

SCOTLAND COUNTY

2014 – 2023 Land Use Plan



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SCOTLAND COUNTY

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CHAPTER 1

INTRODUCTION AND OVERVIEW

Scotland County developed its first Land Development Plan in 1977 with assistance from the North Carolina Department of Natural and Economic Resources, Division of Community Assistance. The 1977 plan was preceded by a Sketch Development Plan in 1972 that served as the basis for the 1977 plan. This *2014 - 2023 Land Use Plan* will serve to bring up to date these previous plans, studies and strategic planning initiatives undertaken by the County Board of Commissioners in recent years and serve as a guiding tool for the coming decade. It will also encompass new issues and developments not present in the original plan, while also reflecting on the recent changes in state and federal policies on land use, planning and the environment.

Each Chapter addresses a unique topic that should be part of making future decisions about land use and growth in the County. As each topic is examined, it is supported by charts, tables and maps that further illustrate the topic.

A list of maps, tables and charts is found immediately following the Table of Contents.

CHAPTER 2

METHODOLOGY

This *2014 – 2023 Land Use Plan* was developed utilizing data that is available from a variety of sources including the Scotland County Economic Development Commission, the Southeastern Economic Development Commission, the North Carolina Departments of Transportation, Cultural Resources, Environment and Natural Resources, and Health and Human Services, as well as information from local health care providers, the military, Scotland County and the municipalities within the county. In that information, the LRCOG found three major themes:

- ★ Scotland County is a rural county located in a predominantly rural region of the State. The County, its farmers and rural residents continue to play an active role in the agricultural future of the region and the State;
- ★ Scotland County is strategically located midway between Wilmington and Charlotte along US-74 (a future Interstate), a major east-west highway thoroughfare, and is in close in proximity to I-95, the major north-south interstate along the east coast of the United States; and
- ★ While the population projections for Scotland County show very little growth in the coming decade, the 'shifting' of the large population bubble of Baby Boomers will influence housing needs and demands on services.

In order to provide more advanced land development maps, the LRCOG has utilized mapping available from Scotland County together with the *Land Suitability Models and Maps* created by the Sustainable Sandhills effort conducted for the Sandhills region in 2009 (Parson, 2009). The Sustainable Sandhills organization utilized a grant from the Environmental Protection Agency to engage various partners, including federal and state agencies, local governments and communities, the military and other stakeholders in developing criteria for the models which are designed to determine the fitness of a given property for a defined use.

Table 1: Suitability Models: Assets and Constraints

	ASSETS	CONSTRAINTS
RESIDENTIAL	In or near an incorporated city or town	In a wetland or flood zone
	Near a primary road	Steeply sloped land
	In an area served by public water and sewer	Near the banks of a waterway (riparian buffer)
	Close to schools and hospitals	
	Distance to Fort Bragg	
COMMERCIAL	Near a primary road	In a wetland or flood zone
	In an area served by public water and sewer	Steeply sloped land
	In an area with sufficient population density	Wet (or hydric) soils
INDUSTRIAL	Near a primary road and interstate highway	In a wetland or flood zone
	In an area served by public water and sewer	Steeply sloped land
	Very near active rail service	Wet (or hydric) soils
WORKING FARMS	Located in an area with "prime farmland soils"	Near a primary road
	Current cropland with a "high productivity index"	In areas that are not rural, based on population density
	Known cultivated lands, grasslands and pastures	
WORKING FOREST	Located in an area with good "woodland management soils"	Near a primary road
	Sufficiently large parcel sizes to support working forest use	Near an industrial plant or hog lagoon
	Sufficiently LOW value land	In areas that are not rural, based on population density
	Known forests, shrub/scrub, woody wetlands, cultivated lands, grasslands and pastures	
NATURAL AREA	Located in a flood plain or along the bank of a waterway	
	In or near areas with high biological value - known as primary and potential reserve design lands, both upland and aquatic	
	In or near existing conservation lands	
	In or near existing conservation lands	
	In or near clusters of Red-Cockaded Woodpeckers (regional partitions) or corridors connecting these areas.	

The sustainability models looked at a number of criteria that either enhanced or diminished the suitability of land parcels with respect to certain uses such as commercial/industrial development, agricultural production or residential usage. The six models and their enhancing or constraining factors are described in the table above. Many areas are usually suitable for multiple uses, but also have factors that make them more appropriate for specific uses.

More information about the Sustainable Sandhills organization and this particular project can be found at <http://www.sustainablesandhills.org/SuitabilityMaps.html>.

CHAPTER 3

VISION STATEMENT, MISSION STATEMENT AND STRATEGIC INITIATIVES

The following policies and principles will be used by the Scotland County Board of Commissioners to guide the work of the county and they are reflected in this plan.

Mission

To protect the health, safety and welfare of our citizens and ensure peace and dignity within the County.

Vision

The Scotland County Board of Commissioners strives to promote the highest quality of life and to create an environment that will make Scotland County the community of choice.

Strategic Initiatives

In late 2011, the Scotland County Board of Commissioners adopted six initiatives on which to focus in the short-term. These initiatives are listed below and they have also been used to guide the work of this update:

- ★ Update the 1977 County Land Development Plan with additional emphasis on housing and water resources.
- ★ Develop Centralized / Joint Purchasing between County Departments.
- ★ Develop a Capital Improvements Plan (CIP) that includes an evaluation of current and future space needs.
- ★ Develop strategies for job growth that includes examination of the

current method of economic development, an economic profile and a vision for economic development.

- ★ Examine the changing county demographics including the benefits and the consequences of no growth / slow growth.
- ★ Study the existing public information and communication efforts; examine how the County communicates with the general public and how this flow of information can be improved.

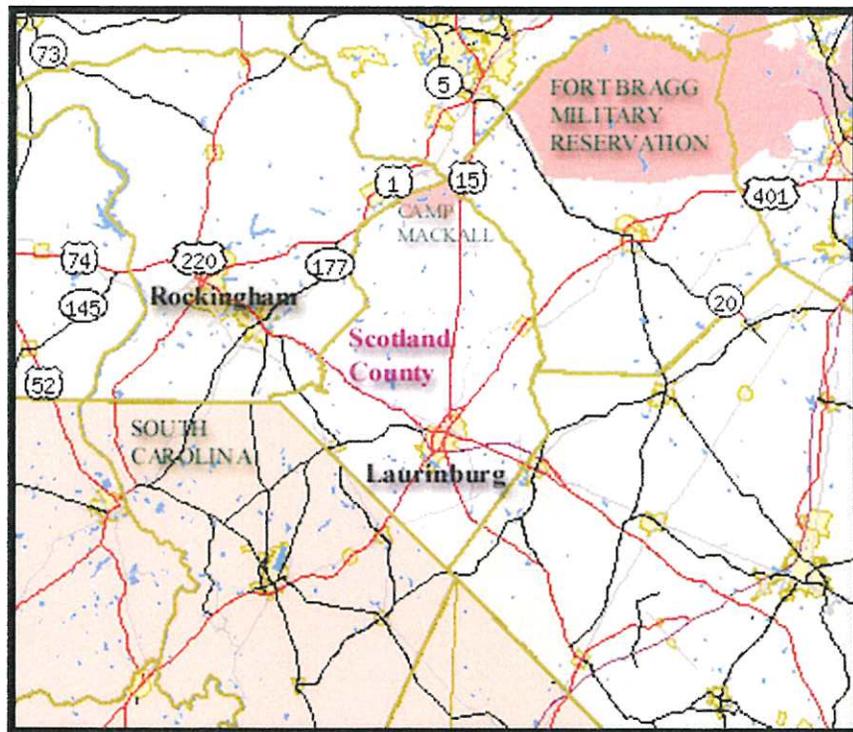
CHAPTER 4

INFORMATION BASE

A. The County and Its Municipal Jurisdictions

Scotland County is located in southeastern North Carolina south of Fayetteville and Cumberland County along the border with South Carolina. The County has a total land area of 321 square miles. See map below.

Map 1: Scotland County Map



Municipalities

Scotland County is home to four cities / towns and one unincorporated community which represent a cross-section of the County's population.

Laurinburg: The County seat, Laurinburg was founded in 1877. The city is said to have been originally settled in the early 1700's by the Scots. The 2012 population estimate for the city was 15,971 persons.

East Laurinburg: Town was first incorporated in 1903 as the Town of Scotland Village and built around the Waverly Mill, the area's first large textile mill. The name was changed to East Laurinburg in 1909. The 2012 population estimate for the city was 295 persons.

Gibson: The town was founded in 1899. The 2012 population estimate for the town was 534 persons.

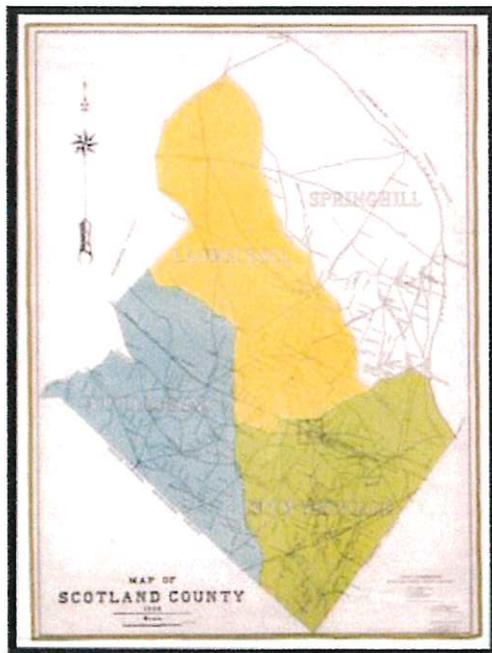
Wagram: The Town of Wagram was officially incorporated in 1912. The 2012 population estimate for the town was 843 persons.

Laurel Hill: While not officially incorporated, the community of Laurel Hill is a "census designated place" with a 2012 population of 1,393 persons.

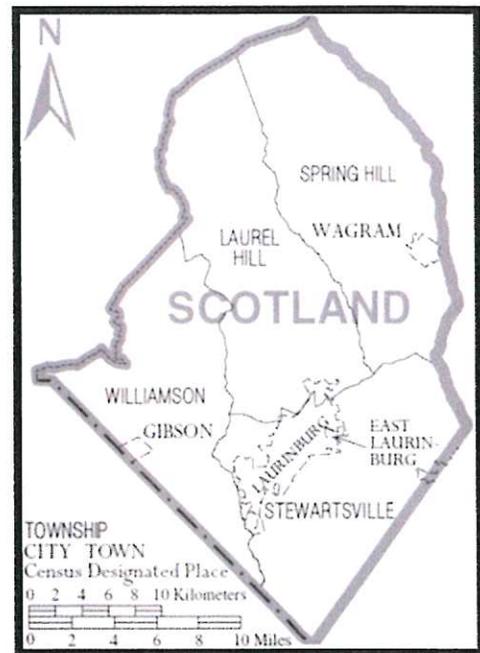
Townships

There are four townships within the County today which mirror those originally established.

Map 2: 1908 Township Map



Map 3: Current Township Map



B. Area History

Records of settlement in Scotland County date back to the early 1700's when Highland Scots are documented as living in the region now known as Scotland County. Pioneers from numerous other countries including England, Ireland and Africa soon followed. Native American settlements were encountered and recorded including the Waccamaw and Lumbee also in the 1700's. ("Scotland County", NCGenWeb)

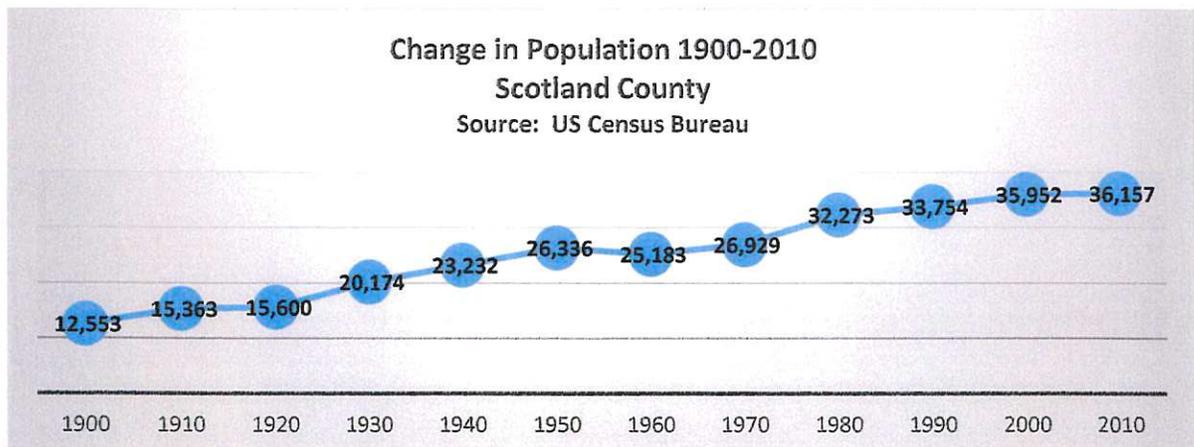
Scotland County was established by the North Carolina General Assembly on February 20, 1899. The County was formed entirely from Richmond County. The Act to Create Scotland County was introduced in the General Assembly by Mr. Hector McLean, sometimes referred to as "the father of Scotland County". A more thorough history can be found on the Scotland County website at <http://ncgenweb.us/nc/scotland/history>.

C. Population and Economy

i. Population Count

By the most recent decennial census (2010 Census) slightly over 36,000 persons call Scotland County "home". This represents a three-fold increase since 1900 and a .6 percent (.6%) increase from the 2000 Census. By comparison, growth Statewide for 2000–2010 was 18.5 percent. The chart below illustrates the change in population for the County over the past 110 years.

Chart 1: Change in Population 1900 to 2010

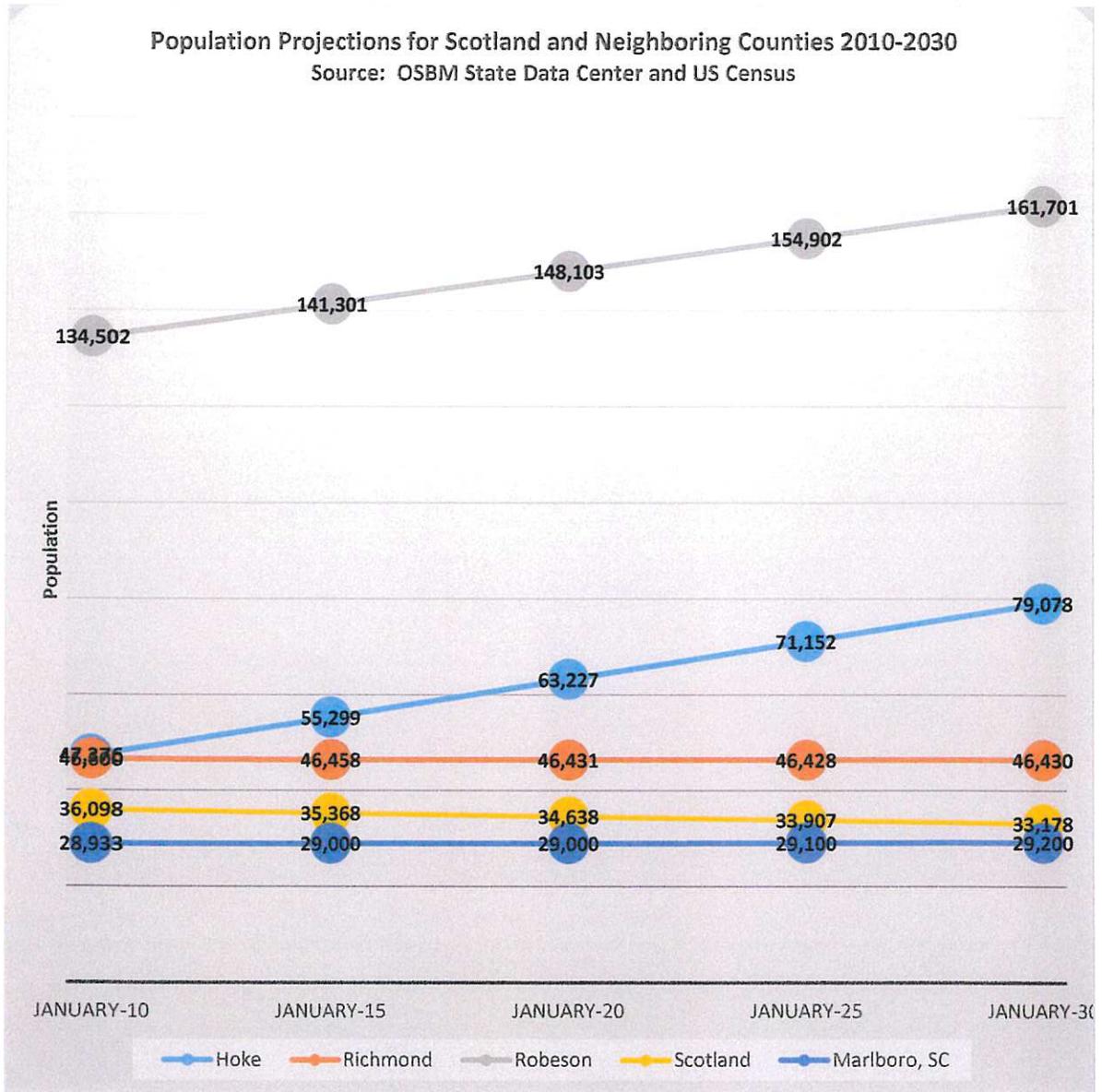


Estimates of growth from the State Office of Budget and Management (OSBM) suggest that Scotland County may experience a net population loss rather than growth over the twenty-year period between 2010 and 2030. (“Certified County Estimates”). As shown in the table below and in the chart on the following page, rates of growth are modest or negligible in all neighboring counties, as well. The exception is Hoke County which has experienced rapid growth associated with the military presence in Cumberland County.

Table 2: Comparison of County Population Estimates and Projections 2010–2030

County	July-10	July-15	July-20	July-25	July-30	Percent Change 2010–2030
Hoke	47,376	55,299	63,227	71,152	79,078	67%
Richmond	46,600	46,458	46,431	46,428	46,430	0%
Robeson	134,502	141,301	148,103	154,902	161,701	20%
Scotland	36,098	35,368	34,638	33,907	33,178	-8%
Marlboro, SC	28,933	29,000	29,000	29,100	29,200	1%
STATE	9,586,227	10,331,630	11,062,090	11,780,936	12,491,837	30%

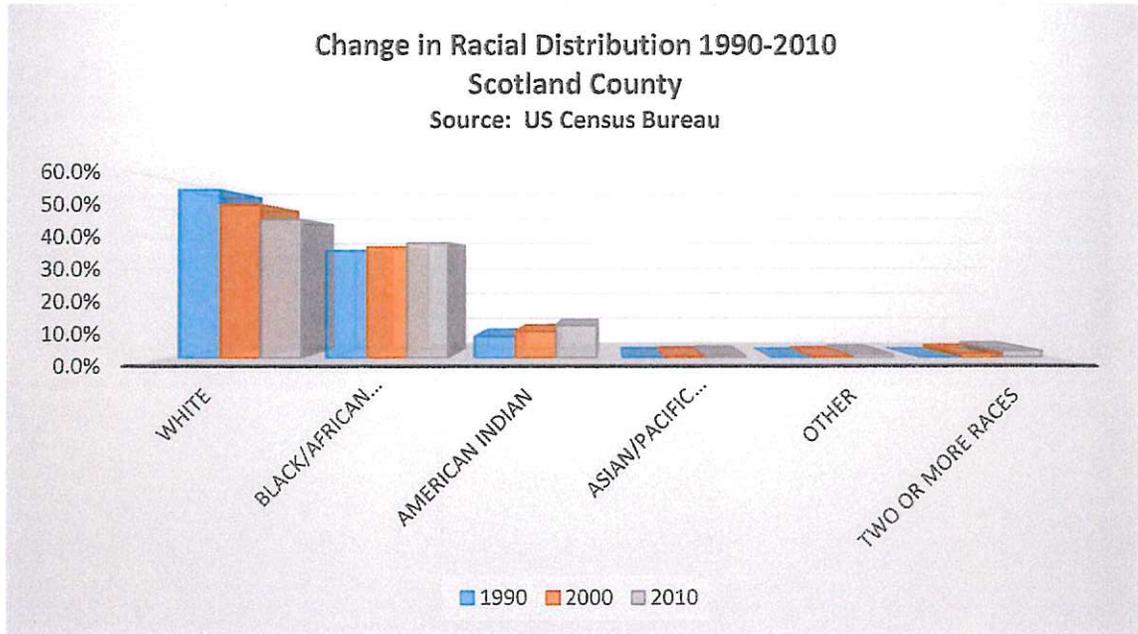
Chart 2: County Population Projections



ii. **Race and Ethnicity**

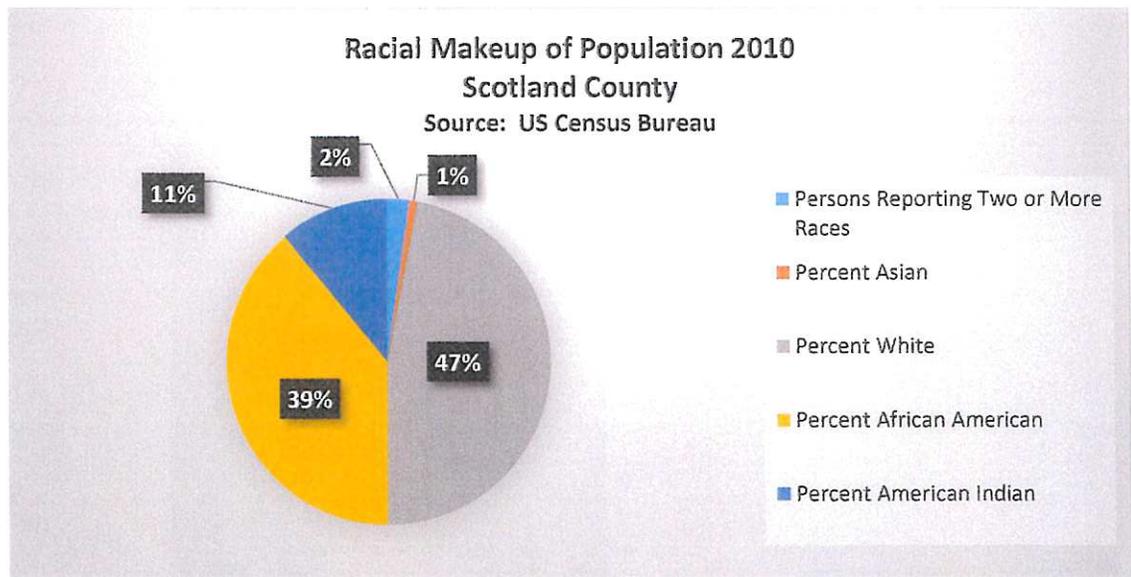
The racial composition of the County has undergone a gradual shift over the last thirty years. As shown in the chart below, the majority population remains white, yet the percentage whites represent of the total population has declined by 10 percent between 1990 and 2010. (2010 Census) The populations of both African Americans and American Indians have increased during that same period.

Chart 3: Racial Composition of Population 1990–2010



As of 2012 estimates, the County population was 47 percent white, 39 percent African American, 11 percent American Indian and three percent all other races as shown on the chart below. (2008–2012 ACS)

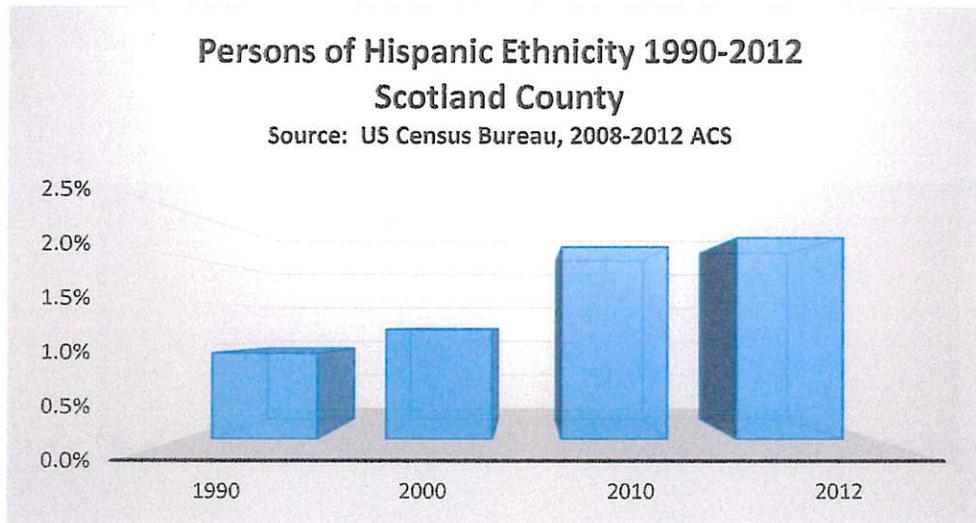
Chart 4: 2012 Racial Composition of Scotland County



Ethnicity within the County is also undergoing a gradual change. Hispanic persons comprised about 2 percent of the population in 2010 compared to 1 percent in 1990.

However, this is a historically undercounted population and actual numbers may be higher.

Chart 5: County Ethnicity 1990–2012



iii. Age

In Scotland County the median age and the percent of population 65 years and over, two means by which age shifts in population can be measured, are on par with figures from neighboring counties and the State. The percent of persons aged 65 or older is 14 percent (14%) according to the most recently available Census data and the median age is 37.8 years, consistent with the State figures for the same period. The table below shows this age data for the County and its neighbors.

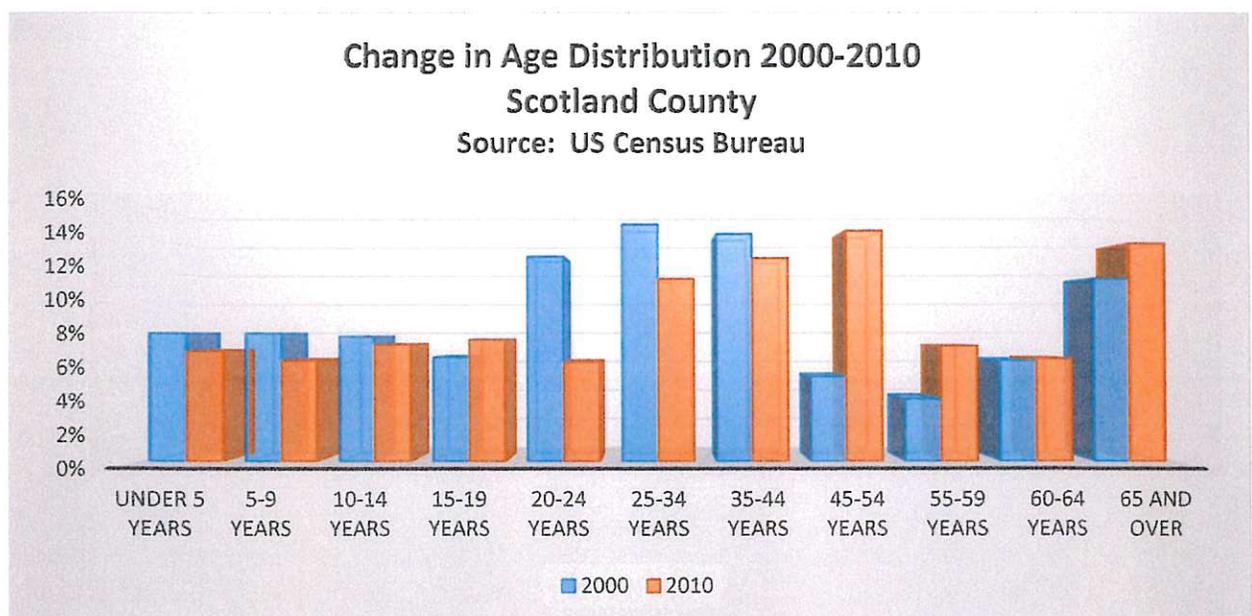
Table 3: Comparison of Age Statistics with Neighboring Counties

County	Percent of Population 65 Years and Older	Median Age
Robeson	11%	34.3
Scotland	14%	37.8
Hoke	7%	30.8
Richmond	14%	38.9
Marlboro, SC	13%	39.1
North Carolina	13%	37.4

Source: US Census Data– 2008–2012 ACS

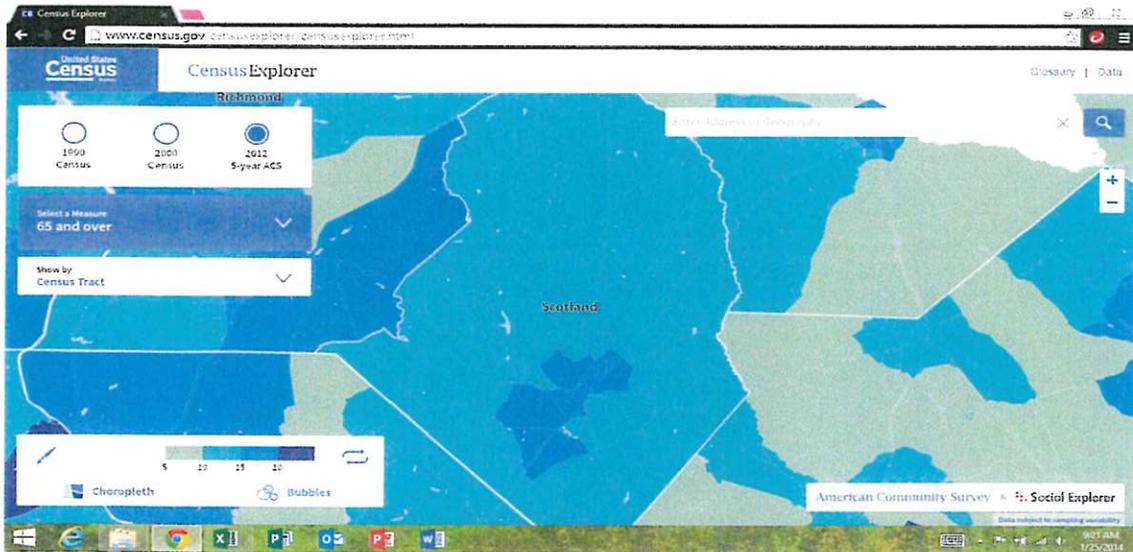
A further look at the population age distribution for Scotland County shows most of the change in age is occurring in persons who are considered “working age”, persons between 20 and 64 years of age. First, persons falling into the 20–24 age bracket have declined by 52 percent (52%) from 2000–2010, signaling not only the natural aging of the population but likely a loss of individuals in this group to outmigration. The second most notable change has occurred in the 45–54 age bracket. Here, the number of individuals in this bracket has increased by a significant 172 percent (172%). Speculation on reasons for this might include the natural shift of a large “bubble” of population forward in age and, possibly, the lingering impacts of manufacturing job loss in the County. Finally, persons aged 65 years and older have increased by 19 percent (19%) in the same ten-year period which is likely attributable to the natural aging of the resident population. See *Chart 6* below.

Chart 6: Changes in Age Distribution



Drilling further down into the age change of the County population 65 years and older, it appears that a concentration of this age group occurs around the City of Laurinburg as shown on the map below. About 16 percent (16%) of persons in the three Census tracts represented by the dark blue area are 65 years of age and over. The aging of the County’s population will influence the future of the County in many ways areas.

Map 4: Concentration of Persons Aged 65 Years and Over



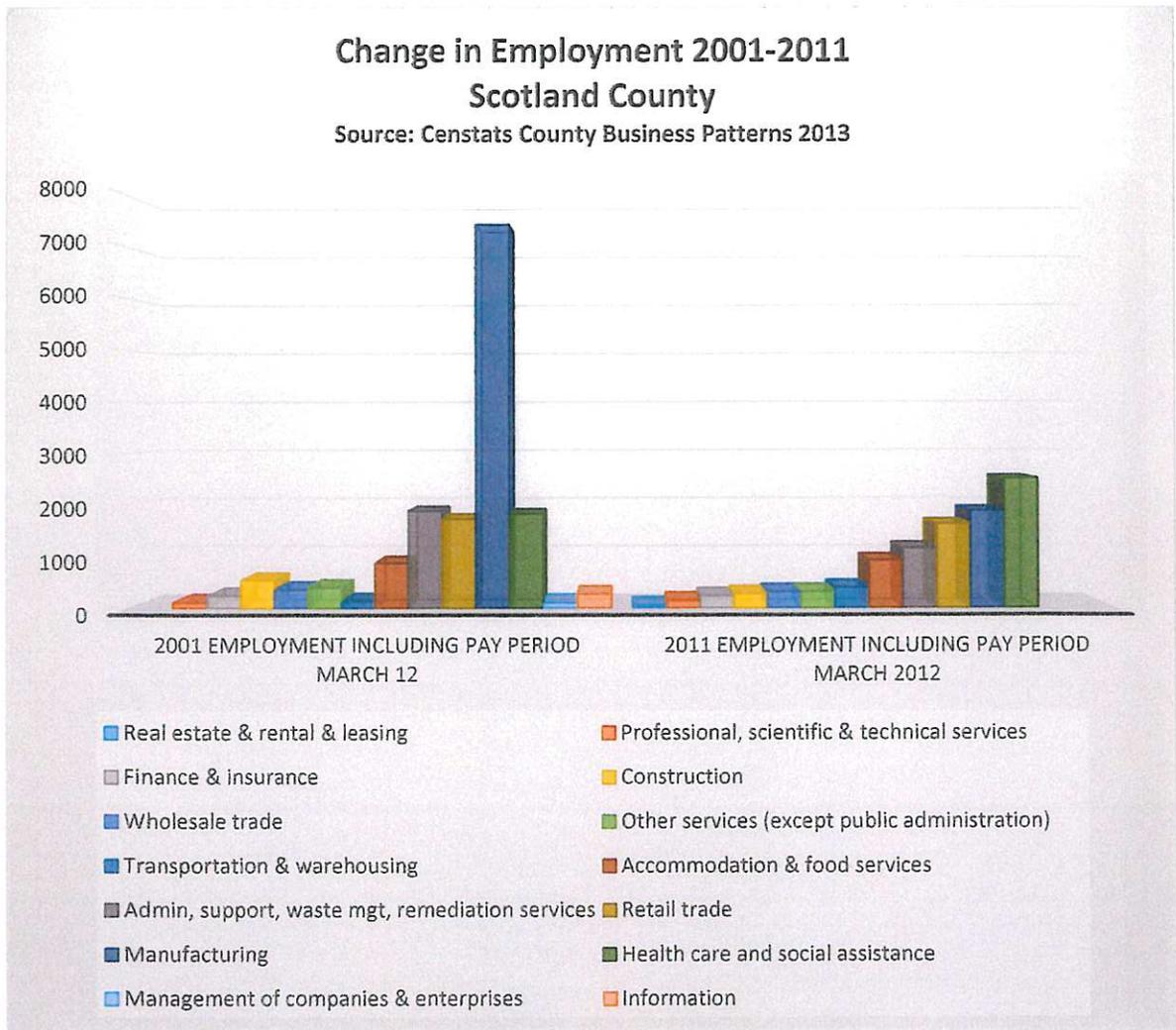
Source: Census Explorer, American Community Survey.

iv. Employment

The most recent data available from the North Carolina Department of Commerce (November 2013) indicates that the civilian labor force in Scotland County is 12,698 persons. Of these, an estimated 1,709 persons were unemployed yielding an unemployment rate of 13.5 percent. The remaining persons in this group are considered employed and the following provides information on their occupations. (DES- LEAD data)

As shown in the chart below, significant shifts appear in areas of employment. The most recent estimates available from the Bureau of Labor Statistics utilized by the Census to develop County business patterns indicates a significant loss of manufacturing (down by 75%), construction (down by 48%), and general administrative/support jobs (down by 38%). Conversely, employment in transportation/warehousing has increased (up by 205 %), health care/social services (up by 37 %) and professional/scientific jobs (up by 39%). (2010 Census)

Chart 7: Change in Employment 2001–2011



The most recent occupational data available from the North Carolina Employment Security Commission for November 2013 is shown in the following chart. While there has been a decline in the overall manufacturing employment, production occupations still rank as the top jobs, followed closely by those in office and administrative support and healthcare. A table showing the County’s ten largest employers follows.

Chart 8: County Employment Profile, November 2013

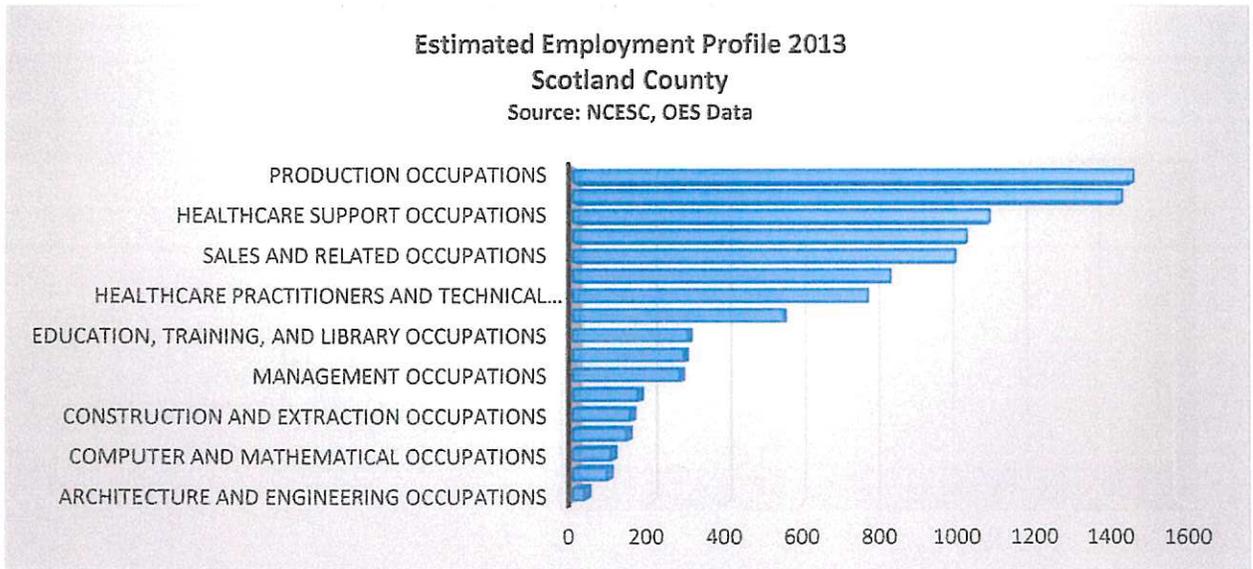


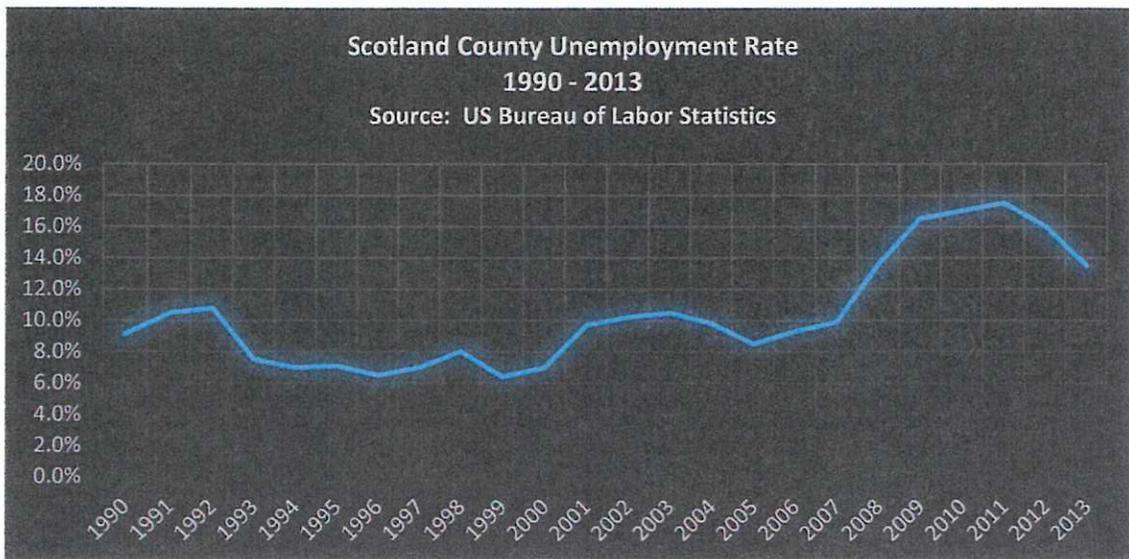
Table 4: Scotland County's Largest Employers 2013

Company Name	Industry	Employment Range
Scotland County Schools	Education & Health Services	1,000+
Scotland Memorial Hospital (A Corp)	Education & Health Services	1,000+
State Of NC Dept. Of Correction	Public Administration	500-999
County Of Scotland	Public Administration	250-499
Associate Staffing LLC	Professional & Business Services	250-499
Wal-Mart Associates, Inc.	Trade, Transportation & Utilities	250-499
Pilkington North America, Inc.	Manufacturing	250-499
Maverick Transportation LLC	Trade, Transportation, & Utilities	100-249
Hanesbrands, Inc.	Manufacturing	100-249

Unemployment in the County (averaged across the twelve months in each year to yield an “annual” rate) appears to be trending downward after reaching a high of 17.5 percent

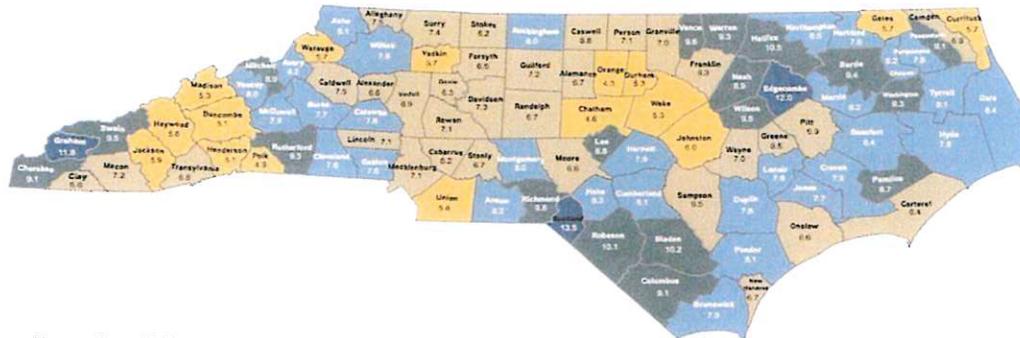
(17.5%) in 2011. Clearly, the loss of traditional manufacturing jobs, as discussed in the section above, has contributed most significantly to this level of unemployment. The chart and map below offer comparative information on the County's unemployment using the most recent information available from the state.

Chart 9: Annual Unemployment 1990–2013

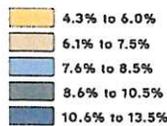


Map 5: 2013 Unemployment by County in North Carolina

North Carolina Unemployment Rates by County November 2013



November 2013



▲ 9 Counties Higher Than Previous Month

▼ 91 Counties Lower Than Previous Month

▬ 0 Counties Same as Previous Month

**North Carolina Rate 6.9%
Not Seasonally Adjusted**

Note: November 2013 data are preliminary.
Prepared by Labor & Economic Analysis Division, North Carolina Department of Commerce 1_2014

v. Income

By the most recent data available, Scotland County's median household income is \$30,472 or 66 percent of the State's median household income of \$46,450. (2008–2012 ACS) The County's household income is on par with each of its neighboring counties but Hoke where the median income is actually higher than the state value as shown in the table below.

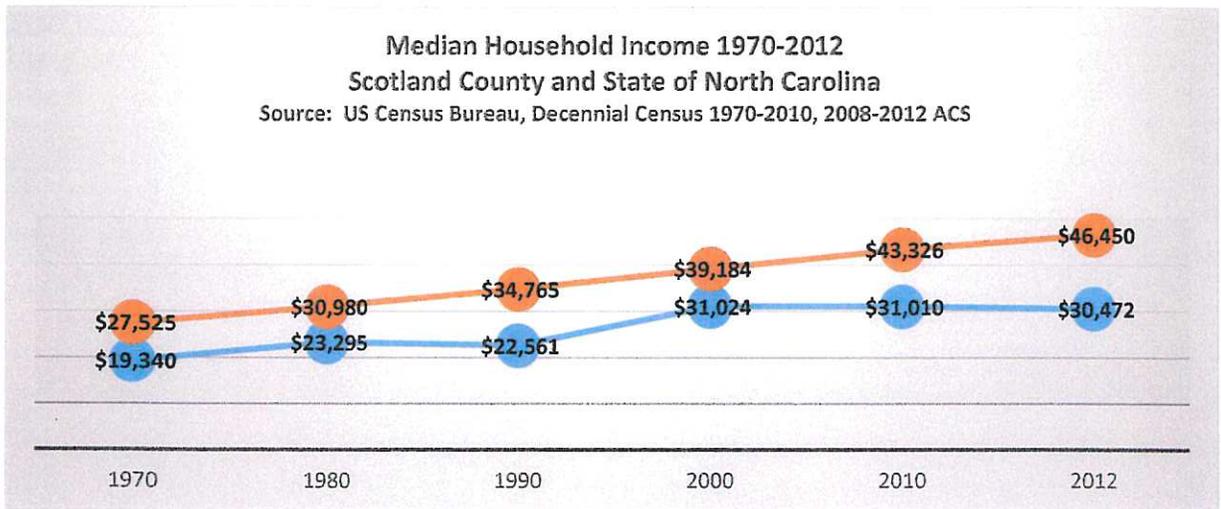
Table 5: Comparison of Median Household Income 2012

	Median Household Income 2012	Median as Percent of State Figure
Hoke	\$ 46,900	101%
Richmond	\$ 31,726	68%
Robeson	\$ 30,167	65%
Scotland	\$ 30,472	66%
Marlboro, SC	\$ 28,612	62%

North Carolina	\$ 46,450	100%
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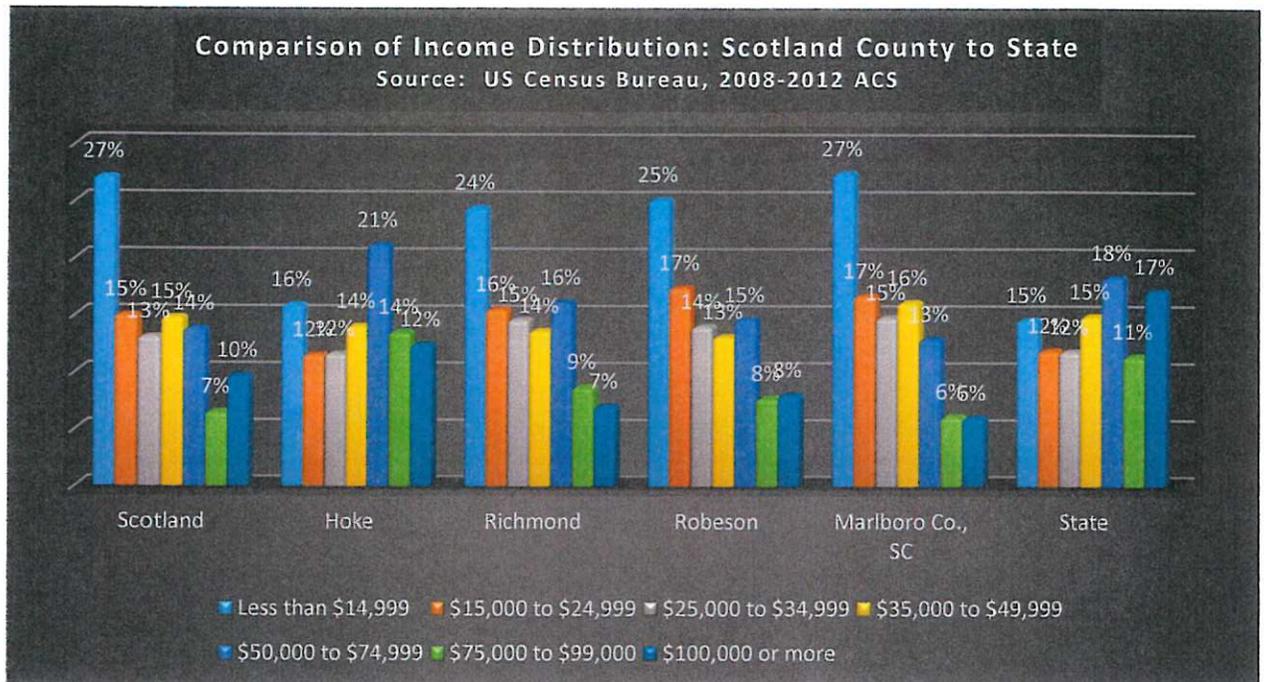
The trend in household income between the County and state has been the County median income running 25 to 35 percent less than the state figure. As shown on the following chart, there was a slight downturn in the County median household income from 2000 to 2010 and, again, from 2010 to 2012.

Chart 10: Comparison of Median Household Income County to State 1970-2012



Looking further into the County's household incomes, we find that the majority of households fall into the group "Less than \$15,000". As shown on the chart below, this is similar to the neighboring counties of Richmond, Robeson and Marlboro, SC. Incomes at the lower end of the scale signal that a portion of the population of the County is comprised of households likely struggling with jobs losses, unemployment and fixed incomes.

Chart 11: Comparison of Income Distribution by County 2012

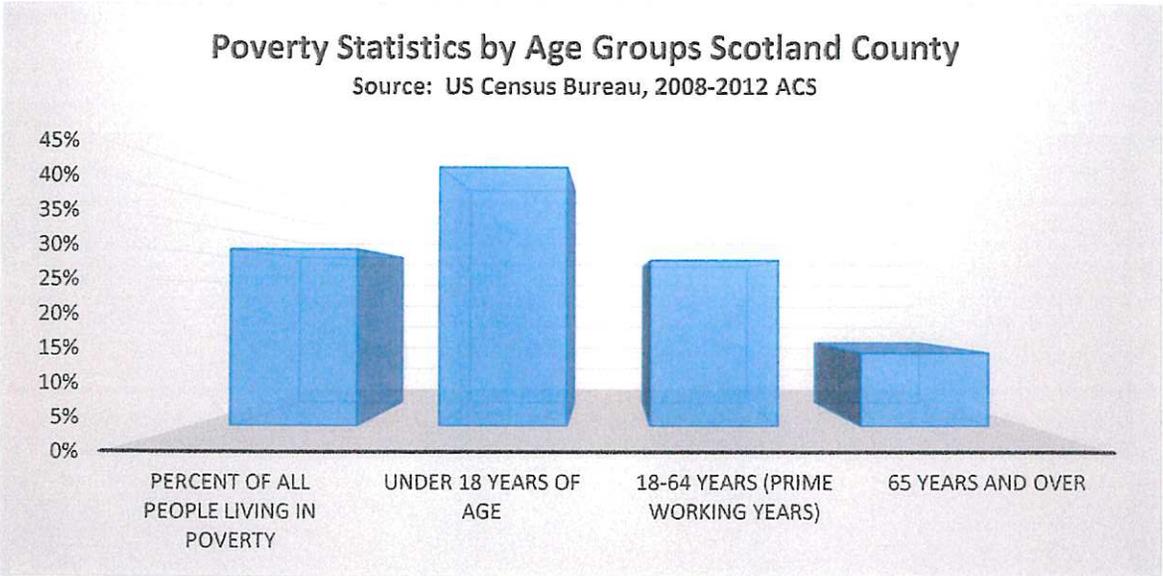


vi. Poverty

By the most recent estimates available, persons living in poverty accounted for almost a third of the population or 31 percent compared to 16.8 percent for the State. The instance of child poverty, persons aged 18 years or less, was 45 percent. The corresponding state rate for child poverty is 24.9 percent making Scotland County's rate almost twice that of the state. (2008–2012 ACS)

It is worth noting that Scotland County has been grappling with the challenges of poverty for many years. The neighboring counties of Richmond, Robeson and Marlboro, SC also record persistently high poverty rates.

Chart 12: Poverty Statistics



D. Land Use and Development

i. Topography

Scotland County is located in the Coastal Plain physiographic province. Elevations range from 140 to 450 feet above sea level. The northern third of the County is part of the Carolina–Georgia Sandhills and is rolling and hilly. Its lowest elevation is approximately 270 feet. The rest of the County is part of the Upper Coastal Plain. It is fairly smooth but has moderately steep breaks along drainage ways and is home to many of the oval-shaped Carolina Bays found in the region. Carolina Bays are elliptical depressions that are generally too wet for agricultural uses or development.

ii. Soils

The soils of Scotland County are strongly leached and acidic. (Soil Survey for Scotland County). With few wetland exceptions, their organic content is low. The soils lying below native forests are low in calcium, magnesium and potassium because of low storage capacity. Approximately 37% of the acreage is droughty sand, 10% somewhat droughty loamy sand, 10% swamp and wet alluvial lands, 10% Carolina Bays, 13% wet upland soils, 11% well drained, sloping upland soils and 9% well-drained, nearly level upland soils. More detailed soils information may be found from the Natural Resources Conservation Service of the US Department of Agriculture at <http://websoilsurvey.nrcs.usda.gov>.

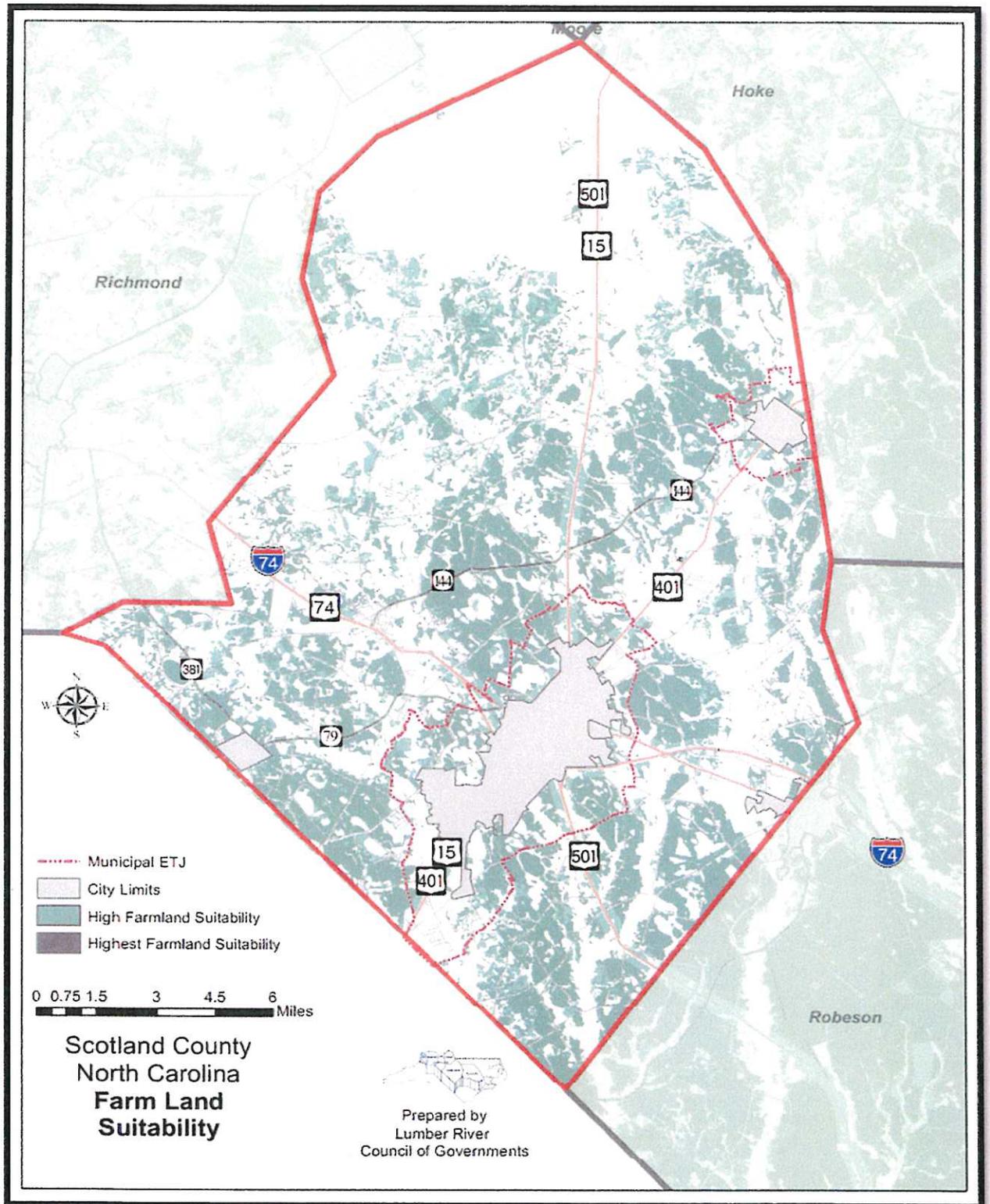
iii. Climate

The climate in Scotland County tends to be warm and humid. Summers are long and hot. Winters are usually short and mild. The climate is fairly even throughout the County. The average annual temperature is 63 degrees. Rainfall averages over 47 inches per year.

iv. Farmland and Forestry Lands

Scotland County is estimated to contain 204,293 acres of land area. (2013 Ag Stat Book) Of this total, over 32% (65,780) of the total acreage is farmland, with an average farm size of 346 acres. Over 40% (27,775) of the farmland acreage is harvested cropland. The average age of the Scotland County farmer is 55.1 years. This average age may become an important factor in the future of agricultural for the County. The *Farmland Suitability Map* is on the following page.

Map 6: Farmland Suitability Map



The soils found within the County are considered good woodland management soils conducive to the formation and sustainability of forest lands. (Scotland County Soil Survey) Such soils are composed of a variety of materials and organisms that when viewed in whole function as a living ecosystem. This ecosystem is able to sustain important habitat for plants, animals and other valuable organisms. This forest acreage helps to protect valuable groundwater resources, forming natural filters for recharge of the County's aquifers. The *Forest Land Suitability Map* is on the following page.

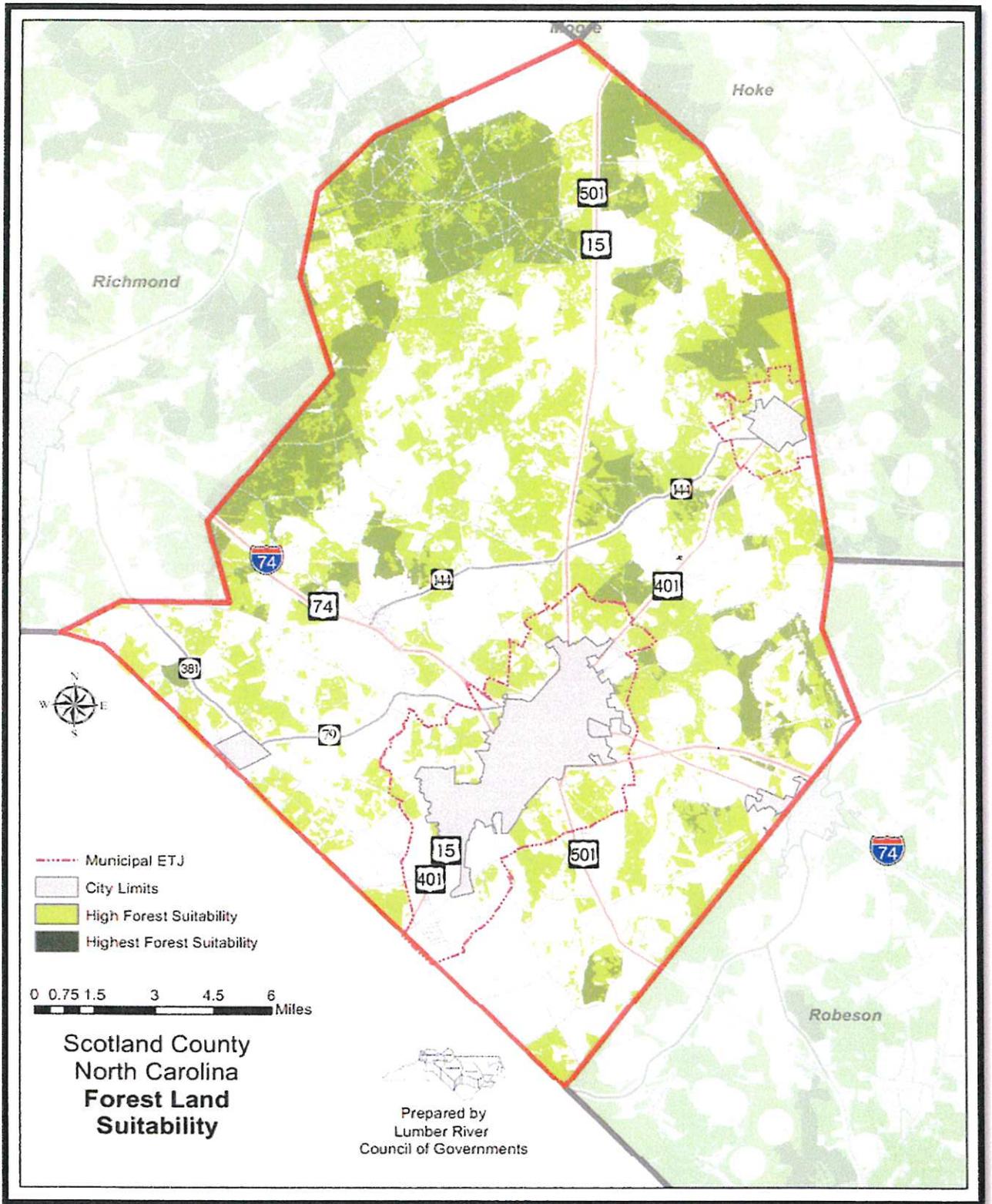
v. **Current Land Use and Classifications**

The Planning Jurisdiction for Scotland County consists of the total acreage outside the planning and zoning jurisdiction of the four incorporated municipalities (City of Laurinburg, Towns of Wagram, Gibson and East Laurinburg), as well as the Camp Mackall military reservation and the Sandhills Game Land. Under authority granted by the NC General Assembly, Scotland County is authorized to develop a land use plan. Current land uses include agricultural, residential, commercial, industrial and open space.

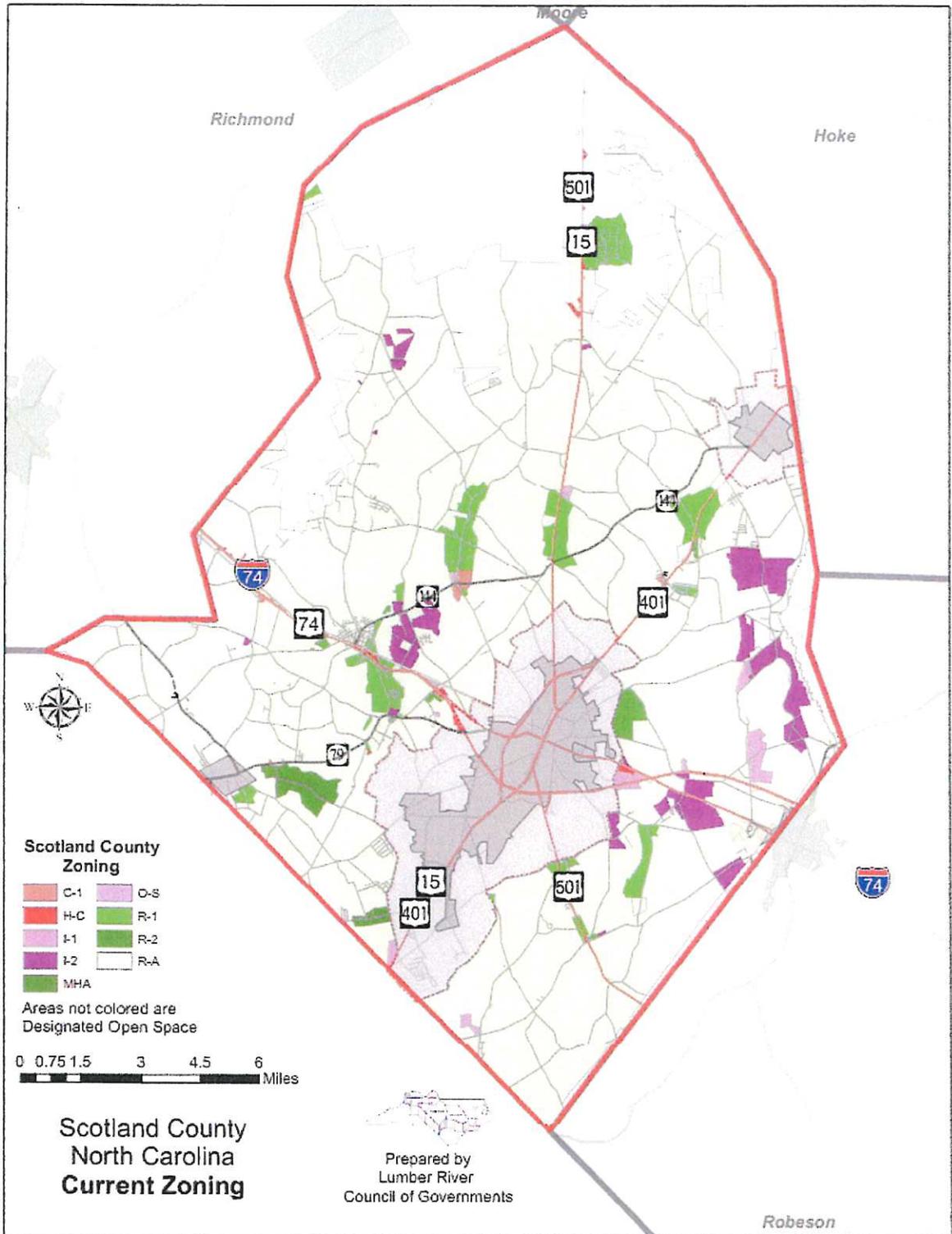
The Scotland County Planning Department has one full-time Planning and Zoning Director; and, has an active Planning / Zoning Board and Board of Adjustment. The County's land use-related regulatory ordinances include: Countywide Zoning Ordinance, Countywide Subdivision Ordinance, Watershed Protection Ordinance, and Voluntary Agriculture Districts, Development and Operation of Manufactured Home Parks Ordinance, Junk Vehicle Ordinance and National Flood Damage Prevention Ordinance.

The County has practiced zoning of its land area since 1980. *Map 8* shows the application of the current zoning classifications.

Map 7: Forest Land Suitability Map



Map 8: County Zoning Map



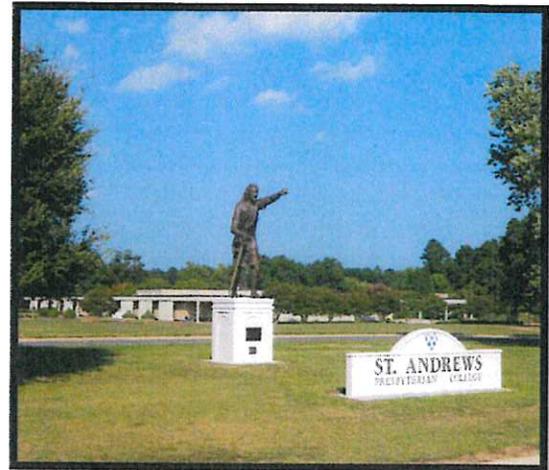
E. Community Facilities and Services

i. Education

Scotland County has one Countywide public school system serving over 6,600 students. There are six elementary, five middle and one high school. More information about these schools may be obtained from the Scotland County Board of Education or the NC Department of Public Instruction website at <http://www.dpi.state.nc.us>.



Richmond Community College



St. Andrews College

Photos Courtesy of R. Hammond.

The County is also served by Richmond Community College which has a campus extension located in Laurinburg. For additional post-secondary education, St. Andrews University (formerly St. Andrews Presbyterian College) is also located in Laurinburg. Opened in 1961, St. Andrews is a private institution focusing on liberal arts with an enrollment of 600. While not located in Scotland, the University of North Carolina at Pembroke also serves the population of the County.

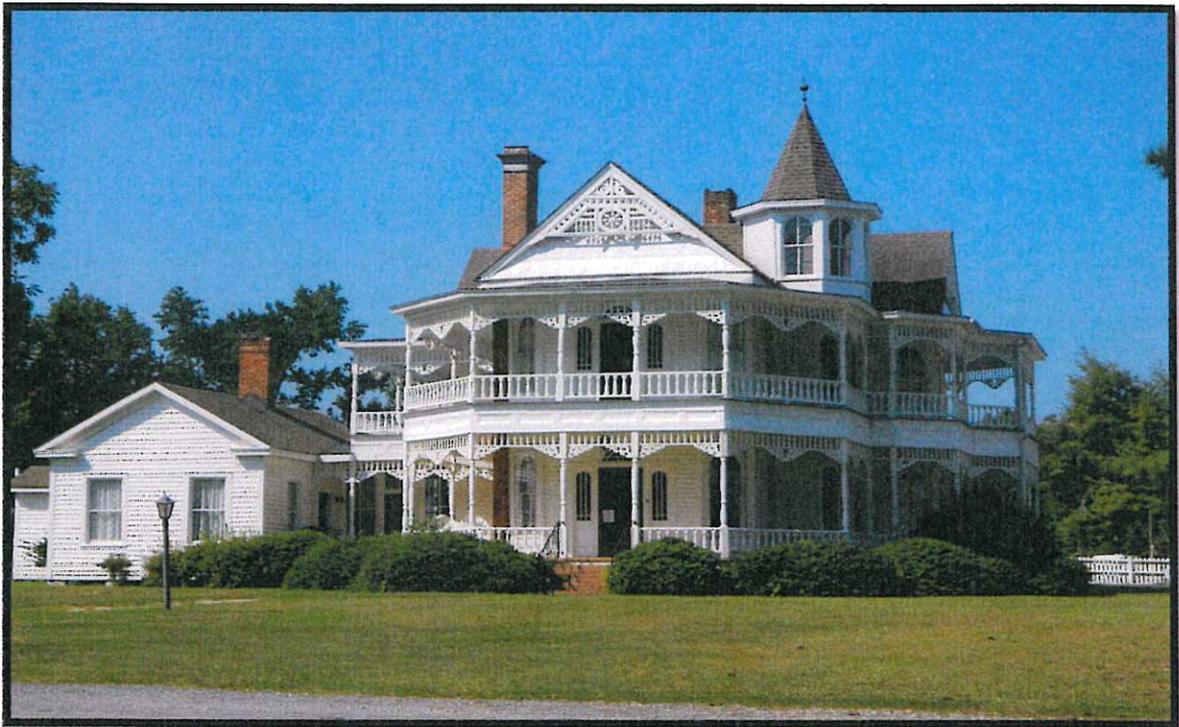
ii. Parks and Recreation

Scotland County Parks and Recreation Department has a comprehensive program that

includes various parks, facilities and programs. The Department oversees twelve parks and several centers for recreation and senior activities. The Department also provides on-line maps of bicycle trails, parks and facilities. The Department has a Master Plan available on its web page found on the County website at www.scotlandCounty.org.

The Lumber River State Park (LRSP) has a boat ramp at the Chalk Banks facility located outside the Town of Wagram. (<http://ncparks.gov>). The Lumber River is a natural and scenic river and carries several related natural and scenic designations. Visitors to the Park totaled approximately 70,000 in 2013 with 20,000 visiting the Chalk Banks location.

There are a number of other properties that are significant to local culture and history. There are 15 sites listed on the National Register of Historic Places. This list and other information about sites of historic or cultural significance may be found at the NC State Historic Preservation Office within the Department of Cultural Resources at <http://www.hpo.ncdcr/nr-PDFs.html#s>.



The John Blue House, Laurinburg, NC (National Register for Scotland County) Photo Courtesy R. Hammond

iii. Solid Waste

The solid waste collection system includes municipal solid waste (MSW), construction and

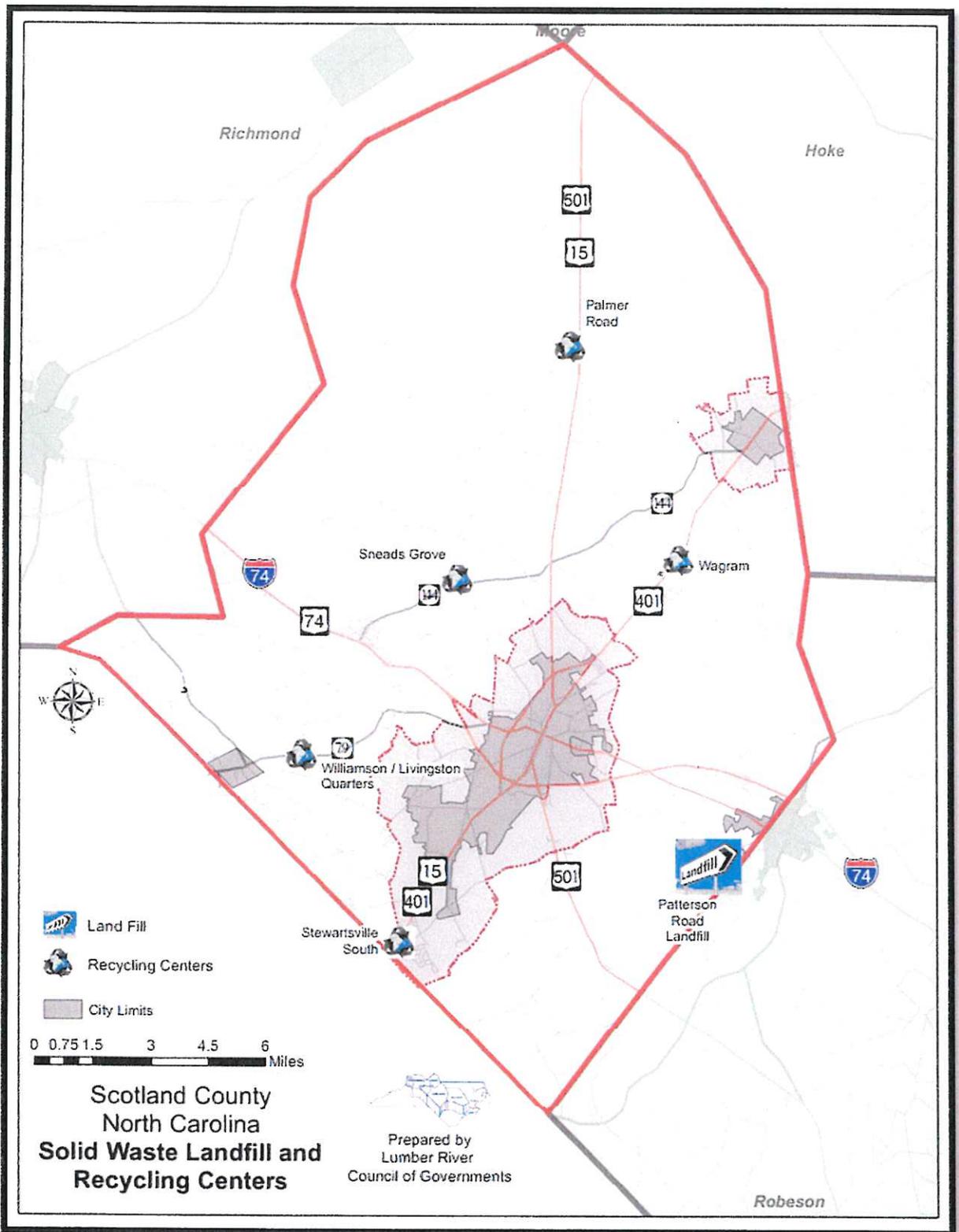
demolition debris (C&D), and yard waste. The County landfill is located on Patterson Road and receives approximately 115 tons of waste per day. This waste stream is broken down into 80 tons of MSW, 25 tons of C&D and 10 tons of yard waste. Construction debris tonnage has fallen dramatically in recent years due to the slowdown in home building and general construction. The landfill is currently estimated to have the capacity to meet County demands for the next 30 years.

The County utilizes five manned sites to serve as collection points for household waste, recyclables and industrial waste for transfer. Industrial waste is taken at designated stations for disposal out-of-County. Recyclables are transferred to a private company located near Wagram. Electronics are collected at the Patterson Road Landfill site. *Map 9* on the following page shows the location of the landfill and collection sites.

iv. Social Services

The mission of the Scotland County Department of Social Services is to “foster individual responsibility and create a strong cooperative community that is responsive to the needs of its citizens”. The agency, located in Laurinburg, offers two areas of service to meet this mission; Social Programs and Economic Programs. Social Programs focus on adult and child welfare while Economic Programs provide temporary crisis assistance. Examples of Social Programs include Work First employment, Child Protective Services, Adult Home Care and Aid to the Blind. Examples of Economic Programs include Food and Nutrition Services, child support enforcement and emergency assistance. More information may also be obtained from the NC Division of Social Services at www.ncdhhs.gov/dss.

Map 9: Solid Waste Recycling Center Locations



v. Medical Facilities and Health Care

Scotland County residents are provided readily accessible health care through a number of resources including a hospital, County agencies and local providers. The Scotland County Health Care System in Laurinburg includes Scotland Memorial Hospital, Cancer and Cardiovascular Centers, primary care practices, urgent care and many other services. There are also coalitions such as Scotland County Healthy Carolinas and non-profits such as the Scotland Community Health Clinic helping to fill gaps in health care. The Scotland County Health Department has published a yearly report entitled the 'State of the County Health Report' which provides more detailed information at www.scotlandCounty.org/health.



Scotland County Memorial Hospital. Photo Courtesy R. Hammond

iv. Housing

Scotland County's housing inventory includes both single and multi-family dwellings, stick-built, modular and manufactured homes of varying ages. The housing inventory also includes about five hundred public housing units and over five hundred Section 8 housing vouchers. The public housing units and vouchers are administered by the Laurinburg

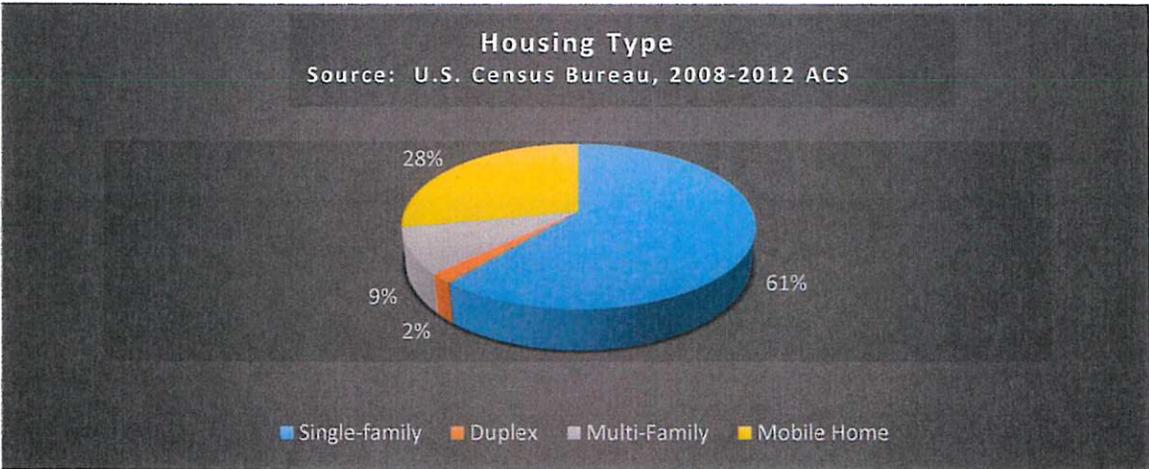
Housing Authority and are provided throughout the County. Public housing was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single family houses to apartments for elderly families. There is no existing data to determine the full impact of public subsidized housing within the County. The possible long term economic and social impact on the County of this trend warrants further examination.

The aging of the County’s population will impact the need for affordable housing options as older adults seek the opportunity to “age in community”. This demand will require housing options ranging from those who are independent to those requiring progressively more assistance.

A. Housing Type

The majority of housing (61 percent) which exists in the County is stick-built single-family homes. (2008–2012 ACS). Multi-family units such as apartment complexes make up about 9 percent of housing occupied housing. Even fewer, about 2 percent, are duplexes. Mobile home units make up about 28 percent of the inventory. This percentage is consistent with neighboring counties.

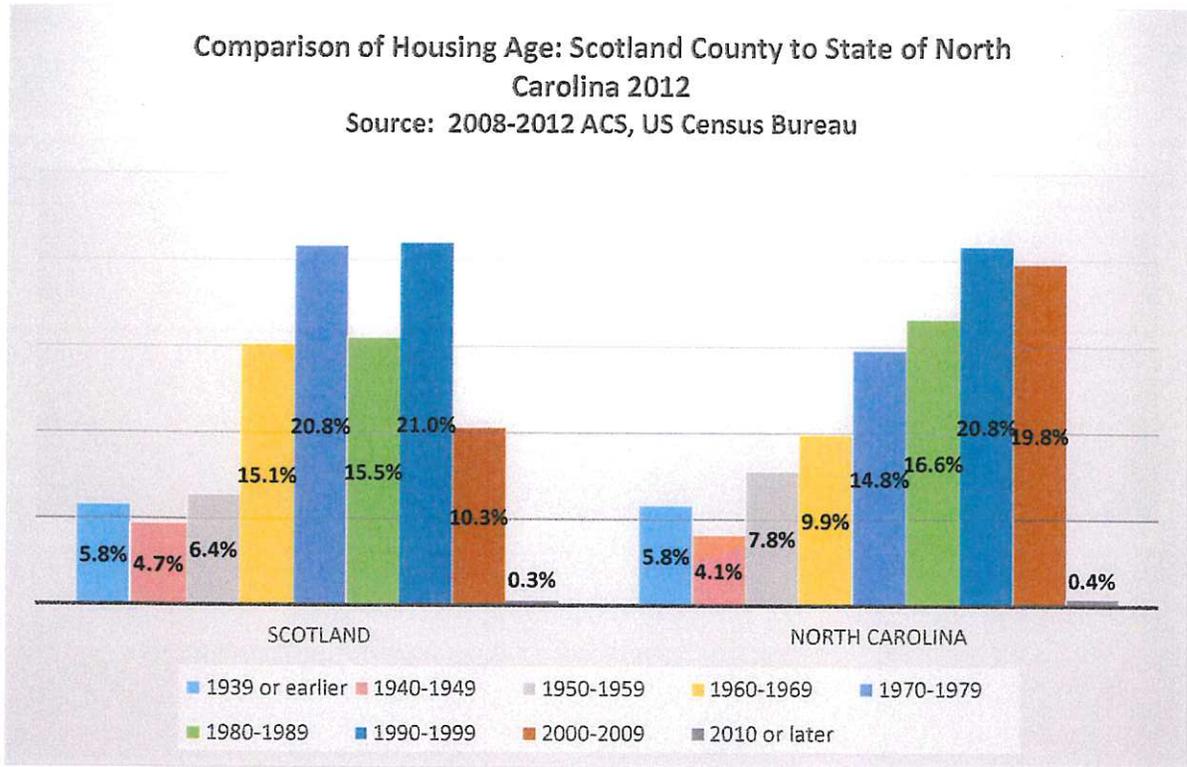
Chart 13: Housing Type 2012



B. Housing Age

The age of housing in the Scotland County inventory shows an interesting variation when compared to the age of housing across the state. As shown in the chart below, Scotland County experienced a growth pop in the 1970’s, likely tied to the growth in manufacturing. Following another growth pop in the 1990’s, growth in the County’s housing inventory has slowed significantly when compared to the State.

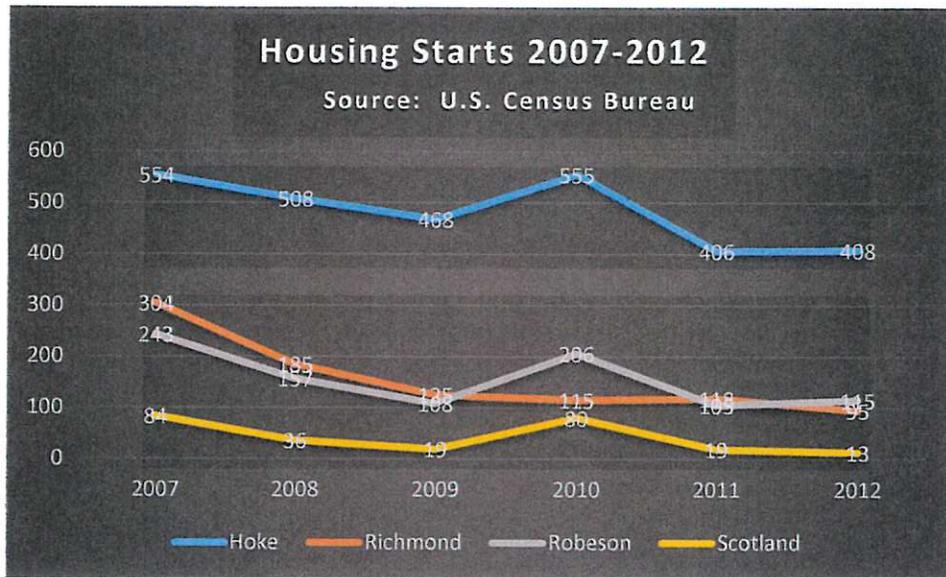
Chart 14: Housing Age



C. Housing Growth

Growth in the residential sector has slowed across the country in response to the economic downturn. In Scotland County, the trend in housing growth, as measured by residential building permits, declined precipitously between 2007 and 2009. With the exception of a spike in 2010, the growth trend now appears to be flat. The chart below compares housing starts in neighboring counties.

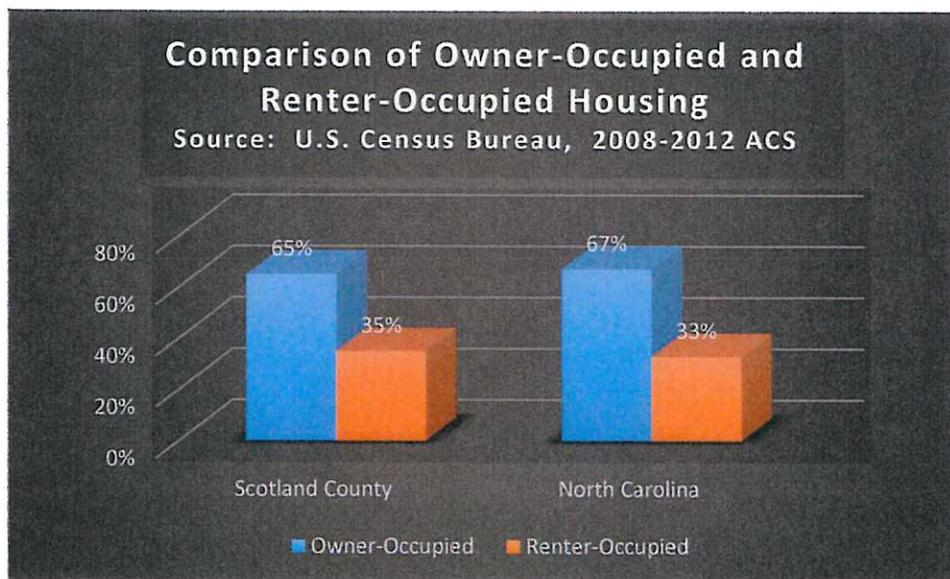
Chart 15: Housing Starts



D. Housing Tenure – Renters and Owners

The percentage of houses occupied by renters versus owners mirrors the figures for the State as a whole. In Scotland County, the majority of homes are owner-occupied (65 percent).

Chart 16: Owner and Rental Housing 2012



vii. Law Enforcement and Emergency Services

The Scotland County Sheriff's Department is staffed by approximately seventy-five employees (75) including thirty-five (35) patrol officers and a drug investigative team, dedicated to providing professional law enforcement for County residents. The Department provides patrol services to the County's unincorporated areas and the Town of Gibson. The department also supplies supportive services to the municipal police departments in Laurinburg and Wagram. Additional Information is available at <http://scotlandsheriff.org/>.

The Scotland County Department of Emergency Management oversees emergency management, 911 central communications, paramedic level EMS services for the County and the Scotland Area Transit System (SCAT). The Department is located at the County Complex on West Boulevard. A new consolidated 911 and Emergency Operations Center is being constructed and is scheduled for completion in late 2014. An existing Emergency Medical Services (EMS) building is also located on the site and a minimum of five paramedics are on duty at all times. A Volunteer Rescue Squad with the City of Laurinburg also provides First Responder and other services. Additional information is available at <http://www.scotlandCounty.org/ems.aspx>.

Volunteer Fire Departments serve County residents within seven fire districts. Assistance is also provided by the NC Forest Service.

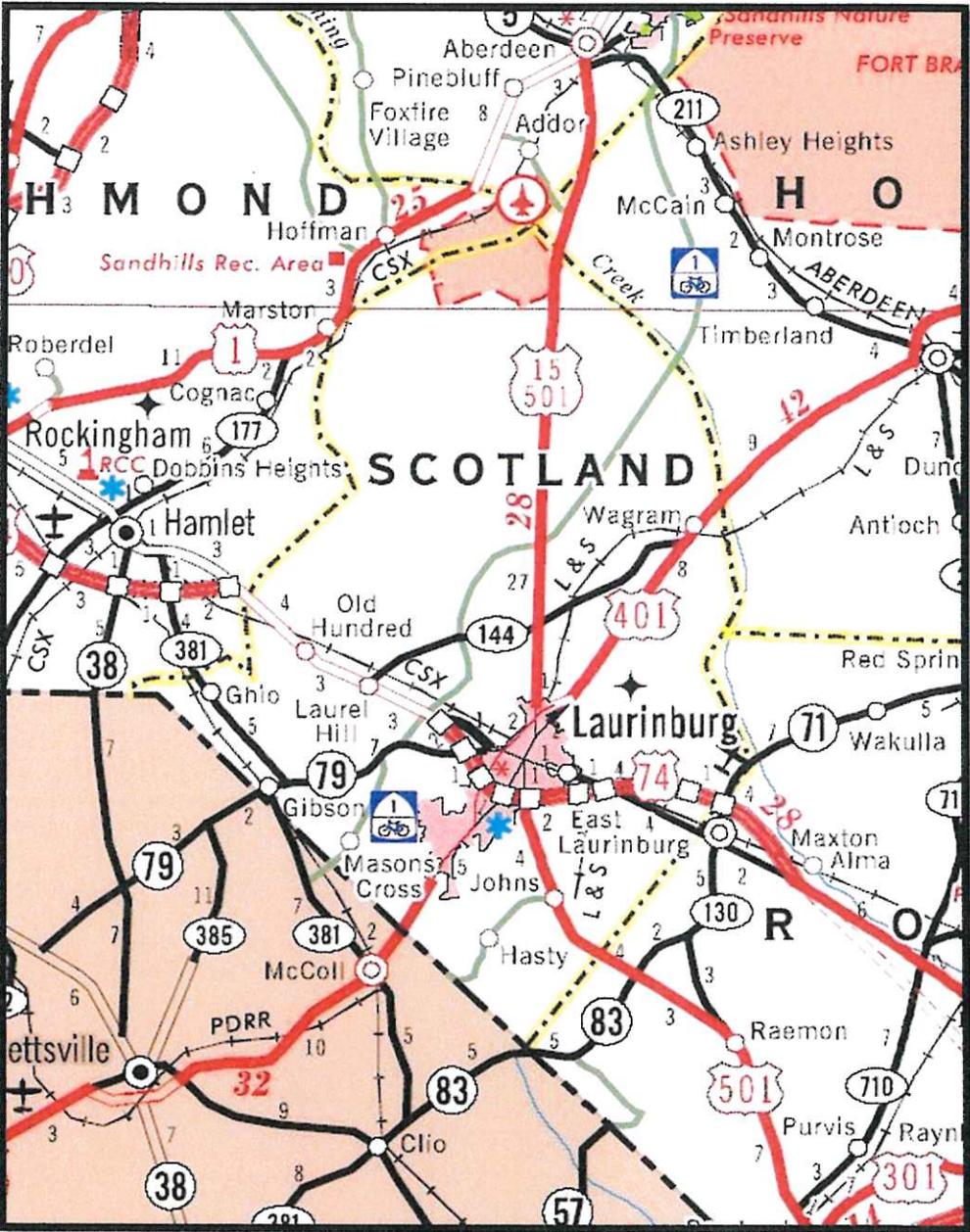
F. Infrastructure

i. Highways

Scotland County is bisected by three major highways; US 74 which runs east-west through the County, and US 15/501 and US 401 which run north-south through the County. (Note: US 74 is designated as the Future Interstate 74 Corridor.) According to the September 2013 North Carolina Department of Transportation (NCDOT) *Report on Highway and Road Mileage for 2012*, there is a total of 552.64 miles of road in the Scotland County. This total can be broken down into municipal mileage (64.74), secondary state roads (410.53) and primary state roads (77.38). Primary roads are defined as all Interstate, US and NC

numbered roads. Secondary roads are defined as all state-maintained roads minus primary road mileage. (Highway Road Mileage 2012)

Map 10: Highway Transportation Map



According to 2012 traffic counts conducted by the NCDOT Transportation Planning Branch, US 74 carries a high of 22,000 vehicles per day where US 74 Bypass separates from US 74

Business west of Laurinburg. When the two roads reconnect on the east side of Laurinburg, the count is reduced to 14,000. This suggests that traffic coming from the west is exiting at Laurinburg and heading either north or south on US15-501.

Traffic counts for the major north-south connectors show that US 401 handles 14,000 vehicles per day south of the US 74 Bypass. The count becomes 20,000 after merging with US 15. This count dwindles to 7,300 vehicles by the time US 401/US 15 reach the South Carolina line. US 501 carries approximately 6,200 vehicles daily south of Laurinburg. For the northern portion of these highways, US 15/US 501 carries 5,800 vehicles per day to the Moore County line with US 401 handling 8,000 vehicles until the Town of Wagram where the number decreases to 6,500 to the Hoke County line. Upgrades and widening of these corridors are priorities for the County's Comprehensive Transportation Plan Committee. Commuting patterns show an outmigration of more than 6,000 commuters per day. *Map 11* on the following page shows selected traffic counts on major roads in Scotland County.

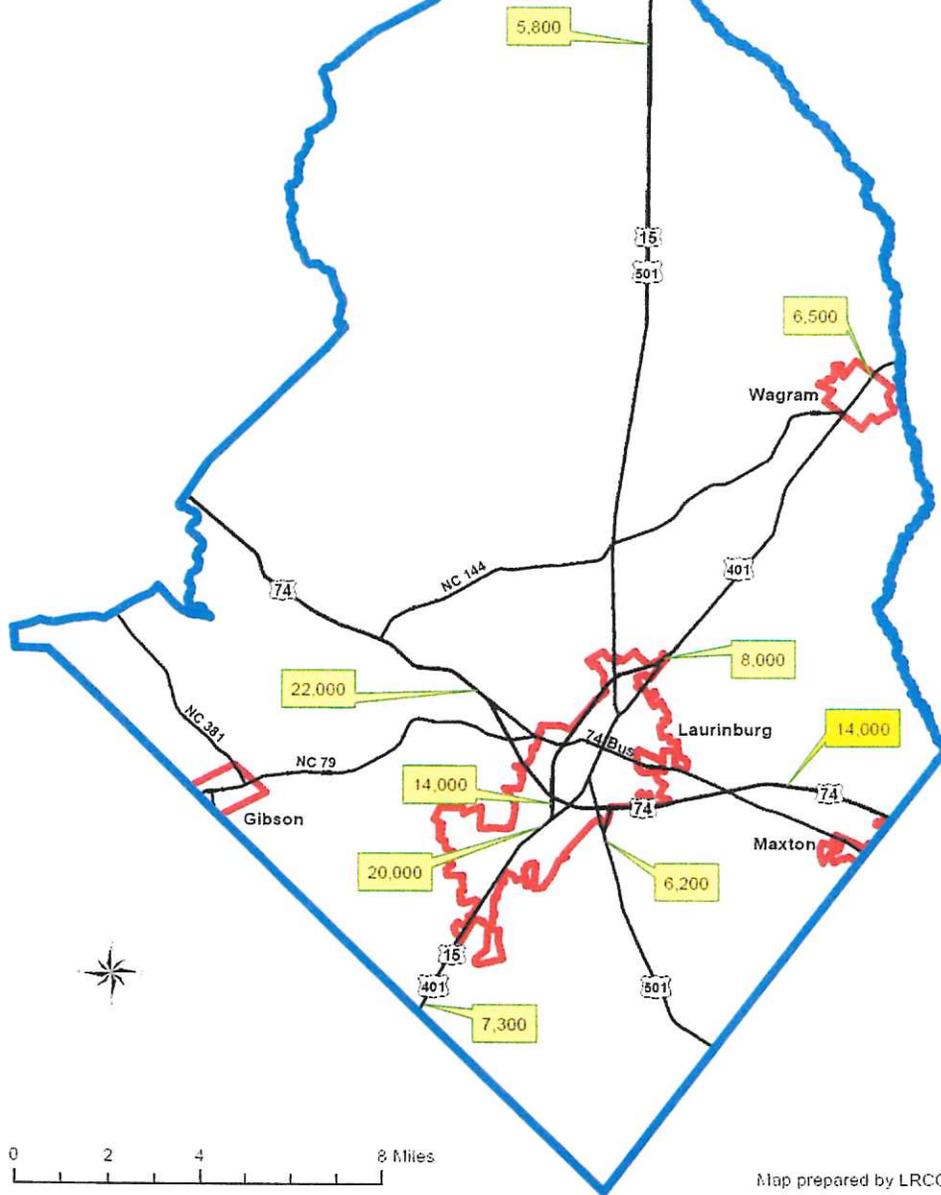
US 74 is designated as a future interstate corridor and upgrades in neighboring counties have been undertaken. Portions of US 74 are recognized as the *Future Interstate 74 Corridor* whereas the upgrades to portions on the western side of the County have not been completed. The major issue for this western portion of the corridor is the Laurel Hill section, for which a feasibility study has been completed which looks at alternate corridors to the current location or to improve the existing corridor through Laurel Hill. Public hearings have been held, but no decision has been made. More current information on the status of this project may be obtained from the Lumber River Rural Transportation Organization (LRRPO) housed at the LRCOG under website at <http://LumberRiverRPO.lrcog.org>. A secondary issue for this corridor revolves around some of the Laurinburg interchanges which do not have adequate separation and inadequate length in their exit or on-ramps, along with inadequate shoulder widths. The upgrade of US 74 to I 74 is the number one transportation project priority for Scotland County along with completion of all the I 74 corridor within the LRRPO region. The LRRPO has also been studying land use along the US 74 corridor with particular focus on the interchanges.

Scotland County is currently working with the NCDOT and LRRPO to update its

Comprehensive Transportation Plan (CTP). Work began in January 2014

Map 11: 2012 Traffic Counts

2012 Traffic Counts



Map prepared by LRCOG

ii. Rail Service

The major rail line running east-west in the County is owned and operated by CSX. The track runs parallel to I-74/US 74. This is the company's primary rail service line running from the port at Wilmington westward toward Charlotte with a major rail yard located in neighboring Richmond County. Both freight and passenger service is provided on this track. The graphic to the right shows CSX rail service today in North Carolina. CSX is the only rail carrier with service into the Wilmington Port.



Map 12: CSX Railroad Transportation Corridors in NC

Shortline railroads, also known as local or regional rail service, are companies that run between the Class I rail servers (such as CSX, Northern and Southern, etc.) and local business and industry. One such shortline rail service company, Gulf and Ohio (G&O) Railways, Inc., operates service from points in South Carolina northward through Laurinburg into Hoke County where it connects with CSX. G&O purchased the service from Laurinburg and Southern in the late 1980s. Commodities carried by the railroad are grain, fertilizer, soda ash, coal, and lime. The company transports over 7,500 carloads annually. (<http://gulfandohio.com/aboutus.htm>)



Memorialized Locomotive from the Laurinburg and Southern Shortline, Laurinburg, NC.
Photo Courtesy R. Hammond

iii. Water and Sewer Infrastructure

Water Service

The following entities provide water service in Scotland County; Scotland County, City of Laurinburg, Town of Wagram, Town of Gibson and the Laurinburg Maxton Airport (LMA). Approximately 3 million gallons per day is used by residents, business and industry. All the systems utilize ground water as their source. More information about ground water resources for Scotland County may be found in Section I. The water system infrastructure includes several deep wells and more than 430 miles of distribution lines.

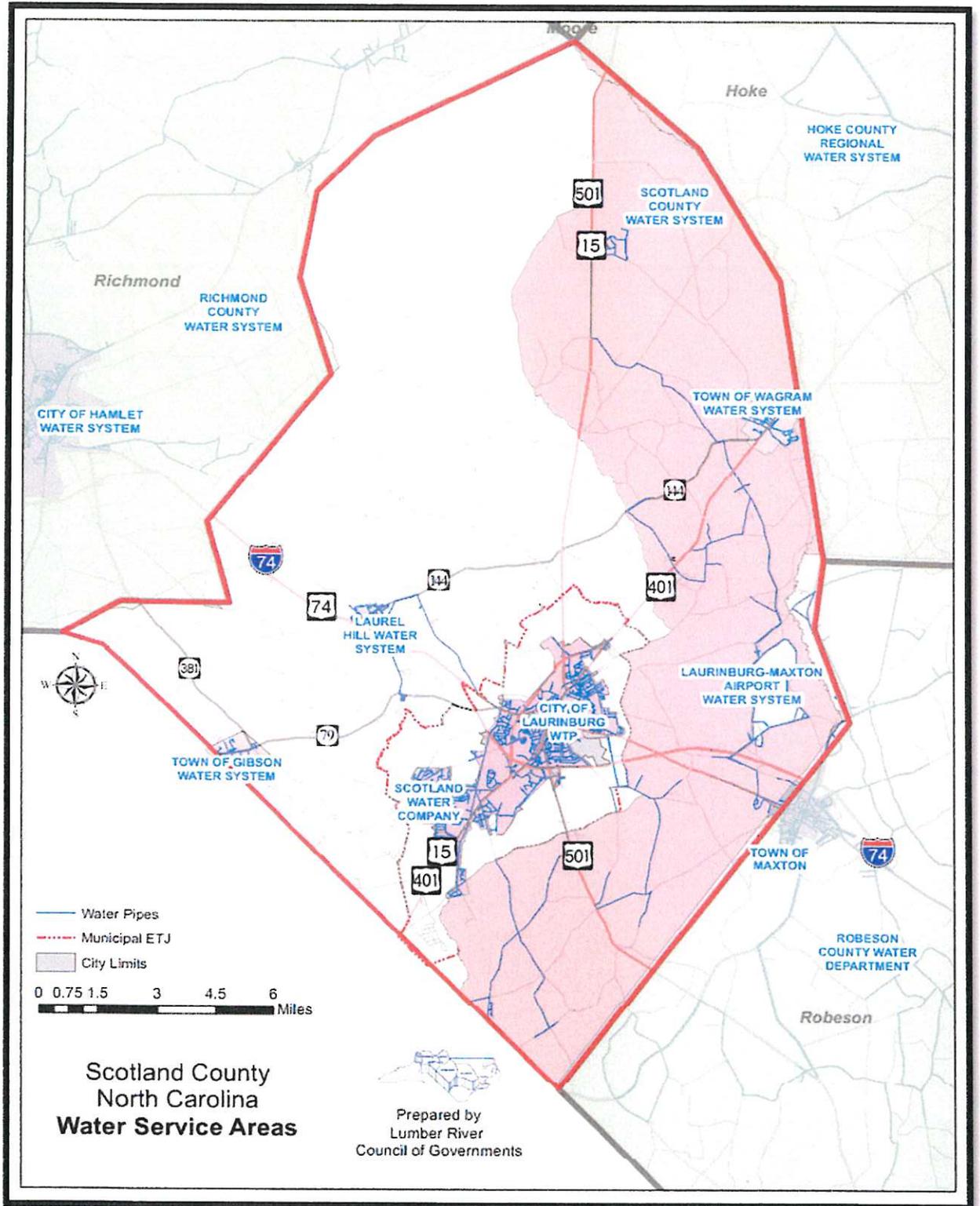
The following table summarizes average daily use, length of the distribution system and customers served. Each of the systems listed has excess capacity to serve new demand. *Map 13* on the following page illustrates the County’s water system service areas.

Table 6: Water System Capacities

System Name	Number of Customers	Average Daily Use (MGD)	Miles of Distribution lines
Town of Gibson	265	.030	20
Laurinburg	7,553	2.34	
Laurinburg–Maxton Airport	27	.266	20
Scotland County Water Districts	2056	.244	181
Wagram	367	.070	13

Notes: Town of Gibson purchases water from Scotland County; Scotland County purchases water from City of Laurinburg and the Laurinburg–Maxton Airport Commission.

Map 13: Scotland County Water Systems



[Wastewater Service](#)

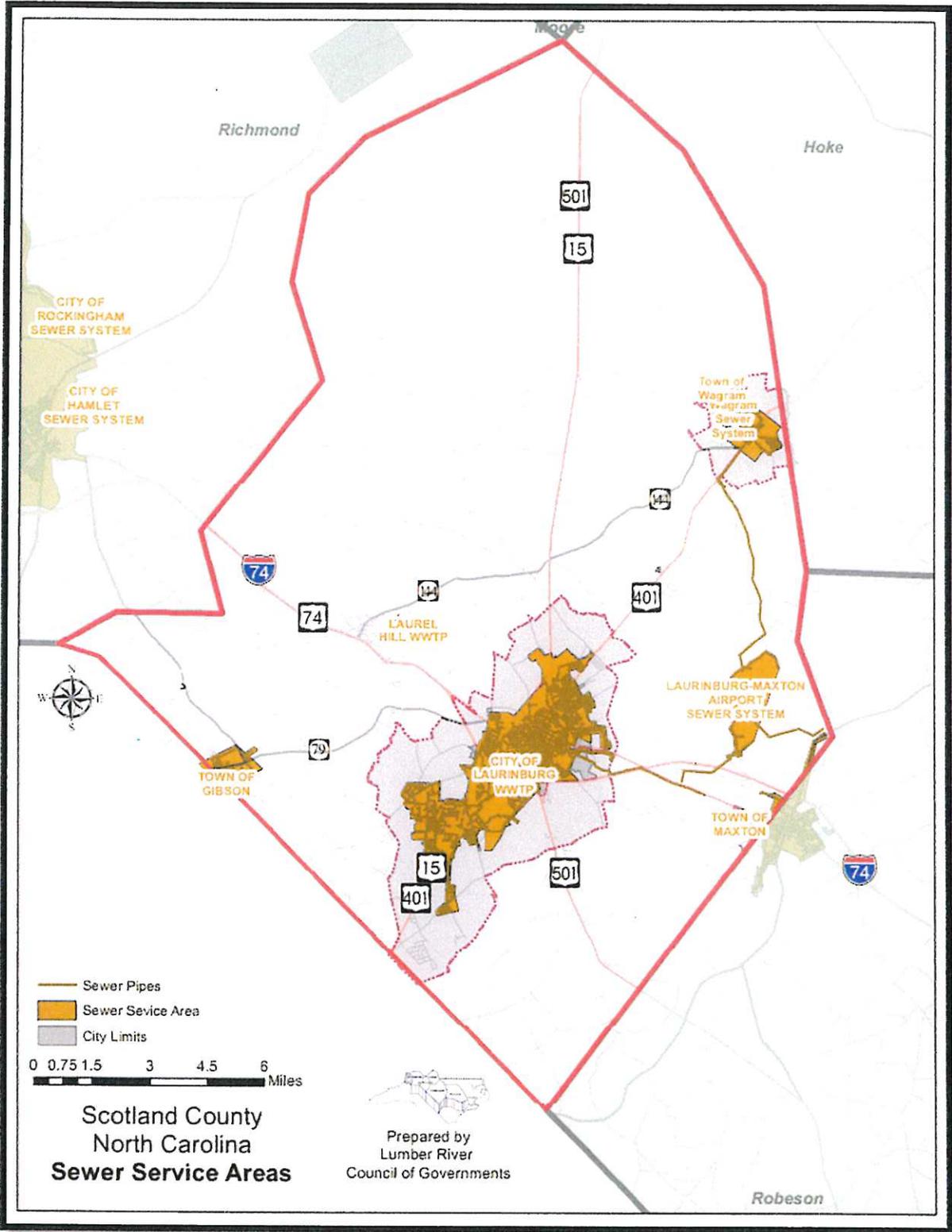
The following entities provide wastewater collection and treatment services in Scotland County: Town of Gibson, City of Laurinburg, LMA and the Town of Wagram. The table below summarizes permitted capacity, average daily discharge and number of connections. Each of the systems listed has excess capacity to serve new demand. *Map 14* on the following page illustrates the extent of wastewater service areas in the County.

Table 7: Wastewater System Capacities

System Name	Permitted Capacity (MGD)	Average Daily Flow (MGD)	Number of Connections
Town of Gibson	.099	.047	232
City of Laurinburg	4.0	1.81	6057
Laurinburg–Maxton Airport	2.3	.049	19
Town of Wagram	.100	.049	342

Notes: Town of Wagram transmits wastewater to LMA WWTP for treatment and discharge

Map 14: Scotland County Wastewater Systems



iv. Natural Gas Availability

Natural gas service is provided to Scotland County by Piedmont Natural Gas. Exact line locations are available from PNG; however, Federal Homeland Security provisions prohibit the publication of the specific locations of gas distribution lines. Natural gas service is available to most of the County's industrial sites and buildings.

v. Telecommunications Availability

According to NCBroadband, over 99% of Scotland County residents have access to broadband speeds of 3 megabytes per second (mbps) or higher. Upload speeds for most residents is 1.5 mbps with some residents having access to upload speeds greater than 3 mbps. Time Warner Cable, AT&T and Windstream are the primary local telephone service providers. A map showing the coverage at 3 MBPS down and 768 KBPS up (Basic level service) is located on the following page. The City of Laurinburg operates a 50 mile fiber optic loop that serves the City and County governments, school facilities, hospital and several related agencies.

vi. Electric Service

Electrical service is available throughout the County. Service is provided by Pee Dee Electrical Membership Cooperative, Lumbee River Electric Membership Cooperative, Duke Energy and the City of Laurinburg.

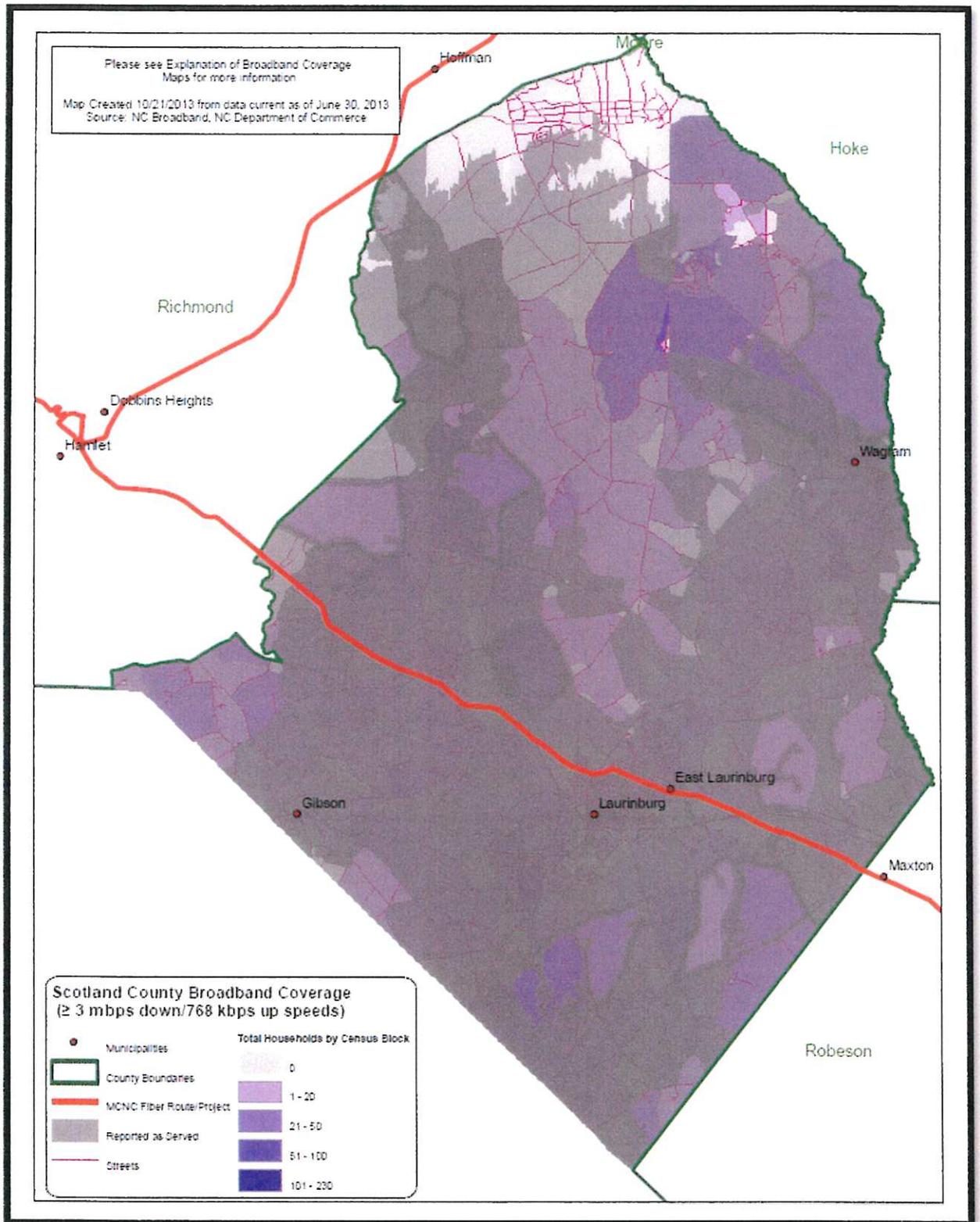
vii. Airports

There are two airports located in Scotland County. The first is the located at *Camp Mackall*, a US Army Base located in the northern part of the County. Camp Mackall Airport has 2 runways (5,000 and 4,740 feet in length respectively) and is a highly restricted area utilized for Special Forces training and not available for public use. (Camp Mackall)

The second airport asset is the *Laurinburg Maxton Airport Commission (LMAC)* located at the Laurinburg- Maxton Airport Industrial Park. The Laurinburg-Maxton Airport and Industrial Park is a self-supporting facility located on the boundary between Scotland County and Robeson County adjacent to US 74. The LMA is jointly owned and managed by the City of Laurinburg and the Town of Maxton through the Laurinburg- Maxton Airport Commission (LMAC). (Laurinburg-Maxton Airport)

The LMAC's industrial park is the largest industrial park in the southeastern region comprising more than 4,000 acres of prime industrial sites with nearly 1,800 acres

Map 15: Broadband Service Availability in Scotland County



available to support continued industrial and commercial development, including a 400-acre certified industrial “mega site”. The airport is located at I 74/US 74 Business at SR 1436 (Airport Road) in Maxton. Information on the LMA and LMAC can be found at <http://www.lmairport.com>.

Water and wastewater utilities available at the site include a total of six (6) groundwater wells with an average 8” distribution line size and approximately 2 million gallons per day (MGD) of excess capacity; two wastewater treatment plants (combined permitted treatment capacity of 2.35 MGD) with an average 15” collection line size and approximately 1 MGD of excess capacity; fiber optic; and, natural gas.

The airport provides tenants and visiting aircraft with a 6,500’ lighted runway equipped with high-intensity lights, full Instrument Landing System (ILS), approach lighting and fueling services. The fixed-base operator is on site. At 6,500’, the main runway at LMAC is of the longest general aviation runways in the state. LMAC recently completed two major airport rehabilitation projects. Completed in 2012, the main runway was completely rehabilitated. Prior to this project, it had been rated one of the worst general aviation runways in the state. The second project completed in late 2013 was the rehabilitation of the parallel taxiway. This airport is used by local industries as well as the military and general public.



LMAC is an asset that is already undergoing improvements to position itself to become a more important component in future economic development.



Airport Runway. Photo courtesy of LMAC.

G. Environmental Resources

i. Water Resources and Meeting Future Needs

Water resources in Scotland include ground water and streams/tributaries that flow into the Lumber River Basin. The Lumber River serves as an eastern boundary between Scotland and Robeson Counties. These water resources have been monitored by the NC Department of Environment and Natural Resources (NCDER) and the US Geological Survey (USGS). Regionally, Scotland County has been working collaboratively with several neighboring counties in the Southern Coastal Plain to study these water resources. Using contributions from participating local governments, and working through the Lumber River Council of Governments (LRCOG), the region's water stakeholders have received numerous grants to expand the regional ground water monitoring network, develop a hydro geologic framework of the aquifer system, investigated the impact of water drawdowns by local industries using the region's aquifers, and to support local water and wastewater systems in efforts to develop rate structures and rates that recover the cost of operating the systems and planning for future rehabilitation and growth. Copies of these and other reports / presentations are available on the LRCOG website at <http://www.lumberrivercog.org>.

The Southern Coastal Plain Groundwater Initiative was a regional, multi-stakeholder effort to examine ground water in Scotland, Bladen, Hoke, Robeson, Columbus and Sampson Counties in response to concerns about the ability of the aquifer system to meet demand. The initiative began in 1991 when the LRCOG entered into a cooperative agreement with the USGS to monitor ground water levels in the six County study area. The studies concluded that in portions of the region, ground water resources were being depleted at a faster rate than the aquifer could be naturally recharged. (Comprehensive Groundwater Study) The area of primary concern was in northern Bladen County around the Town of Tar Heel as a result of water demand by the Smithfield Foods swine processing facility. This area has been addressed and a new surface water treatment plant was put in operation in 2010.

Of concern to Scotland County is the hydro geologic make-up of the aquifers underlying the County. The ground water aquifer system in eastern North Carolina begins at the

transition between the foothills/Sandhills fault line and proceeds eastward towards the coast. Because Scotland is located at the western end of the region, the underlying aquifers are relatively thin and do not have the yields found further east. Though these aquifers lie closer to the surface, and recharge more quickly than deeper aquifers, the yields will be somewhat limited and there is a real need for protection from ground water pollution.

The County is fortunate to have the Lumber River nearby. Although the flow of the Lumber has limited water availability, it is an asset to be further developed as an alternate water source. Scotland has already begun to study this option along with other neighboring counties. The existence of an abandoned surface water intake has also been explored and plans discussed to maintain this important intake and withdrawal permit.

ii. Water Quality

The NC Department of Environment and Natural Resources (DENR) monitors water quality by river basins. Scotland is located in the Lumber River Basin which is part of the larger Pee Dee River basin which coalesces in South Carolina. The Lumber is a unique river due to its low flow and acidic characteristics. The most recent Lumber River Basin Plan was updated in 2010 and may be found at <http://portal.ncdenr.org/web/wq/ps/bpu/basin/lumber/2010>. The plan identifies several areas in the basin that have very high water quality and shows that current water quality standards are being met. (Lumber River Basinwide Water Quality Plan)

The major water quality issue in the basin is the presence of Mercury. The ingestion of mercury can cause damage to the central nervous system. Particularly susceptible are pregnant women and children. A total maximum daily load (TMDL) for mercury discharge by wastewater treatment systems is in place for much of the basin and a statewide TMDL is being developed. Much of the mercury in the basin has been deposited through atmospheric deposition and its reaction with the acidic river water has created a variation of mercury that is deposited in the river sediment and ingested by fish. Of concern to wastewater operators is the strict mercury discharge limit imposed on treatment facilities, which can limit development.

iii. **Water Supply Watershed Protection.**

In 1989, the North Carolina General Assembly ratified the Water Supply Watershed Protection Act (the Act), codified N.C. Gen. Stat. §§143-214.5-214.6. The Act mandated the Environmental Management Commission to adopt minimum statewide water supply protection standards by January 1, 1991 and to reclassify all existing surface water supply watersheds to the appropriate classification by January 1, 1992. The law also required that all local governments having land jurisdiction within the water supply watersheds adopt and implement water supply watershed protection ordinances, maps and a management plan.

Scotland County has a Water Supply Watershed Ordinance which can be found on the County website (www.scotlandCounty.org). There is one watershed area identified in the County. This watershed protects a raw water intake on the Lumber River owned by Robeson County.

iv. **Air Quality**

The Division of Air Quality (DAQ) works with the state's citizenry to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ has programs to operate a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develop and implement plans to meet future air quality initiatives, assure compliance with air quality rules, and educate, inform and assist the public with regard to air quality issues. (<http://www.daq.state.nc.us>)

Scotland County contains no areas of non-attainment for federal or state air quality standards.

v. **Natural Habitats and Protection Areas**

The land area that is now Scotland County was originally covered in forest. The principal tree was the long-leaf pine which is indigenous to the Sandhills and Upper Coastal Plain. Also found are white oak, hickory, yellow poplar, dogwood and other varieties of pine, oak, cypress and gum.

Wildlife includes bobwhite, dove, rabbit, squirrel, fox, raccoon and many nongame birds. Deer and turkey are found mainly in the Sandhills. Wood ducks, mallards and black ducks

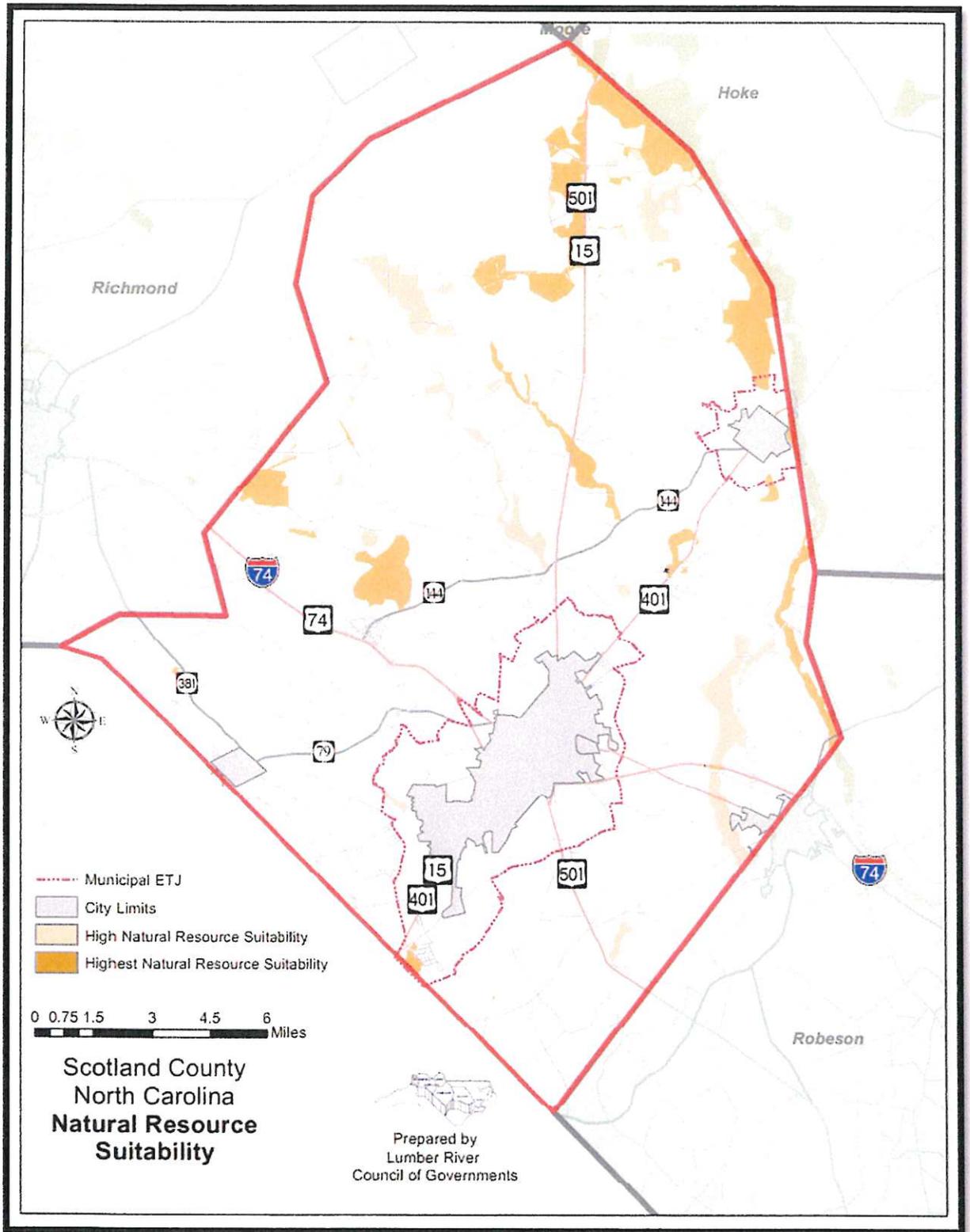
are numerous near streams, ponds and swamps. Wetlands are inhabited by beaver, otter, mink and muskrat. There are several varieties of fresh water fish in the many farm ponds, lakes, streams and the Lumber River.

There are two other protected areas of significance in the County. The first is *Camp Mackall Military Reservation* which is located in Richmond and Scotland Counties and consists of 62,000 acres, 4,500 of which are in Scotland. Camp Mackall was created before World War II and is used primarily for training exercises by the US Army. Access to the Camp is restricted and there are cooperative land use planning efforts between local governments adjacent to Ft. Bragg and its related operations areas. Of particular concern are the protection of the ecosystem and protection of military training from incompatible land development.

The second area is the *Sandhills Game Lands* which consist of more than 58,000 acres in Richmond, Moore and Scotland County. The preserve is owned and operated by the NC Wildlife Resources Commission and is known for its extensive long leaf pine habitat. Use of the preserve is restricted to preservation and recreation.

Map 16 on the following page shows land suitability that reflect factors related to natural and scenic areas located in and along waterways, areas of high biological value, conservation lands and protected areas.

Map 16: Natural Area Suitability



H. Existing Local, State and Federal Policies

The process of developing this *2014 - 2023 Land Use Plan* involved conducting an inventory of other plans, policies and programs already in existence, which might impact the Land Use Plan as it seeks to guide development of Scotland County. The table below outlines the plans, policies and programs of Scotland County, the State of North Carolina and the Federal Government which have been considered in the development of this land use plan.

Table 8: Review of Existing Local, State and Federal Plans, Policies and Programs

PLAN/POLICY/PROGRAM	LOCAL	STATE	FEDERAL
Scotland County Ordinances	X		
Lumber River Rural Transportation Planning Organization (RPO)	X	X	
Federal Water Quality Standards		X	X
Federal Air Quality Standards		X	X
Federal Safe Drinking Water Standards		X	X

CHAPTER 5

Recommended Goals and Objectives

Below are recommendations for basic land use goals to consider and objectives to implement regarding future land use in the County.

GOALS

- ★ Promote land use decisions that encourage development in suitable areas while protecting natural resources and the rural character of the County.
- ★ Promote the recognition and enactment of actions to protect natural resources including groundwater resources giving particular emphasis on quantity and source protection.

OBJECTIVES

- ★ Update all land use ordinances (Subdivision and Zoning) to capture new land use issues, regulatory changes and emerging developments in rural areas such as solar farms and energy development.
- ★ Identify infrastructure assets and transportation corridors where investment is needed that will support future economic growth and development.
- ★ Promote fiscally responsible growth by reviewing and updating land use regulations and ordinances, recovering costs associated with development and encouraging growth in areas where development is most suitable.

- ★ Promote a multigenerational planning approach to ensure that needs of all residents are met, with particular attention to the aging of the County's population.
- ★ Work with the City of Laurinburg and Towns of East Laurinburg, Gibson and Wagram on land use and growth issues through coordinated planning.
- ★ Continue to participate in the Lumber River Rural Transportation Planning Organization (LRRPO) to better plan for highway and other transportation development within Scotland and neighboring counties including the continued development of the US 74 interstate corridor.
- ★ Continue to partner with the military to protect military facilities and training from incompatible land development.
- ★ Work to protect property rights and land values by soliciting public participation in land use policy and decision-making.
- ★ Actively work to protect valuable natural resources such as water, prime farmland and natural preservation areas.
- ★ Conduct a housing survey that looks at such issues as the types and cost range of housing versus the need in that category.

CHAPTER 6

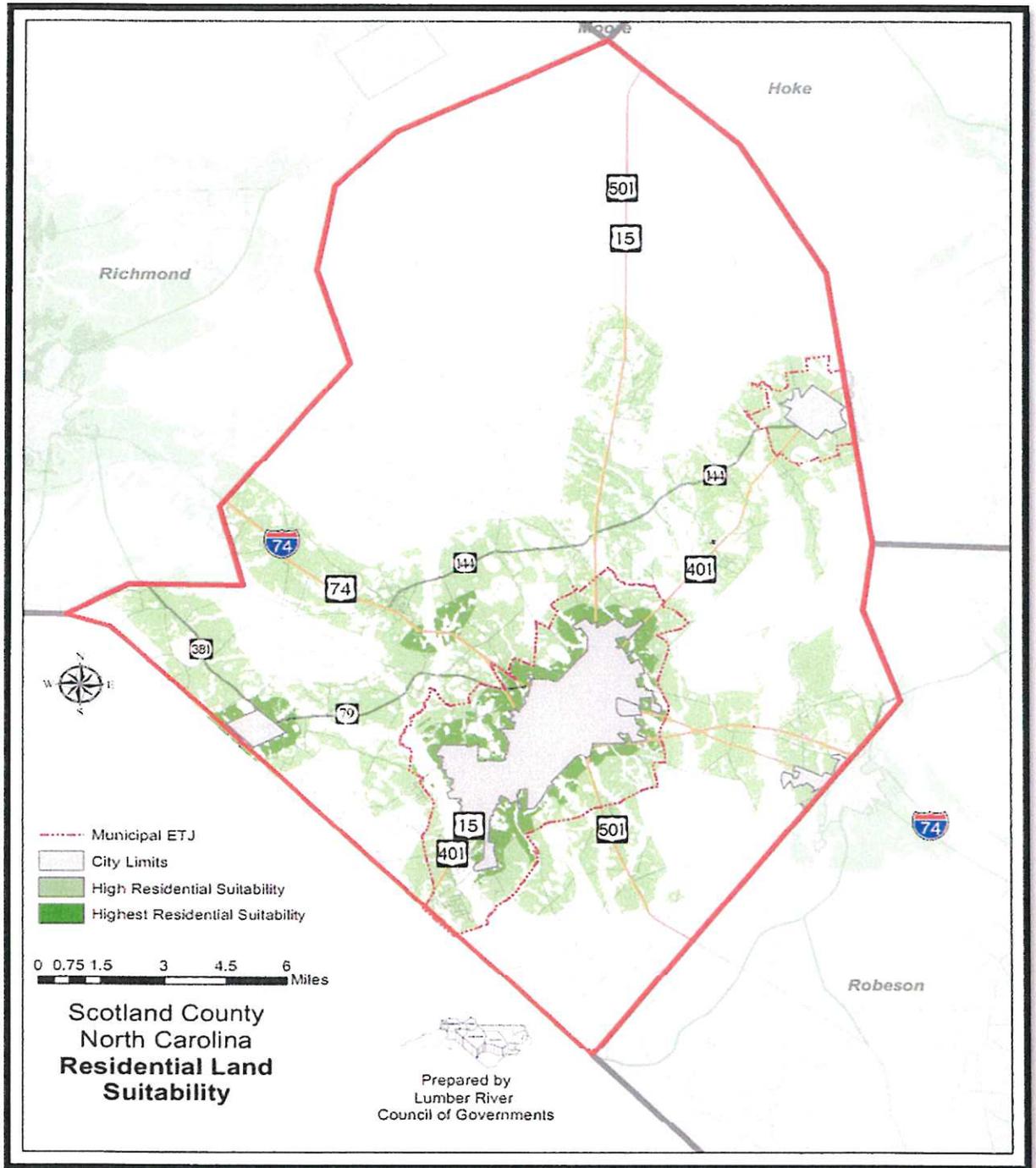
Recommended Growth Areas

The LRCOG utilized the land suitability maps as the tool to show where areas with the highest potential for forestry and agriculture, while also pinpointing areas where growth may be limited due to the existence of natural / scenic areas or the lack of supporting infrastructure. The following maps bring forth all these factors to produce a series of maps that show:

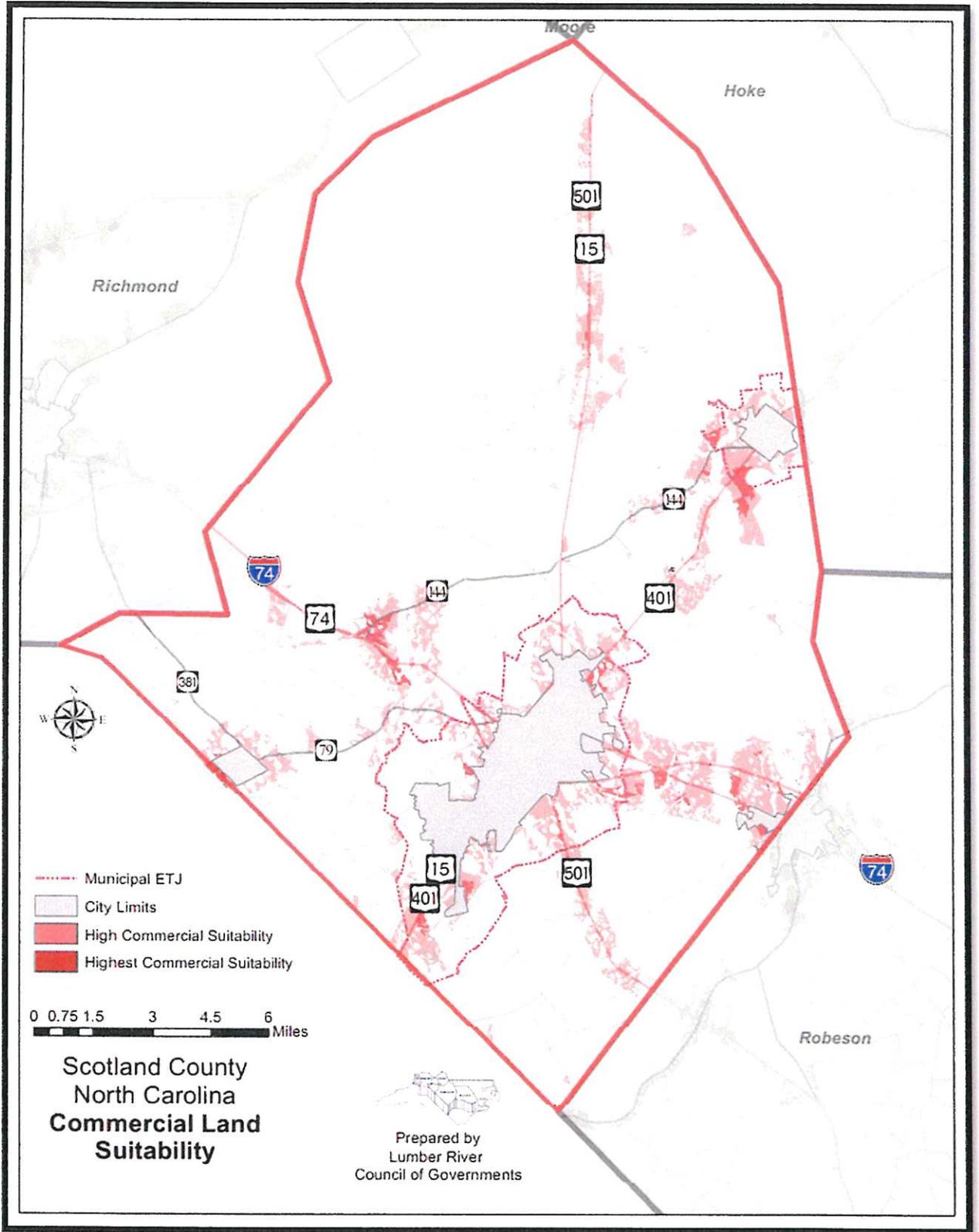
1. The location of land most highly suited for residential growth. **Map 17.**
2. The location of land most highly suited for commercial growth. **Map 18.**
3. The location of land most highly suited for industrial growth. **Map 19.**
4. The Composite Map of High Growth Suitability. **Map 20.**

This map is a composite of the previous three maps, melding the three high growth suitability areas into one map. This composite map visually depicts the influence of utilities, infrastructure and land suitability factors in development decisions.

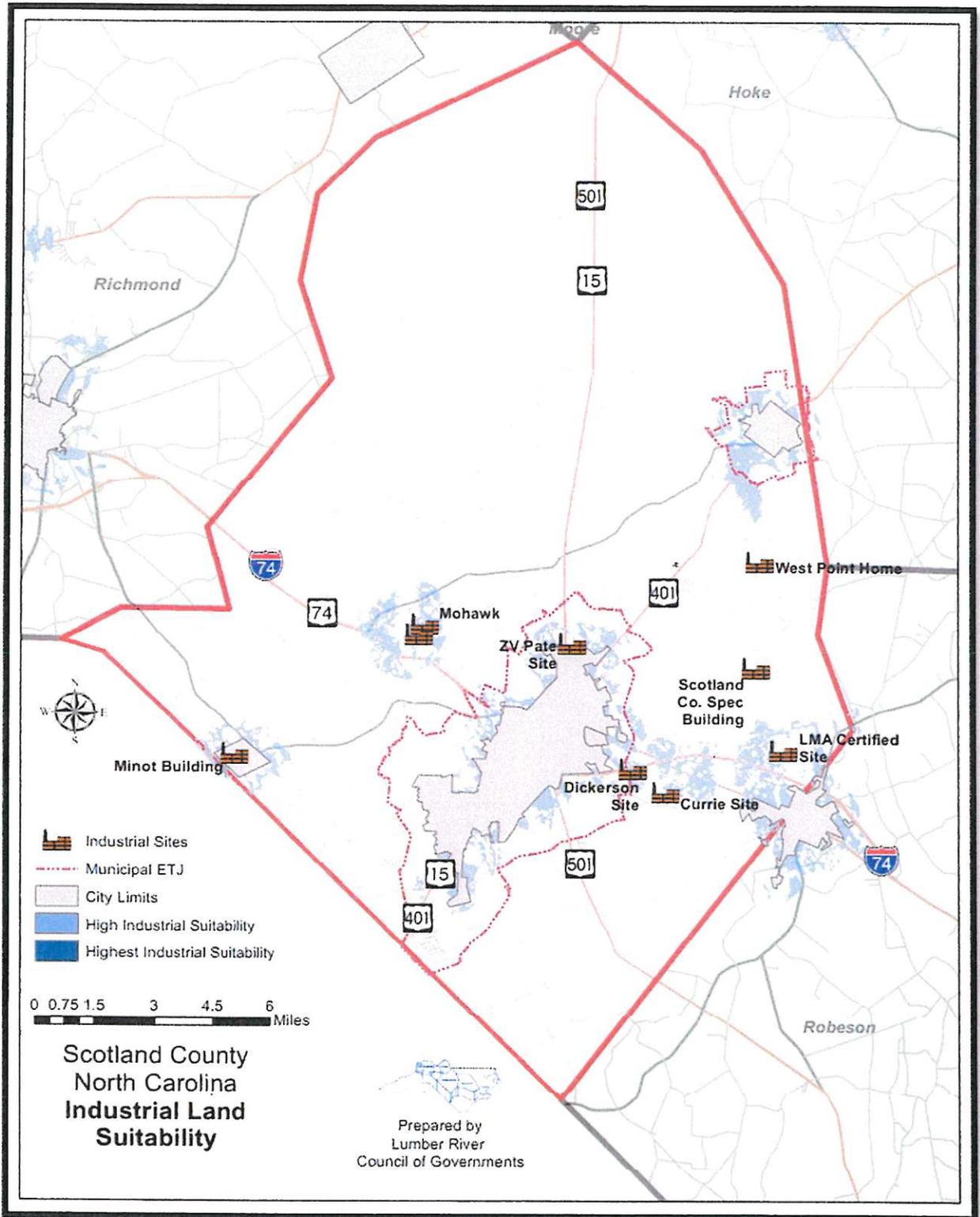
Map 17: Residential Growth Suitability



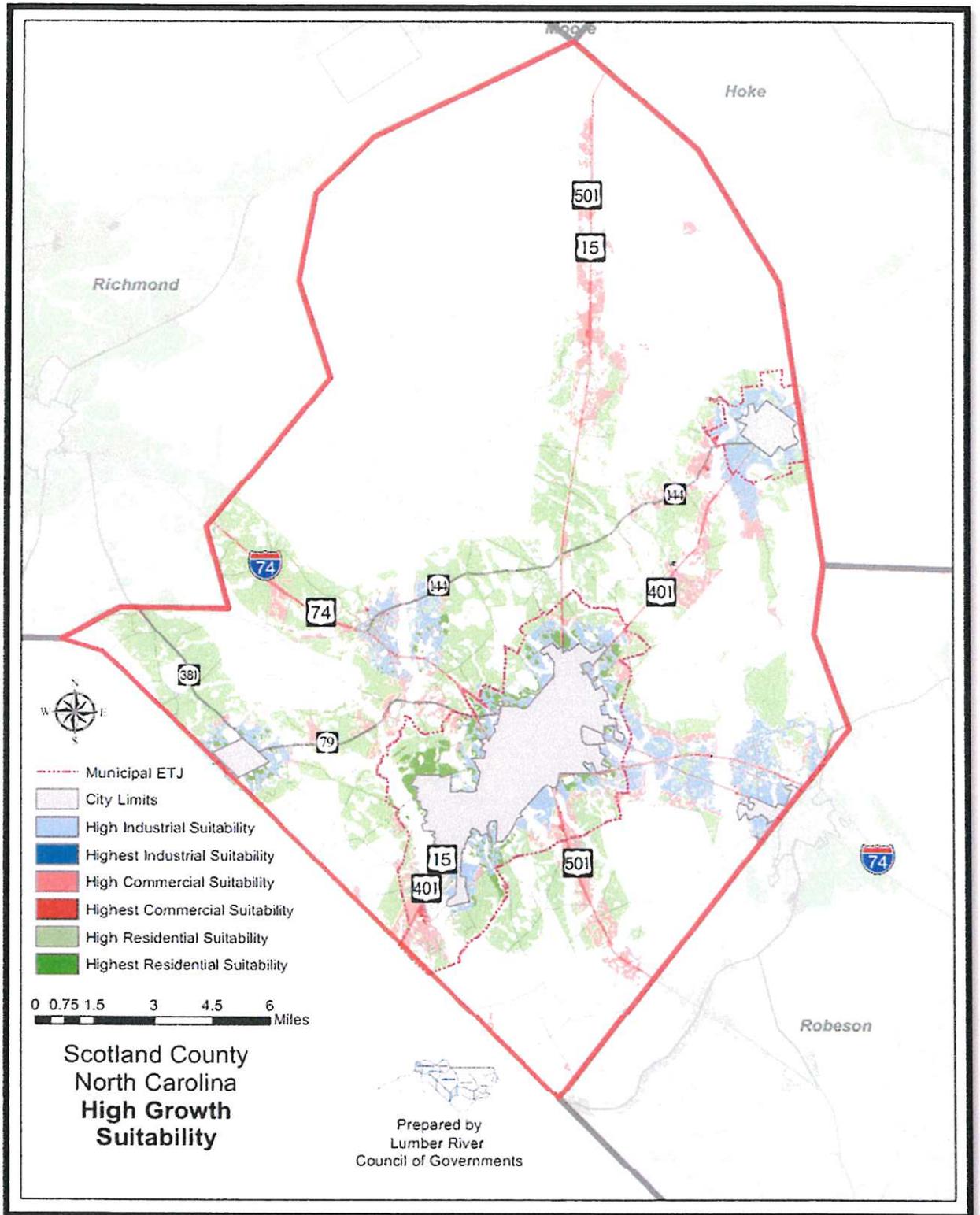
Map 18: Commercial Growth Suitability



Map 19: Industrial Growth Suitability



Map 20: Composite Map of High Growth Suitability



CHAPTER 7

USING AND UPDATING THIS PLAN

This plan is intended to be a precursor to further planning and goal setting. The information in this plan is current and focused on those elements that most affect land use and development decisions. Subsequent goal setting will more thoroughly describe land development goals which will be translated into objectives and action steps.

Upon adoption of this updated Plan, the Scotland County Planning Board should be charged with further refining the Plan's goals and objectives. The process should include engaging the public through community meetings that update them on current land use and issues that have been so far identified.

Input should be used by the staff, Planning Board and Board of Commissioners to:

- Continue refining the goals that in turn further define the mission and vision of the Land Use Plan.
- Develop objectives that are more specific in detailing initiatives, objectives and strategies; while also identifying responsible parties that can act together to accomplish established goals and objectives.
- Identify and recommend policies which are actions, or courses of action, that can be adopted to achieve goals and objectives.
- Present specific growth and development scenarios with recommendations for updating the Land Use Plan and land use ordinances so that they are consistent with preferred growth policies.
- Coordinate land use planning and infrastructure development in order to encourage desired development patterns.

CHAPTER 8

TYPES OF AMENDMENTS AND AMENDMENT PROCESS

Once adopted, this plan may be amended by the Board of County Commissioners utilizing the procedure for amending a local ordinance in accordance with N.C.G.S. 113A-110.

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