers

Rank	Company Name	Industry	Employee Range
1	Defense Ex Army Navy & Air Force	Public Administration	1000+
2	Onslow County Board Of Education	Educational Services	1000+
3	Marine Corps Exchange Service	Retail Trade	1000+
4	Wal-Mart Associates Inc.	Retail Trade	1000+
5	County Of Onslow	Public Administration	1000+
6	Onslow Memorial Hospital	Health Care and Social Assistance	1000+
7	Coastal Carolina Community College	Educational Services	500-999
8	Food Lion	Retail Trade	500-999
9	City Of Jacksonville	Public Administration	500-999
10	Concentrix Cvg Customer Management	Administrative and Support and Waste Management and Remediation Services	500-999
11	Coastal Enterprises Of Jacksonville	Administrative and Support and Waste Management and Remediation Services	250-499
12	Mcdonalds	Accommodation and Food Services	250-499
13	Lowes Home Centers Inc	Retail Trade	250-499
14	The Wood Company (A Corp) Accommodation and Food Services		250-499
15	Gfs	Accommodation and Food Services	250-499
16	Taco Bell	Accommodation and Food Services	250-499
17	Dominos	Accommodation and Food Services	250-499
18	Results Customer Solutions Llc	Professional, Scientific, and Technical Services	250-499
19	Stanadyne Llc	Manufacturing	250-499
20	U S Postal Service	Transportation and Warehousing	100-249
21	Gmri Inc	Accommodation and Food Services	100-249
22	Principle Long Term Care Inc	Health Care and Social Assistance	100-249
23	Marine Federal Credit Union	Management of Companies and Enterprises	100-249
24	Yorktown Systems Group Inc	Professional, Scientific, and Technical Services	100-249
25	Wendys Old Fashioned Hamburgers	Accommodation and Food Services	100-249

Figure 15: Onslow County Top 25 Employers

Growth

This section will discuss potential areas of growth within Onslow County:

- Geospatial Elements and Determinants of Growth
- Rural Characteristics in Growing Onslow

Geospatial Elements and Determinants of Growth

Onslow County's coastal location within North Carolina creates various challenges in relation to residential growth. Specifically, Onslow County is still a largely rural county north of Jacksonville. Here, much of the land consists of agricultural use or rural residential living. This, in conjunction with its distance from a major economic influencer such as Raleigh, forces the county to create its own economic foundations. When interviewing key informants and stakeholders in the planning and development sectors, OREd found that Onslow County holds a wealth of land ready for future residential development outside of Jacksonville's urban boundary. With the potential influx of people moving to Onslow County for military purposes, areas like unincorporated Onslow County, north of Jacksonville and Richlands, are developer's main focus area for medium density residential developments.

Rural Characteristics in Growing Onslow

In contrast, Onslow County's rural atmosphere and its proximity to the beach is one of the major reasons why the United State Marines built a base here in the early 1940s. The presence of Camp Lejeune is what gives rural Onslow County an urban atmosphere in Jacksonville. While the City of Jacksonville is small in comparison the other urban areas of North Carolina, the commercial amenities and number of residents in the area align to create an urban setting. Stakeholders noted the various positive and negative impacts of having a military base in the county; however, many focused on the positive outcomes of Camp Lejeune and the growth it has brought to the area. This military growth has resulted in employment opportunities to members of the community that may not have been possible without Camp Lejeune.

Residential Developments

Much of the residential growth within the county is manifested in the areas around Richlands and Holly Ridge. Commute times to employment opportunities and other retail and recreation activities have a large contribution to residential growth in Onslow County. When considered in combination with the urban amenities of Jacksonville, it's understandable why significant growth is sprinkled throughout Onslow County. Currently, there are numerous developments that are permitted or under construction in the region. The developments identified in *Figure 16* are comprised of data collected from the Onslow County Land Use Study. This list contains the top 25 developments in Onslow County, ordered from the largest number of lots available to the smallest.

Location	Development Name	Lots Built	Lots Available	Est. Construction Begin	Est. Construction End
Holly Ridge	Summerhouse on Everett Bay	339	690	2006	2022
Onslow County	Onslow Tract 24	0	525	2020	2024
Onslow County	The Preserve at Tidewater	170	309	2017	2022
Onslow County	Everett's Place Section II at Onslow Bay	0	300	2020	2022
Richlands	Trifield	228	293	2004	2030
Onslow County	Village Creek Phase	10	208	2020	2024
City of Jacksonville	The Vineyards	0	191	2021	2026
City of Jacksonville	N/a	0	180	2022	2028
Onslow County	Bennett Place Section IV and Roanoke Bay Section III @ Stateside	0	158	2020	2021
Onslow County	Windpointe	0	148	2020	2023
Richlands	Maidstone	67	132	2009	2035
Onslow County	Stones Landing Section III and Paradise Point Section IV at Onslow Bay	0	130	2020	2022
Onslow County	The Colony at Towne Point (74 duples unit and 56 townhome units)	0	130	2020	2022
Onslow County	Paradise Point Section IV Stones Landing Section III and Atlantic Cove Section II at Onslows Bay	0	118	2020	2022
Richlands	Windstead Place	13	107	2011	2035
Onslow County	Permeta Branch	12	105	2019	2024
Onslow County	The Landing at Mill Creek Phase III & IV	2	102	2019	2022
City of Jacksonville	Harvest Meadows	0	95	2021	2026
Onslow County	Waverly Place	0	94	2020	2022
Onslow County	Aaronfield at Old Folkstone	0	88	2020	2021
Swansboro	The Hammocks at the Port Phase II	0	83	2020	2025
City of Jacksonville	Springfield Apartments	0	80	2021	2022

Holly Ridge	Landing at Folkstone	25	78	2012	2025
Onslow County	Stonebay Townhomes	9	75	2019	2022-2024
Onslow County	Topsail Bluff	5	71	2018	2025

Figure 16: Onslow County Developments

Area Housing Market Statistics

As of February 2020, the median sale price of a single-family home in Onslow County was \$165,000 (Realtor.com, 2020). While Cumberland County's median sale price of a single-family home during the same time was much lower at \$129,000, homes in Onslow County have appreciated 10.1% in the last 10 years (Zillow, 2020; Best Places, 2020). From February 2018 to February 2020, Onslow County's median sale price for single family homes increased 22% from \$135,000 to \$165,000 (Realtor.com, 2020). In contrast, Cumberland County's median sale price for single family homes grew by 14.2% for the same period (Zillow, 2020). Information on the sale prices of all single-family homes from February 2018 to February 2020 is provided in *Figure 17*.

Comparative Year	Onslow County	Cumberland County
Feb 2018	\$135K	\$113K
Feb 2019	\$150K	\$113K
Feb 2020	\$165K	\$129K

Figure 17: Onslow County Housing Statistics

Commercial/Industrial Development

Commercial Development

Onslow County offers ample commercial opportunity. The North American Industry Classification System (NAICS) identifies the retail trade sector as the sector with the highest number of jobs in the county (7,300) (U.S. Census Bureau, 2020). Much of this commercial development is contained on the Western Boulevard corridor from Gum Branch Road in the north to Highway 24 in the south. This density of jobs along the Western Boulevard corridor can be seen in Figure 18. The map below, pulled from the U.S. Census Bureau's On The Map application, shows the centralized commercial activity along Western Boulevard.

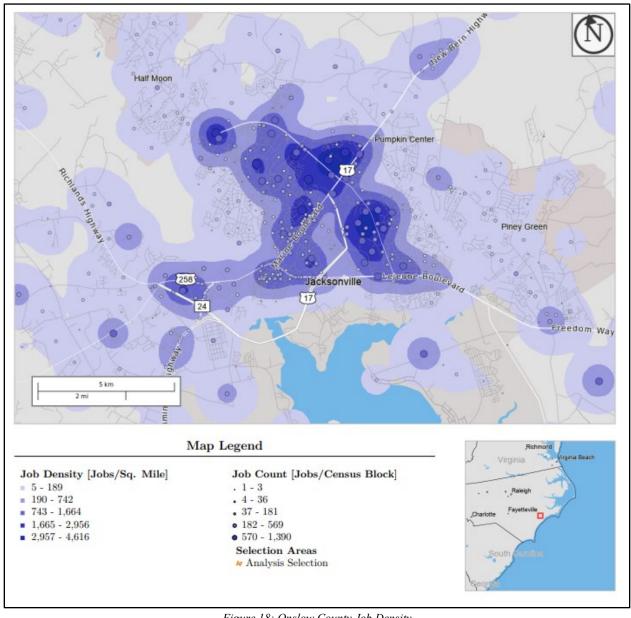


Figure 18: Onslow County Job Density

The Western Boulevard corridor offers many commercial amenities that current residents and future residents can take advantage of. Numerous restaurants and retail stores can be found along this six-mile stretch of road, some of which can be seen in the chart below. Aside from the number of services available along Western Boulevard, this commercial hub is conveniently located in the middle of the county. Most parts of Onslow County can access these amenities within a 30-minute drive or less.

Restaurant	Retail
Buffalo Wild Wings	Target
Longhorn Steakhouse	Burlington
Cheddar Scratch Chicken	Kohls
Carolina Ale House	Petsmart
Logans Roadhouse	Bed Bath & Beyond
Outback Steakhouse	Walgreens
Dunkin' Donuts	Jacksonville Mall
Jimmy Johns	Walmart

Figure 19: Onslow County's Commercial Companies

Industrial Development

Onslow County boasts many opportunities for industrial development. Namely, Onslow County's two sizable industrial parks provide readily available spaces for future employers and businesses: Burton Business and Industrial Park and Camp Davis Industrial Park.

Burton Business and Industrial Park, just a few miles northwest of Jacksonville proper, is a sizeable park consisting of over 700 acres ready for development (Jacksonville Onslow Economic Development, 2020). Conveniently located off highway 258 in Onslow County, and only 9 miles from the Albert J. Ellis airport, Burton Business and Industrial Park provides ample accessibility for its future tenants and owners. Part of Burton Business and Industrial Park is also located within one of the City of Jacksonville's opportunity zones (Jacksonville Onslow

Economic Development, 2020). This means that under certain conditions determined by the City of Jacksonville, new investments in the area are eligible for tax incentives (City of Jacksonville). Lastly, Burton Business and Industrial park is proud to offer a 30,000 square foot shell building for sale. This building sits on 18 acres of land within the park and is expandable to 60,000 square feet (Jacksonville Onslow



Figure 20: Burton Business and Industrial Park's Shell Building

Economic Development, 2020).

Located southwest of Jacksonville, in Holly Ridge, is Camp Davis Industrial Park. This smaller industrial park (around 110 acres) offers 5 remaining lots ranging in price from \$89,000 to \$1.8 million (Jacksonville Onslow Economic Development, 2020). Onslow Bay Boatworks is one of the prominent entities that took advantage of the opportunities presented in the Camp Davis Industrial park (Pippin, 2020). Onslow Bay Boatworks has deep roots in Onslow County and they plan to build a 50,000 square foot facility in the park (Pippin, 2020).

Infrastructure

Transportation

As Onslow County continues to see residential growth and as Camp Lejeune continues to expand, transportation infrastructure is becoming a focus area for local practitioners. Informants noted that population numbers in the county are growing at a rapid rate, but funding for transportation projects is coming slower than desired. Additionally, many of the access points around Camp Lejeune experience congestion during peak periods which impacts the operational efficiency of the base and the lives of non-military commuters.

Many of the projects currently funded in the area revolve around highway widenings, intersection improvements, and safety improvements. Below are a few projects which several informants noted throughout interviews.

The Gum Branch Road Improvements (U-4906)

Gum Branch Road is an 8-mile stretch of road between Richlands and Jacksonville. Recent and near-future residential developments are requiring that Gum Branch Road receive various improvements, namely paved shoulders and additional turn lanes between Richlands and Half Moon. The section of Gum Branch Road between Richlands and Half Moon experiences average annual daily traffic (AADT) counts ranging from 9,000 to 23,000 commuters (NCDOT, 2020). Informants noted that these numbers are expected to rise as this portion of Onslow County is seeing numerous residential developments. Additionally, informants noted that northern portions of the county, such as Richlands, are popular areas for military personnel to reside. This results in a large volume of commuter traffic traveling from Richlands to Camp Lejeune via Gum Branch Road. Construction for this project is estimated to begin in 2020 (Jacksonville Urban Area Metropolitan Planning Organization, 2020).

NC 210 Widening (U-5949)

NC 210 is a 7-mile stretch running from U.S. 17 to Old Folkstone Road. Similar to the Gum Branch Road project, NC 210 sees traffic counts ranging from 17,000 to 20,000, which is partially due to the proximity to Camp Lejeune and the commuters in the area (NCDOT, 2020). This project is currently in the design phase and it is not expected to begin constructed until 2028 (Jacksonville Urban Area Metropolitan Planning Organization, 2020).

Remaining Projects

Onslow County's remaining transportation projects mainly revolve around intersection improvements. Specifically, the portion of Western Boulevard from Gum Branch Road to U.S. 17 contains 4 intersection improvement projects which consist of adding turn lanes, adding through lanes, and improving safety features for these highly travelled corridors. Three of these projects are currently in the construction phase and one is still in the design phase, with expected construction to begin in 2022.

Water and Sewer

Onslow Water and Sewer Authority is the region's largest water and sewer supplier. Other sizeable entities include Pluris and the City of Jacksonville. Many informants noted the concerns with wastewater treatment and the need for more capacity. Informants from all 3 entities noted the projected growth of the county has been a major influencer in the push to improve infrastructure and increase capacities. Specifically, the more coastal communities, like Holly Ridge and Swansboro, are near capacity on the wastewater side. The near-term residential growth in these areas will result in the need for capacity improvements.

City of Jacksonville Sewer Project

The City of Jacksonville currently has a sewer expansion project that involves construction of new pump stations and new sewer lines. The main purpose of this project is to provide increased capacity in the northwest region of Jacksonville. The new sewer lines will extend from the Western Boulevard corridor of Jacksonville across Gum Branch Road and Highway 258 to Fire Tower Road in the west (City of Jacksonville, 2020). This expansion of infrastructure is planning to bring Jacksonville's sewer capacity to 15 millions of gallons per day (MDG), which will provide much needed capacity relief in a portion of Onslow County that is expected to have several hundred residential units built by 2028 (City of Jacksonville, 2020). A map of the project can be seen below.

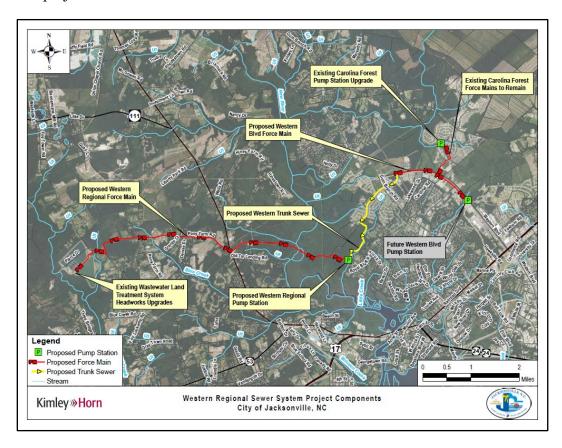


Figure 21: City of Jacksonville Sewer Project

Source: City of Jacksonville Water and Sewer Department

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