

Introduction

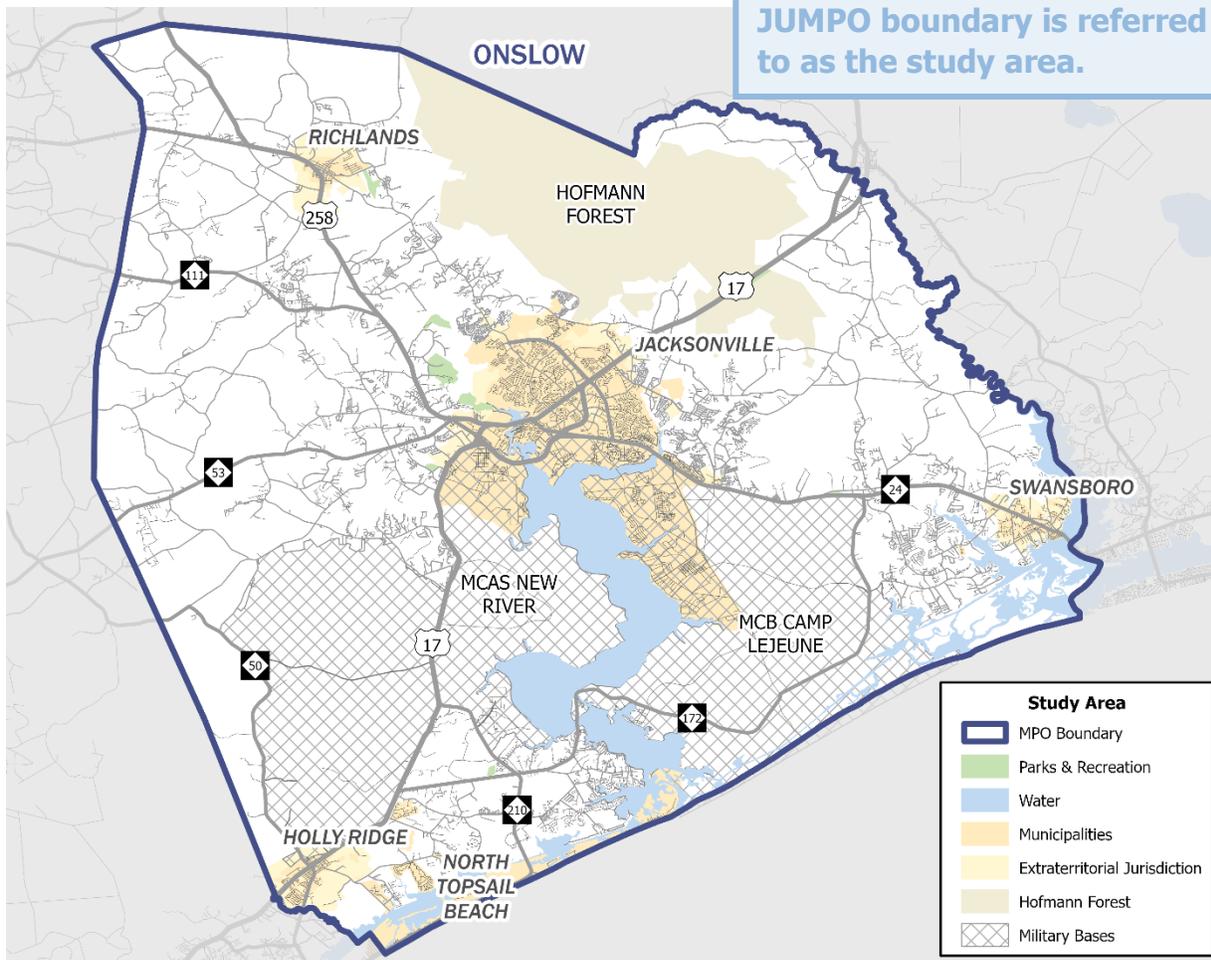
JUMPO is the transportation planning agency that serves the City of Jacksonville, the Town of Richlands, the Town of Swansboro, the Town of Holly Ridge, the Town of North Topsail Beach, and Onslow County. The JUMPO 2050 MTP defines the strategy for creating a regional transportation system that accommodates its citizens' current and future mobility needs. The State of the Region examines the current socioeconomic conditions, travel and development trends, and existing plans for the future of the planning area.

The State of the Region uses demographic data provided by the U.S. Census Bureau's 2022 American Community Survey (ACS) 5-Year Estimates, transportation data from NCDOT, and other data from JUMPO.

Study Area

FIGURE 2: JUMPO STUDY AREA

The JUMPO area covers the entirety of Onslow County except Surf City. The JUMPO boundary is referred to as the study area.



Data sourced from Onslow County & City of Jacksonville

Population Characteristics

Total Population

The JUMPO study area encompasses all of Onslow County except Surf City, including MCB Camp Lejeune and MCAS New River. It is in southeast North Carolina and has an area of approximately 767 square miles. It is bordered by Carteret, Jones, Duplin, and Pender counties and the Atlantic Ocean. The study area has a population of over 200,000 people.

Table 3 shows the total population and the population density for the MPO’s five municipalities, the study area, and the state of North Carolina.

TABLE 3: POPULATION AND POPULATION DENSITY (ACS 2022)

	Total Population	Population Density
City of Jacksonville	71,908	1,260
Town of Richlands	2,577	1,564
Town of Swansboro	3,759	1,578
Town of Holly Ridge	4,236	1,031
Town of North Topsail Beach	775	69
Study Area	203,686	225
North Carolina	10,698,973	199

Population Projections

Table 4 shows the population growth and projections in the study area and North Carolina based on the North Carolina Office of State Budget and Management (OSBM, accessed February 2025). Between 2010 and 2020, the study area grew by 15.1% and North Carolina grew by 9.5%. By 2050, the study area’s population is expected to grow by 37.2% to approximately 280,753. The growth projected for the study area by 2050 (37.2%) is comparable to the growth of the state (35.7%).

TABLE 4: POPULATION GROWTH AND PROJECTIONS

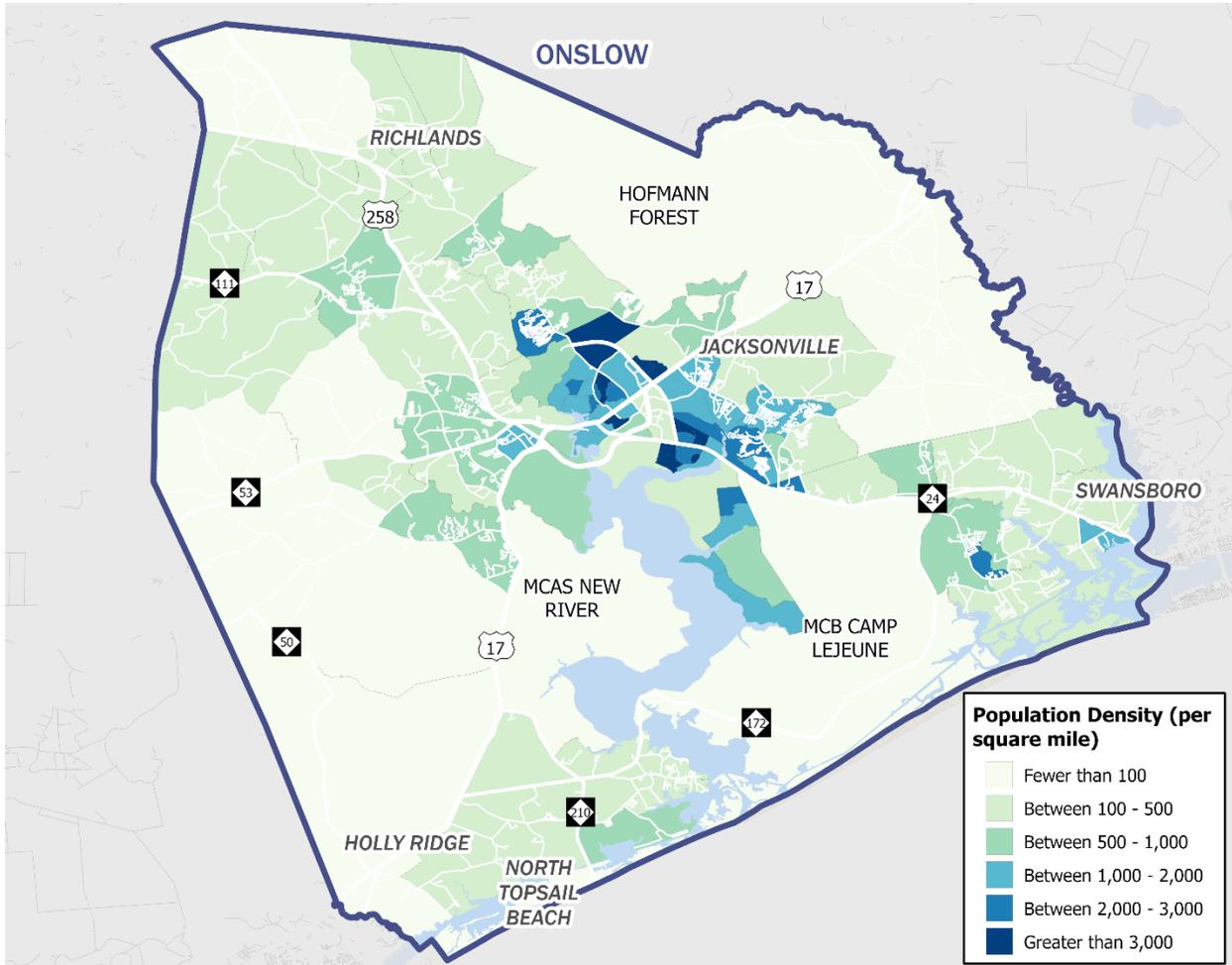
Location	2010	2020	2030	2040	2050	Percent Change
Study Area	177,801	204,576	230,898	255,825	280,753	+37.2%
North Carolina	9,535,762	10,439,539	11,743,841	12,966,080	14,170,486	+35.7%

**Percent change between 2020 and 2050*

Population Density

Figure 3 shows the population density by Census Block Group. The total population in the study area is 203,686 people with an average population density of 225 persons per square mile. The densest area is concentrated in the City of Jacksonville. MCB Camp Lejeune’s eastern territory, south of Jacksonville, is home to a higher-than-average population density. Piney Green is another densely populated area directly east of Jacksonville and north of Camp Lejeune. Swansboro and the surrounding area are also more densely populated than other parts of the study area.

FIGURE 3: POPULATION DENSITY BY BLOCK GROUP



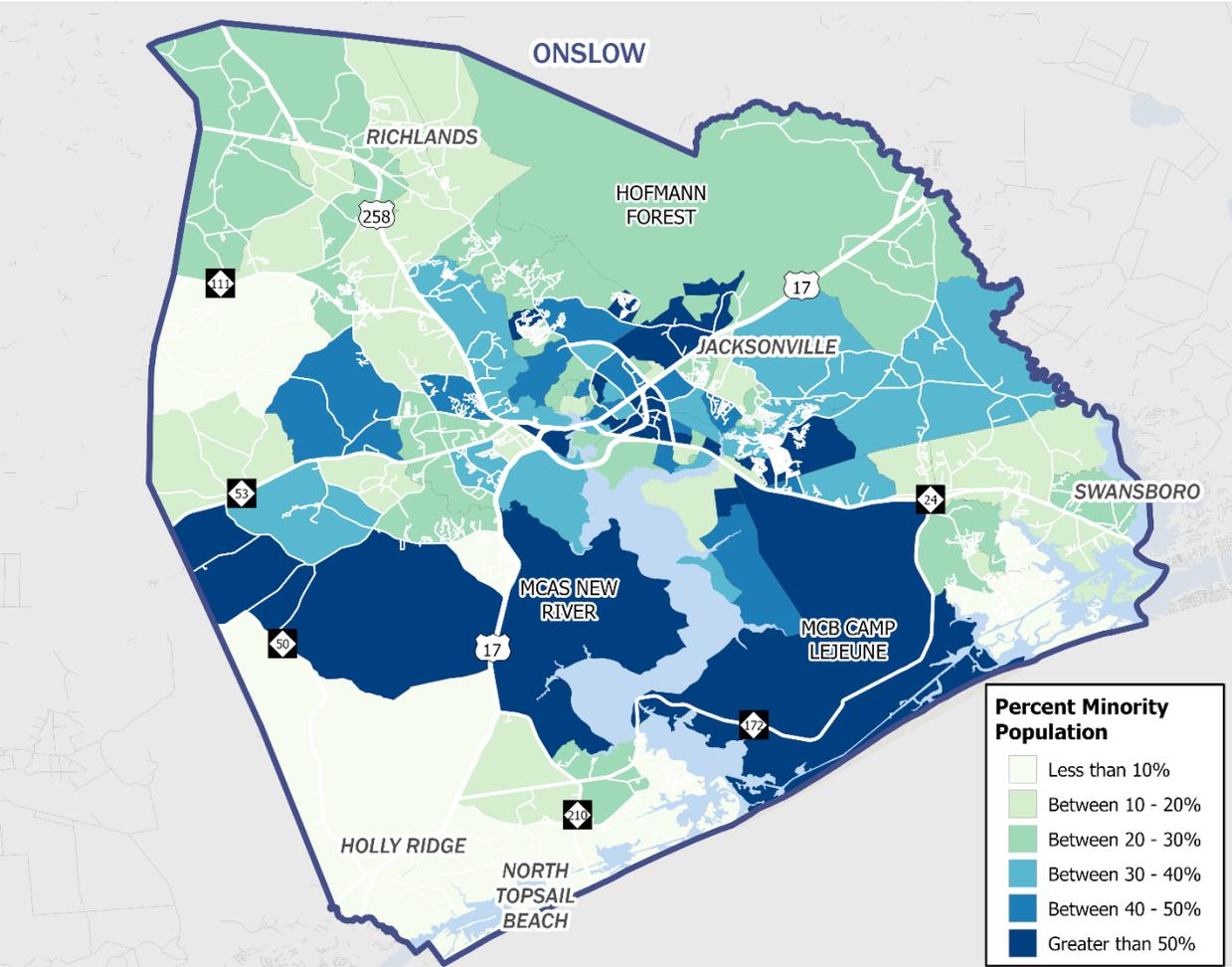
Data sourced from 2022 ACS 5-year estimates

Minority Population

The American Community Survey (ACS) collects detailed demographic information regarding racial identity and cultural origin. Race is defined as one or more of the following: White, Black or African American, American Indian and Alaska Native, Asian, or Native Hawaiian and Other Pacific Islander. As defined by ACS, racial minorities include all people who indicate a race other than White. Ethnic minorities include all people identifying as Hispanic, Latino, or of Spanish origin.

Figure 4 shows the percent racial minority by Census Block Group. The racial minority populations in the study area are most prominent within the City of Jacksonville and areas east of the city. Additionally, areas east of Jacksonville in Piney Green contained higher concentrations of racial minority community members. Minority populations are also prevalent throughout Camp Lejeune and New River. The racial minority population of the study area is approximately 29.5% of the total population. This is lower than the statewide racial minority population of approximately 37.8%. The ethnic minority population in the study area is approximately 13.3% whereas the statewide ethnic minority population is approximately 10.4%.

FIGURE 4: PERCENT MINORITY POPULATION BY BLOCK GROUP



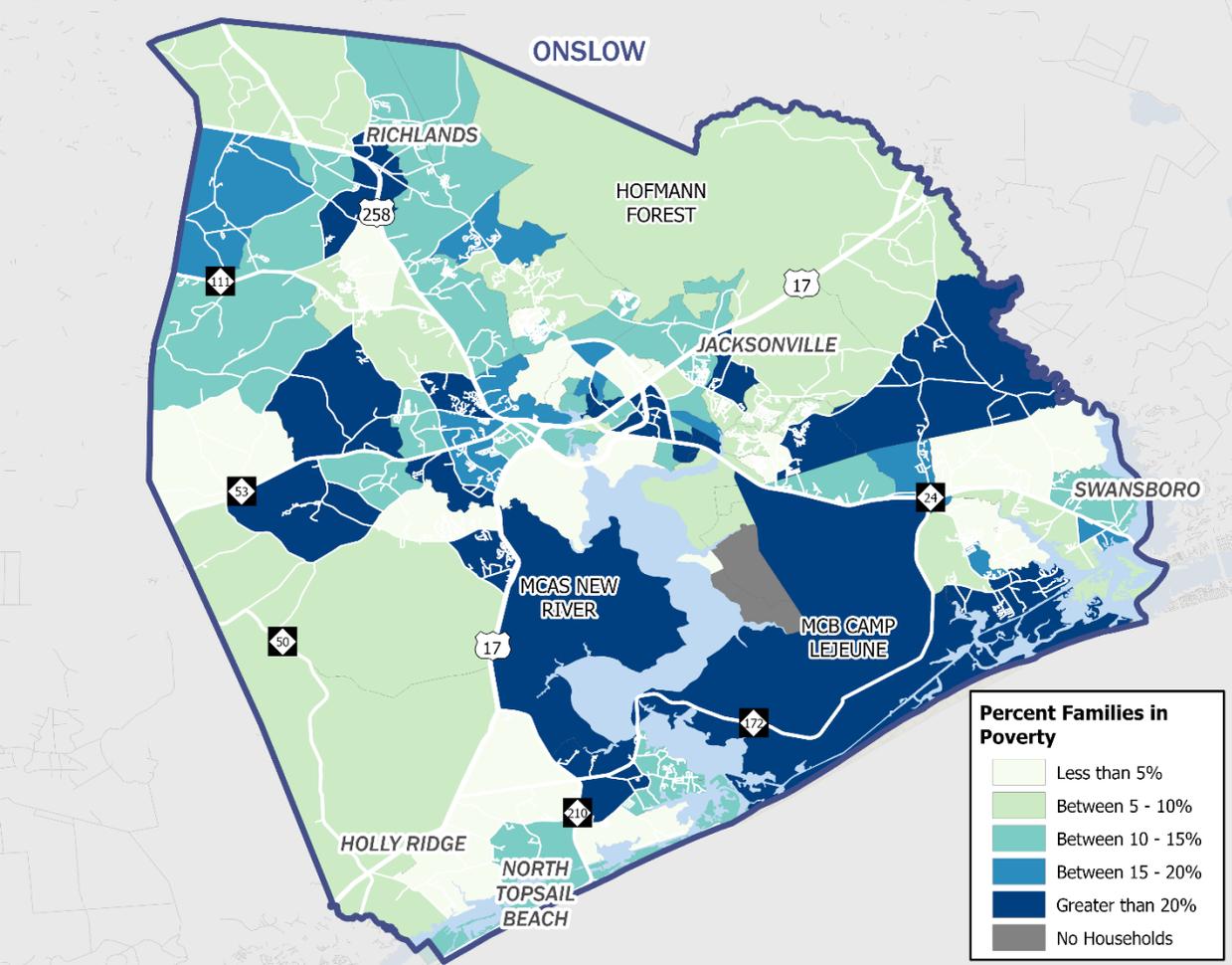
Data sourced from 2022 ACS-5-year estimates

Poverty and Income

The federal poverty threshold for a family of four is an annual income of \$29,950, and the threshold for an individual is \$14,880. In the study area, 12.4% of families are below the poverty threshold. The statewide average of families in poverty is 12.9%, 0.5% higher than the study area. As shown in Figure 5, families below the poverty threshold are distributed throughout the MPO boundary. Parts of Jacksonville, Richlands, Sneads Ferry, Piney Green, and Hubert are the communities in the study area with higher concentrations of poverty.

The study area's median average family income is \$54,654, which is lower than North Carolina's median average family income of \$67,481.

FIGURE 5: PERCENT OF FAMILIES IN POVERTY BY BLOCK GROUP



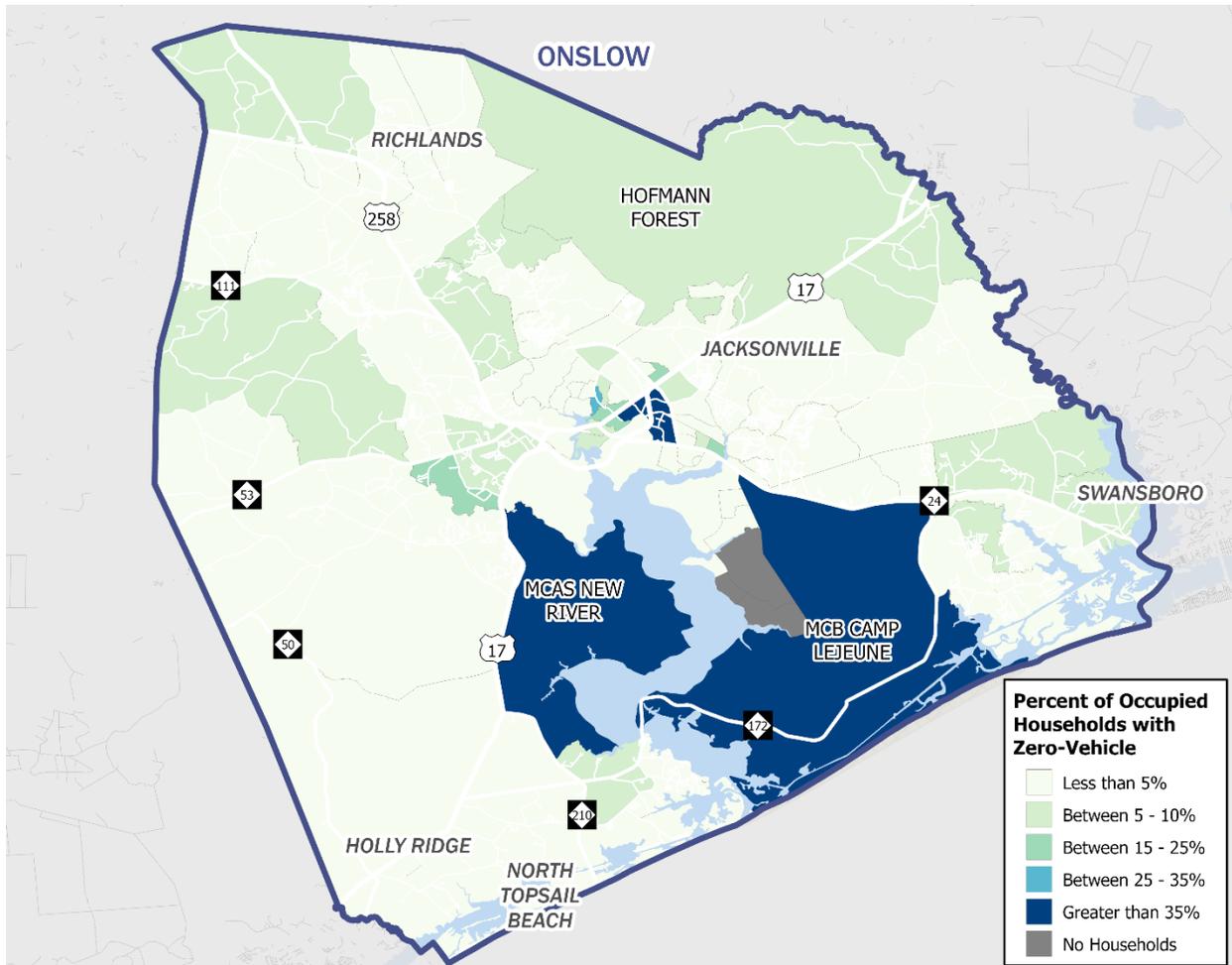
Data sourced from 2022 ACS-5-year estimates

Vehicle Availability

Vehicle availability is an essential data point to understand when considering mobility needs. Of the total 71,009 occupied households in the study area, 2,728 (or 3.8%) do not have access to a vehicle. Compared to North Carolina, the study area contains fewer households without access to a vehicle. In the state, 5.0% of all households do not have access to a vehicle.

Figure 6 shows the percentage of households without access to a vehicle. The highest concentration of households with no vehicles are found in the City of Jacksonville. In Jacksonville there is transit service available, which can provide access and connectivity to households that may not have access to a vehicle. Other areas with higher concentrations of zero-vehicle households include Swansboro, the rural areas directly west of Jacksonville, and the outskirts of Richlands. Since Marines in entry-level training cannot have a vehicle on base, MCB Camp Lejeune also contains higher concentrations of zero-vehicle households. MCB Camp Lejeune is connected to Jacksonville by an express city transit route.

FIGURE 6: PERCENT OF ZERO-VEHICLE HOUSEHOLDS BY BLOCK GROUP



Data sourced from 2022 ACS-5-year estimates

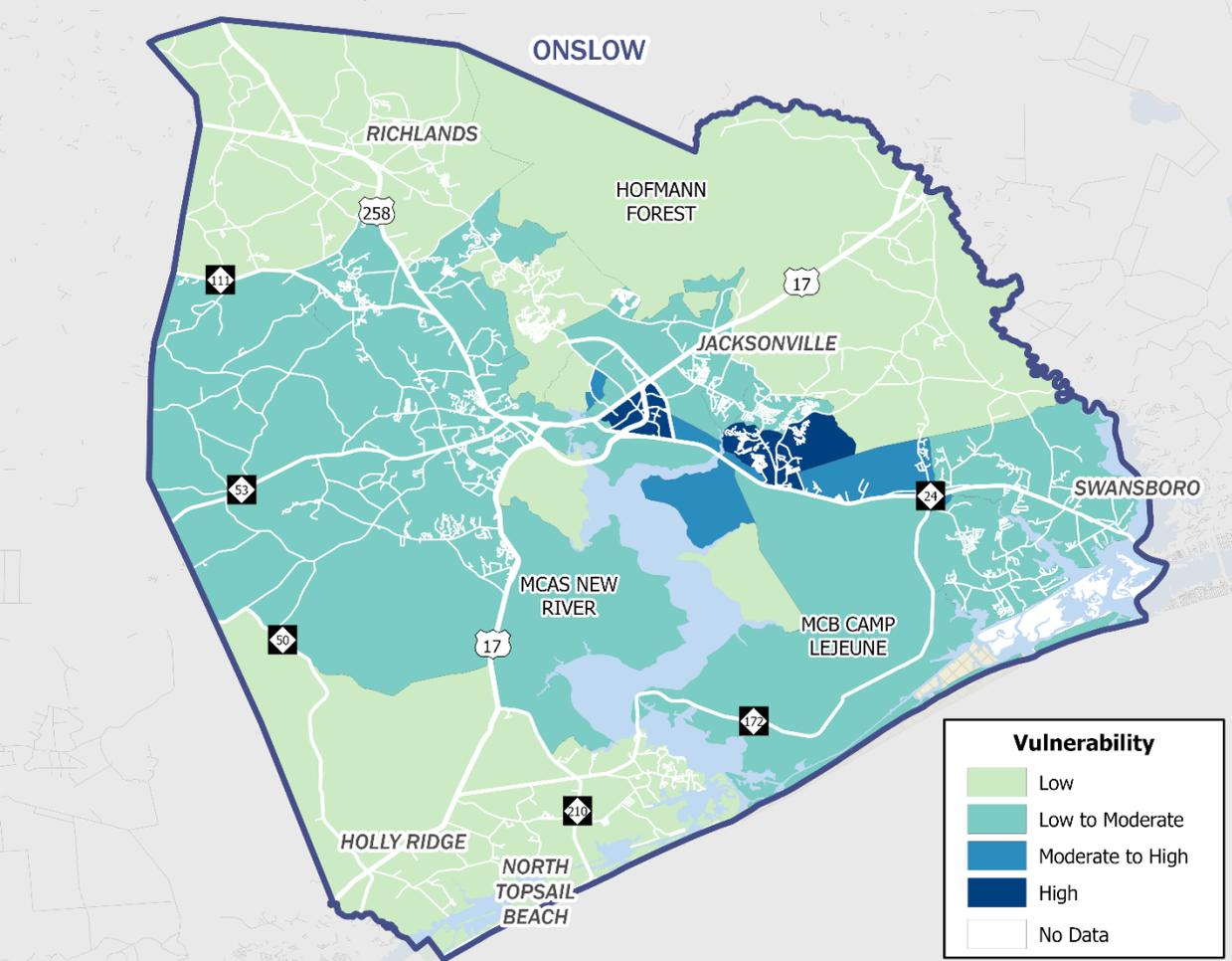
Environmental Justice Index

The Environmental Justice Index (EJI) was created by the Centers for Disease Control and Prevention (CDC) to measure the cumulative impacts of environmental burdens, social vulnerability, and health vulnerability.

Within the social vulnerability category, the EJI accounts for racial and ethnic status, socioeconomic status, and household characteristics and type. For environmental burden, the EJI accounts for pollution and hazardous waste, the built environment, and transportation infrastructure. The health vulnerability category pertains to pre-existing chronic disease burdens. With this data, the EJI scores each census tract so that officials can identify areas with high vulnerability and prioritize action for these communities.

Within the study area, vulnerability is concentrated in portions of the City of Jacksonville, Piney Green, MCB Camp Lejeune, and the western sections of Hubert. These areas are considered vulnerable due to high exposure to potentially toxic sites, high population levels with pre-existing chronic diseases, and low walkability and access to parks. Additionally, the population is within the 94th percentile for civilians with disabilities. Poverty levels range from the 85th to 89th percentile for the areas with elevated vulnerability.

FIGURE 7: ENVIRONMENTAL JUSTICE VULNERABILITY INDEX



Data sourced from CDC Environmental Justice Index (EJI)

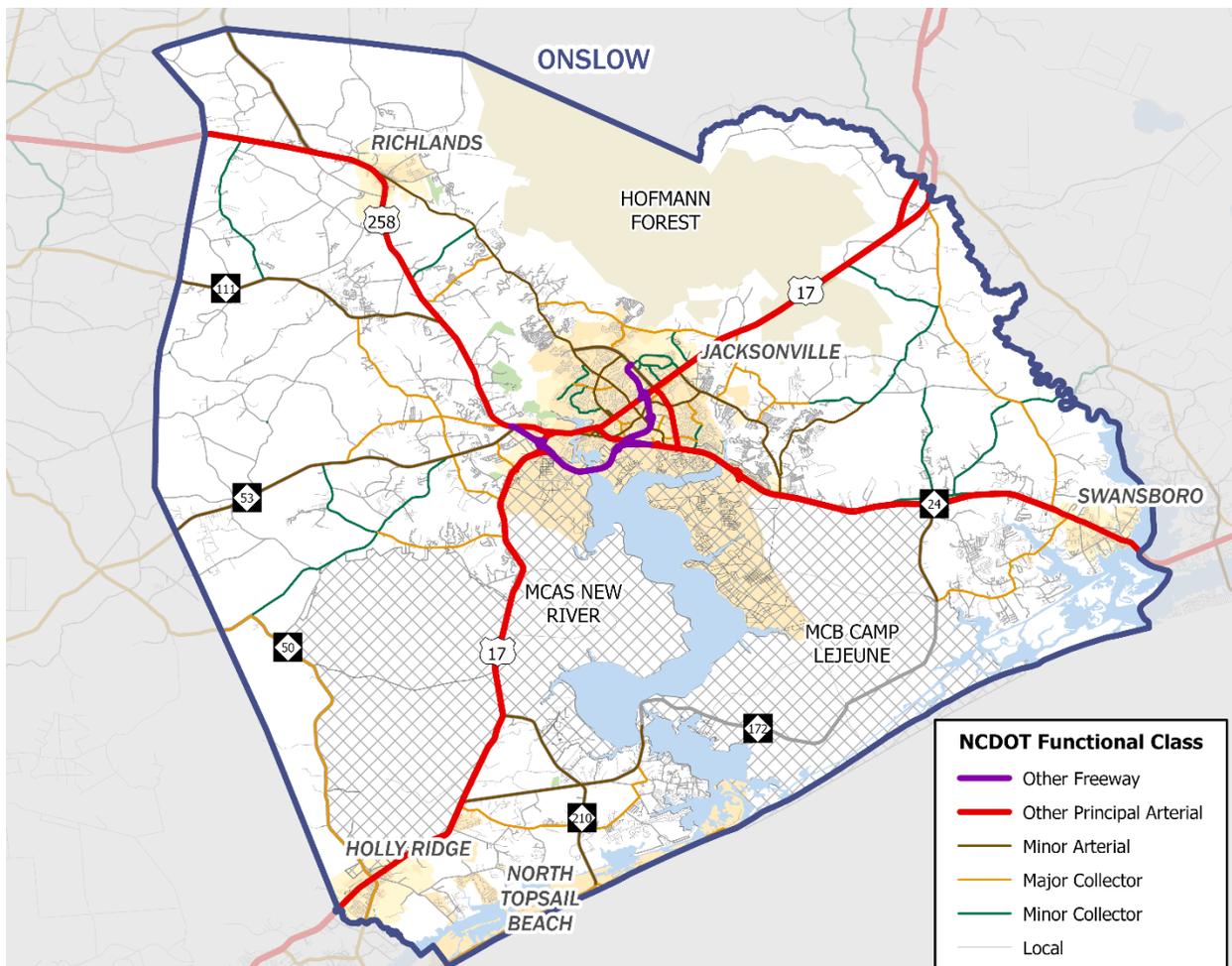
Transportation Conditions

Functional Classification

Functional classifications categorize roadways based on speeds, vehicular capacities, and relationships with adjacent existing and future land utilizations. The functional classification system characterizes streets according to the land uses served and the traffic each street is intended to serve. The classification defines the street in terms of roadway design and features to service the movement primarily of vehicles. Functional classifications found in the study area include:

- **Other Freeway:** Freeways provide the most mobility and the least access. These facilities primarily serve long distance travel and support regional mobility needs.
- **Principal Arterial:** Serves major activity centers, carries the highest traffic volume, and serves high-volume corridors.
- **Minor Arterial:** Connects with principal arterials and serves trips of moderate length.
- **Major & Minor Collector:** Provides access and traffic circulation within residential neighborhoods and commercial areas.
- **Local:** Provides access with little or no through movement and consists of roads not defined as arterials or collectors.

FIGURE 8: FUNCTIONAL CLASSIFICATION



Data sourced from NCDOT

Daily Traffic Volumes

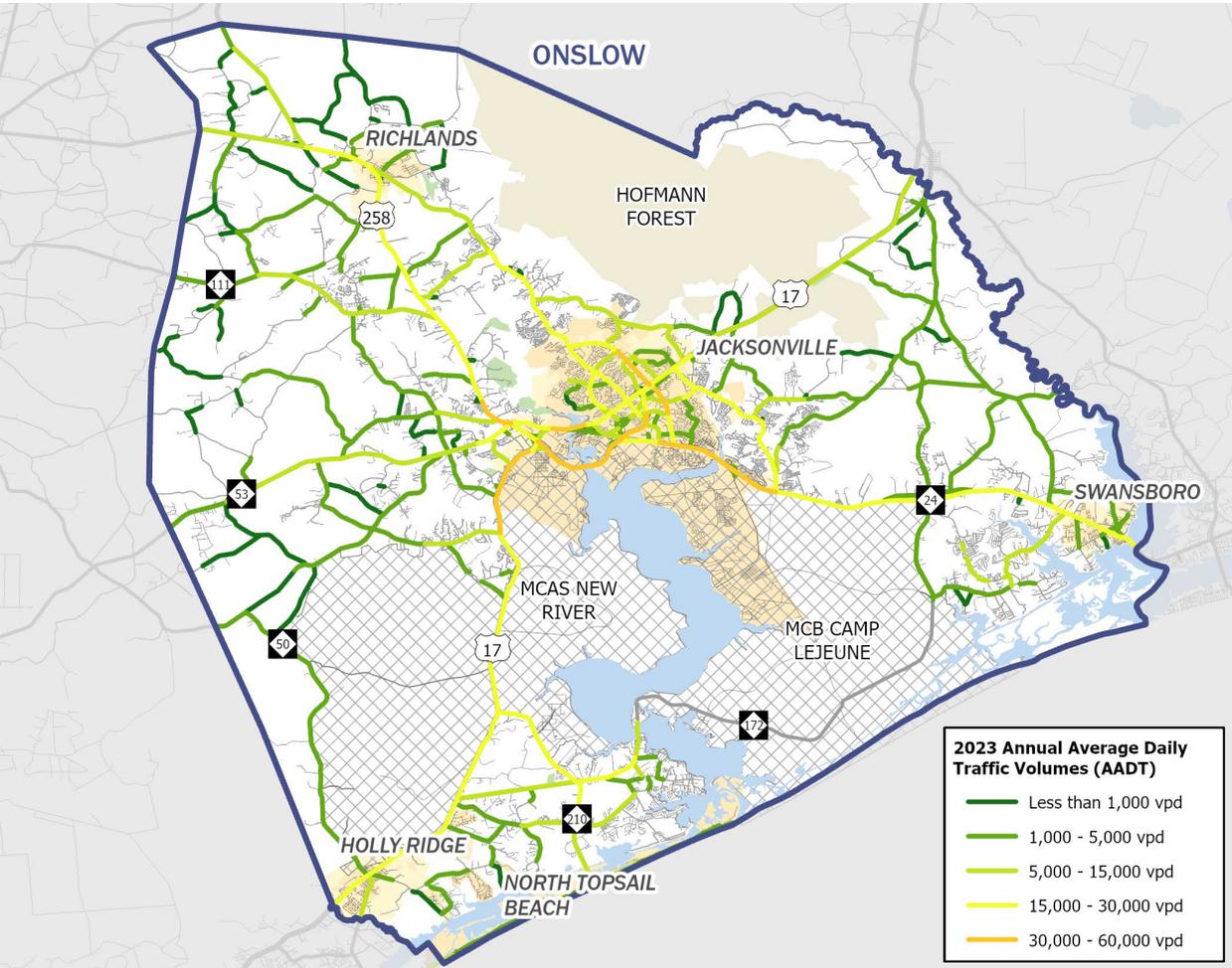
The annual average daily traffic (AADT) reflects the total number of vehicles traveling along a roadway segment on average. The NCDOT collects AADT data annually, the most recent being from 2023.

Figure 9 shows the AADT vehicles per day (vpd) in the study area. Table 5 shows roads with the highest recorded AADT segments:

TABLE 5: CORRIDORS WITH HIGHEST RECORDED AADTS

Corridor Name	Vehicles per Day (vpd)
US 17 (From US 17 BUS to Montford Landing Rd)	52,000
US 17 Business (From US 258 to Court St)	31,500
US 258 (From Blue Creek Rd to NC 53)	37,000
NC 24 (From Pine Valley Rd to Holcomb Rd)	39,000
NC 53 (From Henderson Dr to Gateway Dr)	41,000

FIGURE 9: 2023 ANNUAL AVERAGE DAILY TRAFFIC



Data sourced from 2023 NCDOT AADT Segments

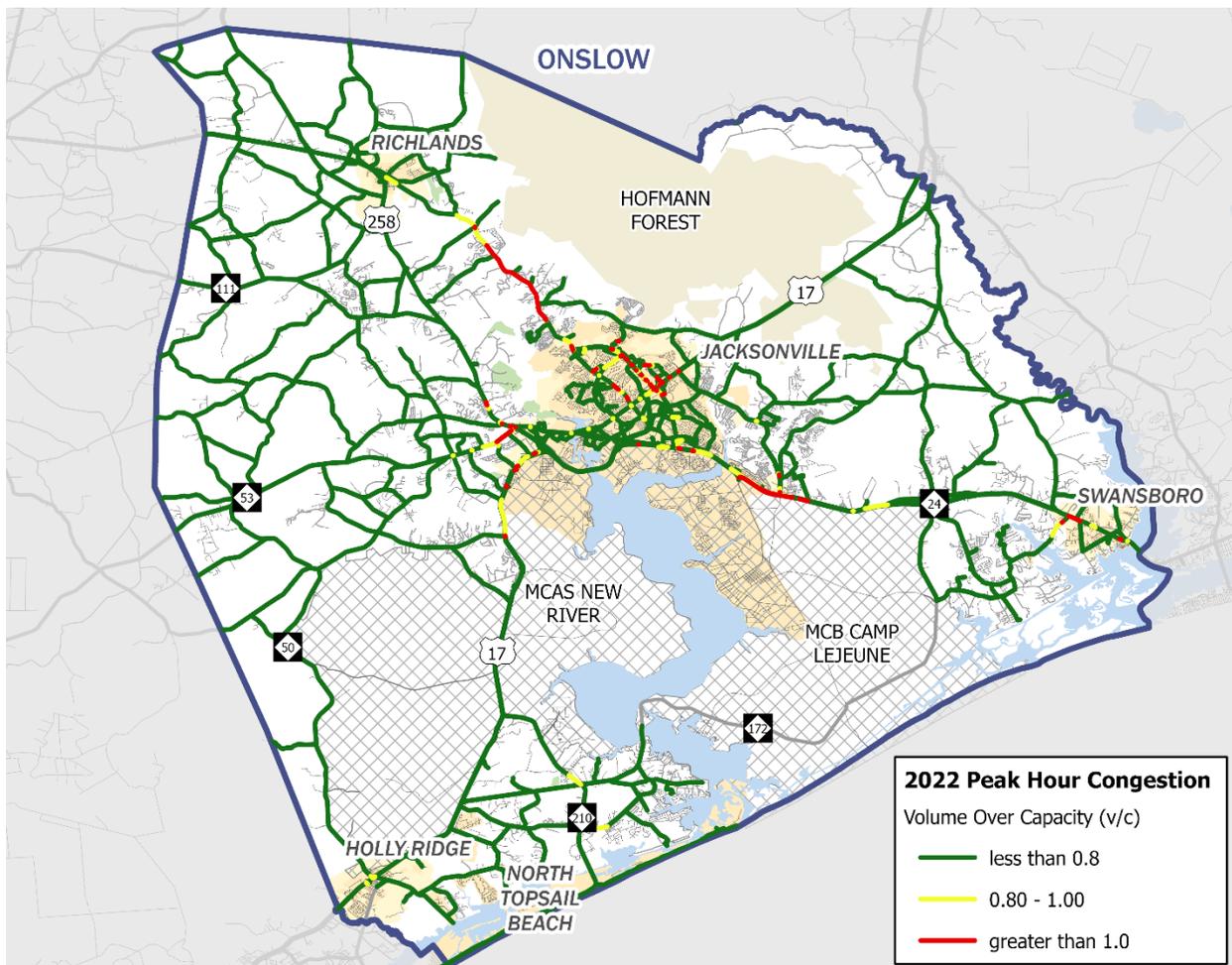
Traffic Congestion – Base Year 2022

Traffic volumes alone cannot be the sole determinant of congestion. The available roadway capacity is equally important in understanding network congestion. An effective means to measure congestion is determining the volume-to-capacity ratio, or V/C ratio. A V/C ratio is calculated by dividing the traffic volume of a roadway segment by the roadway's capacity.

In Figure 10, the roadways were grouped into the following categories:

- **Below Capacity:** Facilities with a V/C less than 0.80. Roadways operating below capacity have experience little to no congestion during peak travel periods.
- **At Capacity:** Facilities with a V/C between 0.81 and 1.00. Roadways operating at capacity are somewhat congested during non-peak periods and congested during peak hours.
- **Above Capacity:** Facilities with a V/C greater than 1.00. Roadways operating above capacity experience congestion during both peak and non-peak periods.

FIGURE 10: BASE YEAR MODEL PM PEAK HOUR CONGESTION (V/C)



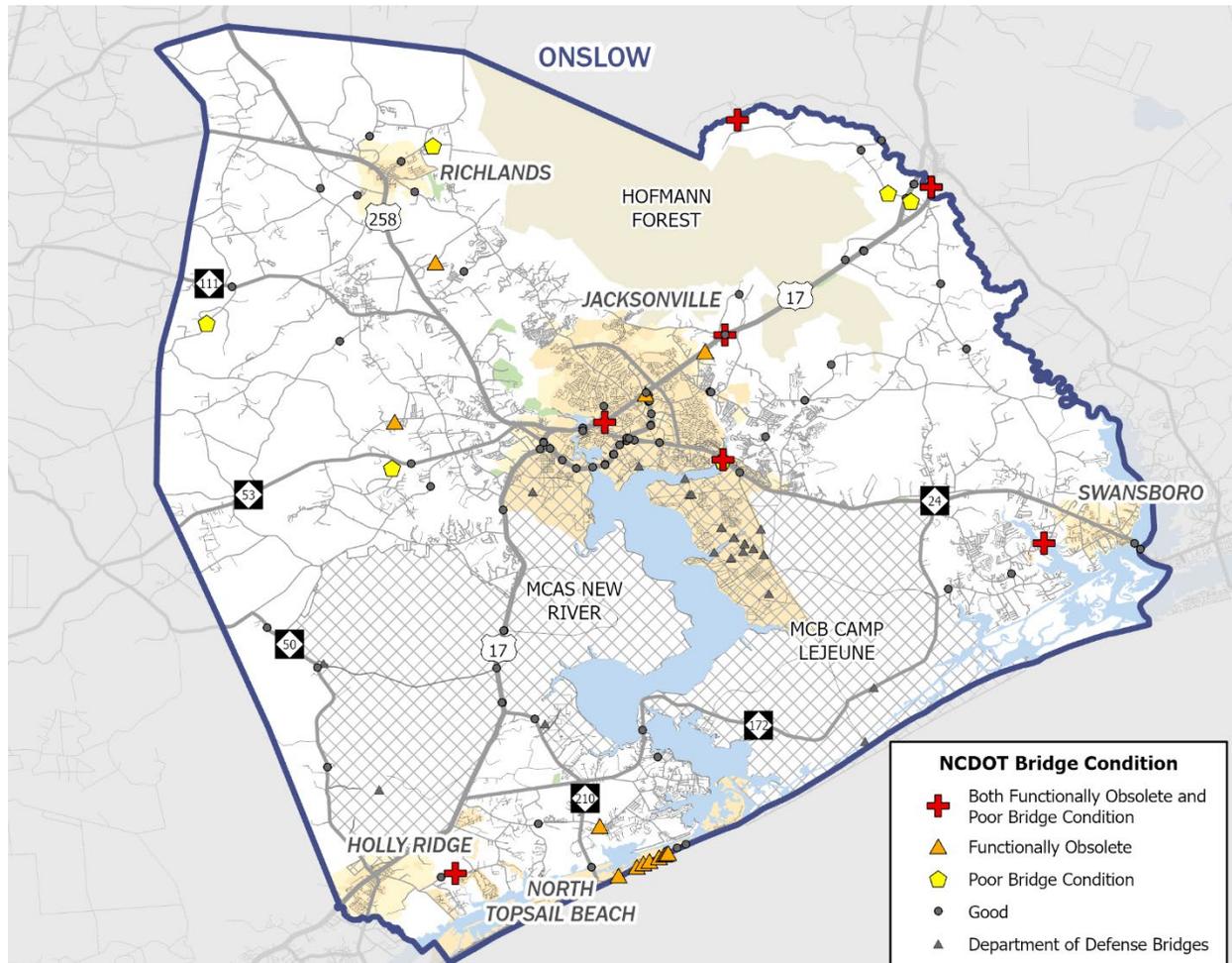
Data sourced from Region 16 Travel Demand Model

Bridge Condition

The study area includes 108 NCDOT bridge structures. Figure 11 shows the condition of the 108 structures. An additional 26 bridges are owned and maintained by the Department of Defense (DoD). As of December 2023, the bridge inventory was updated by NCDOT to determine the condition of bridge structures. There are 20 functionally obsolete bridges and 13 bridges in poor condition. There are 7 bridges that are both functionally obsolete and in poor condition.

- **Functionally Obsolete:** Bridges were built to standards that are not used today; they are not inherently unsafe, but they may not have adequate lanes, shoulder widths, or vertical clearances or may be occasionally flooded.
- **Bridge Health Index:** NCDOT’s Bridge Health Index indicates if a bridge condition rating is good or poor. Good means that the bridge can safely carry the typical-sized commercial or passenger vehicles for that route. Bridges in poor condition are safe, but their components are deteriorating. They require significant maintenance to remain in service and might require limits on vehicle weights.

FIGURE 11: BRIDGE CONDITION



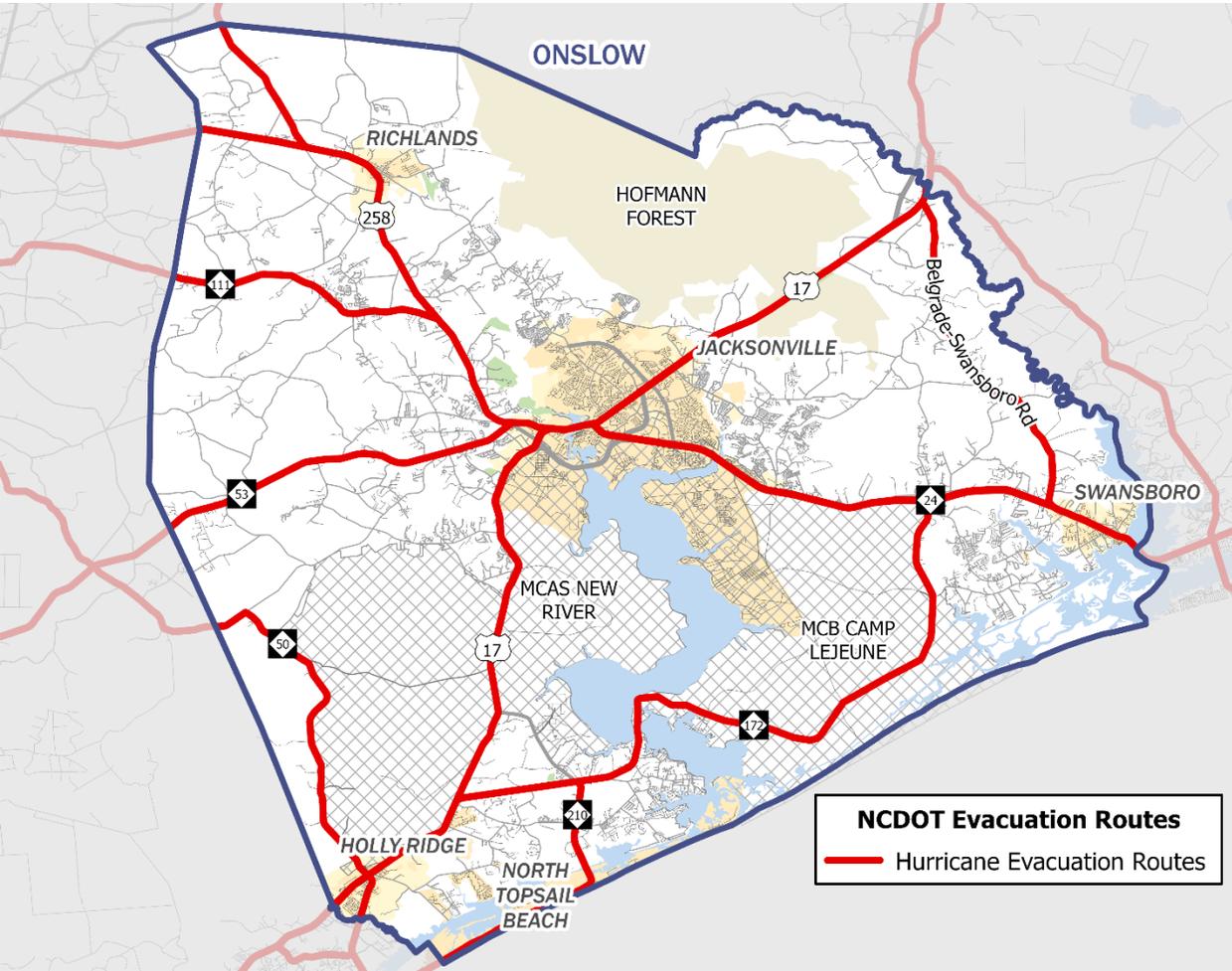
Data sourced from NCDOT Bridge Maintenance Unit

Evacuation Routes

NCDOT designates a system of hurricane evacuation routes to help residents and visitors stay safe before, during, and after hurricane events. Typically, evacuation routes are marked with circular blue signs that read "Evacuation Route" and are placed along interstates and major highways. Figure 12 shows the designated evacuation routes in the study area. The routes selected provide the most direct path and accommodate heavy traffic volumes. The designated evacuation routes in the study area include:

- US 17
- US 258
- NC 24
- NC 53
- NC 50
- NC 111
- NC 172
- NC 210
- Belgrade/Swansboro Rd (NC 1434)

FIGURE 12: EVACUATION ROUTES



Data sourced from NCDOT Evacuation Routes

Crash History

NCDOT maintains crash data for historic crashes throughout the state. Within the study area, 5,566 collisions were reported between January 2018 and December 2022. The collisions can be further analyzed by crash severity. The following descriptions reflect the type of crash severity as defined in the crash report.

- **Fatal (K):** Death occurring within 30 days of the crash due to injuries received from the crash
- **Disabling (A):** Injury is serious enough to prevent normal activity for at least one day
- **Evident Injury (B):** Non-fatal or disabling injuries that are evident at the scene of the crash
- **Possible Injury (C):** No visible injury, but those involved in the crash complain of pain or momentary unconsciousness
- **Property Damage Only (PDO):** No injury, only property damage
- **Unknown (U):** Unknown if any injury occurred

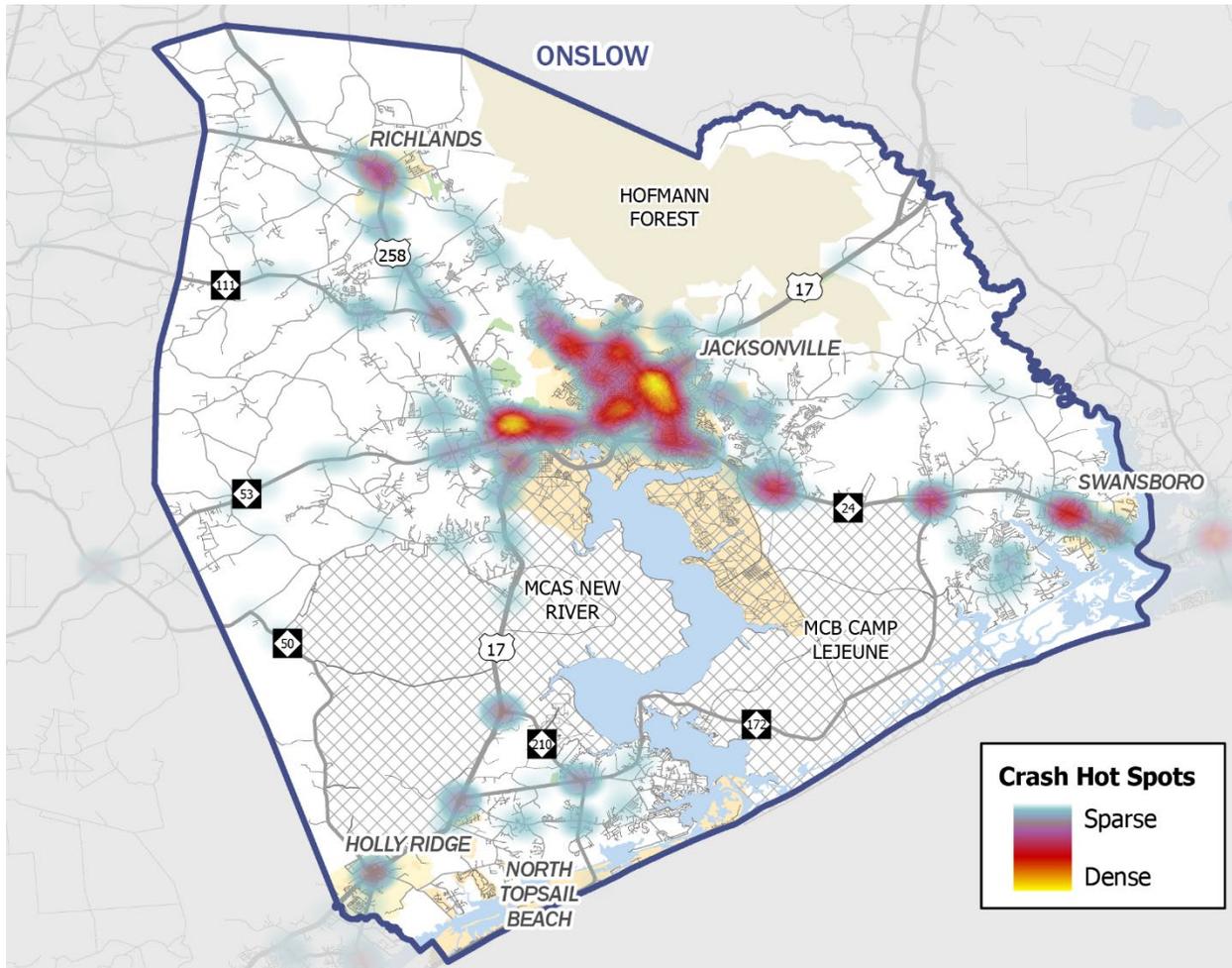
Table 6 shows the total number of crashes by collision severity in the study area. Most crashes are property damage-only crashes (70%) and less than 1% of crashes resulted in fatalities. Nearly 20% of all crashes resulted in a possible injury.

TABLE 6: TOTAL CRASHES BY CRASH SEVERITY

Collision Severity	Number of Collisions	Percent of Total
Fatality (K)	29	0.5%
Disabling Injury (A)	58	1.0%
Evident Injury (B)	425	7.6%
Possible Injury (C)	1,047	18.8%
Property Damage Only (PDO)	3,949	70.9%
Unspecified	58	1.2%
Total	5,566	100%

Between 2018 and 2022, there were more than 5,500 reported collisions in the study area.

Figure 13 shows the crash hot spots in the study area from January 2018 through December 2022. The bright yellow indicates a higher crash density at a given location. The US 17 and US 17 Business interchange has the highest concentration of crashes. Jacksonville contains major crash locations, including the intersections along US 17 Business, US 17, and Western Blvd. NC 24 between Jacksonville and Swansboro also contains multiple locations with elevated crash incidents. Table 7 highlights the ten locations with the highest number of crashes.

FIGURE 13: CRASH HOT SPOTS, 2018-2022


Data sourced from NCDOT Crash Frequency by Intersection (2018-2022)

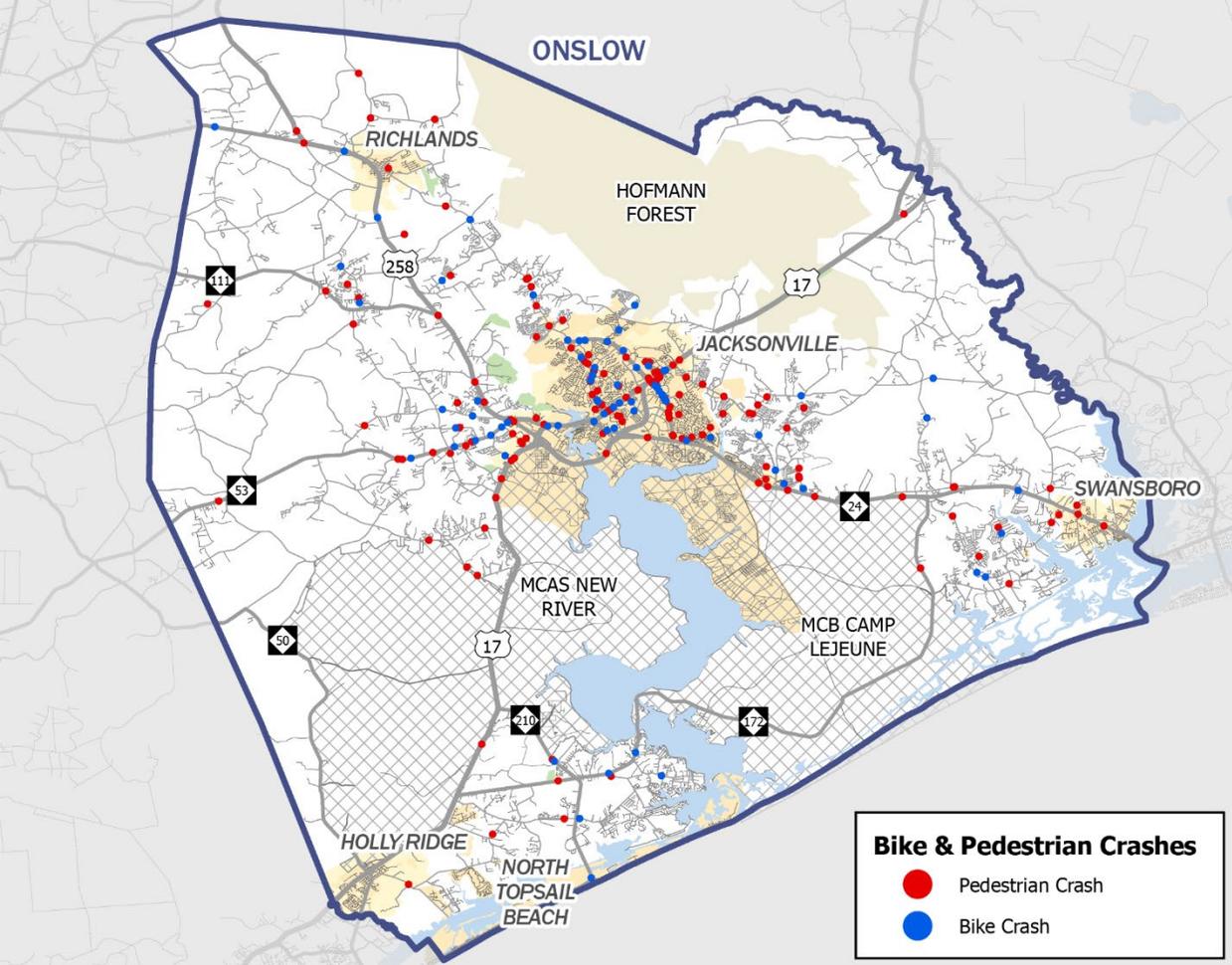
TABLE 7: HOTSPOT CRASH LOCATIONS, 2018-2022

Street 1	Street 2	Total	Crashes						
			K	A	B	C	PDO	U	
US 258	US 258 SB Couplet	147	0	0	9	31	106	1	
NC 53 (Western Blvd)	Gum Branch Rd	122	0	0	8	19	95	0	
NC 24	Piney Green Rd	113	1	0	4	16	92	0	
NC 53 (Western Blvd)	Country Club Rd	108	0	1	5	18	83	1	
NC 53 (Western Blvd)	Marlin Dr	84	0	0	1	18	65	0	
US 258	Blue Creek Rd	77	0	0	5	14	58	0	
US 17 Business	Gum Branch/Bell Fork Rd	74	0	1	6	11	56	0	
US 17	NC 210	72	1	1	5	15	50	0	
NC 53 (Western Blvd)	Commerce Rd	72	0	0	2	18	52	0	
US 258	NC 111	71	1	2	11	11	45	1	

Bicycle and Pedestrian Crashes

In addition to the total crashes, Figure 14 shows the crashes involving a bicycle or pedestrian. NCDOT maintains historic bicycle and pedestrian data collected from police-reported bicycle-motor vehicle and pedestrian-motor vehicle collisions on public roadways. The information shown is from January 2018 through December 2022. Pedestrian crashes are the highest along Western Blvd, US 17 Business/US 17, Henderson Dr, and Gum Branch Rd. The location where bicycle crashes are the highest are Western Blvd, Burgaw Hwy (NC 53), Henderson Dr, and US 17 Business.

FIGURE 14: BICYCLE AND PEDESTRIAN CRASHES



Data sourced from NCDOT Bicyclists & Pedestrian Crash Maps (2018-2022)

Bicycle and Pedestrian

A metropolitan transportation plan is not complete without considering the active transportation network. The following section outlines the bicycle and pedestrian facilities in the study area.

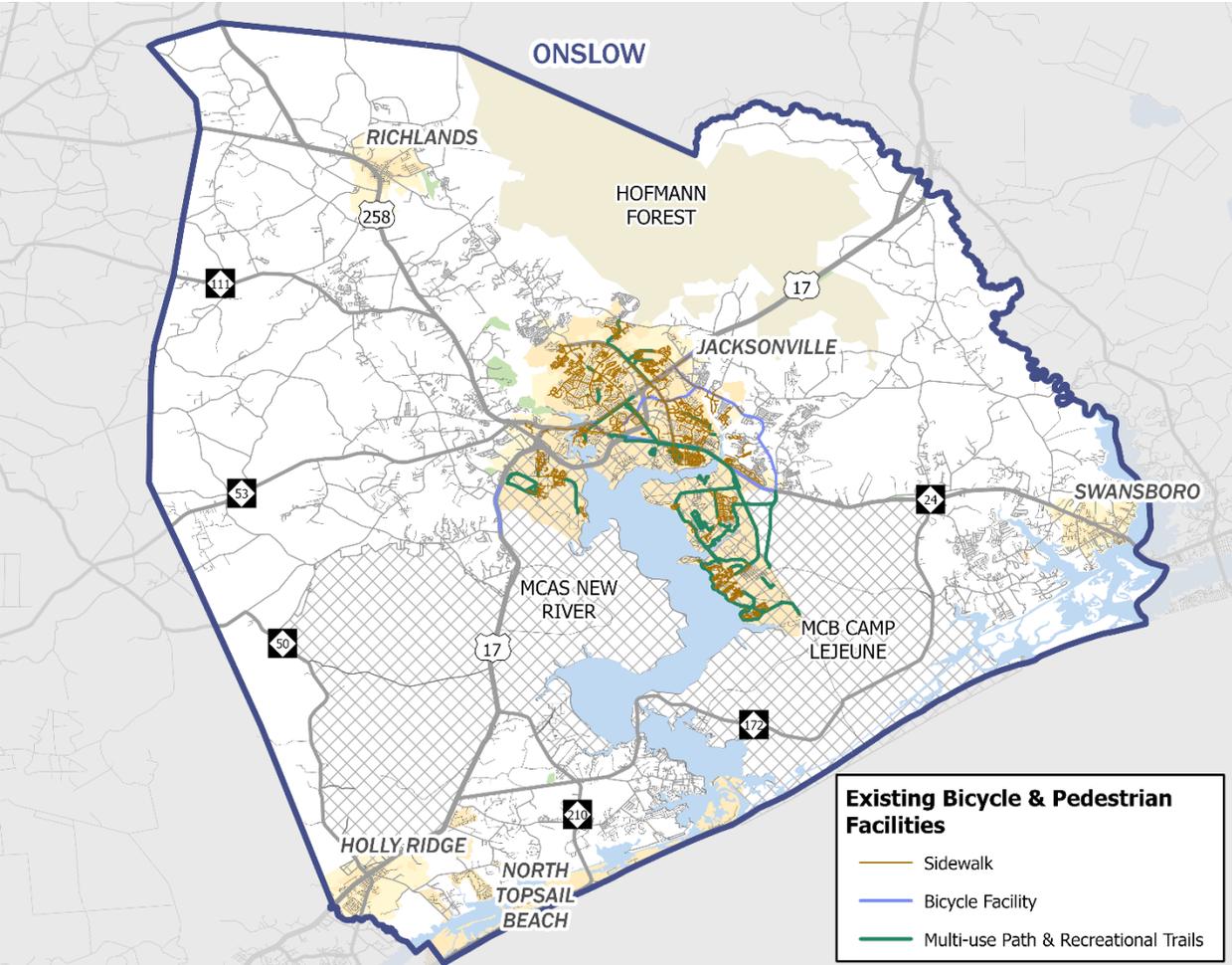
The City of Jacksonville has a comprehensive network of pedestrian facilities. These include multi-use trails and paths, crosswalks, mid-block crossings, driveway crossings, and pedestrian and roadway bridge facilities.

Figure 15 shows the existing bicycle and pedestrian facilities. As seen in Table 7, there are approximately 258.9 linear miles of sidewalk, 87.7 miles of multi-use paths or trails, and 30.9 miles of bicycle facilities.

TABLE 8: TOTAL LINEAR MILES OF EXISTING BICYCLE AND PEDESTRIAN FACILITIES

Facility Type	Study Area (miles)	Camp Lejeune (miles)	Total (miles)
Sidewalk	167.2	91.7	258.9
Bicycle Facility	30.9	0	30.9
Multi-Use Path / Trails	15.6	72.1	87.7

FIGURE 15: EXISTING BICYCLE AND PEDESTRIAN FACILITIES



Data sourced from City of Jacksonville & Onslow County

Transit

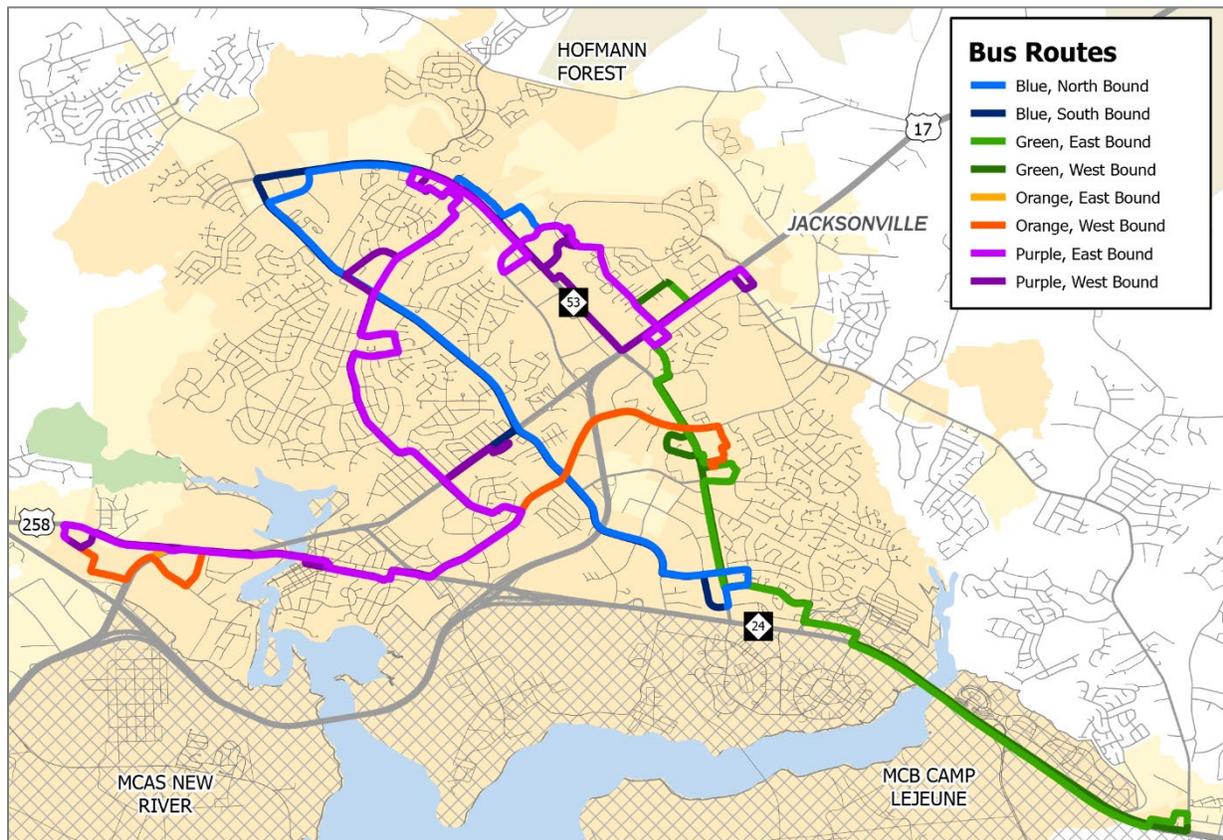
Jacksonville Transit provides fixed-route bus and demand response service within the City of Jacksonville and parts of Onslow County. Jacksonville Transit also provides express bus service between the city and adjacent military installations.

Local Fixed-Route Service

As seen in Figure 16, Jacksonville Transit operates four local fixed-route services every day of the week. Service operates hourly for all city routes. On weekdays, transit operates from 5:55 a.m. to 8:10 p.m. and on weekends, transit operates from 9:55 a.m. to 8:10 p.m. Local fixed-route trips cost \$1.50 one-way. Seniors 65 years and older, youths between 6 and 18 years old, and persons with disabilities pay half fare (\$0.75) with an approved half-fare identification card. Express service costs \$4.00 one-way, with a \$1.00 discount to American with Disabilities Act (ADA) paratransit eligible passengers. Children under 6 years old and personal aides ride free.

- **Route 101** (Purple) | Yopp Walmart, downtown Jacksonville, Jacksonville Station AMC Theater, and CarMax
- **Route 102** (Green) | Walmart on North Marine, Jacksonville Mall, Piney Green Shopping Center, and Coastal Carolina Community College
- **Route 103** (Orange) | Walmart on Yopp Road, downtown Jacksonville, Jacksonville Station, Jacksonville Mall
- **Route 104** (Blue) | Jacksonville Station, retail and restaurants on Gum Branch Road, Bell Fork Road, Western Ext, Shops & AMC Theater

FIGURE 16: LOCAL FIXED-ROUTE SERVICE

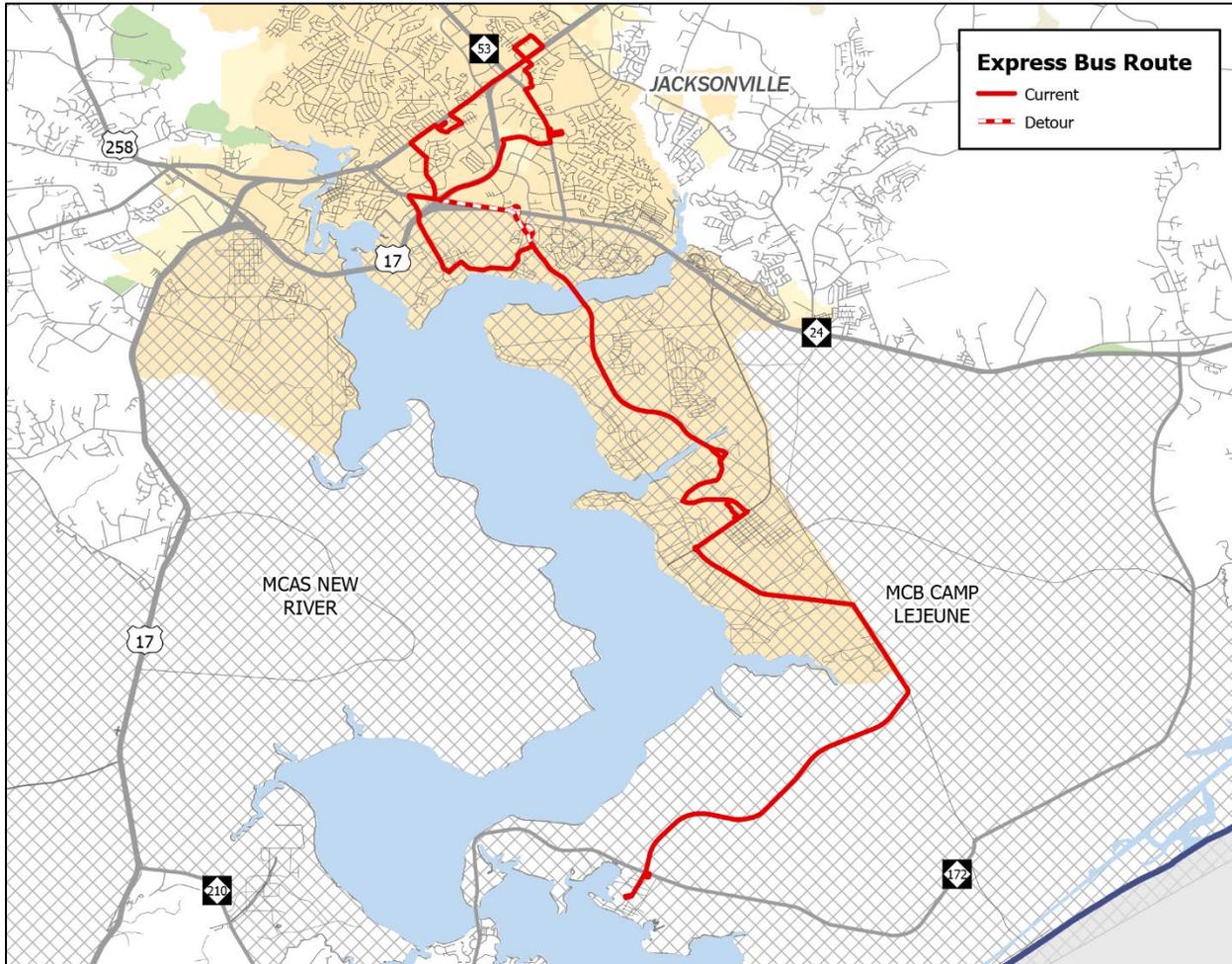


Data sourced from Jacksonville Transit

Express Route Service

Figure 17 shows Jacksonville Transit's express route, which is known as the Scarlet Route. It operates between the City of Jacksonville and Camp Lejeune hourly on weekends and offers extended operating hours during the holidays.

FIGURE 17: EXPRESS BUS ROUTE



Data sourced from Jacksonville Transit

Demand Response Service

Jacksonville Transit contracts with Onslow United Transit System (OUTS) to offer a complimentary paratransit service during Jacksonville Transit's hours of operations. The service complies with ADA regulatory requirements. If eligible, passengers can request trips within $\frac{3}{4}$ miles on either side of a fixed-route service.

OUTS provides additional on-demand service to Onslow County. They are a private, non-profit agency coordinating public transportation and human service agencies. The OUTS fleet includes 20 vehicles with ADA equipment. For in-county service, passengers must call at least a day in advance. For out-of-county service, a reservation must be made at least three days prior.

Other Transportation Modes

Airports

Figure 18 shows the Albert J. Ellis Airport, a county-owned commercial airport that also provides general and corporate air services for the region. MCAS New River is the only East Coast rotary wing and tiltrotor air station.

Railroads

The Camp Lejeune Railroad was constructed in 1941 to connect Camp Lejeune with the Atlantic Coast Line Railroad in Jacksonville. The railroad, operated by Norfolk Southern, provides access to the Port of Morehead City and the Marine Corps Air Station at Cherry Point. Figure 18 shows the seven at-grade railroad crossings in the study area.

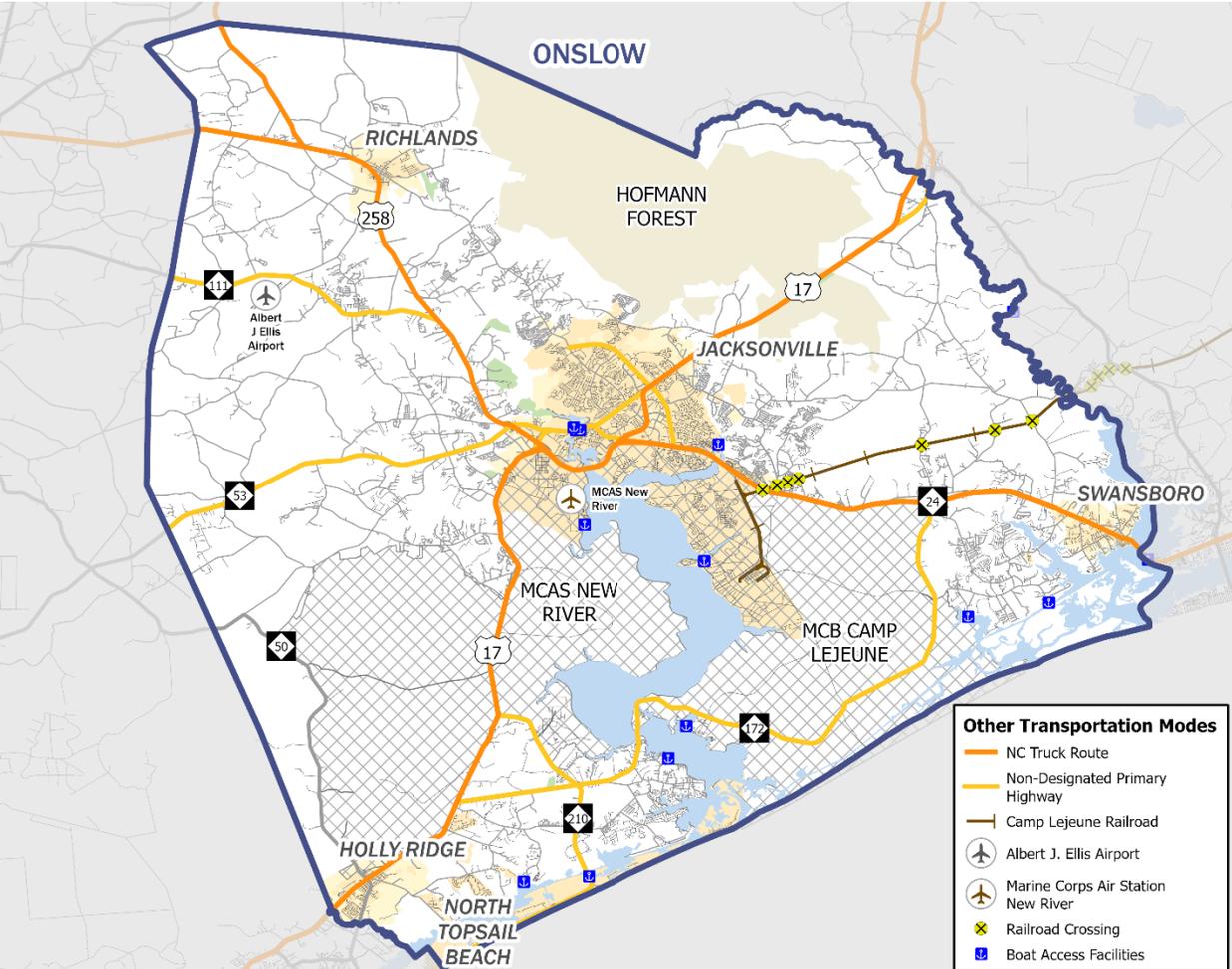
Boat Access

The New River and many tributaries are navigable waterways providing access to the Atlantic Ocean. While Jacksonville is not a major port, commercial, public, and private boat launch facilities are in Jacksonville, Sneads Ferry, Turkey Point, MCB Camp Lejeune, and MCAS New River.

Truck Routes

The North Carolina Truck Network (NCTN) includes US 17, US 258, and NC 24. The Surface Transportation Assistance Act (STAA) of 1982 applies to the NCTN and to trucks 53' in length, 102" in width, or twin trailers. STAA-dimensioned trucks are allowed reasonable access to locations within three miles of the NCTN without additional approval. Other trucks are not restricted unless a route is specifically signed.

FIGURE 18: OTHER MODES OF TRANSPORTATION



Data sourced from NCDOT North Carolina Truck Route (NCTIN), NCDOT Rail Division, NCDOT Division of Aviation Airports, Onslow County

Commuting Patterns

The commuting patterns of a region can provide insight into how people move throughout the area. According to ACS, the primary mode of transportation for commuting trips is by private vehicle. In the study area, 82% of commuters take a vehicle to work by driving alone or carpooling. The study area contains a higher percentage of commuters who walk to work (7%) compared to the state average of 2%. The top employers in Onslow County include the Department of Defense, Onslow County Board of Education, Wal-Mart Associates Inc, and Jacksonville Hospital Inc. Table 9 shows a summary of commuting patterns by mode. Figure 19 shows the major employment hotspots in the study area.

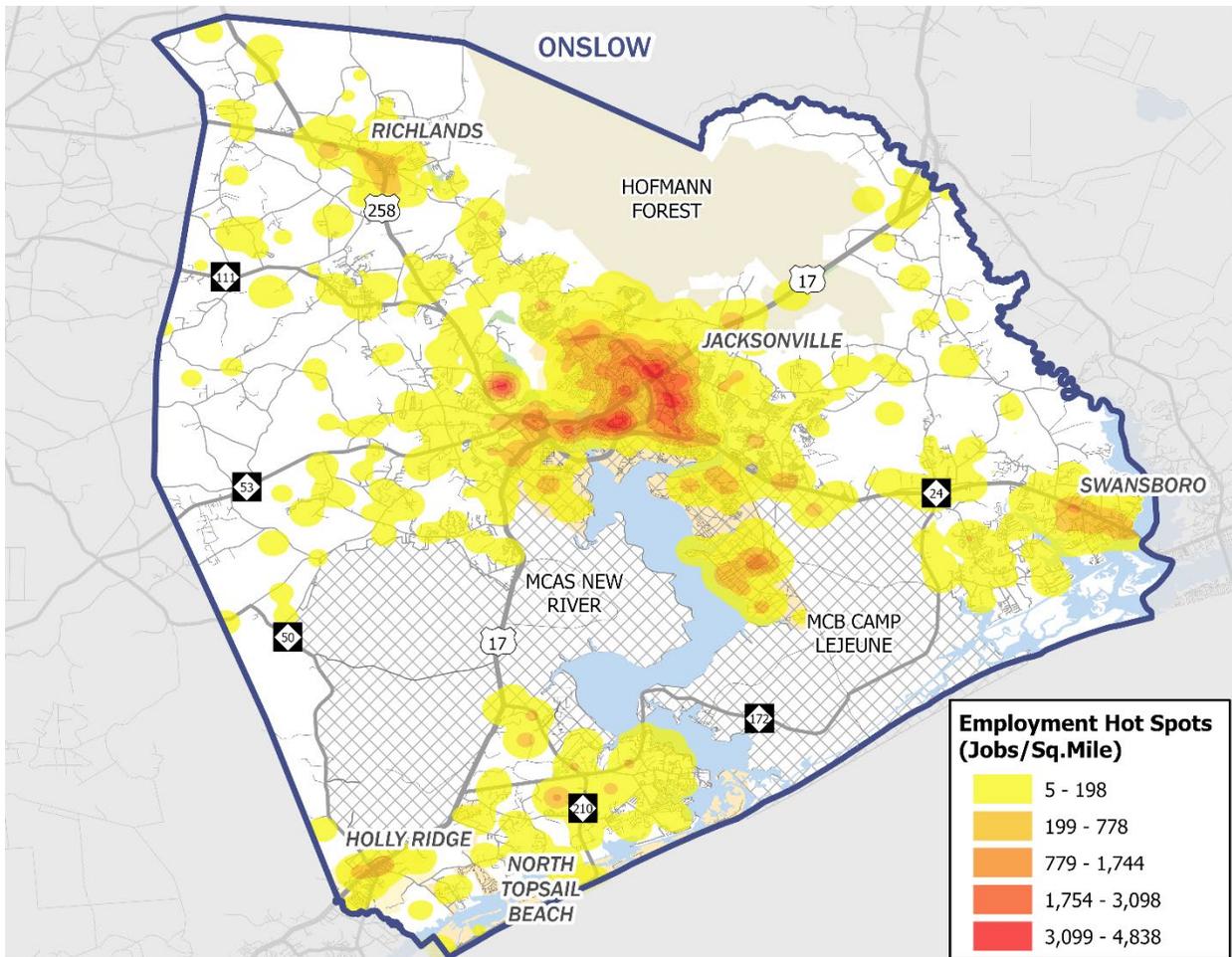
TABLE 9: COMMUTING PATTERNS BY MODE (ACS 2022 5-YEAR)

Mode of Transportation	Study Area	North Carolina
Drive	82.2%	83.9%
Transit	0.1%	0.8%
Bike	0.2%	0.1%
Walk	7.1%	1.6%
Other	2.1%	1.2%
Work from Home	8.3%	12.4%

Of those who drive to work in the study area:

69.5% drive alone
12.7% carpool

FIGURE 19: EMPLOYMENT HOTSPOTS



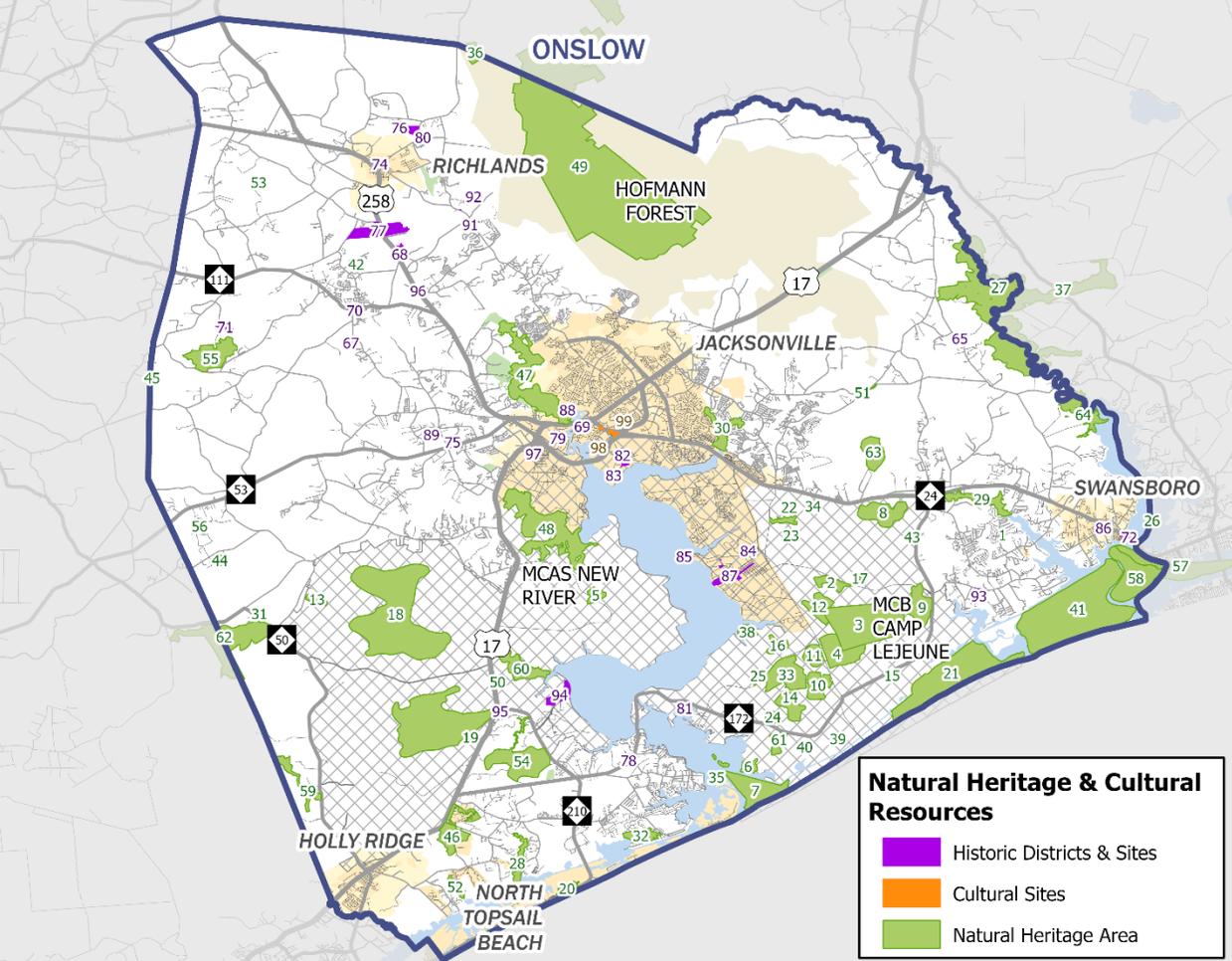
Data sourced from 2020 LEHD

Environmental Conditions

Natural Heritage and Cultural Resources

As seen in Figure 20, the study area has a diversity of Natural Heritage Areas and cultural resources within Jacksonville and Camp Lejeune and throughout unincorporated areas outside of the major activity centers. Table 10 and Table 11 describe each Natural Heritage Area and cultural resource in the study area. Natural Heritage Areas are significant in and around MCB Camp Lejeune. Therefore, the heritage areas are listed separately here for those that pertain to Department of Defense (DoD) and those that do not have a DoD affiliation.

FIGURE 20: NATURAL HERITAGE AND CULTURAL RESOURCES



Data sourced from Onslow County, City of Jacksonville, NC Historic Preservation Office (HPO), NC Natural Heritage Program (NHP)

TABLE 10: NATURAL HERITAGE AREAS IN STUDY AREA

Identifier	Description	Identifier	Description
1	Ball Pond Limesink Complex	33	Longleaf Pine Ridge*
2	Lyman Road Cypress Savanna*	34	Wallace Creek Swap
3	G-10 Impact Area*	35	New River Inlet Bird Nesting Islands
4	Loosestrife Pocosin*	36	Hofmann Forest Cypress Natural Area
5	Verona Loop Flatwoods*	37	Holston Creek Natural Area
6	Corn Landing*	38	Frenchs Creek Coastal Goldenrod Site*
7	New River Inlet*	39	Mockup Road Coastal Goldenrod Site*
8	Pocosin Road Flatwoods*	40	Salliers Bay Coastal Goldenrod Site*
9	Spring Branch Limesinks*	41	Bear Island and Marshes
10	Africa Pond Limesinks*	42	Rock House Cave Natural Area
11	Alligator Meadow Limesinks*	43	Starretts Meadow*
12	Cowhead Creek Limesinks*	44	Tate Road Savanna
13	Padgett Swamp Road Natural Area*	45	Nine Mile Creek Flatwoods
14	Hog Pen Road Flatwoods and Pocosin*	46	Folkstone Savannas
15	Freeman Creek Meadow*	47	New River Swamps and Marshes
16	Frenchs Creek Limesinks*	48	Southwest Creek*
17	Pondspice Meadow*	49	Hofmann Forest White Oak Pocosin
18	Great Sandy Run Pocosin*	50	Dixon Pine Savanna*
19	South Bay Road Natural Area*	51	Old 30 Road Powerline Savanna
20	North Topsail Beach Maritime Forest	52	Kings Creek Marshes
21	Browns Island*	53	Gregory Fork Road Flatwoods
22	Powerline Road Sandhill*	54	Stones Creek Sandhills
23	Old Bear Creek Road Pond*	55	Batchelor Road Flatwoods
24	Dove Road Pocosin*	56	Maple Hill Limesink Complex
25	Marines Road Sandhills*	57	Bogue Inlet/Bogue Sound Bird Nesting Islands*
26	Jones Island/White Oak River	58	Huggins/Dudley Island
27	White Oak River Marshes and Swamps	59	Juniper Swamp and Savannas
28	Turkey Creek Marshes	60	Millstone Creek Swamp*
29	Queens Creek Tidal Marshes	61	Mile Hammock Bay Sandhills*
30	Northeast Creek Tidal Forests	62	Sandy Run Swamp and Savannas
31	Cooleys Meadowrue Type Locality	63	Horse Swamp Savannas and Woodlands
32	Alligator Bay Marshes and Forests	64	Stella White Oak River Marshes

*US DoD Natural Heritage Area in Camp Lejeune

TABLE 11: HISTORIC AND CULTURAL DISTRICTS OR SITES IN STUDY AREA

Identifier	Description	Identifier	Description
65	Palo Alto Plantation	83	Montford Point Camps Nos. 2 and 2A HD
66	Mill Avenue Historic District	84	Parachute Training Historic District (Bldgs PT 4, PT5, PT6)
67	Alum Spring	85	Naval Hospital Historic District
68	Avirett-Stephens Plantation	86	Swansboro Historic District
69	Bank of Onslow/Jacksonville Masonic Hall	87	Command Services and Regimental Area No. 3 Historic District
70	Catherine Lake Historic District	88	USO Building
71	Futral Family Farm	89	Elisha (Elijah) Walton House
72	William Edward Mattocks House	90	Southwest Primitive Baptist Church & Cemetery
73	Pelletier House and Wantland Spring	91	Gum Branch Church
74	Richlands Historic District	92	Newbold Family House
75	Southwest Historic District	93	Sanders Farm Rural Historic District
76	Taylor Farm	94	Stone Bay Rifle Range Historic District
77	Venters Farm Historic District	95	Dixon School (Dixon Middle School)
78	Yopps Meeting House	96	Edney Chapel School
79	Georgetown Community Cemetery	97	Camp Geiger Historic District
80	Brocks Rural Historic District	98	Lejeune Memorial Gardens
81	Assault Amphibian Base HD	99	Beirut Memorial Grove & Freedom Fountain
82	Montford Point Camp No. 1 HD		

**Purple represents Historic Districts & Sites and Brown represents Cultural Sites shown in Figure 19*

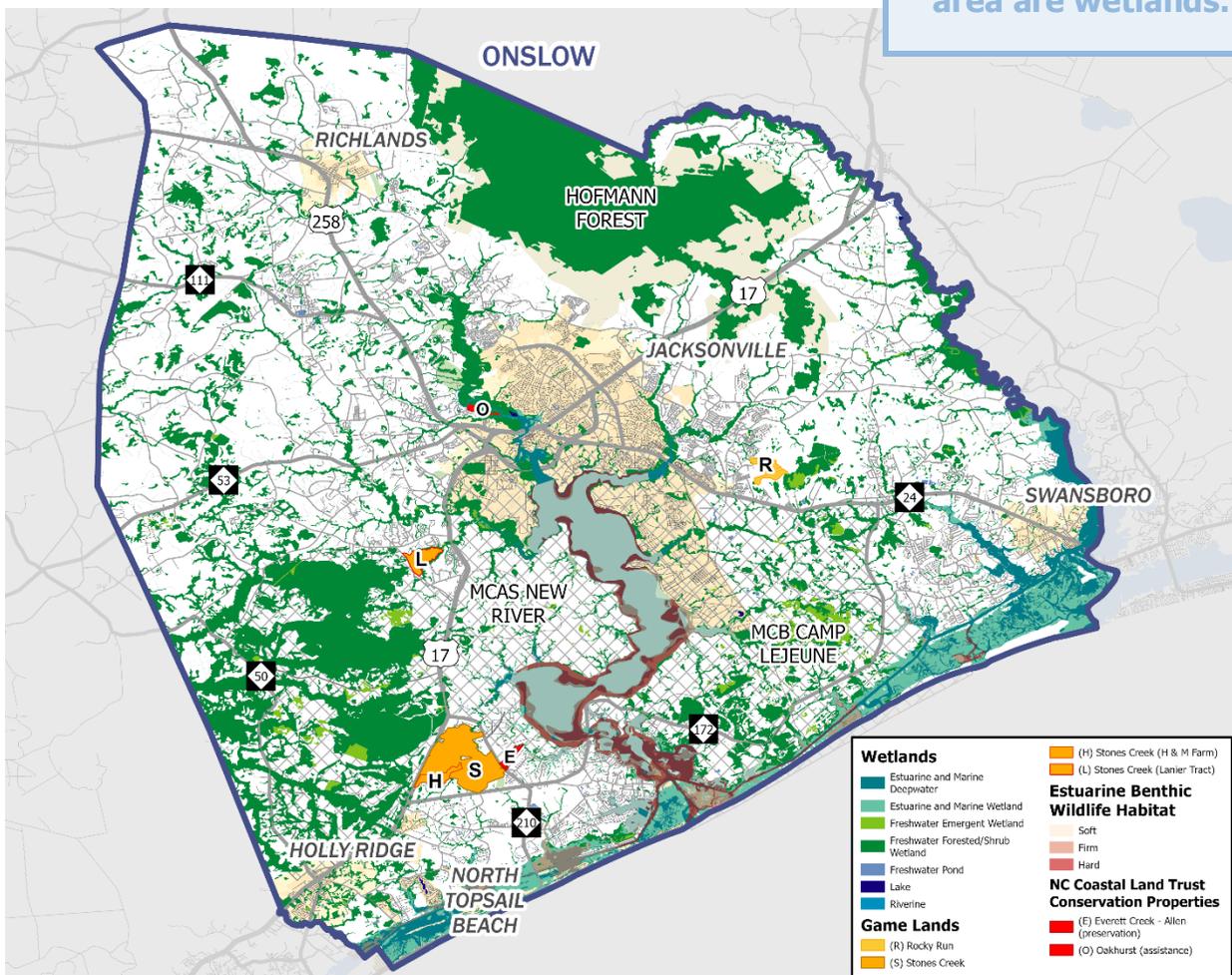
Natural Resources

Various wetlands and environmental features create a diverse ecosystem in the study area. The study area is home to the New River watershed, which includes a variety of animal and plant species. Figure 21 shows the major natural resources present in the area including wetlands, game lands, estuaries, and land trust conservation properties. The key environmental features are listed below.

- **Two Land Trust Conservation Properties:** The Everett Creek-Allen property (currently being preserved) and the Oakhurst property.
- **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.

**272 square miles
(33.5%) of the study
area are wetlands.**

FIGURE 21: NATURAL RESOURCES



Data sourced from Onslow County, NC Coastal Land Trust, NC Department of Environmental Quality (DEQ)

Previous Plan Review

Table 12 inventories the previous plans and documents completed in the study area. Chronologically organized, the inventory summarizes planning efforts as far back as 2013 and includes comprehensive plans, corridor studies, a bicycle/pedestrian plan, feasibility studies, and transit plans.

TABLE 12: PREVIOUS PLAN REVIEW

Name	Description	Major Recommendations
Onslow County Horizon 2040 Comprehensive Plan (2024)	Comprehensive plan and mandated Coastal Area Management Act Plan for Onslow County, which sets goals and objectives to provide the legal basis for land use regulations and guides capital improvements planning.	<ul style="list-style-type: none"> • Incorporate infrastructure and service impacts into the review of development proposals. • Work with ONWASA, NCDOT, JUMPO, and other agencies to incorporate County growth plans into capital improvement plans. • Implement the recommended detailed land use strategies and work to develop capital improvements to address deficiencies in transportation infrastructure identified in small area plans. • Support maintaining an effective signage and addressing system for all streets, roads, and highways. • Work with NCDOT and JUMPO to prioritize the completion of enhancements to the NC-24 corridor from Jacksonville to I-40. • Consider establishing a dedicated source of recurring funds for participation in critical safety and operational improvement projects. • Use traffic impact analyses to determine the proper improvements necessary to roadway infrastructure to accommodate new development. • Continue to integrate transportation planning with land use planning. • Support the provision of safe evacuation routes.

Name	Description	Major Recommendations
Recreation & Parks Comprehensive Plan Update (2023)	This comprehensive plan update sets the goals and objectives for meeting recreation needs in the City of Jacksonville.	<ul style="list-style-type: none"> • Upgrade Park and greenway signage and wayfinding to make consistent with online information. • Install wayfinding at parks and greenways. • Further develop the Downtown Blueway Trail. • Connect Northeast Creek Park to Huff Drive Trail with a greenway. • Connect Jacksonville Commons to future parks with a greenway along Western Boulevard. • Install pedestrian crosswalk at Western Boulevard and Henderson Drive. • Connect Jacksonville Commons via Jacksonville Parkway to Branchwood park area. • Install internal park trails at Jacksonville Commons, Northeast creek Park, Downtown Park Connector, and Woodlands. • Connect Branchwood to Jacksonville Parkway. • Add kayak non-motorized boating accesses at Wilson Bay and Phillips Park.
Hazard Mitigation Plan (2021)	Hazard mitigation plan for the Southeastern NC region creates a framework for improving resiliency and recommends specific actions to minimize hazard vulnerability.	<ul style="list-style-type: none"> • Maintain GIS database of streets that will be used for evacuation. • Adopt a policy prohibiting the development of critical public facilities in the 100-year floodplain in cases where viable alternatives exist. • The county will develop a vulnerability assessment database of all its identified critical infrastructure to include assessment for emergency generators when one is not already established. Develop necessary mitigation to identify hazards.
Jacksonville Capital Improvement Plan (2021)	This is a long term (10-year) plan for the City of Jacksonville, which identifies capital projects and acquisition needs, provides a planning schedule, and identifies options for financing the plan. Projects and acquisitions in the first year of the CIP forecast period become the capital budget for the budget year.	<ul style="list-style-type: none"> • Installation of new sidewalks, trails, and multi-use paths. • Make downtown more pedestrian-friendly with wider sidewalks, improved lighting, and vegetated medians. • Improve various parking lots downtown to increase capacity and accessibility. • Extension of the Rails-to-Trails greenway at Chaney Avenue. • Construct a multimodal transportation center as the central location for coordinated public transportation operations. • Installation of fiber throughout the city. • Install trail and greenway through the northern corridor of Western Boulevard. • Intersection improvements and road widening for various roads in the city.

Name	Description	Major Recommendations
2045 Long Range Transportation Plan (2021)	The plan characterizes current and future transportation needs and provides multimodal transportation strategies to address these needs. It also outlines the region’s long-range transportation vision and identifies the projects necessary to attain that vision through 2045.	<ul style="list-style-type: none"> • Improve transit systems by creating a new fare structure and media advertisement. Create universal pass programs and improve mobility management. Restructure the route for the multimodal center and expand ADA service to the city limit. In the long term, expand service to bases and improve intercity express service. Expand vanpool and park-and-ride services. • Improve NC 111 and US 258 through widening and intersection improvements to increase access to Albert J. Ellis Airport. • Improve bicycle and pedestrian infrastructure throughout urban areas. Expand bicycle and pedestrian infrastructure near schools, commercial nodes, medical facilities, Coastal Carolina Community College, parks and recreation centers, public facilities, Jacksonville Mall, and local military bases. • Continue to complete corridor improvements including new locations, access management projects, widenings, and intersection/interchange improvements. • Improve safety through increased public education. • Improve safety at various focus intersections and interchanges. • Develop a regional freight plan identifying corridors and conflict points for freight activity.
Downtown Circulation Study (2017)	Comprehensive transportation circulation study for downtown Jacksonville to determine how to improve circulation, interconnectivity, and overall cohesiveness and vibrancy.	<ul style="list-style-type: none"> • Convert Court Street to two-way travel between Old Bridge and New Bridge Streets. • Install two roundabouts along New Bridge Street. • Increase parking downtown by 179 parking spaces. • Extend Chaney Steet Trail to New Bridge Street. • Improve sidewalks throughout Jacksonville. • Install bulbouts, high visibility crosswalks, and sharrows. • Enhance bus stops/shelters and make ADA accessible.

Name	Description	Major Recommendations
NC 53 Western Boulevard Corridor Study (2015)	Corridor study for Western Boulevard from NC 24 to US 17 includes an assessment of transportation operations and a series of recommendations for all modes.	<ul style="list-style-type: none"> • Improve signage along Western Boulevard. • Increase the number of signal heads along Western Boulevard. • Implement access management through the installation of landscaped medians. • Add or improve turn lanes at intersections along Western Boulevard. • Install street lighting. • Construct a multi-use path along the east side of corridor. • Increase frequency of transit service. • Create new parks and recreation areas near Western Boulevard. • Expand mixed-use development along Western Boulevard.
Sneads Ferry Community Plan (2015)	The Community Plan for Sneads Ferry develops a vision tied to land use recommendations and backed by a strategy that addresses traffic, safety, and access for all travel modes.	<ul style="list-style-type: none"> • Support the development of the Coastal Crescent alternative route of the Mountains-to-Sea Trail. • Construct a multi-use path along NC 210. • Provide bicycle and pedestrian amenities at intersections as roadways are widened. • Widen road corridors on NC 210 and NC 172. • Preserve access on future divided roadways in accordance with the preferred access plan. • Construct paved shoulders as roadways are resurfaced. • Construct developer-funded collector streets as part of new developments. • Improve intersections along US 17, NC 172, and NC 210
NC 24 Corridor Study (2013)	Corridor study for NC 24 from Bell Fork Road to Piney Green Road reviews existing roadway issues and recommends improvements related to traffic management, non-motorized connectivity, traffic congestion, and safety.	<ul style="list-style-type: none"> • Implement preferred development principles through revisions to the CAMA Land Use Plan, Jacksonville UDO, and supporting policies and ordinances. • Consider the creation of an access management overlay ordinance. • Pursue high-priority intersection lane additions and resurfacing. • Enhance crosswalks and pedestrian signals and construct sidewalks along the corridor.

Name	Description	Major Recommendations
Jacksonville CAMA Plan (2013)	The land use plan for Jacksonville sets goals and objectives to provide a legal basis for land use regulations and capital improvements.	<ul style="list-style-type: none"> • Expand safe, available, and diverse public access to public waterways. • Increase neighborhood stability through collaborative code enforcement, and the provision of public amenities (sidewalks, green space, streetscaping). • Develop a street system that safely and effectively serves all users, including pedestrians and bicyclists. • Coordinate development and street improvements to maintain acceptable traffic flows and minimize delays due to traffic congestion. • Adopt a growth management element and implement the comprehensive plan. • Foster vibrant mixed-use downtown that retains the character of existing commercial and residential neighborhoods. • Ensure that new development pays for its proportional share of new public facilities necessary to accommodate the additional service demands.

Conclusion

Documenting the existing system helps balance the competing interests of improving mobility and preserving the region's important natural, cultural, and transportation resources. The location of these resources must factor into the decision process when determining transportation investments—because it is good practice and a federal requirement. The earlier these features are identified, the more likely sustainable solutions will arise to reduce unnecessary delays and expenses throughout the design and construction of identified projects.