Richmond County Working Lands Protection Plan

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Acknowledgements

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Executive Summary

Agriculture is an important economic engine in Richmond County. It contributes to economic diversity, open space, and the cultural and rural heritage of the county. The agricultural industry has experienced major changes in the past decade. In 10 years, from 1997 to 2007, land in farms decreased by 13,549 acres. The number of farms, during that same time period, increased by 26 farms, but the median size of farms decreased by 70 acres (USDA, Census of Agriculture, 1997, 2007).

It is anticipated that 40,000 people will be moving to the Ft. Bragg region as Ft. McPherson in Atlanta closes as part of the United States Department of Defense's (DOD) Base Realignment and Closure (BRAC) program. The DOD and the state of North Carolina realized the region needed to prepare for this transition and established the Ft Bragg BRAC Regional Task Force (BRAC RTF). BRAC RTF has focused on education, workforce development, infrastructure and land-use planning for the 11-county region surrounding Ft. Bragg and Camp Mackall. The land use planning also includes farm and forest protection.

One of the major issues of the BRAC growth is increased encroachment around Ft. Bragg. This has been an ongoing issue with the base as Fayetteville and the surrounding counties have grown over the years. A powerful planning tool available to ensure that the number-one industry, agriculture, is considered in this projected BRAC growth is a working lands protection plan (WLPP) specific to each county and its unique agricultural situation. Through a grant with the North Carolina Department of Agriculture and Consumer Services' (NCDA) Agricultural Development and Farmland Preservation Trust Fund, BRAC RTF and Mount Olive College are creating individual WLPPs for each of the 11 counties.

With these challenges and the evolving trends in agriculture, there are opportunities to maintain a viable agricultural industry in Richmond County. Agriculture is valued as an economic and cultural element by municipalities and rural communities. Large processors of broilers, chickens, eggs and hogs have increased considerably as a diversification venue for producers. In addition, the local food movement has increased the demand for locally grown produce. The demand for renewable energy offers potential for corn, soybeans and timber in the county. To help ensure that the industry remains viable and productive, programs that help farmers and forestland owners preserve their assets, explore and expand new markets and products, and that reduce conflicts between farmers and landowners and their non-farm neighbors are important to support.

Numerous programs exist that can be implemented to protect against the loss of farmland and strengthen the agricultural industry's viability and sustainability in Richmond County. Programs such as the Present-Use Value Taxation Program and the Voluntary Agricultural

District program provide farmers some relief from escalating land values. Conservation easements are one set of tools that can provide financial benefits to landowners.

The purpose of this plan is to provide an assessment of the current state of the agricultural industry in Richmond County and to identify its challenges and opportunities. The plan also sets forth a set of recommendations and specific timelines to assist in the continued development and preservation of agriculture in Richmond County. This plan is to be a living document that should be revisited periodically by the county and the agencies involved to update and revise as needed.

Richmond County, N.C.

Location and Climate

Richmond County's location, hardiness zone, ground water supply and soils are attributes that directly impact the profitability and subsequent preservation of agriculture and forest land.

Richmond County is located in the south-central part of North Carolina and is the 38th* largest county in the state in land area. (http://www.richmondnc.com/content/45/default.aspx).

The county is situated on the Fall Line with three distinct physiographic regions, the Piedmont region in the western part of the county, and the Sandhills and the Coastal Plain in the central and eastern parts of the county. The transitional zones between the Piedmont and the Sandhills and Coastal Plain regions are irregular with as much as three miles in width. Richmond County has a total land area of 306,938 acres (Evans, Soil Survey of Richmond County, 1999, USDA, Natural Resources Conservation Service).

The county has a temperate climate and is located within the USDA Hardiness Zone of 7B (www.ces.ncsu.edu/departs/hort/consumer/weather/hardiness_zones.html). Hardiness is affected by duration and intensity of sunlight, length of growing season, amount and timing of rainfall, length and severity of summer drought, soil characteristics, proximity to a large body of water, slope, frost occurrence, humidity and cultural practices. The average winter temperature is 43 degrees Fahrenheit, and the average summer temperature is 78 degrees Fahrenheit. Average annual rainfall is 47 inches, 54 percent of which usually falls April through September. The growing season length allows for some double cropping, and rainfall is adequate most years for attainment of average crop yields (NRCS, Richmond County).

Supplies of ground water are adequate in most parts of Richmond County. All incorporated towns in Richmond County have municipal water systems. Rural residents use drilled or bored wells. Irrigation water for agricultural use is supplied by numerous ponds and natural water bodies in the county (NRCS, Richmond County).

Nearly three-fourths of Richmond County is drained by the Pee Dee River and its tributaries. The larger tributaries include Little River, Mountain Creek, Cartledge Creek, Hitchcock Creek and Marks Creek. Drowning Creek is located along the northeastern boundary of the county and drains most of the remaining quarter of the county.

Six North Carolina public water supply systems withdraw water from the hydroelectric reservoirs on the Yadkin-Pee-Dee River in North Carolina: Tuckertown, Albemarle, Denton, Narrows, Tillery in Montgomery County, Norwood and Blewett Falls serving both Anson County and Richmond Counties.

Population, Income and Employment

Population growth in Richmond County has remained fairly static over the last decade. According to the Economic Development Intelligence System (EDIS) of the North Carolina Department of Commerce, the 2009 population was 46,898, as reported in January 2010, which represented only 0.1 percent annual population growth since 2000 when population was reported as 46,564. Of the current residents, more than 54 percent (25,229) are from inside urbanized clusters; 44.5 percent are rural non-farm and 0.7 percent are rural farm. The median age of Richmond County residents in 2009 was 38 years with more than 27 percent of the population ages 0-19 years. Almost 20 percent of the population was 60 years of age or older (EDIS, January 2010). According to EDIS, the 2009 median family income was $44,027, up 24.9 percent from the 2000 data at $35,242. The median disposable income in 2009 was $29,373. In 2000, 19.6 percent of the population was below the income poverty level.

County unemployment rates have increased from 2007 to the present, which is comparable to the economic status of the state and nation. Private nonfarm employment from 2000 to 2007 increased by 8.3 percent according to the N.C. Rural Center (June 2009). The unemployment rate has slowly risen from 7.5 percent in 2007 to 9.6 percent in 2008 and 13.2 percent in the third quarter of 2009 (N.C. Rural Center, 2009). Farm labor also decreased from 592 laborers in 2002 to 431 laborers in 2007 (USDA Census of Agriculture, 2002 and 2007).

Richmond County has a Tier 1 designation from the N.C. Department of Commerce. The Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns each a tier designation. The 40 most distressed counties are designated as Tier 1 (N.C. Department of Commerce).

As a result of the economic downturn, Richmond County has experienced employment losses equivalent to other counties in the state. While population growth is not adding additional pressure, the county is encouraging growth and economic development to provide services and infrastructure to its residents. Agriculture and agribusiness are important to the county's economy and can provide opportunity for the future viability of the county and its residents.

History and Development

Thousands of years before the Europeans arrived in the area, Native Americans inhabited land along the Pee Dee River. Later they farmed this land. Richmond County was established in 1779 and was carved from Anson County. According to local history, the county was created because of the difficulty citizens had crossing the Pee Dee River to reach the courthouse in Anson County. The county was named for the third Duke of Richmond, and the county seat, Rockingham, was named for the second Marquis of Rockingham (www.richmondnc.com).

Corn and small grains were the major crops grown in Richmond County prior to the Civil War as well as cotton and indigo. The county began to grow as a result of agricultural diversification and subsequent supporting industries such as cotton mills. By the early to mid 1800s, people used the waters of the Piedmont streams and rivers to power cotton gins and textile mills. Chartered in 1833, the Richmond Mill was the seventh cotton mill chartered in North Carolina. In 1865, it was burned by Sherman's troops and rebuilt in 1865, but it burned again in 1972. Cotton became a major crop after the Civil War and remained a major crop until the mid 1900s.

Today, textiles remain important to the county's economy. Other industries of importance are poultry production and the railroad network, both adding support to economic growth in the county (Evans, Soil Survey of Richmond County, North Carolina, 1999). The railroad industry has been essential not only to the economy, but to the county's heritage. The first railroad through Richmond County was begun in 1861, and rail access helped establish many small towns throughout the county. According to the U.S. Census, today, there are six incorporated towns: Dobbins Heights, Ellerbe, Hamlet, Hoffman, Norman and Rockingham, and a number of established communities, many of which were established as a result of rail in the county. (www.richmondnc.com).

The Richmond Tourism Development Authority (www.visitrichmondcounty.com) recognizes the county's rich heritage with information about agritourism that depicts the importance of agriculture to the county as well as outdoor pursuits such as hunting, bird watching and camping. It further promotes the rich clay soil along the Pee Dee River and highlights all the historic districts and sites within the county, specifically the Rankin Museum of American Heritage; the National Railroad Museum and Hall of Fame; the historic districts in Rockingham, Hamlet and Ellerbe; the Hamlet Train Station; the Ellerbe Springs Inn; the Pee Dee National Wildlife Refuge and the Sandhills Game Lands.

State of Agriculture in Richmond County

Agriculture and its industries have evolved and changed over the years. The current state of agriculture in Richmond County reflects the changes in land use, agricultural production, forestry and farm operations.

Land Resources, Capability and Use

Land is a valuable resource in Richmond County, particularly for the farming community. Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. It can be cultivated land, pastureland or forestland.

Figure 1 illustrates the current land cover for Richmond County. Land cover is the current use or what is visible from an aerial view as the apparent land surface (forest, farmland, wetland, water body, pavement or rooftop, pasture, grassland or lawn). Figure 1 delineates the vast amount of land in Richmond County that is currently undeveloped and involved in farming, forests or pastureland. In 2007, Richmond County had 278 farms that operated on 40,904 acres of land or 13 percent of the total land area in the county. Of the total farmed land area, cropland represented 45.18 percent (18,406 acres). (USDA, Census of Agriculture, 2007). Woodland on farms accounted for 35.58 percent (14,725 acres) of acreage, pastureland 11.21 percent (4,500 acres) and other uses made up 8.03 percent (3,272 acres) (Figure 2).

From 1997 to 2007, the number of farms in Richmond County increased by 27, from 251 to 278 respectively. The land in farms during this same time period decreased 24 percent with a reported loss of 13,549 acres. Average farm size also decreased by s70 acres in the same time period with 2007 average farm acreage reported as 147 acres. The smaller farm size and yet higher farm numbers may be representative of a shift from full-time farming to part-time farming operations. Financial constraints and increasing input costs associated with farming are also a component of this trend. Additionally, some livestock and poultry producers find it feasible to work off the farm and manage livestock facilities. Some farmland has been left idle, converted to nonagricultural uses or set aside in government programs such as the Conservation Reserve Program. Table 1 depicts general farm statistics in Richmond County over the 10-year period from 1997 to 2007.

As the acreage of land in farms decreased total cropland and harvested cropland acreages decreased. Total cropland represents all land that has been or is currently being planted for crop production. Harvested cropland represents all land that had some type of harvest from that

acreage. From 1997 to 2007, there was a decrease of 8,004 acres of cropland and a decrease of 7,130 acres of harvested cropland (Table 2). These acres do not account for pastured land or land in conservation programs. The decrease in cropland acreage may also be related to the increased number of livestock operations in Richmond County. As a result, forage crops in 2007 represent the largest single crop acreage, replacing cotton, which was the top crop in acreage in 2002. Utility of forage crops for waste management and for feed are important to farm management systems in Richmond County.

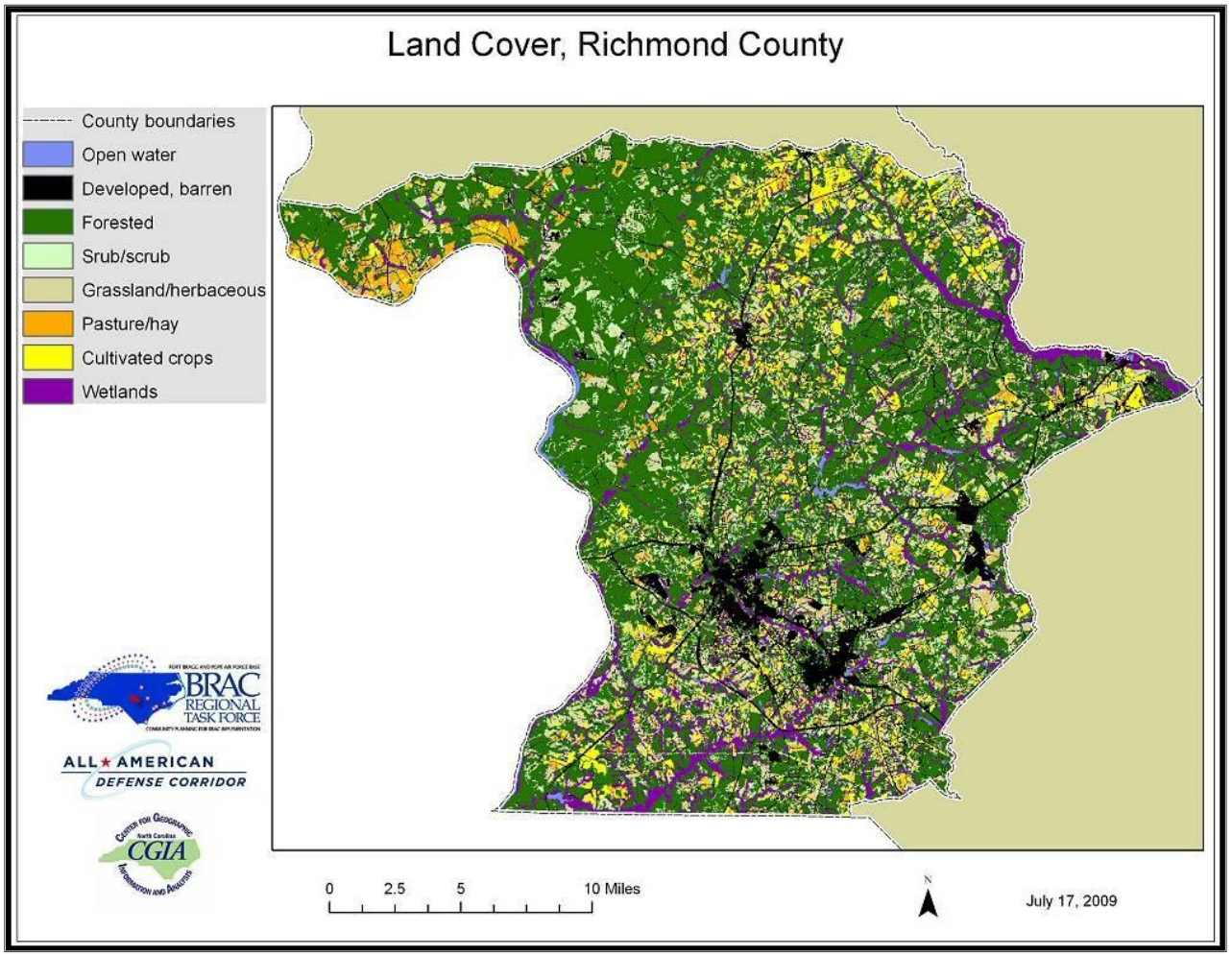
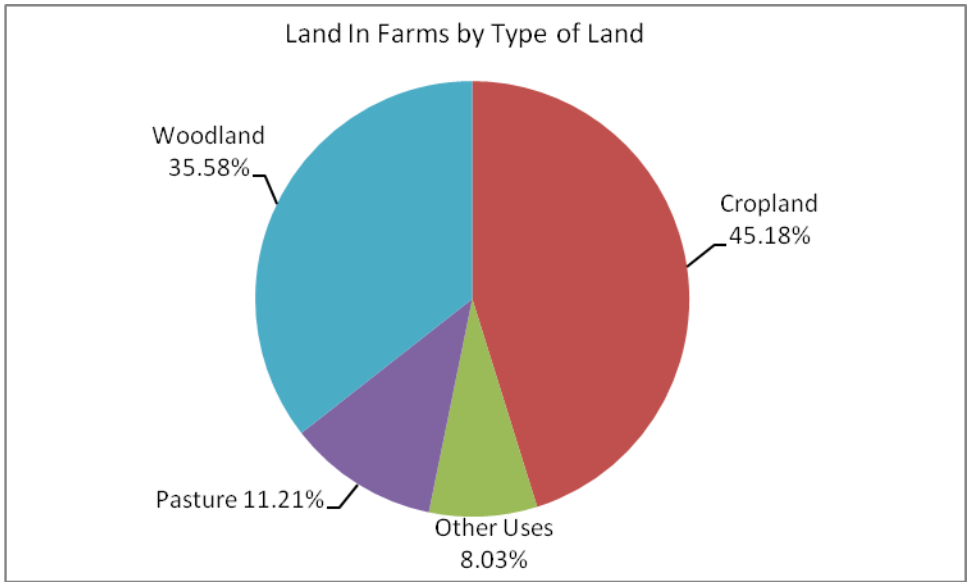


Figure 1. Land Cover by Type. Source: U.S. Geological Survey.

Figure 2. Land in Farms



Source: USDA Census of Agriculture, 2007

Table 1. Number of Farms, Land in Farms, Median Farm Size

	2007	2002	1997
Number of Farms	278	257	251
Land in Farms (acres)	40,904	49,293	54,177
Median Farm Size (acres)	147	192	217

Source: USDA Census of Agriculture, 2007, 2002, 1997.

Table 2. Cropland and Harvested Cropland

	2007	2002	1997
Total Cropland	18,480	20,123	26,484
Harvested Cropland	10,766	12,734	17,896

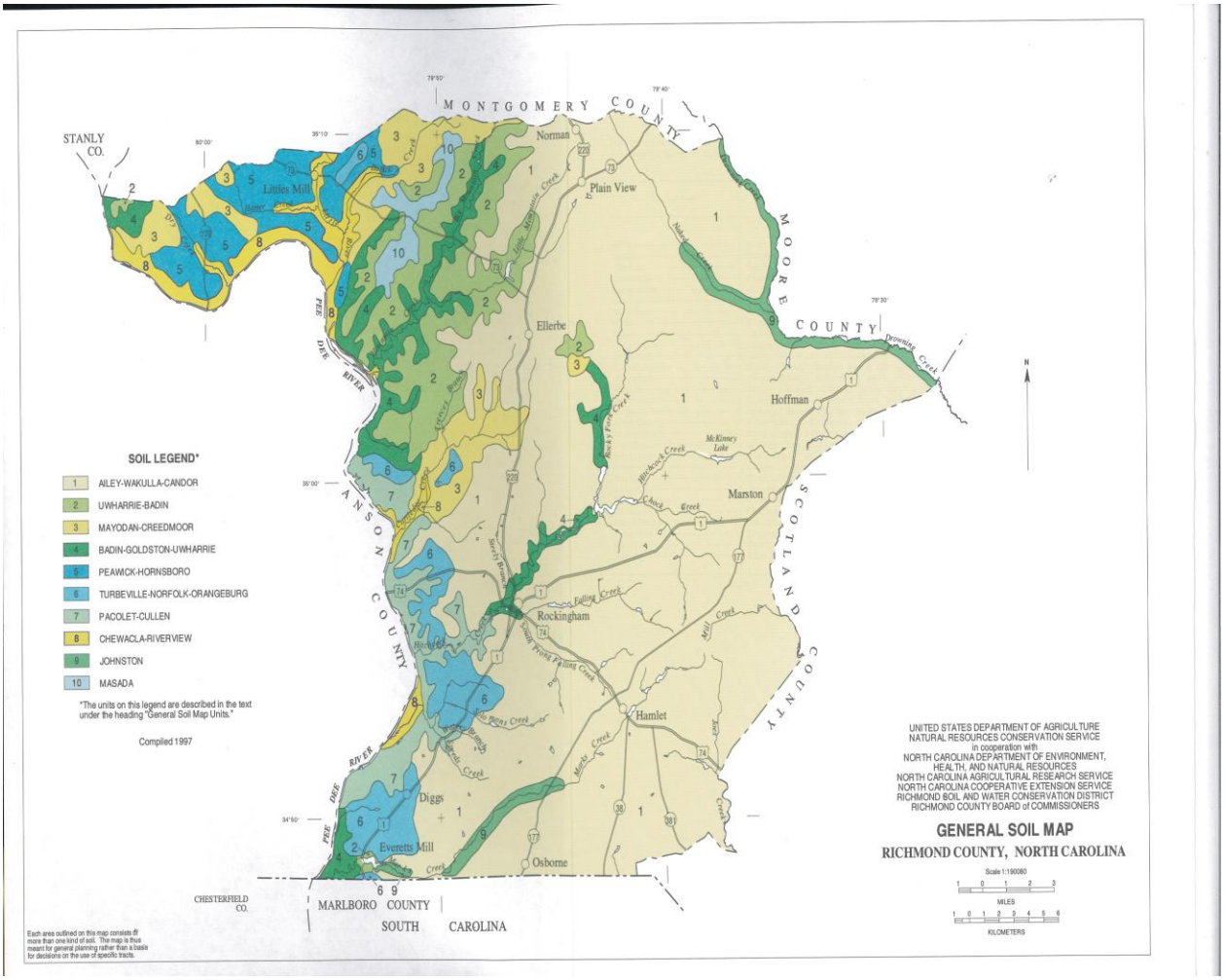
Source: USDA Census of Agriculture, 2007, 2002, 1997.

Soil Resources and Capabilities

Generally, the soils in Richmond County that are well suited to agriculture are also well suited to commercial and residential development. An understanding of the capability classes of soils and their use are important for the planning of future land use. Figure 3 and Table 3 illustrate and delineate the soil associations and soil types that are present in Richmond County. Slope, drainage, depth and rockiness are all attributes that determine the suitability of soils for conflicting uses of development or agriculture. Approximately 52,095 acres, or nearly 17 percent, of total acreage in Richmond County meet soil requirements for prime farmland designation. Nearly all soils evaluated as highest capability for farmland are located in the western third of the county with largest acreage noted in the northwestern section of the county. Much of the remainder of the county exhibits soils with a high capability for agricultural use but may have limitations related to slope or other limiting attributes. Land use compatibility for agronomic use is illustrated in Figure 4. Land capability classifications are a system of soil groupings based primarily on soil capability to produce common cultivated crops and pasture plants without deterioration (USDA Natural Resources Conservation Service, Soil Data Mart http://soildatamart.nrcs.usda.gov/Report.aspx?Survey=NC153&UseState=NC

Figures 5 and 6 illustrate the suitability of soil types for the production of loblolly and longleaf pine, respectively (USDA Natural Resources Conservation Service Soil Data Mart http://soildatamart.nrcs.usda.gov/Report.aspx?Survey=NC153&UseState=NC). Almost countywide, soils are classified as highly suitable for the production of loblolly pine. Only moderate productivity is noted for longleaf pine production with high suitability noted in small pockets primarily in the southwestern part of the county. Longleaf pine forest type covers 32,126 acres in Richmond County. Other acreage of forestland includes loblolly-shortleaf covering 89,342 acres; oak-pine with 38,797 acres that is predominately hardwoods; oak-hickory on 64,389 acres; and oak-gum-cypress on 12, 699, which is mostly located in bottomland forest (Figure 7). Forested land, the dominant land cover for the county, occupies 78 percent of the land area of the county (N.C. Division of Forest Resources, Richmond County, 2010). Loblolly pine is the most important timber species because it grows fast, adapts to soil and climate, is easy to establish and manage, and has the highest average sale value per acre.

Figure 3. General Soils Map, Richmond County; Soil Survey of Richmond County, N.C.



Source: USDA Natural Resource Conservation Service, Richmond County

Table 3. Acreage and Proportionate Extent of the Soils, Richmond Co.

Map Symbol	Map Unit Name	Acres	Percent
AaB	Ailey sand, moderately wet, 0 to 6 percent slopes	95	*
AcB	Ailey loamy sand, 0 to 8 percent slopes	27,353	8.9
AcC	Ailey loamy sand, 8 to 15 percent slopes	46,310	15.1
AgC	Ailey gravelly loamy sand, 8 to 15 percent slopes	1,076	0.4
AgD	Ailey gravelly loamy sand, 15 to 25 percent slopes	1,939	0.6
AuB	Ailey-Urban land complex, 0 to 8 percent slopes	2,137	0.7
AuC	Ailey-Urban land complex, 8 to 15 percent slopes	549	0.2
BcB	Badin channery silt loam, 2 to 8 percent slopes	574	0.2
BgC	Badin-Goldston complex, 8 to 15 percent slopes	1,921	0.6
CaC	Candor and Wakulla soils, 8 to 15 percent slopes	22,453	7.3
ChA	Chewacla loam, 0 to 2 percent slopes, frequently flooded	11,367	3.7
CrB	Creedmoor fine sandy loam, 2 to 8 percent slopes	3,137	1.0
CzD	Cullen-Wynott complex, 15 to 35 percent slopes	2,418	0.8
DaB2	Hiwassee clay loam, 2 to 8 percent slopes, moderately eroded	403	0.1
DaC2	Hiwassee clay loam, 8 to 15 percent slopes, moderately eroded	486	0.2
DAM	Dam	3	*
EmD	Enon-Mayodan complex, 15 to 35 percent slopes, very stony	150	*
EzB	Enon-Wynott complex, 2 to 8 percent slopes	284	*
EzC	Enon-Wynott complex, 4 to 15 percent slopes, very bouldery	180	*
FaB2	Faceville sandy clay loam, 2 to 6 percent slopes, moderately eroded	50	*
GdD	Goldston-Badin complex, 15 to 55 percent slopes	7,614	2.5
HsA	Hornsboro silt loam, 0 to 2 percent slopes	1,931	0.6
JmA	Johnston mucky loam, 0 to 2 percent slopes, frequently flooded	11,853	3.9
MaC	Masada sandy loam, 8 to 15 percent slopes	5,278	1.7
MaD	Masada sandy loam, 15 to 25 percent slopes	2,253	0.7
MbB2	Mayodan sandy clay loam, 2 to 8 percent slopes, moderately eroded	1,209	0.4
MbC2	Mayodan sandy clay loam, 8 to 15 percent slopes, moderately eroded	3,137	1.0
MbD	Mayodan sandy loam, 15 to 25 percent slopes	2,155	0.7
MdD	Mayodan sandy loam, 15 to 25 percent slopes, stony	303	*
MeB2	Peakin-Exway complex, 2 to 8 percent slopes, moderately eroded	917	0.3
MeC2	Peakin-Exway complex, 8 to 15 percent slopes, moderately eroded	585	0.2
MnB	McQueen loam, 1 to 6 percent slopes	1,356	0.4
NoA	Norfolk loamy sand, 0 to 2 percent slopes	664	0.2
NoB	Norfolk loamy sand, 2 to 6 percent slopes	1,783	0.6
OrA	Orangeburg loamy sand, 0 to 2 percent slopes	431	0.1
OrB	Orangeburg loamy sand, 2 to 6 percent slopes	1,028	0.3
PaC	Pacolet gravelly sandy loam, 8 to 15 percent slopes	939	0.3
PaD	Pacolet gravelly sandy loam, 15 to 35 percent slopes	3,824	1.2
PcA	Paxville fine sandy loam, 0 to 2 percent slopes	1,222	0.4
PeA	Peawick fine sandy loam, 0 to 2 percent slopes	2,376	0.8
PeB	Peawick fine sandy loam, 2 to 6 percent slopes	6,440	2.1
PfA	Peawick silt loam, 0 to 3 percent slopes, rarely flooded	360	0.1
PoA	Pelion loamy sand, 0 to 2 percent slopes	2,687	0.9
PoB	Pelion loamy sand, 2 to 8 percent slopes	6,899	2.2
PoC	Pelion loamy sand, 8 to 15 percent slopes	1,914	0.6
PrB	Pelion-Urban land complex, 0 to 8 percent slopes	267	*
PrC	Pelion-Urban land complex, 8 to 15 percent slopes	282	*
PsC	Pinoka-Brickhaven complex, 4 to 15 percent slopes, very stony	203	*
Pt	Pits, quarry	264	*
RvA	Riverview loam, 0 to 2 percent slopes, occasionally flooded	2,040	0.7
TbA	Turbeville sandy loam, 0 to 2 percent slopes	788	0.3
TbB	Turbeville sandy loam, 2 to 8 percent slopes	5,055	1.6
Ud	Udorthents, loamy	986	0.3
Ur	Urban land	429	0.1
UwB2	Georgeville clay loam, 2 to 8 percent slopes, moderately eroded	2,503	0.8
UwC2	Georgeville clay loam, 8 to 15 percent slopes, moderately eroded	1,806	0.6
UwD	Georgeville silt loam, 15 to 25 percent slopes	3,024	1.0

UxB2	**Georgeville-Badin complex, 2 to 8 percent slopes, moderately eroded**	**2,674**	**0.9**
UxC2	**Georgeville-Badin complex, 8 to 15 percent slopes, moderately eroded**	**9,333**	**3.0**
UxD	**Georgeville-Badin complex, 15 to 25 percent slopes**	**4,938**	**1.6**
W	**Water**	**4,829**	**1.6**
WcB	**Wakulla and Candor soils, 0 to 8 percent slopes**	**72,981**	**23.8**
WuB	**Wakulla-Candor-Urban land complex, 0 to 10 percent slopes**	**2,493**	**0.8**
Total		**306,938**	**100.0**

* Less than 0.1 percent. Survey Area Version Date: 09/18/2009

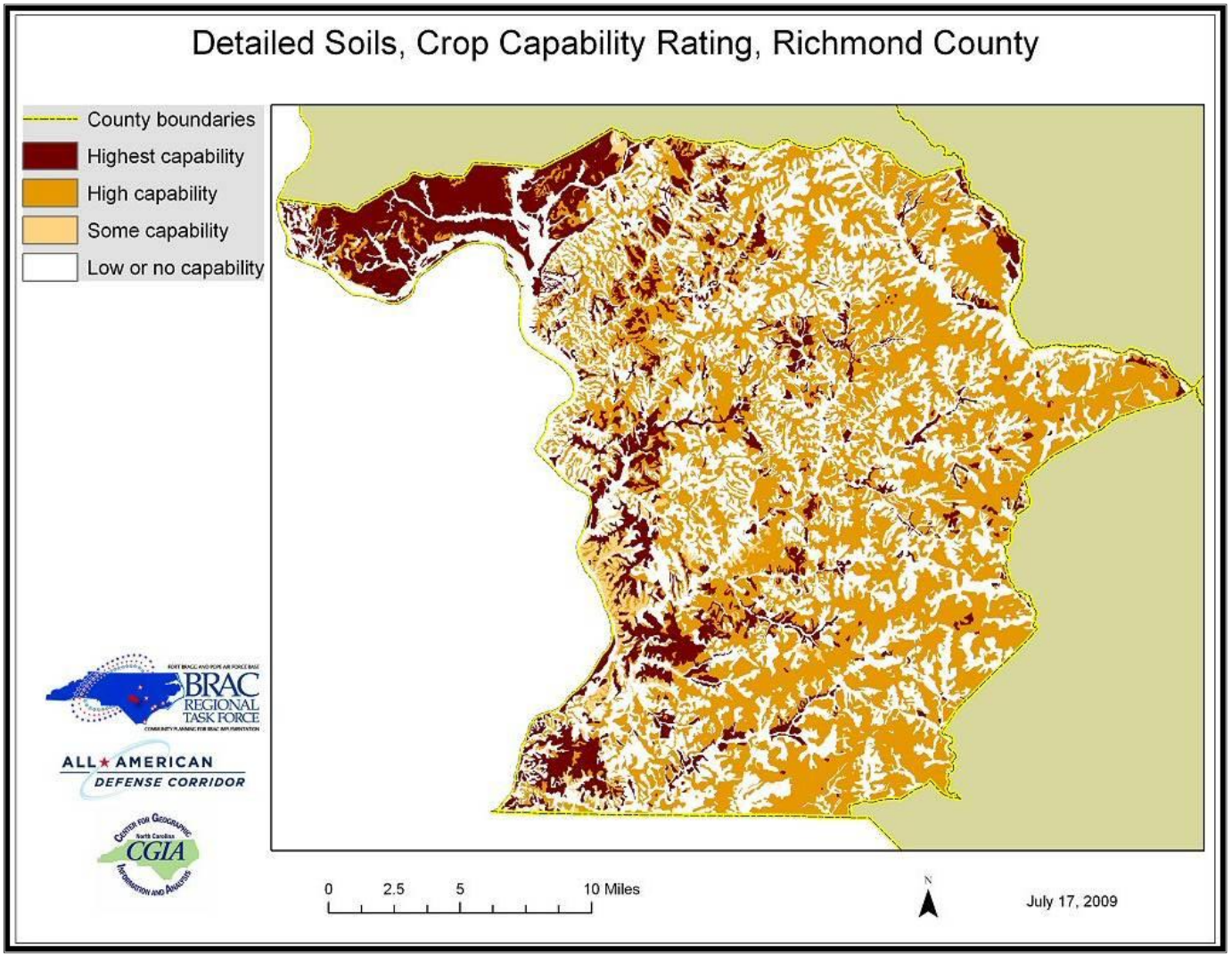


Figure 4. Crop Capability Rating from Detailed Soil Survey. Source: Natural Resources and Conservation Service and CGIA.

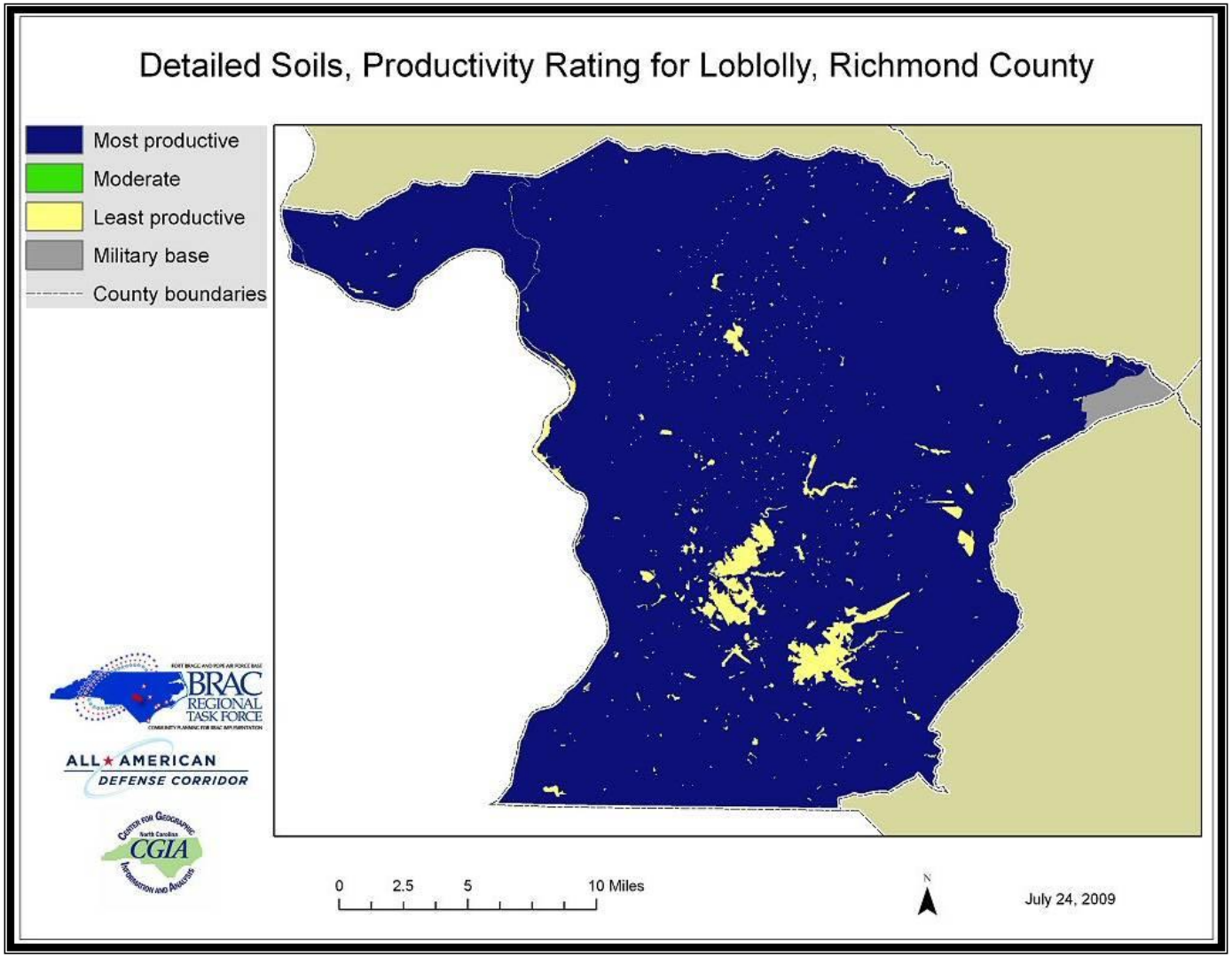


Figure 5. Detailed Soils, Rating Based on Site Index of Loblolly Productivity. Source: CGIA and NRCS

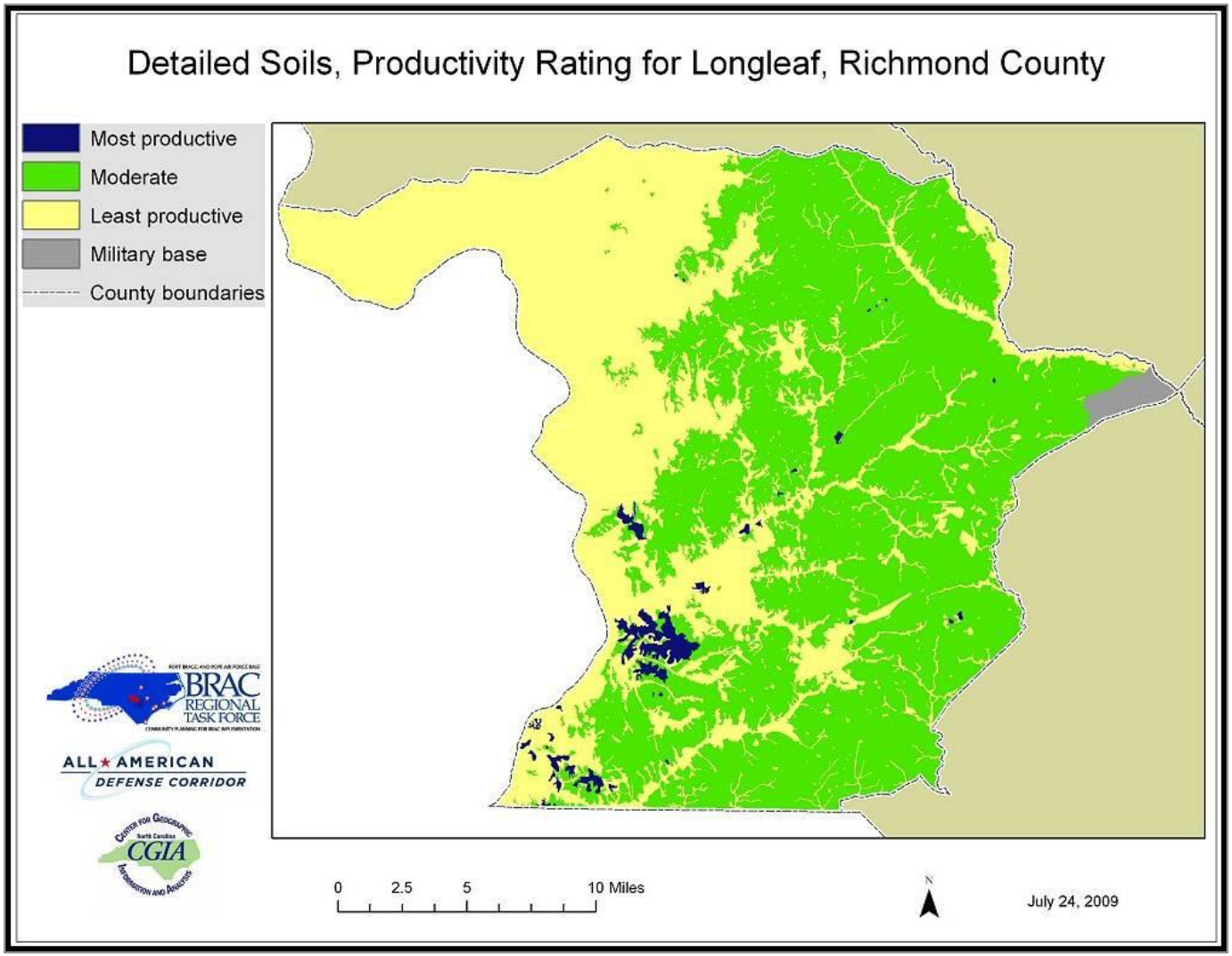


Figure 6. Detailed Soils, Rating Based on Site Index for Longleaf Productivity. Source: CGIA and NRCS

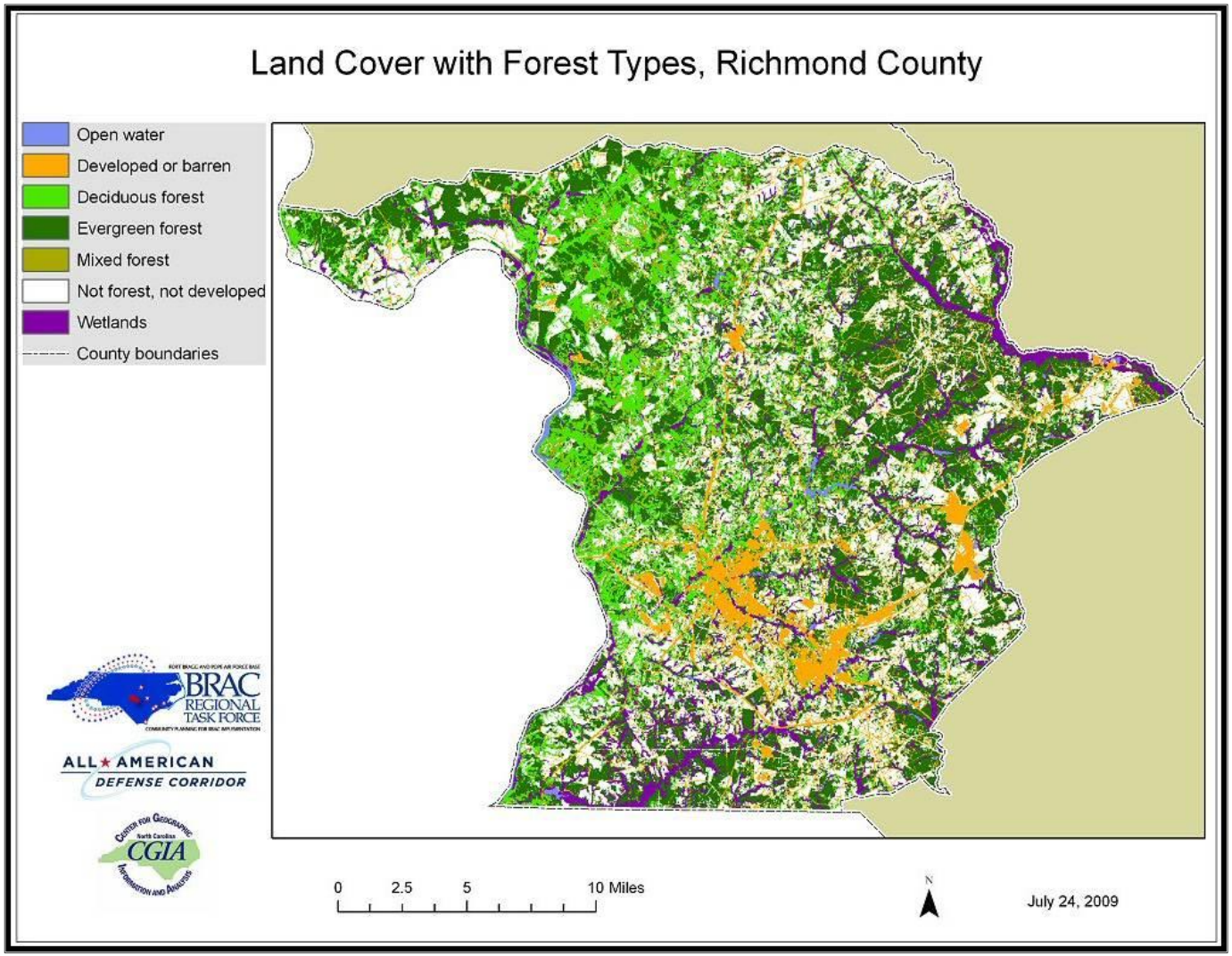


Figure 7. Land Cover from USGS, National Land Cover Data based on 2001 Satellite Imagery. Source: CGIA

Land Values and Land Use

Land values and land use play a significant role in the fate of agriculture. Rental land is important to farmers wishing to expand their production. According to the North Carolina Department of Agriculture and Consumer Services, the statewide average rent per acre in 2008 was $45.90. Richmond County is located in District 60. Other counties in this district include Anson, Cabarrus, Cleveland, Gaston, Lincoln, Mecklenburg, Montgomery, Moore, Stanly and Union. When evaluating the agricultural productivity of land, Richmond County reported slightly lower rent values than the district average in 2008 (Table 4).

In 2007, there were 33 farms rented for land, buildings and grazing fees with a total of $342,000 cash rent paid. In 2002, there were 28 farms rented with cash rent paid of $368,000 (USDA Census of Agriculture, 2007 and 2002). Low land rent values make retention of land difficult for landowners who rent land to farmers as tax rates remain relatively high. Of the counties in District 60, property tax rates in only Anson, Gaston and Mecklenburg are higher than in Richmond, and in of the 11 BRAC counties, only Scotland and Sampson Counties are higher than Richmond County.

The tax rate per $100 value is $0.8100 as of 2010 in Richmond County (N.C. Association of County Commissioners, 2010). In 2007, farm owners paid $875,000 in property taxes to the county as compared to 2002 when $485,000 was collected. This represents an increase of more than 55 percent over this five-year period (USDA, 2007). The economic base of Richmond County depends heavily on property taxes.

To offset the impact of relatively high property tax rates, Richmond County employs a present land use taxation program. The present-use program adjusts tax rates to enable agricultural, forestry and horticultural land to be taxed at its present-use value instead of its market value. Productive agricultural and forested lands are allowed to defer to a lower tax rate thereby offering protection for continued present use. According to the Richmond County Planning Department in August 2010, 1,545 land parcels were enrolled in the Present-Use Value Program, which represents 97,708 acres of farm and forest land.

The availability of land is fundamental to farmland preservation as is planned land use. For decades, land use practices have been haphazard, inefficient and unsustainable. In an effort to sustain farmland as well as to provide an attractive area for residents and businesses, a well designed and implemented land-use plan is needed. Land-use planning practices create and maintain efficient infrastructure, a sense of community and preserve natural systems. Land-use planning, which acknowledges the value of agricultural and forest land, is an important tool that will help to ensure an agricultural preservation strategy as well as growth and development. The goal is to minimize conflicting uses while encouraging a strengthened county economy.

Figure 8 shows suitability ratings for various uses of areas that are not in the present-use program. These data illustrate land parcels where multiple uses could be pursued. Numerous parcels exist that could be considered for agricultural use or commercial/industrial development (purple), agricultural use or residential development (yellow).

Land use must also consider infrastructure and its importance to citizens and farmers. Roads and highways are necessary to meet growing population demands for accessibility to jobs and services in the county. They are necessary for farmers to get their crops and livestock to markets and just as important to consumers in purchasing these commodities. However, new highways and changes in the highway system can be a challenge and potential threat to farmland. Public water and sewer systems support development. Farms are not dependent upon public water and sewer systems. However, as these systems expand outside municipal areas and into viable farms and forests, agricultural lands will become more attractive and suitable for development.

Figure 9 displays planned highways in areas where farmland potential is present. The planned expansion of public water service to southeastern Richmond County (orange) also coincides with areas of both high and low farmland suitability (Figure 10). Farmland could be impacted with expansion of public water and subsequent development along transportation corridors.

Timberland in the county has the potential to be threatened by development as well. Forest management and harvest operations have been impacted by the economy and infrastructure with the economic downturn and expansion of the highway system. Figure 11 shows planned highway access and future water and sewer expansion through areas most suitable for forestland. Timber production is not reliant on public water and sewer systems. As systems expand, present forested areas will become more appealing for development.

In addition to the potential loss of agriculture and forested acreage to accommodate improved access and growth, the impact of Ft. Bragg also needs to be included in the challenges for Richmond County. The Ft. Bragg Joint Land-Use Study (JLUS) updated in 2008 shows parcels of land that have been identified as critical or important land to protect within a five-mile radius of the base (Figure 12). These lands represent areas that would be affected by actions from trainings and maneuvers as well as areas that need protection from urban and suburban encroachment, which greatly impacts the base and its mission.

The JLUS criteria for classifying land are based on a goal to maintain rural land use that is compatible with the military mission and sustainable for the region. The update to the JLUS classification applied the following criteria to parcels (using parcel size of 10 acres or greater as the "rural land" category):

- *Protected* land: Rural parcels that have been identified by state and local sources as permanent open space (through ownership or easement) including state game lands, conservation lands and recreation areas.

- *Critical* to maintain in a compatible land use: Rural parcels that are primarily of the highest value as a natural area (including significant natural heritage areas) or intersect a military accident potential zone or intersect a military noise zone.
- *Important* to maintain in a compatible land use: Rural parcels that are primarily of high value as a natural area or of the highest value for farmland or forestland.
- *Other Rural* land is in parcels of 10 acres or larger that are not critical or important.
- *Low Density* development land is in parcels between three and 10 acres in size and within one mile of a military installation.
- *Urban/Agri* land is in parcels smaller than 10 acres that have been designated by a county as "agricultural" for tax purposes.
- *Urban* land is in parcels smaller than 10 acres, not agricultural.

Source: CGIA Draft Report, December 4, 2009, Joint Land Use Study Parcel Classification Update.

As noted in Figure 13, Camp Mackall is located in the eastern most part of Richmond County. Figure 13 illustrates that in addition to the actual installation, there are land parcels in the protected, critical and important land classification categories. Maintenance of compatible uses in these designated areas additionally presents challenges to planners, county officials and landowners.

Figure 14 illustrates the need to protect more agricultural lands around Camp Mackall that have been identified as critical and important.

Table 5 shows s a total of 72 agricultural parcels in Richmond County encompassing a total of 6,107 acres where retention of existing compatible use is preferred. Three parcels (861 acres) are currently protected, but 18 parcels (2,785 acres) are identified as critical, and 42 parcels (2,310 acres) are deemed important. The critical and important parcels are vital to the military for continued training needs and expansion. The need for these acreages to remain in working farms or forests is essential to the continued presence of the military in the region.

As noted, land-use policies greatly impact land for agricultural use. As a result of leadership and foresight, Richmond County adopted a Strategic Land Use Plan in July 2002. (http://www.richmondnc.com/planning.aspx) The plan set the following goals:

- To preserve, protect and sustain the rural agricultural nature of the county;
- To protect, preserve and conserve the county's environmental and heritage resources;
- To interlink land planning decisions with current and future transportation improvements; and
- To create and maintain an atmosphere that promotes sound economic development principals within land-use planning practices.

The plan did not impose or exercise any controls over croplands, timberlands, pasturelands, orchards or idle or other farmlands, farmhouses, barns, poultry houses, farm buildings or tenant houses for those working on farms as long as they are located on the farm. Residences for non-farm use or occupancy and other non-farm uses were subject to the land-use plan.

Richmond County's leadership committed to preserving, protecting and sustaining the rural agricultural nature of the county and the county's environmental and heritage resources through the adoption of the Strategic Land Use Plan. Farming and agriculture is embraced in the goals and commitment of the leadership. County officials noted that the strategic plan helped determine what is important to the county and what tools are available to assist in meeting the goals set forth in the land use plan. Figure 15 is the County Zoning Map and visually designates the county zoning districts. It is noted in review of land capability class, use suitability and expected growth and development that county planners and officials are cognizant of the need to protect working lands through planned growth and development.

Additionally, Richmond County planners and leaders understand the need for and subsequent costs of development. Studies conducted by Renkow (1998, 2001, 2006) and Dorfman (2004) in five N.C. counties found agricultural lands contributed more in property taxes than the costs of community services they received. Table 6 depicts the cost of providing services per dollar of revenue for the five counties as compared to the national average. Richmond County, while different from counties studied, can assume the trends are similar.

The most notable comparison is the reported costs associated with Farms/Forests and Commercial/Industrial. All but one county in the study and the national average reported that the cost of services to commercial/industrial development were lower than farms/forests; however, the cost of residential development across the board is higher than both these uses. These associated costs with development or non-development should serve to encourage planners and leaders to continue to engage agriculture in land-use planning. Additionally, these leaders may want to consider incentives for the retention of farms/forests much as is done to attract commercial/industrial development.

The Richmond County Board of Commissioners approved a Voluntary Agriculture District Ordinance in April, 2010. The Commissioners approved a 16-member Agricultural Advisory Board to administer the VAD program in September 2010. Protection will be added against farm and farmer nuisance suits. The VAD program will increase awareness of agriculture throughout the county and will encourage citizen support of farmers, foresters and horticultural operations. This is a key step in providing support for agricultural lands in the county.

Table 4. N.C. Department of Agriculture and Consumer Services 2008 Cash Rent Values

Agricultural Land	Richmond County	District 60	State
High Productivity	$49.50	$52.90	$45.90
Medium Productivity	$25.10	$37	$25.10
Low Productivity	$21.10	$25.80	$21.10

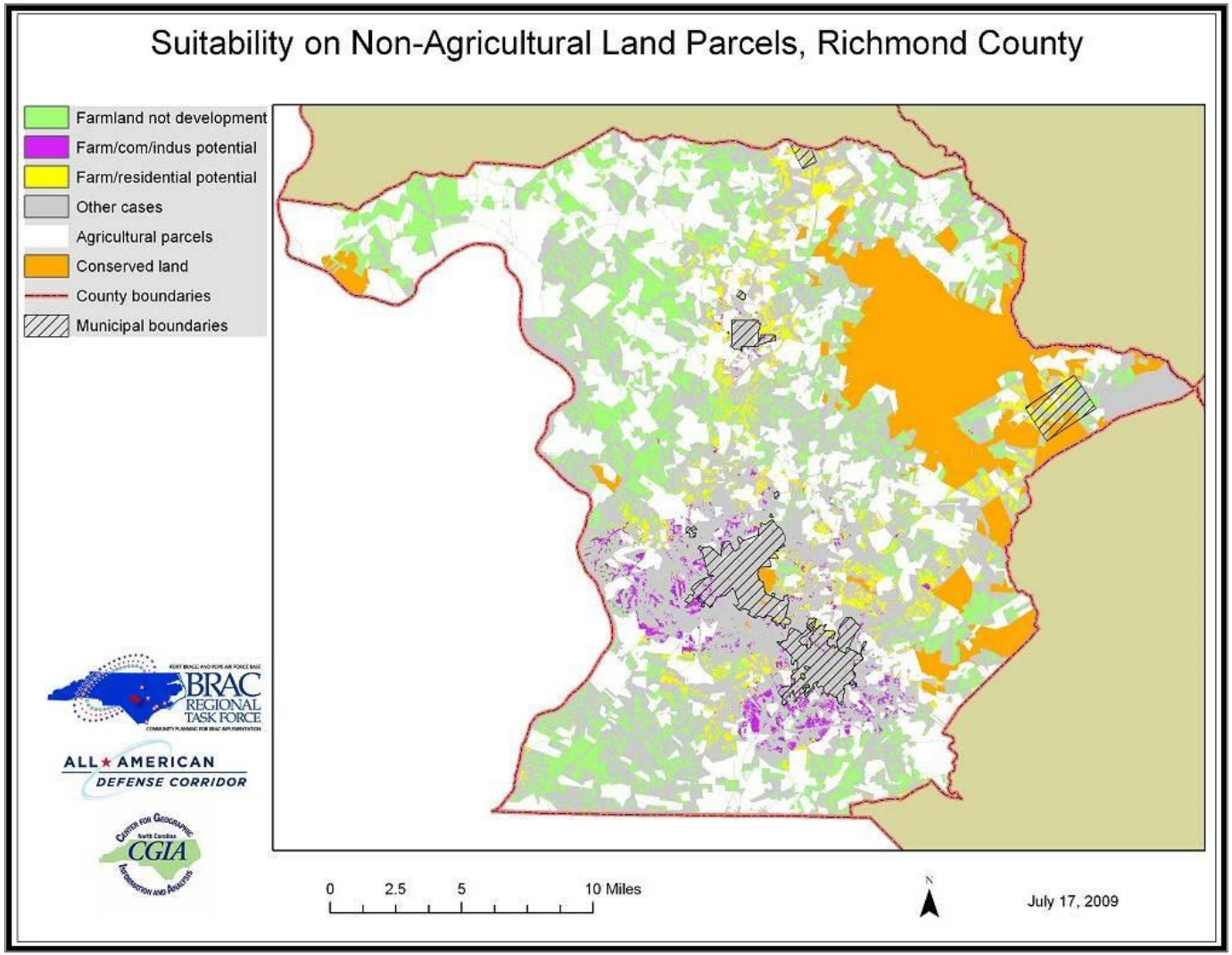


Figure 8. Suitability in Areas Not in Present Use Tax Status. Source: CGIA and Richmond County.

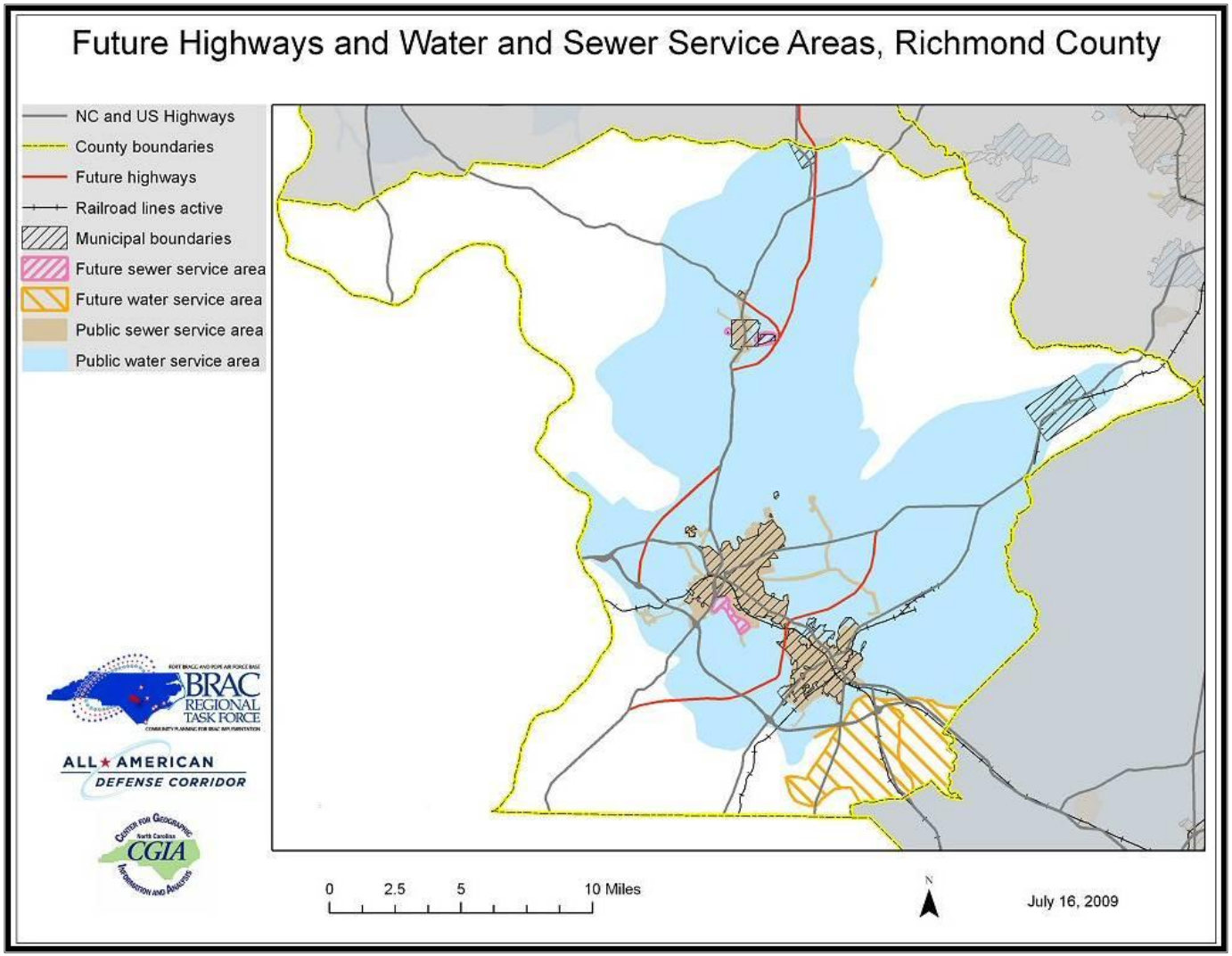


Figure 9. Infrastructure in Richmond County. Sources: N.C. Rural Economic Development Center, CGIA, and N.C. Department of Transportation.

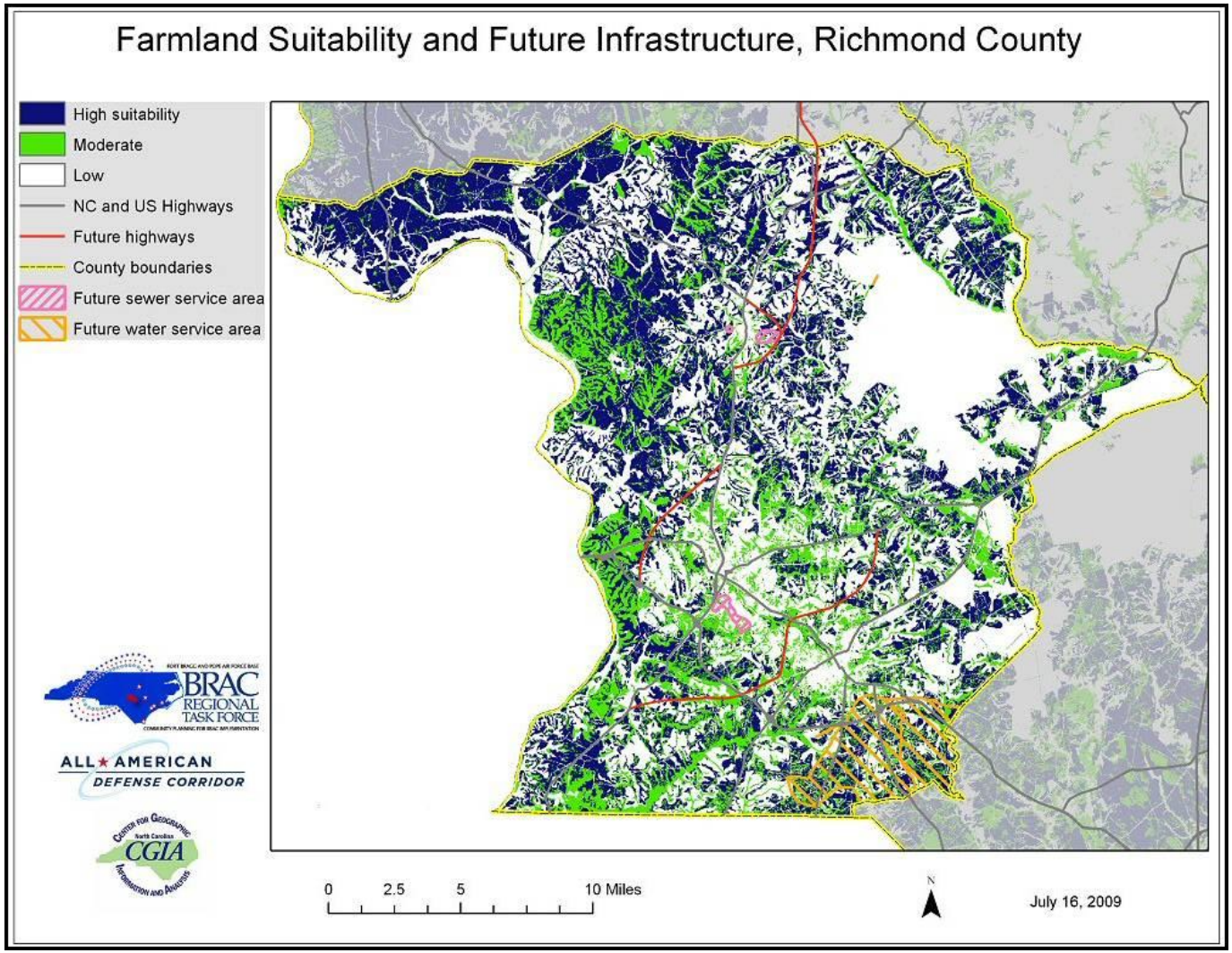


Figure 10. Infrastructure and Farmland. Source: CGIA

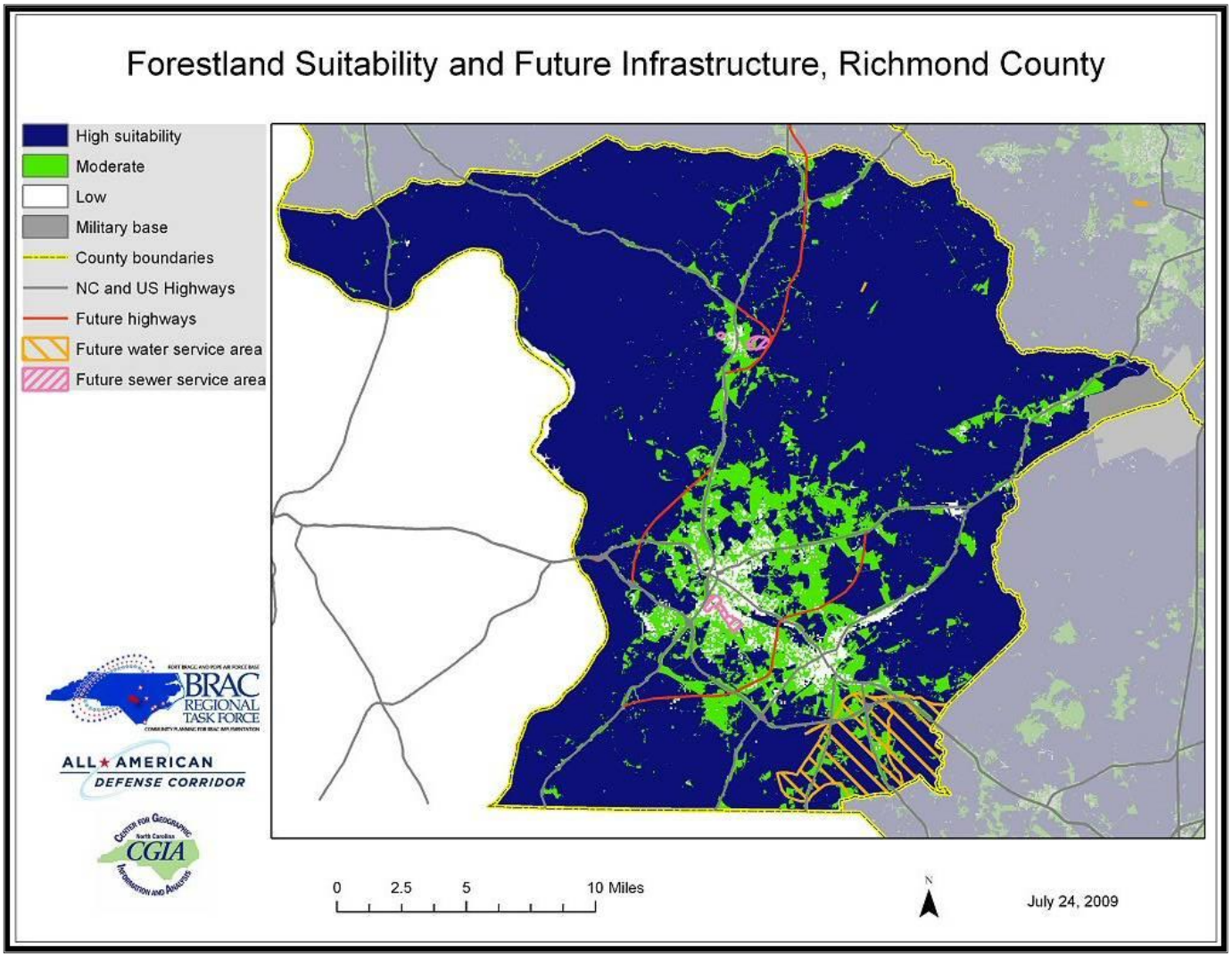


Figure 11. Future Infrastructure and Forestland Suitability. Source: BRAC RTF and CGIA.

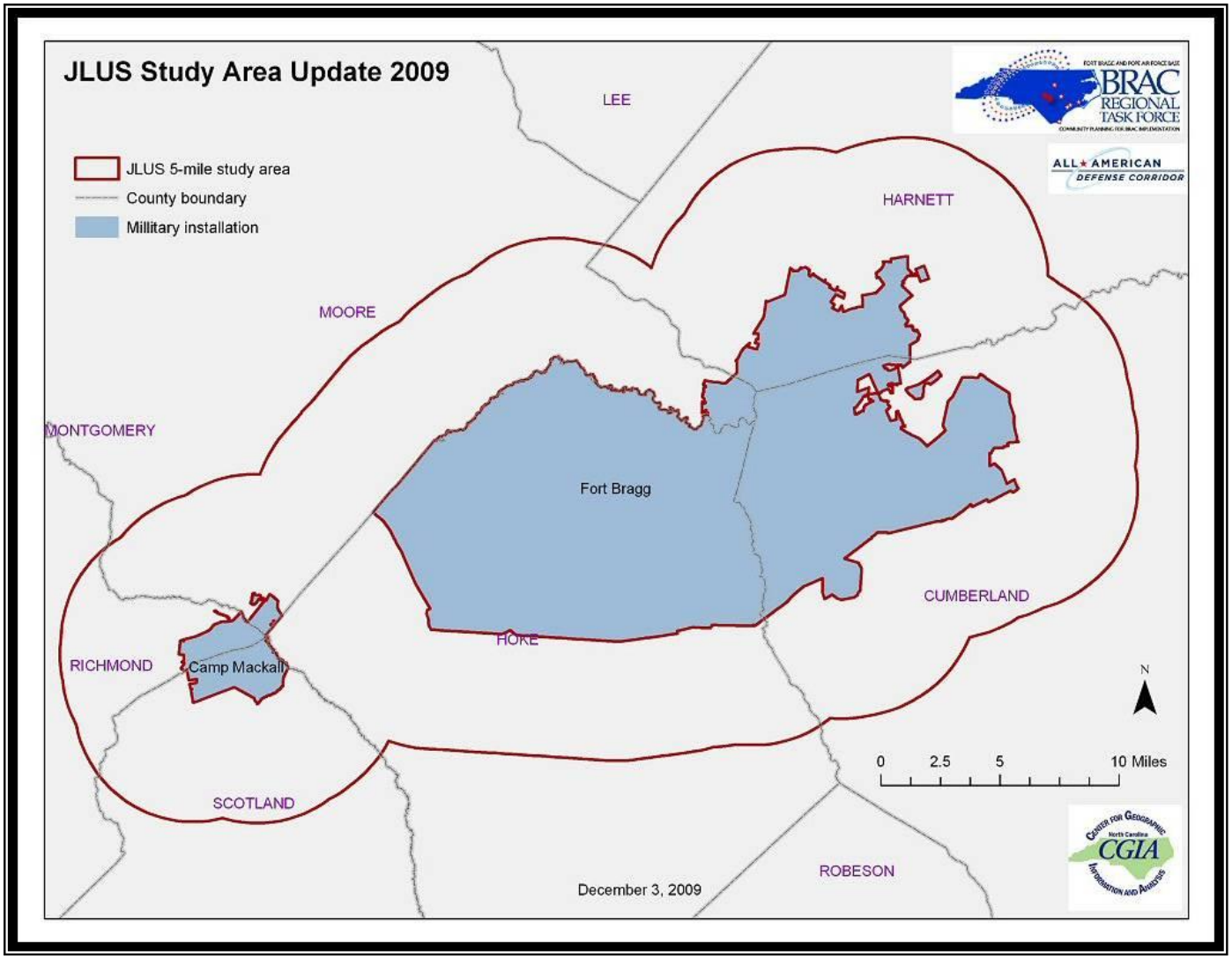


Figure 12. Ft. Bragg Joint Land Study Area and Counties. Source: CGIA Draft Report, December 4, 2009, Joint Land Use Study Parcel Classification Update.

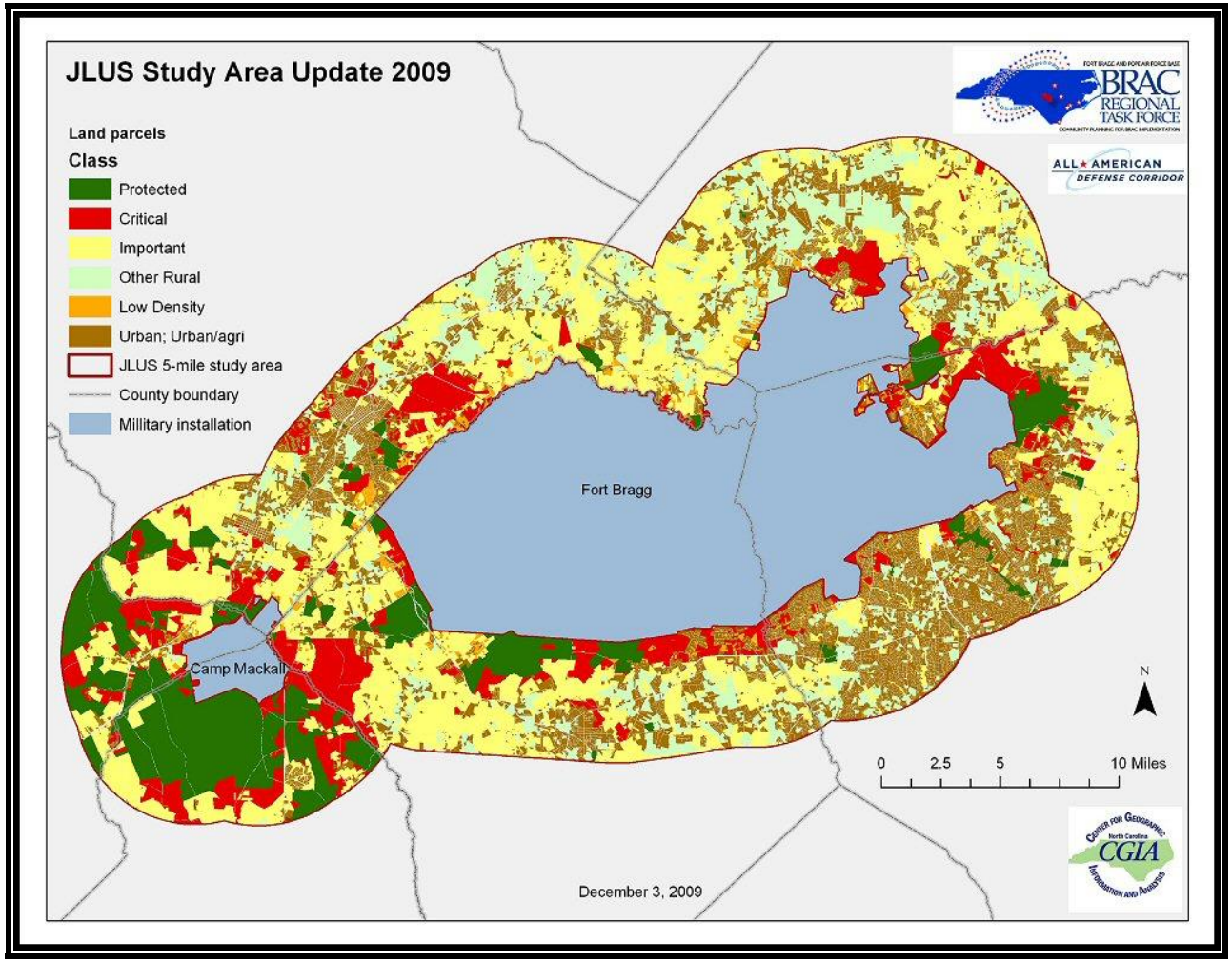


Figure 13. Land Parcels by JLUS Category, JLUS Study Area. Source: CGIA Draft Report, December 4, 2009, Joint Land Use Study Parcel Classification Update

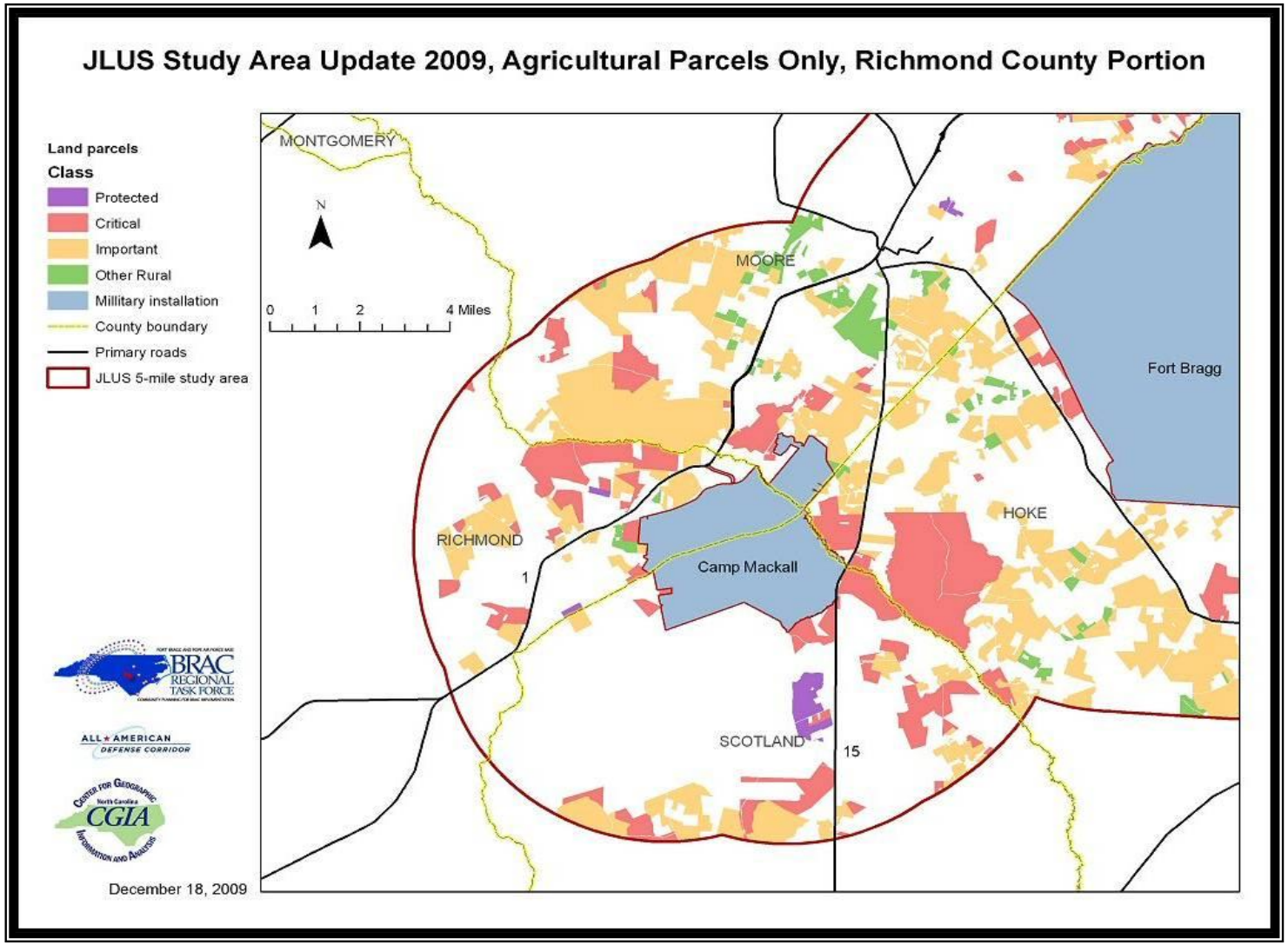


Figure 14. JLUS Update. Farmland Suitability Ratings, Farm Parcels. Source: CGIA and BRAC RTF

Table 5. All Agricultural Parcels Within Five-Mile Study Area, JLUS, Richmond County

	Number of Parcels	Acreage of Parcels
Critical	18	2,785
Important	42	2,310
Other Rural	7	143
Protected	3	861
Low Density	0	0
Urban	2	8

Table 6. N.C. Cost of Community Services Studies

(Cost of Providing Services Per Dollar of Revenue)

County	Residential	Commercial/Industrial	Farm/Forestland	Source
Chatham	$1.11	$0.47	$0.92	Renkow, 1998
Wake	$1.54	$0.18	$0.47	Renkow, 2001
Union	$1.30	$0.41	$0.24	Dorfman, 2004
Orange	$1.31	$0.24	$0.72	Renkow, 2006
Alamance	$1.47	$0.23	$0.59	Renkow, 2006
National Avg.	$1.15	$0.29	$0.37	AFT, 2006

Source: ADFP Trust Fund 2008 Annual Report

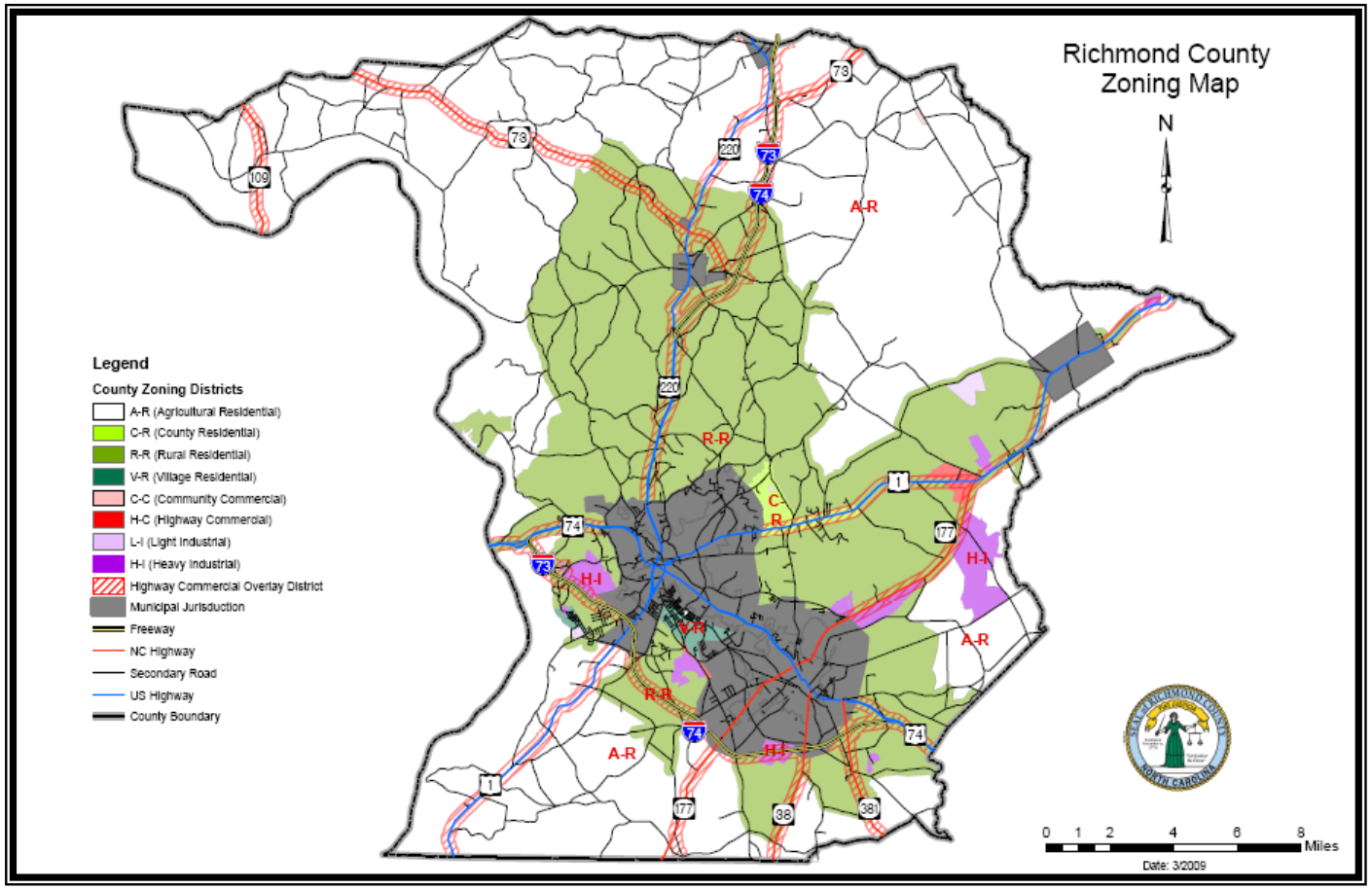


Figure 15. Richmond County Zoning Map. Source: James Armstrong, Richmond County Planning Department.

Richmond County Agricultural and Forest Production

Impact to County Economy

The total Richmond County value-added income from agriculture and agribusiness reported in 2008 was $1,087,940,758 (Table 7). The value-added income reported represented the entire spectrum of the agricultural industry including production, agribusiness, forestry and processing. At the farm level, value-added income means sales. At the manufacturing, wholesale and retail levels, value-added income is sales minus the cost of non-labor inputs. Value-added avoids the multiple counting of a product used several times in the production chain.

Of the total income reported from Agriculture/Food Industry, farming (the production of crops, livestock, ornamentals and turf) contributes 69 percent or $133,161,006 of this total income, and manufacturing and wholesale/retail contributes only 31 percent. Agriculture and agribusiness contribute almost one-third of the total economy of Richmond County. The importance of protecting land for farming and timber production is apparent as the production of raw commodities accounts for the majority of the income received.

Employment in agriculture and agribusiness in 2008 accounted for 22.4 percent of the county's total employment (Walden, NCSU IMPLAN, Mig. Inc. 2008) While all occupational areas have experienced job losses since that time, agricultural and agribusiness are still major employers in the county. According to the 2002 Economic Census of the U.S. Census Bureau, there were 54 manufacturing industries in Richmond County. They included two food manufacturers, four animal slaughtering and processing plants, and a poultry processing facility. There were three textile mills and three apparel manufacturers. There were eight paper manufacturing industries and a large number of supporting industries for equipment, repair and supplies.

Farms in Richmond County employed 431 workers and had a payroll of $3,415,000 in 2007 (USDA Census of Agriculture, 2007). This was a 27 percent reduction in farm labor numbers from 2002, due in part to the shift to smaller farms and more part-time farmers who cannot afford more workers. However, there was a $799,000 increase in payroll to workers from 2002 to 2007, which contributed significantly to the economic base in the county. The increase was due to the increased minimum wage and additional employees hired to assist in livestock production.

The forestry industry is an economic engine in Richmond County as well. In 2008, Richmond County ranked 19th in the state based on income harvested and delivered to mills (US Forest Service, *Forest Inventory and Analysis Data Timber Products Output Survey* 2006 and 2007).

Owners of woodlands produce timber; conserve wildlife, soil and water; preserve aesthetic values and provide opportunities for recreational activities. There are 116 timber-related businesses that operate in the county. They include consulting foresters, mills and logging companies (N.C. Division of Forest Resources, 2002). Because of the increasing popularity of landscaping, especially in urban areas, pine straw has become a marketable commodity.

Table 7. Agriculture and Agribusiness Total Income for Richmond County

Industry	Total Income	Share of County Value-Added
Agriculture/Food	$202,158,150	18.6%
Natural Fiber	$41,873,898	3.8%
Forestry	$40,354,018	3.7%
All Agriculture/Agribusiness	$284,368,066	26.1%
Total County Value Added (Equals Gross County Product, a sum of all value-added production in the county)	$1,087,940,758	

Source: Dr. Michael L. Walden, North Carolina State University 2008. IMPLAN, Mig. Inc

Agricultural Production Commodities and Trends

The agricultural industry, locally and nationally, has experienced significant changes in recent years. These changes ranged from federal price support programs coming to an end to the development of technology to turn agricultural commodities into biofuels. A major change that occurred in 2005 was the federal tobacco program buyout. As a result, flue-cured tobacco acreage in Richmond County went from 695 acres in 2007 to 450 acres in 2009. (N.C. Cooperative Extension, Richmond County, 2007 and 2009). In 2002, there were 1,910 acres of flue-cured tobacco reported in Richmond County and the county ranked 51st out of 100 counties in North Carolina. (NCDA, Census of Agriculture, 2002). Many producers have opted out of tobacco production entirely and are producing other commodities or have diversified into livestock operations. Growers have increased livestock production in the county with a marked increase noted in poultry production. Table 8 illustrates trends for the top agricultural crops produced in Richmond County.

An evaluation of the data in Table 8 verifies the decline in tobacco production and other traditional row crops. Value-added crops, vegetables, melons and others increased in 2007 to levels above those produced in the late 1990s. This again may be attributed to the shift in primary and part-time operators. More importantly, the forage crop acreage – hay, hayledge, grass silage – has almost doubled since 1997. This is indicates a shift from crop production to livestock production.

Since 1997, broiler production numbers have increased by 41 percent; although numbers in 2002 and 2007 were reported as almost half of the 1997 reported production numbers. Richmond County broiler production numbers have ranked the county in the top 10 counties in broiler production since 1997. In 2007, Richmond County ranked 5th in the state in broiler production. Numbers reported in 2007 were only about 23 percent of the numbers reported in 2008 (Table 8). This would indicate that other counties producing broilers also experienced a similar amount of variability in production numbers from 1997 to 2008 as Richmond County.

Hog and pig numbers in the county have remained fairly static from 1997 to 2008 as noted in Table 9. Of the pig producing counties statewide, Richmond County reported its highest ranking of 26th in 2008, even after a reduction in production numbers.

As numbers of livestock have remained steady (swine) or markedly increased (poultry), Table 9 illustrates the impact on income received from these commodities over a five-year period in Richmond County.

Cattle numbers were not significant enough to report until 2007. From 2007 to 2008, cattle numbers increased by 15 percent (Table 8). Increased cattle numbers and increased forage acreages are directly related to the expansion of the broiler industry and steady swine numbers in the county. Forage crops are critical to waste and nutrient management in intensive livestock operations. Cattle, mainly cow/calf operations, are also seen as being a necessary diversification opportunity to maximize the utilization of forage lands and products.

In 2008, cash receipts from livestock and poultry in Richmond County were reported as $125,174,000, and the county ranked 12th in the state for income from these products. Crop production contributed $6,663,000 to the reported total of cash receipts received, which was $133,455,241. Clearly, livestock makes a significant contribution to the agricultural receipts accounting for 95 percent of cash received in the county.

Over the past few years, the cost of land, equipment and production inputs rose disproportionately to commodity sale prices. Initially, market values for agricultural products sold seem impressive, but if the total farm production expenses are examined, a different picture emerges. There is a direct correlation between the values of agricultural products sold and production expenses to equate net farm income.

The average farm income in Richmond County has increased 29.2 percent from 1997 to 2007; however, expenses have increased by 42.7 percent over the same time period, significantly narrowing the profit margin (USDA Census of Agriculture, 2007, 2002, 1997). Table 10 demonstrates the rate of increase of expenses and income. Over time, these factors have created a challenge for farmers to remain viable. The increase in expenses can be attributed to the increased price of fuel, seed and fertilizer. Though expenses have increased, net income increases still out pace expenses and allow farmers to remain profitable.

Table 11 summarizes the number of farms in the county based on annual revenue over the past five years. From 2002 to 2007, the number of farms that earned less than $1,000 per year increased by almost 26 percent. There was also a 23 percent increase in the number of farms earning $5,000 to $9,999 per year. A 33 percent decrease in farms earning $10,000 to $24,999 as well as a 3 percent decrease in farms earning more than $100,000 was reported as well for the same time period. Again, these numbers tend to support a shift in growth in smaller income earning farms, which possibly supports the premise of an increasing part-time farmer population in the county. This shift may also be a result of the continuing high costs associated with agricultural production.

Diversification of operations to include livestock and poultry has been critical to profitability for Richmond County producers. Diversification also includes best management practices of woodlands and forestry resources in the county.

The Forest Statistics for North Carolina by Mark J. Brown of the USDA Forest Service, (January 2004), reported that there were 303,400 acres in total land acreage for Richmond County. There is a discrepancy from this report and the total acreage of the county reported in the Soil Survey of Richmond County published by USDA Natural Resources Conservation Service (1999). The soil survey reported 306,938 total acres in Richmond County. For purposes of discussion on forestry and woodlands, the total land area for Richmond County of 303,400 acres will be used. Of the total acres in the county (303,400 acres), Richmond County has a total forested land mass of 233,600 acres, which indicates that 77 percent of the county is forested. Areas of timberland by ownership class (acres) and percentage of forested acres are depicted in Table 12. Private ownership accounts for the majority of timberland ownership (65 percent) in the county followed by the forest industry ownership (24 percent). Private ownership allows producers of timberland to generate additional income for their farming operations.

Many farms in the county contain woodlands that generate supplemental income. According to Bill Demay, assistant district forester for the N.C. Division of Forest Resources, farmers utilized these woodlands for additional income and received $8,551,950 in revenue from stumpage value in 2009, which placed Richmond County 20th in the state. Stumpage is the price paid to landowners who are selling timber. This income implies a strong incentive for landowners to manage forestland for saw timber production. Pine straw figures are unavailable, but pine straw harvested would also add to the value of woodlands in the county. Intensively managing

forest land involves techniques that resemble those practiced in agriculture and requires diverse management plans.

The Economic Impact of Privately-Owned Forest by the National Alliance of Forest Owners reported the contribution of forestry wood products, paper products and wood furniture industries to the economies of 29 states and five regions in 2009. The average contribution to the state gross domestic product per acre for all forests, public and private, was $359. Private forests account for $382 of the total state gross domestic product. Forests in North Carolina contributed $887 per acre in annual sales in 2009 and also contributed $316 to the state gross domestic product (Table 13).

Richmond County has 151,000 acres of timberland in private ownership (USDA, Forest Service, 2007). If the average state tax contribution in North Carolina per acre is $24.50, as reported in Table 13, this represents a potential of $3,713,090 in state tax contribution for Richmond County. Similarly, if timberland sells for an average of $887 per acre, the value of privately owned forest acreage in Richmond County would represent a figure of $133,937,000. Whether forest land is providing revenue to the county through taxation or to the land owner through the sale of acreage, forest land offers the potential for economic impact to Richmond County.

Table 8. Crop and Livestock Trends

	1997	2002	2007	2008	Highest State Rank (Year)
Major Crops (value of sales $1,000)					
Tobacco	$4,776,000	$1,910,000	N/A	N/A	
Vegetables	$1,581,000	$630,000	$1,984,000	N/A	33 (2007)
Forage Crops (Acres)	3,216	4,398	3,507	5,600	48 (2008)
Major Livestock (number/state rank)					
Broilers	19,349,804 (7)	5,378,488 (9)	7,652,877 (5)	33,000,000 (7)	5 (2007)
Hogs and Pigs	54,720 (29)	53,961 (28)	54,748 (27)	50,000 (26)	26 (2008)
Cattle	N/A	N/A	4,500 (69)	5,300 (53)	53 (2008)

Source: USDA, Census of Agriculture, 2007; NCDA&CS Ag Statistics 2009

Table 9. Value of Sales for Poultry and Their Products, Hogs and Pigs

	Value of Sales 2002	Value of Sales 2007
Poultry	$47,190,000	$105,959,000
Hogs and Pigs	$13,122,000	$15,859,000

USDA, Census of Agriculture, 2002, 2007

Table 10. Agricultural Expenses and Income in Richmond County

	2007	2002	1997
Average farm production expense per farm	$351,948	$202,144	$201,448
Average farm net income	$110,840	$61,339	$43,450

USDA Census of Agriculture, 2007, 2002, 1997.

Table 11. Number of Farms by Income

Farm Income	2007	2002	Change
Less than $1,000	108	80	+28
$1,000 to $2,499	27	27	0
$2,500 to $4,999	23	23	0
$5,000 to $9,999	22	17	+5
$10,000 to $24,999	12	16	-4
$25,000 to $49,999	4	5	-1
$50,000 to $99,999	4	5	-1
$100,000 or more	77	80	-3

Source: USDA Census of Agriculture 2002, 2007

Table 12. Areas of Timberland by Ownership Class (Acres)

Ownership Class	Acres	Percentage
All Ownership	233,600	100
Private Ownership	151,000	65
Forest Industry	55,500	24
State Government	18,800	8
Federal Government	4,700	2
County & Municipal Government	3,600	1

Source: USDA Forest Service, 2007

Table 13. Economic Impact of Privately-Owned Forests, 2006

Economic Impact	
***DII Employment Per 1000 Acres**	12
DII Payroll Contribution Per Acre	$390.00
State Tax Contribution Per Acre	$24.59
Annual Sale Per Acre	$887.00
Contribution to GDP Per Acre	$316.00

*DII indicates the direct, indirect, and induced employment and payroll.
Source: National Alliance of Forest Owner, 2009

Farm Operators

Farm owner demographics and trends are important to know (Table 14). Owner characteristics can shed light on the potential growth and the expansion or reduction in the county's agricultural activity and production. A slight decrease in the number of operators that define their primary occupation as agriculture in Richmond County was noted over the last decade. At the same time, an increase in the number of farm operators with farming depicted as a secondary occupation went from 90 operators in 2002 to 154 in 2007 (USDA Census of Agriculture, 2007). In summary, these trends suggest that agricultural producers defining themselves as full-time are remaining steady in number while those defining themselves as part-time are increasing in Richmond County.

The average age of the principal operator in the county was 58.6 years of age which was consistent with the statewide average age of operators. Richmond County farmers represent an aging farm population, which has implications for future agricultural production.

The gender of principal operators remained fairly static for males while the number of female operators increased by 26 percent. This could be indicative of the transition of farms to heirs or a growth in interest of less traditional owners and operators in agricultural production. This might translate also to a shift from traditional commodity production to other diverse operations, but is difficult to discern if this will occur.

There were fewer African-American operators reported in 2007 than in 2002 but more than reported in 1997. The largest increase (46 percent) was noted in the number of white operators. There were also increases reported in Asian operators, operators of more than one race and the addition of one operator of Spanish, Hispanic or Latino origin.

Agriculture in Richmond County is essential to the economic stability of the county. Both income and employment generated as a result of agricultural industries and agribusinesses account for a significant share of the county's revenue. Livestock is the primary contributor to agricultural income and cash receipts, but a diversified agricultural landscape is emerging in the county as producers transition from full-time to part-time operators. The aging farm population has additional implications for the complexion of agriculture in the future.

The timber resources in the county are vast and offer opportunity for planned management of forest resources for timber production as well as alternative uses. The impact of agriculture is recognized by planners and leadership in the county and land-use planning is currently structured to support the retention of agricultural lands. Even with this understanding and support, numerous challenges and opportunities exist to further support and preserve farms and forests in Richmond County.

In order to better realize these challenges, three target audiences were surveyed and interviewed to better evaluate the current state of agriculture. Additionally, information was

gathered to determine what agricultural producers, agribusiness owners and non-farm residents of Richmond County know about agriculture and forestry and more importantly whether they support the preservation of farms and forests.

Table 14. Farm Operator Statistics in Richmond County

	2007	2002	1997
Number of Operators With Farming as Primary Occupation	124	167	129
Number of Operators With Farming as Secondary Occupation	154	90	122
Average Operator Age	59	56	55
Principal Operator: Male	232	230	223
Principal Operator: Female	46	27	28
Principle Operator Race: White	361	312	248
Principle Operator Race: African American	18	25	3*
Principle Operator Race: Asian	10	-	-
Principle Operator Race: Spanish, Hispanic, Latino	1	-	-
More Than One Race	7	2	-

USDA Census of Agriculture
*1997 data, Black and other races

Opportunities and Challenges

In an effort to access the opportunities and challenges facing Richmond County farmers and agribusinesses, and to gain insight into the perceptions of non-farm residents regarding agriculture, surveys and interviews were conducted of these three target audiences. The surveys were created and distributed by Mount Olive College and Ft. Bragg BRAC RTF. The demographics of the three target audiences demonstrate adequate representation of the agricultural community. The surveys represent a snapshot of agriculture in the county. Information gathered from focus groups and individual interviews proved valuable in substantiating survey results.

Livestock is the mainstay of agriculture in the county. Respondents to the survey represented the livestock industry as well as other commodities as follows: grapes, vegetables, grain corn, silage corn, hay, sweet potatoes, peanuts, tobacco, cotton, soybeans, tree fruits, timberland, herbs, flowers, perennials, nursery/greenhouse, other field crops, small fruits, wheat/small grains, top floor hogs, broilers, beef cattle, grass-fed cattle and horses. The diversity of commodities grown by respondents coincides with the diversity noted in the farming community of Richmond County.

This diversity also exemplifies the trend of farmers who have moved toward the production of value-added products, some doing so on a part-time basis. Figure 16 illustrates this trend as a majority of respondents are self-described as part-time farmers of working less than 40 hours a week on the farm. Figure 17 designated the amount of income produced on the farm by respondents, which further substantiates the presence of part-time farmers. Agribusinesses that responded to the surveys observed trends in agriculture in Richmond County that echoed the move to more part-time farms and more diversification as they adjust to provide supplies and services to these operations.

Marketing of products is imperative to both full- and part-time farmers. Farmers surveyed indicated they sold products produced through two primary channels:

- 83.3 percent were sold wholesale through auction, brokers and third parties primarily representing marketing of livestock
- 33.3 percent sold directly to consumers (farm stand, U-pick, internet, etc.)

As diversification of products continues, it is expected that marketing options and opportunities will additionally expand. The marketing of livestock—hogs and broilers—does not afford options for market diversification, but it does appear that interest in direct marketing of value-added products is a future area of expansion in the county. It should be reiterated that many farmers deemed as part-time are not all engaged in value-added crops that are direct marketed.

A number of part-time farmers are involved in intensive broiler or hog operations that allow them the option to seek income off the farm.

That said, 100 percent of the producer respondents reported that they expect to expand their agricultural operations in Richmond County over the next five years. Agribusiness owners indicated a similar expectation for their own businesses with intentions to increase agricultural inventories and sales over this same period. Of the farmers that plan to expand, 75 percent noted that they expect to purchase additional equipment, while 38 percent would seek to purchase additional acres or bring inactive acreage into production.

Land is seen as a limited resource for farmers surveyed. Lack of available acreage was identified as a major hurdle by 56 percent of farmers and was denoted as the main reason they could not expand their operations. More than a quarter of the respondents indicated that they expect to rent additional acres, but 11 percent noted that there is a lack of available land to rent. When asked about other areas of expansion, most noted that they intend to raise additional animals, renovate buildings, add new technology and develop a direct market for some of their farm products.

Of striking significance, when farmers were asked why they had not expanded or did not anticipate expansion, 89 percent indicated age to be a primary factor. This presents an additional challenge for the future of agriculture in the county but opportunity as well. A quarter of the respondents indicated that they anticipate the transfer of ownership of their farms to others. Sixty-seven percent indicated that they expect to transfer to family to continue farming, and another 11 percent indicated that they would seek to sell to other farmers to keep land in production. Only 22 percent indicated that they would transfer their land to family without the intent to continue farming. Several producers in personal interviews cited grave concern regarding the future of their farm and noted a lack of young farmers and/or family members with an interest to take over the operations. These statistics indicate that the majority of land currently in farming is expected to remain in agricultural production.

When asked how long farmers intended to continue farming, 36 percent replied five to 10 more years, while 46 percent indicated an additional 20 years. The future of farming represented in Richmond County is one that is stable and offers opportunity for growth. Producers' commitment to sustainability of their operations is clearly a real attribute for the county.

Of the farmers surveyed, 56 percent indicated that 50 percent or less of their income comes from farm income. The remaining 44 percent surveyed generate greater than 50 percent of their income from the farm. The nearly equal split of respondents once again exemplifies the shift toward part-time farmers whether through the diversification to value-added product production or the addition of intensive livestock production units.

The degree of knowledge about programs and policies that impact farms and forests was also high among the producers in the county. However, from data gathered, there are educational opportunities in a number of areas that could benefit Richmond County farmers.

It was apparent from the survey results that many farmers are not familiar or knowledgeable of Voluntary Agricultural District (VAD) programs. Twenty percent indicated they are participating in the program, and yet Richmond County does not presently have a VAD program. More than 80 percent of respondents indicated that they are not aware of North Carolina's Enhanced Voluntary Agricultural District program, and more than 90 percent indicated that they are not aware of North Carolina's Agricultural Development and Farmland Preservation Trust Fund.

Nearly 60 percent stated that they are aware of North Carolina's agricultural present-use value assessment and taxation of agriculture, but 75 percent were not aware of the conservation easement tax credit, and more than 90 percent were not aware of North Carolina's historic preservation tax credit. These programs represent important options or tools for farm and forest landowners to utilize. It is apparent that education and training related to these programs and their benefits could be of interest and advantage to landowners.

Farmers surveyed and interviewed expressed familiarity and indicated the importance of conservation cost-share programs, government support payments, disaster relief payments and right-to-farm laws. They additionally indicated farm/land values were of concern and 58 percent noted the one thing that would help them to keep their land in agriculture is lower property taxes.

Landowners are less familiar with agriculture district maintenance/expansion, transfer of development rights and carbon sequestration as potential opportunities to assist farmers in retaining profitability in the future. This knowledge deficit was evident in agribusiness owners as well. Additionally, no landowners that responded indicated use of their land for purposes related to wildlife, hunting, mining or other compatible uses. Opportunities for agritourism and these diverse uses exist. Exposing landowners to existing operations and opportunities is essential to encourage them to pursue this diversification.

Farmers must be environmental stewards and protect the resources from which they gain their livelihood. However, regulations can often create difficulty in management and increase costs thereby reducing profitability. When landowners were asked what environmental or energy issues they deemed important to the future of their operations, water use restrictions, environmental regulations for nutrient and soil, and on-farm energy use and production were noted of greatest concern. The responses indicate the need to educate farmers in the topics identified.

When asked about financial or tax issues, farm and forest landowners overwhelmingly found the following issues to be very important: income tax reform (91 percent), capital gains and

estate tax reform (91 percent) and present-use value and taxation (73 percent). Most noted these as factors that limited their profitability.

Over 70 percent of respondents also indicated that estate planning for farm transition and reduced health care costs are very important as the farming population ages. More than 45 percent of respondents noted that they need additional information to better understand risk and risk management as well as issues and opportunities related to the sale or lease of development rights. As Richmond County farmers and forest landowners have diversified and specialized to remain viable, the need exists to further involve and educate them about existing tools and programs that may assist operations in remaining profitable.

Farmers also expressed a need for information about direct marketing of products and development of new products and markets. There was an expressed need for information about buying and selling cooperatives. Continued efforts to maintain farmers' viability opens opportunities for marketing and distribution channels not utilized in the past. Ensuring expertise to guide this interest is important.

Among the areas that producers and agribusiness owners designated a need for technical assistance or practical training include:

- Woodlot management assistance
- Assistance with farm transfer/estate planning
- Assistance with marketing and sales promotion
- Conservation Best Management Practices
- Nutrient and environmental management training
- Pesticide management training

To accomplish agricultural awareness through marketing and sales, both farmers and agribusinesses feel that youth education and consumer education are crucial to the future success of agriculture and agribusiness in the county. Encouraging youth to pursue careers in agriculture is deemed essential.

The spatially diffuse nature of independent farms and agribusinesses contribute to the lack of economic development attention that manufacturing and other industries typically attract. Personal interviews conducted verified the belief that the farming industry is not accepted by most economic developers as a viable economic stimulus in the county. However, Perdue Farms is the largest employer in Richmond County, and this fact alone directly impacts the economic well-being of all citizens in the county. The challenge remains to facilitate economic developers and county leaders with an understanding of the true economic value of agriculture and agribusinesses. More importantly, it is imperative for economic developers to recognize and include agriculture as a viable economic engine to the county.

Mindset infers the general belief of understanding about an issue. Farming as an occupation has two distinct mindsets. First and foremost, farmers are sometimes reluctant to encourage their children to farm. They have a clear understanding of the hard work and labor involved in farming, the hardships of nature that cannot be controlled and the daily risks they take to farm. Some in the farming community do not view farming as a privileged and esteemed occupation. Farmers often encourage their children to get a better education and seek employment where they will have a steady income and benefits.

However, farming is more than an occupation. It is truly a way of life. Farmers need to be optimistic about the future of agriculture and encourage their children to stay on the farm, but in order to achieve this they must see opportunity for the future. Fewer farmers and farm families view farming as a privilege. Regulations, lack of profitability and risk often overshadow the ability to productively and profitably work the land while sustaining the cultural values that honor the county's heritage. The adage that "we are our own worst enemy" is one that opportunity and education can change.

Another mindset relates to the perception of non-farm residents and agriculture. Because most residents have not farmed or owned land, they do not realize the significant financial and economic stresses many farm families face. Nor do they realize the skills required to be successful in agriculture or agribusiness. Most importantly they have no concept of the impact of agriculture to the county or state economy. Consumer education is one avenue that can change this, but the agricultural community must be engaged in the effort.

Eighty percent of the non-farm residents queried were between 25 and 64 years of age. This age range is most impacted by the agricultural industry in the county. These are the working public and make up a large portion of the consumer public as well. The majority of residents responding had lived in the county for more than 20 years (Figure 18).

More than 22 percent of the non-farm respondents on the BRAC-RFT survey indicated that agriculture is a declining industry with no future growth, 15.1 percent had not visited a farm in more than 10 years, and 1.9 percent had never visited a farm. The lack of understanding of farming and its value to the county is evident non-farm resident's estimate of the size of Richmond County's agricultural industry. Nearly 78 percent of the respondents incorrectly estimated the economic value of agriculture. Clearly, educational measures are needed to educate the public about the agricultural industry.

Seventy-one percent of the respondents reported that they have lived near a farm or timber operation, with 34 percent currently living within one-fourth of a mile of a farm or forest. Of those have lived near a farm or timber operation, 81 percent noted that the land owner or farmer was a good neighbor (Figure 18).

Figure 19 denotes that the majority of respondents (59 percent) had visited a farm or timber operation within the last year, and only a modest number of residents responding had never visited an agricultural operation.

The perception of agriculture and its potential for growth was noted by the majority of respondents to be stable or have some potential for expansion (Figure 20). While residents gauged the status of agriculture positively and its future to be promising, only 2.2 percent of those questioned correctly estimated the size of the county's agricultural industry of over $300 million dollars (Figure 21). When asked if Richmond County should take steps to help preserve farmland non-farm respondents indicated "yes" with only a small percentage indicating uncertainty (Figure 22). Additionally, when asked if agricultural businesses should be encouraged to expand in Richmond County, 98 percent responded affirmatively with 2 percent uncertain and no one responding negatively. The response from non-farm respondents shows definite support for farmland preservation and expansion of agricultural businesses in Richmond County.

Non-farm respondents also were active in supporting agriculture as an industry, not merely as a land use. The majority of those surveyed made purchases at fruit and vegetable stands, shopped at stores featuring local farm produce and products, patronized U-pick operations and had participated in some type of farm tourism (Figure 23). This strong support of locally grown products is encouraging as farms continue to seek markets for diversification.

Ninety-eight percent of non farm respondents and those interviewed believe farming enhances the scenic beauty of Richmond County, and 90 percent feel that farming enhances the open space in the county. Eighty-six percent think that local farmers deliver generally high-quality products, and 82 percent feel that farming is positive for the environment.

Less than half of the respondents (45 percent) believe that farming presents a good career for enterprising persons, but 67 percent think agriculture and farming are high-technology industries. More than 86 percent of respondents agreed with the need to provide loans and grants to develop local farm enterprises, and 78.4 percent think tax breaks to farmers are important.

The responses indicate support from the public for county government to assist with loans, grants and tax incentives to enhance and increase farm enterprises. These responses also indicate a need to include agriculture and agricultural industries as career options to be explored by youth and those seeking new employment.

Of the non-farm respondents, 100 percent support local government funding for farmland preservation. Citizens who were interviewed echoed the opinions of agricultural producers and agribusiness owners and support funding for farmland preservation to protect the future of agriculture and its contribution to the economy, rural heritage and green space.

Survey results of non-farm residents clearly demonstrate that Richmond County residents value farming not only for the scenic beauty and open spaces but also for the high-quality products produced. Although residents had no idea of the economic impact that agriculture and agribusiness contribute to Richmond County, they responded 100 percent positively for local government to fund farmland preservation. This serves as a clear message to county leaders that farmland preservation is valued and supported by Richmond County residents.

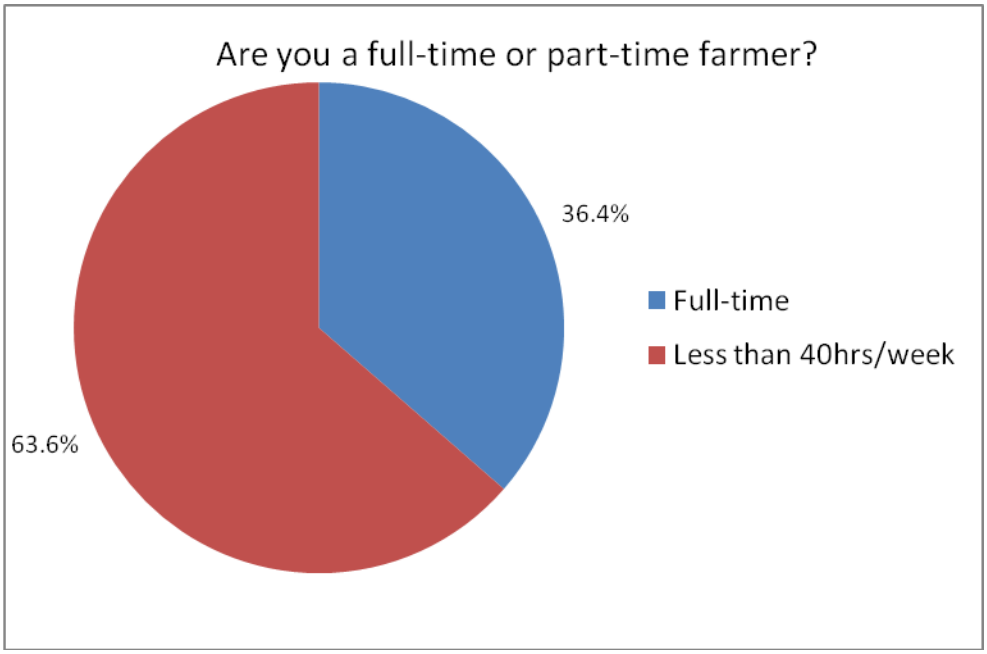


Figure 16. Richmond County Agricultural Producer Survey

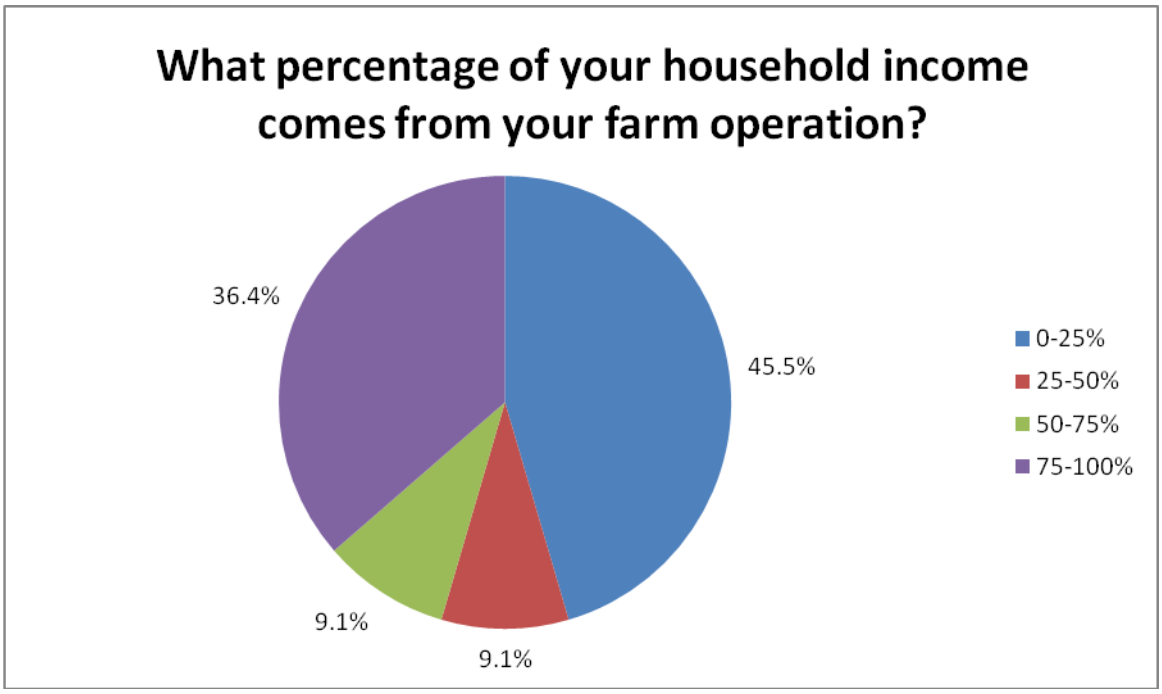


Figure 17. Richmond County Agricultural Producer Survey

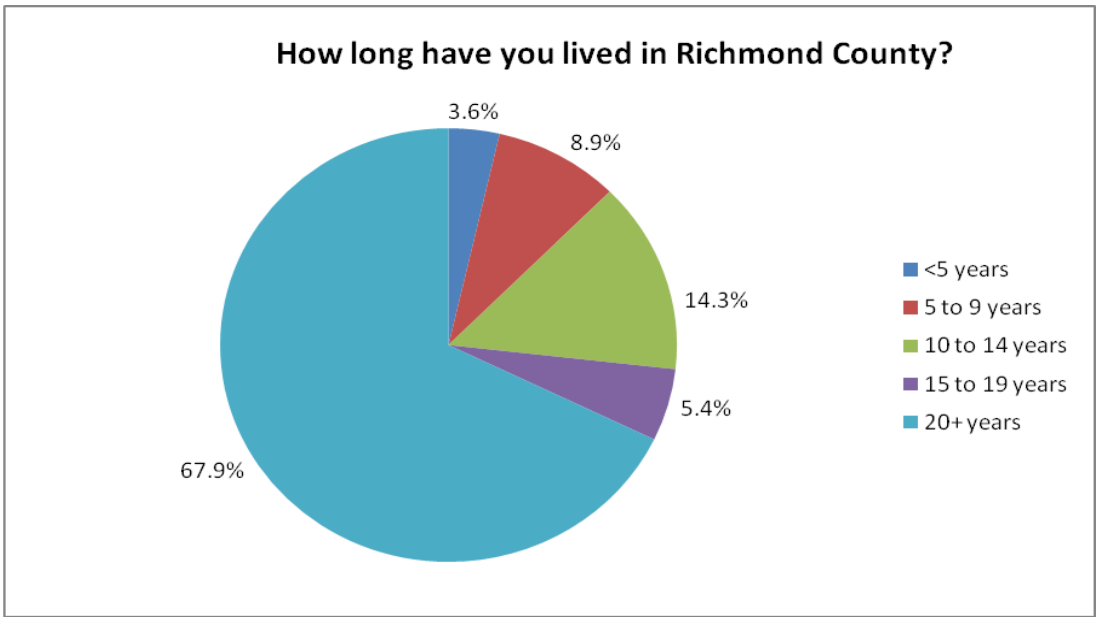


Figure 18. Richmond County Non-Farm Survey

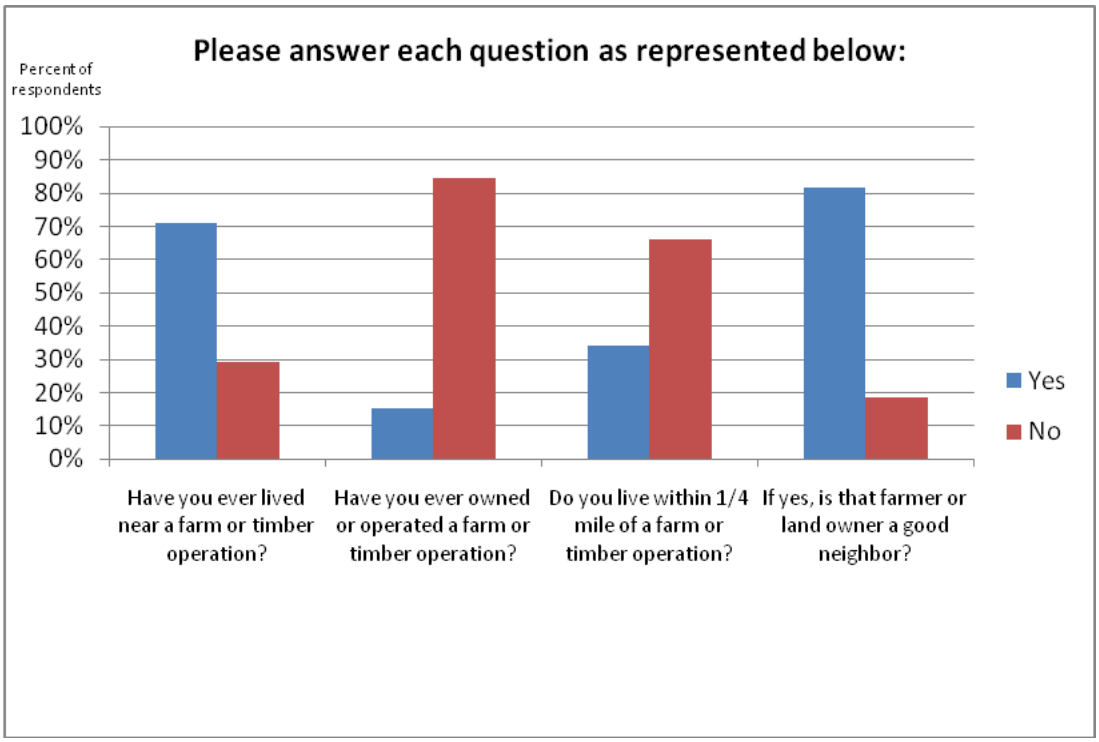


Figure 19. Richmond County Non-Farm Survey

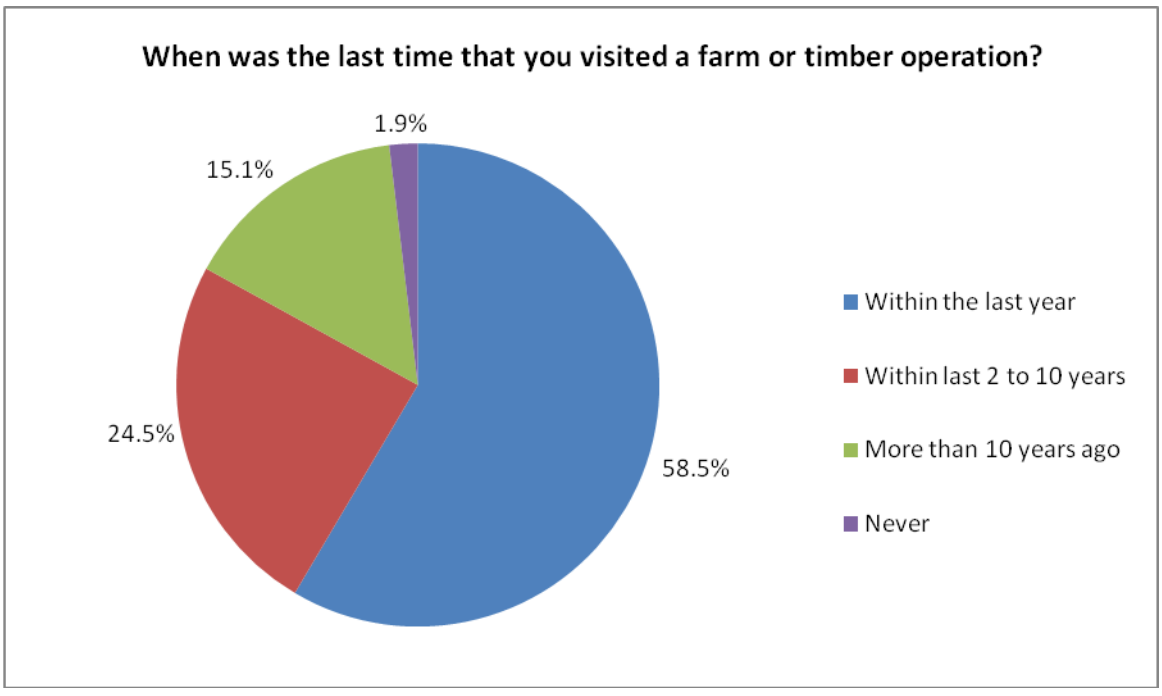


Figure 20. Richmond County Non-Farm Survey

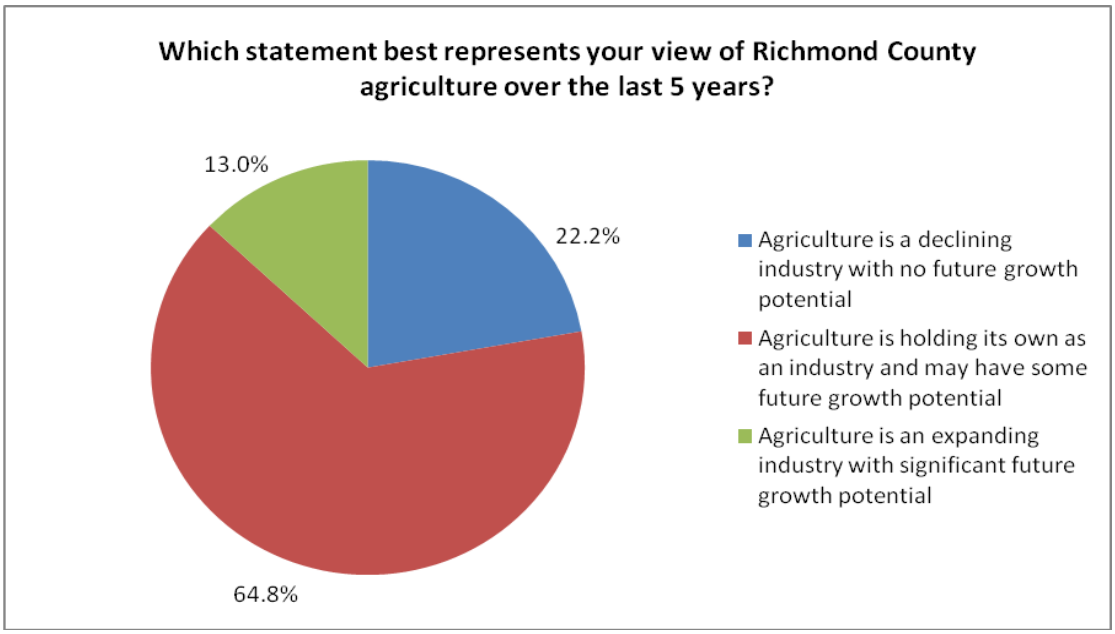


Figure 21. Richmond County Non-Farm Survey

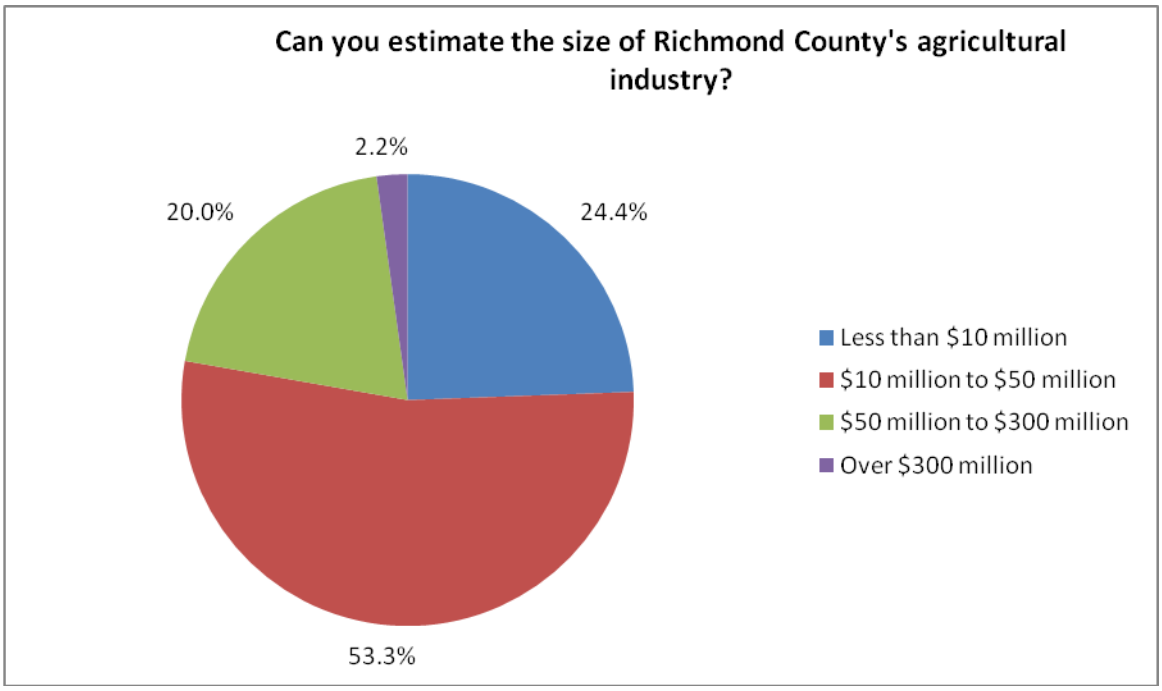


Figure 22. Richmond County Non-Farm Survey

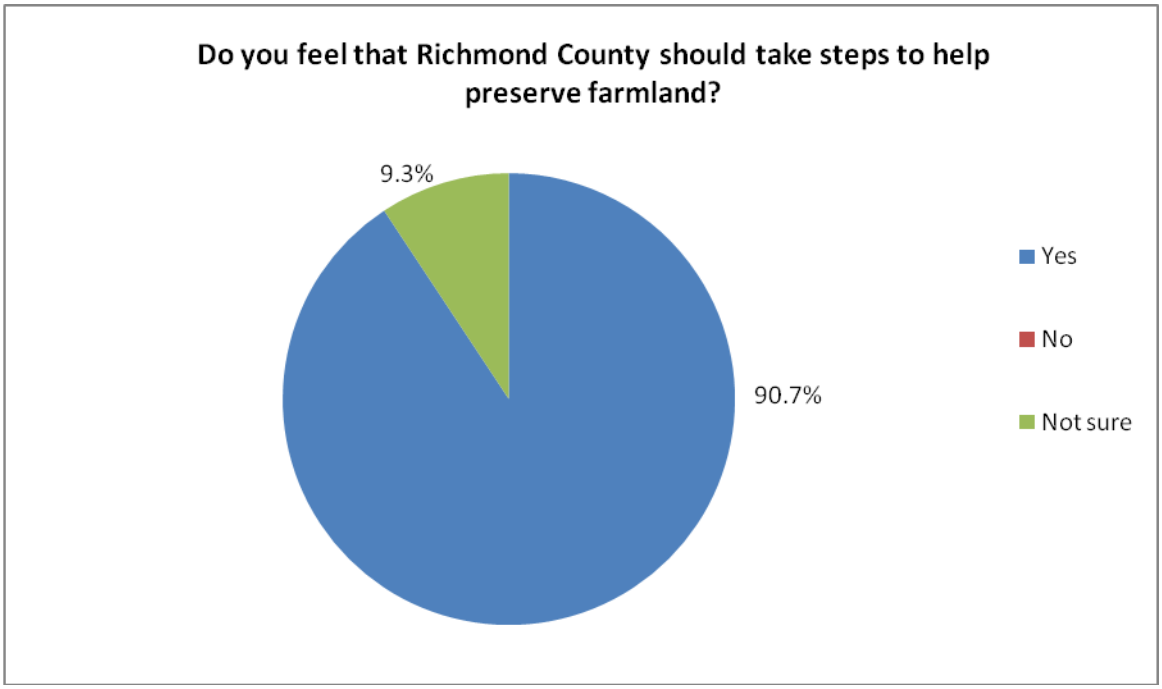


Figure 23. Richmond County Non-Farm Survey

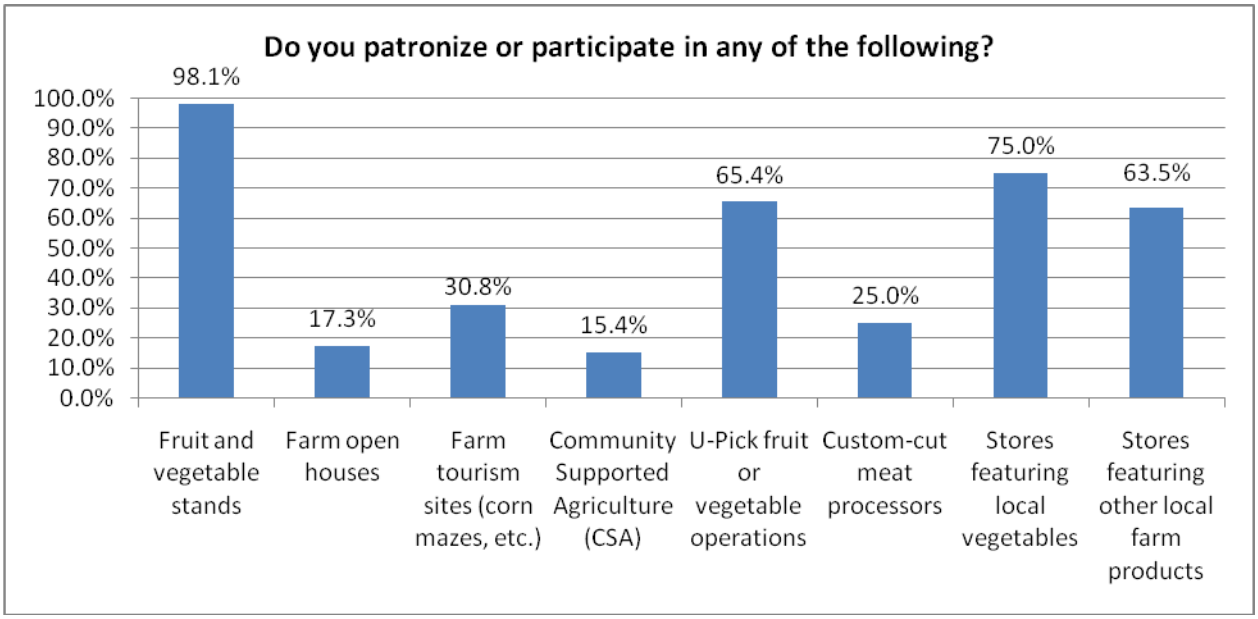


Figure 24. Richmond County Non-Farm Survey

Strengths and Opportunities

Agriculture has been an integral part of Richmond County's development. Survey results from all targeted audiences support the expansion of farming operations, support the provision of public support of agriculture, recognize agriculture as part of the county's cultural and historical heritage and appreciate the aesthetic qualities of agriculture. These survey results outline opportunities in the county. Present patronization of farm products, the local food movement, potential NCDA Century farm designations, potential cooperatives and the North Carolina Value-Added Cost Share program are other opportunities for agricultural sustainability. Agritourism and expansion of marketing venues will strengthen the economy and contribute to the profitability and sustainability of family farms as well.

As referenced, mindsets also play a role in providing opportunities in agriculture. Farming needs to be identified as an honorable occupation. Farmers today are visionaries. They set personal and professional goals and start with the end in mind. They must have business skills and a good understanding of economics. Successful farmers know how their operation is doing, what their business and production trends are and how they fare in relation to others in the agricultural industry. They must stay abreast of current events that may impact their business.

Farmers must possess delegation skills. Successful delegation means relinquishing control over some tasks. The knowledge of basic and advanced management principles is crucial to the success of agricultural operations. Organizational skills are critical for producers to acquire. This includes awareness and use of business structures, accounting practices, tax law, general management and time management.

Farmers need good communication skills as well. The ability to deal with lenders, suppliers, landowners, employees and family is important. Positive personal interaction is especially important for those in product development and promotion. Farmers must have great balance in the skills needed to handle the day-to-day stress and decision-making.

Farmers today are businessmen in every sense of the word. Farming takes skill, talent, initiative, innovation and business savvy to be successful. From personal interviews, it is difficult for the public to grasp the multi-tasking and multi-talents needed to succeed as a farmer. Unless the public has some knowledge and experience in farming, they tend to see a farmer as a day laborer and a tiller of the soil.

With these important and necessary skills, farmers in Richmond County are exploring options to remain viable. The potential for farm expansion is a definite strength and opportunity for the county particularly in fruit, vegetable and livestock operations. This is also tied to the availability of fertile and suitable soils in the county for farming. Part-time farmers would be able to manage smaller acreage, and fruits and vegetables are better suited for this production.

Respondents to the agricultural survey indicated that they plan to stay in business. These predictions strengthen agricultural sustainability in the county. However, there is still a need to assist producers in developing retirement/transition plans so that numerous families are not relying on a moderate income for support. Strengthening youth education programs about agriculture and producers' mentoring to youth in a positive manner are important to engaging the younger generation in the field of agriculture.

The N.C. Department of Agriculture and Consumer Services designates farms with 100 years of farming heritage as Century Farms. To be eligible for Century Farms, a farm must have had continuous ownership by a family for 100 years or more. Century Farms designation and subsequent signage is a way to enhance the historic heritage of farmland in Richmond County. In fact, there are 10 farms in the county currently designated as Century Farms. There are opportunities for additional farms to be designated as Century Farms and to carry on the proud farm family tradition while increasing awareness of the virtues of agriculture. http://www.ncagr.gov/paffairs/century/

Non-farm respondents appreciate the scenic opportunities that agriculture and forestry offer. While this may lead to an appreciation of agriculture, to truly strengthen the commitment of all residents to the future of agriculture, the impact of agriculture and agribusiness must be marketed. While the general public supports farmland preservation, awareness of the impact to revenue and overall employment and quality of life of agriculture could broaden and solidify this support.

Diversification of farming operations is critical to sustainability of farmland and agricultural profitability. The local-food movement is an opportunity for many farmers, especially small and mid-sized farmers who market most of their products directly to consumers. The majority of non-farm respondents surveyed indicated that they patronize stores that feature local farm products and are direct market consumers. The data implies that the citizens of Richmond County want fresh produce and are willing to purchase locally. In the comment section of the survey, several respondents mentioned the potential of a Regional Farmer's Market. In an interview with the chairman of the Richmond County Commissioners, he indicated the same potential and possibilities exist to support such a market.

In January 2010, a workshop on Community Supported Agriculture (CSA) was held for Moore, Richmond and Lee County farmers, local food advocates and organizations. Responses to the Sustainable Sandhills Local Food Survey indicated a high level of interest in accessing local food. Nearly 90 percent of the respondents (general public) in the Sustainable Sandhills survey had no previous experience with CSAs, but 60 percent were willing to spend up to $375 per season for such a service. Nearly 50 percent of respondents requested seven types of fruits and vegetables per week. Interestingly, nearly 70 percent of respondents preferred sustainable growing practices instead of certified organic growing practice (www.sustainablesandhills.org January 19,2010, *CSA Training and Survey Release a Success*).

Organic production requires land to be idle from production for three years, thus creating a loss of income for producers. Sustainable practices, which are different from organic, do not require land to be idle and can allow large-scale production crops to transition to value-added crops.

The nature and function of cooperatives differ considerably—such as purchasing cooperatives, consumer cooperatives and marketing cooperatives. In the context of agriculture, a farmer's cooperative refers to an organization of local farmers established to pool resources for mutual benefit in regard to the growth and sale of their products. According to the BRAC RTF agricultural producer survey respondents, only 16.7 percent presently sell their produce to a cooperative because cooperatives are not easily accessible to Richmond County producers. Producers need training on how cooperatives operate. However, cooperatives might offer opportunities for small fruit and vegetable growers in Richmond County to increase profitability.

There are several cooperatives operating in North Carolina. The Sandhills Farm to Table Cooperative is a business enterprise selling fresh local food (http://www.sandhillsfarm2table.com). This is a business cooperative owned and controlled by those who produce (farmers), distribute (workers), and consume (customers) a product. The cooperative is just underway but will eventually sell food that is grown on farms in Moore, Lee, Harnett, Hoke, Richmond, Montgomery, Scotland and Chatham Counties. This cooperative will open avenues for Richmond County producers to market and sell their products.

The North Carolina Value-Added Cost Share (NCVAS) program, administered by N.C. MarketReady, is a program funded by the N.C. Tobacco Trust Fund Commission (http://www.ncmarketready.org). The purpose of the program is to support the development of value-added agricultural operations. Richmond County is poised to take advantage of this opportunity for producers to expand their product offerings to a broader audience. Producers and applicants can seek dollars to assist in the purchase of new or used equipment with cost-share funding. Such programs as the NCVAS program are viable and potential ways for farmers to add value to their products. There has been no indication that Richmond County producers have applied for these funds, but the potential opportunity is a promising one.

Like most of North Carolina's rural communities, Richmond County is struggling to maintain vitality and a sense of identity. There has been a shift to fewer, but larger and more specialized as farms, and rural populations have declined. These realizations have exacerbated the economic status of many rural communities. Jobs—any kind, at any cost—seem to be a primary objective for some residents of rural communities. And job searches often take people further away from their communities.

Rural economic development and tourism opportunities can create places where workers are productive and where they want to stay to become part of the community. Development linked to local resources will protect the physical and social environment of the community and

enhance the quality of life. Quality of life is the product of relationships among people and between people and their environments. The linkage of rural community development with varied local resources is increasingly important.

There is no question that tourism brings new money into the local economy through visitor expenditures. Tourism helps diversify and stabilize rural economies. It also can help attract additional industry by creating a larger business base and increasing visitors' recognition of opportunities. Tourism creates jobs and income through business expansion and new business start-ups. It also supports business services and products that could not be supported by the community's existing retail trade.

Rural tourism embraces the people of the community and is strengthened with their cultures, traditions, values and connection with local families. Rural tourism involves the employment of local people and includes small-scale enterprises, open space and nature. It includes the attraction of countryside, rural areas and a visual amenity. Rural tourism is an inclusive term that embraces the complex patterns of rural environment, history and location.

The Richmond County Tourism Development Authority's website entices tourists to purchase fresh agricultural commodities in Richmond County, strengthening the county's commitment to agriculture. There is a link to agritourism sites in the county at the Tourism Authority's website: www.visitrichmondcounty.com. Agricultural producers and agribusiness owners must begin to embrace their rural heritage and market it. Diversification to compatible uses is for the most part an unexplored avenue for continued profitability.

HomegrownHandmade is an identification and marketing program sponsored by the N.C. Arts Council and N.C. Cooperative Extension, Richmond County (www.homegrownhandmade.com). Art roads and farm trails in North Carolina have been identified. Richmond County is listed in the *Scenes of the Sandhills* section of the program. There are 37 sites in Richmond County identified: 17 in Ellerbe, five in Hamlet, one in Hoffman and 14 in Rockingham. These include nurseries, bee farms, heritage trails, museums, a state fish hatchery and a number of farms to visit. HomegrownHandmade is an opportunity for producers and landowners to expand into agritourism as another means of diversification for profitability and sustainability.

Marketing is an obstacle for producers. North Carolina Farm Fresh, which is part of the N.C. Department of Agriculture and Consumer Services, is a directory of pick-your-own farms, roadside farm markets and farmer's markets throughout North Carolina. It is designed to help the consumer find the freshest locally grown fruits, vegetables, ornamental plans, flowers, herbs and Christmas trees. On the N.C. Department of Agriculture's website http://www.ncfarmfresh.com, Richmond County has 10 sites listed. The North Carolina Farm Fresh program offers yet another opportunity to enhance agricultural income and profitability.

All producer survey respondents had expanded some part of their farming operations within the past five years. Even though producers are concerned about property taxes, the ability to sell or lease land and a decrease in farm profitability, they have purchased additional equipment, renovated building, put into production inactive land, rented additional land and diversified commodities. These actions indicate a commitment and willingness to continue in agricultural production in Richmond County. With education and training, additional tools to support farmland preservation, agricultural development and diversification exist that growers must embrace and local leaders must support.

Working Lands Protection Programs and Tools

(Compiled by John Bonham, 2009)

There are numerous programs and tools that can enhance farmland sustainability. Some of these programs are state programs, others options are for the local leadership to consider. These programs offer some viable options for Richmond County.

Present-Use Value Tax Program

Present-Use Value, or PUV, is a program established by N.C.G.S. 105-277.2 to .7 and administered by the county assessor through which qualifying property can be assessed, for property tax purposes, based on its use as agricultural, horticultural or forest land. The present-use value is the value of the land based solely on its ability to produce income. Qualifying property is assessed at its present-use value rather than its market value. The tax office also maintains a market value for the land and the difference between market value and the present-use values is maintained in the tax records as deferred taxes. When land becomes disqualified from the program, the deferred taxes for the current and three previous years, with interest, will usually become payable and due.

Basic Requirements

- Minimum acreage of production land:
  - 10 acres for agricultural use
  - 5 acres for horticulture use
  - 20 acres for forest use
- Production must follow a sound management plan.
- Agricultural and horticultural land must have at least one qualifying tract that has produced an average gross income of at least $1,000 for the three years preceding the application year.
- Forest land must follow a forest management plan.

Benefits

Protection from:

- Increasing land values that are based on development potential.
- The potential increase in property taxes.

More information can be found at: http://www.dor.state.nc.us/publications/property.html

Voluntary Agricultural Districts (VAD)

Established by N.C.G. S. 106-737 to 743 and administered at the county level, Voluntary Agricultural Districts are designated areas where commercial agriculture will be encouraged and protected. The purpose of the districts are to increase identity and pride in the agricultural community and to increase protection from nuisance suits and other negative impacts on properly managed farms.

Basic Requirements

- Land must be enrolled in the Present-Use Value program or otherwise be determined to meet the qualifications of the program.
- The landowner must enter into a revocable agreement to limit development for a ten-year period.

Benefits

- Notification to buyers of nearby property that they're moving into an agricultural area.
- Abeyance of water and sewer assessments.
- Public hearings on the condemnation of farmland.
- Stronger protection from nuisance suits.
- Representation by an appointed board regarding concerns on threats to the agricultural sector.

Enhanced Voluntary Agricultural Districts

Established by N.C.G.S. 106-743.1 to .5, an Enhanced Voluntary Agricultural District is a VAC formed of one or more farms that are subject to an IRREVOCVABLE ten-year agreement to limit development. In return for the condition of irrevocability, the landowner receives the added benefits of being able to receive 25 percent of gross revenue from the sale of non-farm products and still qualify as a bona fide farm, and being eligible to receive up to 90 percent cost-share assistance from the Agricultural Cost Share Program.

Conservation Easements

A conservation easement is a written agreement between a landowner and a qualified conservation organization or public agency under which the landowner agrees to keep the land available for agriculture and to restrict subdivision, non-farm development and other uses that are incompatible with commercial agriculture.

Basic Requirements

- Permanently foregoing the right to subdivide or develop the land being conserved. There will be other limitations on activities to preserve the land's productivity, environmental values, and rural character.
- Cash payments in the range of $20,000 to $40,000 are needed to cover the costs of the transaction. These costs are for legal services, a survey, an appraisal, long-term stewardship services provided by the conservation partner, and other miscellaneous activities. In some cases grant funds will cover these costs.

Other Information

- A portion of the property can be left out of the easement, thereby providing an area for future homes and other non-farm activities.
- Agricultural activities, including forestry, are allowed under the agreement.
- Despite the term "easement" access to the public is not provided by the agreement.
- The value of a conservation easement is determined by a licensed land appraiser and is typically between 25 percent and 75 percent of the land's market value.
- A periodic inspection of the property is required to ensure that development does not occur. This provision will be included in the agreement.
- The agreement is recorded on the county's land records and runs with the title. All future landowners must comply with the terms and conditions of the agreement.

Financial Benefits

- If the conservation easement is donated then the landowner will likely qualify for a federal income tax deduction and a state income tax credit. The value of these benefits depends on the appraised value of the easement and the income tax situation of the landowner.
- A conservation easement can also be sold by the landowner through a transaction commonly referred to as a Purchase of Development Rights (PDR) or Purchase of Agricultural Conservation Easement (PACE). Funds to purchase a conservation and easement can be raised from private and government sources. North Carolina and the federal government have programs to purchase agricultural conservation easements. Funding through these programs is very competitive and will generally amount to a percentage of the easement's value. The tax benefits described above can be claimed for any of the easement's value above the purchase price.

Term Conservation Easements

Also called Agricultural Agreements, these agreements are similar to conservation easements but apply for a finite period of time agreed to by the landowner and conservation partner.

Lease of Development Right

Cumberland County has created a lease of development rights for land that is in near proximity of military operations and Ft. Bragg. These parcels have been identified as "critical" and "important" in the JLUS 2008 study. This program essentially allows the landowner to lease the development rights of their land to the county for the same amount as their property tax. The program is to encourage landowners to maintain their working lands in order to provide an adequate buffer for the base, its training, and its operations. A copy of the Cumberland County is provided in the appendices.

Farm Transition Planning

Making careful plans for the transfer of ownership of farm property and assets from the current owner to the next can be enough to preserve a farm for decades. Many options are available when planning an estate or land transfer. Farm owners can increase the likelihood of a successful transition that maintains the viability of the farm by obtaining professional assistance early in the process. The NC Farm Transition Network provides educational and technical resources to professionals and landowners on this matter.

Right-to-Farm Law

North Carolina has a right-to-farm law (N.C.G.S. 106-700 to 701 (2006) which protects farm and forestry operations from being declared a nuisance as long as they have been in operation for at least one year and are operated properly and without negligence.

N.C. Agricultural Development and Farmland Preservation Trust Fund

N.C.G.S. 106-744(c) established a trust fund to be administered by the Commissioner of Agriculture. The purpose of the trust fund is to provide monies to purchase of agricultural conservation easements and to fund programs that promote the development and sustainability of farming, and the transition of existing farms to new farm families. Counties and nonprofit conservation organizations can apply for grants for these purposes. The General Assembly appropriated $8 million to the trust fund for the 2008 fiscal year and $4 million for the 2009 fiscal year.

Development Rights Ordinance For Ft. Bragg Jlus Identified "Critically Important" And "Important" Lands

As recommended by the Ft. Bragg Joint Land-Use Study (JLUS) that was conducted by the Regional Land-Use Advisory Council (RLUAC), and Ft. Bragg, it would benefit the county to

create tools to provide options for land owners in areas deemed important to the training efforts of the military. Investigation into a program offering lease of development rights should be considered. Cumberland County has a lease that could be used as a model. It was designed prior to the JLUS Study. Cumberland County's lease for development right encourages property owners with land along military boundaries to enter into a lease of development rights agreement with the county (Cumberland County Lease of Development Rights). Property owners lease their development rights to the county for a specified number of years. The county, in return, provides an annual payment to the property owner that is equivalent to the county property taxes on the land. It is believed that this will possibly serve as a tool for the future.

Recommendations

This section offers suggested recommendations for Richmond County to protect farmland from conversion and enhance agriculture's viability. Community leaders are encouraged to adopt, modify or add additional strategies that they deem appropriate for Richmond County. Each action is followed by a proposed time of implementation. Actual implementation will be contingent upon the county's financial state and allocated human resources.

Evaluate and educate property owners of the present-use tax value program.

Identify land that qualifies for, but currently is not enrolled in, the agricultural present-use value tax program. Educate agricultural and forest landowners to take appropriate steps to engage their property in the program. The Division of Forest Resources in Richmond County has the capability to evaluate and write forest management plans for landowners meeting requirements to qualify for the Present-Use Tax Program. The N.C. Cooperative Extension Richmond County Center working with the Tax Assessor's office should develop an educational program for agricultural producers, forest land owners, property heirs including absentee landowners to encourage enrollment in this tax incentive program. The result of these educational and service programs by county agencies should reduce costs to landowners without compromising tax revenue collections for the county.

Implementation and Timelines:

An evaluation of existing properties enrolled in this program should be conducted in concert with their present land use and parcel acreage. The Agricultural Advisory Board should make a concerted effort to assist in promotion of the present-use value tax program and its benefits to farmers and qualifying forest landowners with the assistance of farm-related agencies and organizations working with the Tax Assessor's office.

Efforts to begin this educational program and evaluation of properties through the efforts of the Agricultural Advisory Board should be an on-going process. Benchmark dates should be established by the Agricultural Advisory Board on an annual basis. First date to assess additional properties added to the present-use tax value program should be by June 2011.

Develop an Agricultural Education Action Team for Richmond County.

Educating Richmond County agencies and governmental officials on the importance of agriculture is imperative to assuring continued growth and diversification of the agricultural sector. Based on interviews, it is apparent that the county commissioners recognize the

importance of agriculture and agribusiness needs in the county. It is, however, imperative that local leaders and town officials, economic developers and tourism leaders in the county also recognize the importance of this industry.

The cost of services provided by the county between agriculture and other commercial opportunities are comparable, and county incentive packages should be comparable as well. This will help promote agriculture as a potential economic engine in Richmond County. It is recommended that agricultural agencies, producers and agribusinesses cooperatively conduct agricultural awareness events/tours to educate officials, economic developers and citizens as to the role of agriculture in the county.

Implementation and Timeline:

Schedule periodic meetings with the Economic Development Commission, N.C. Cooperative Extension Richmond County Center, Richmond County Soil and Water Conservation District, Agriculture Advisory Board, N.C. Division of Forest Resources Richmond County, Farm Bureau and other county agencies involved with agriculture to explain and explore the promotion of agriculture in Richmond County. It is imperative to include multiple agricultural producers and agribusinesses in this effort. The effort should begin in the fall of 2011. A marketing strategy should be developed by early spring in 2012. The plan should begin implementation by fall of 2012 and continue with annual updates and revisions.

Richmond County Tourism Development Authority

The Richmond County Tourism Development Authority should continue to represent the agriculture sector as the countywide marketing plan for Richmond County evolves.

Implementation and Timeline:

Work with the Tourism Development Authority to ensure agri- tourism is a component of the overall marketing plan for the county. Identify and develop marketing strategies with a strategic plan developed by fall of 2011. Annual revisions and updates as needed.

Develop an Economic Development Assistance Program for agriculture and agribusinesses in Richmond County.

Through a partnership with the Agriculture Advisory Board, the Small Business Center, the Chamber of Commerce and others, education and training will be provided to interested agricultural producers and landowners. These efforts will be communicated to the economic developer to ensure community support. Assistance can be made to individual farmers or to non-profit organizations and can be independent or in conjunction with other funds. This program will be used for transaction costs, signage and agricultural easements within the VAD program.

Implementation and Timeline:

Develop the administrative framework in early 2012 and determine strategies for public and private investment. Begin soliciting and developing investments in late 2012. The Agricultural Advisory Board, N.C. Cooperative Extension Richmond County Center, USDA Natural Resources and Conservation Service, Richmond County Soil and Water Conservation District, Farm Bureau and other farm-related organizations should be involved in the development of the program.

Educate Richmond County farmers, landowners and residents.

Educating the public of the benefits of Richmond County working lands and the threats to them will reduce conflicts between farmers and their non-farm neighbors. It will also stimulate the market for locally grown products. Developing public events and agritourism opportunities are two alternatives to highlight the attributes of agriculture and to educate residents. The use of multiple outlets, some as described earlier, we- based sites, mass media, workshops, schools and civic organizations offers an array of options. Some of the topics that should be covered in education and outreach are:

1. Small Business Development and Value-Added Agricultural Business Development

The Agricultural Advisory Board should cooperate with Richmond Community College, Small Business Center, in concert with N.C. Cooperative Extension Richmond County Center and other agriculture-related agencies and loan centers, to offer small business workshops and certifications for potential business developers. Like any business venture, there are risks that will vary with the size of the investment, the type of product(s) and market potential. People are usually not knowledgeable on how to start a small business--financial management, business management, product development or marketing potential. The Small Business Center can provide educational expertise and training.

The Small Business Center and/or N.C. Cooperative Extension Richmond County Center should offer training on value-added agricultural enterprises. Value-added agriculture offers entrepreneurial farmers an opportunity to identify and pursue new crops and new markets. Value-added is the process of changing or transforming a product from its original state to a more valuable state. In a more broad sense, value added is to economically add value to a product by changing its current place and time from one set of characteristics to other characteristics that are more preferred in the marketplace. It is a rapidly growing segment of North Carolina's agricultural economy that offers both the established and the new farmer a variety of ways to develop a business and take advantage of its profit potential. Viable niche markets should be researched and identified.

Implementation and Timeline:

Develop and market educational workshops for potential and/or present small business owners by 2011. Value-added workshops should be conducted in 2011. These should be annual trainings and workshops, or as needed.

2. Working Land Estate Planning

The Agricultural Advisory Board should cooperate with Richmond Community College and/or N.C. Cooperative Extension, Richmond County Center with resources from N.C. State University to develop and implement Working Land Estate Planning seminars and workshops. The program should focus on strategies of transitioning the family farm to interested and/or non-interested family member(s). Options must be explored and available to protect family legacy. There are basically three principle obstacles in planning an estate: living probate, death probate and death taxes. These need to be addressed in the program. There is a definite need for increased awareness of farm estate planning, increased strategies for planning to transition from farming and decisions on how and when a farm estate plan should be implemented. This recommendation is specific to the needs expressed in producer surveys and personal interviews conducted in the county. It is a definite need that is not being met presently. Underserved family farmers have limited resources. This training will allow them to pass on a legacy, no matter how large or small.

Partnerships to plan and conduct a farm estate planning program should include: N.C. Cooperative Extension Richmond County Center, Farm Bureau, USDA agencies, the Agricultural Advisory Board and other land preservation, conservation and stewardship program representatives including land trusts and conservation organizations and attorneys specializing in estate planning.

Implementation and Timeline:

Schedule planning group to address specific issues and work with partners to market and target audiences. In November 2011, the first farm estate planning program should be implemented. The program should be reviewed, revised and implemented annually.

3. Youth Education

Existing youth organizations such as 4-H cultivate an awareness and appreciation for agriculture. Extension, Soil and Water Districts and other agencies in the county will continue to work together to provide youth education programs to heighten awareness of opportunities in agriculture.

Implementation and Timeline:

Develop education campaigns for youth. Begin campaigns and action plans in spring 2011. The education campaigns should be coordinated by N.C. Cooperative Extension Richmond County Center and a committee of other pertinent agencies, including other USDA agencies.

Action Steps

To maintain the viability of the agricultural community, the Richmond County Board of Commissioners should consider each of the recommendations of this plan. Each recommendation should be reviewed for possible implementation. Furthermore, the Board of Commissioners should request an annual report on the state of agriculture from the Agricultural Advisory Board. This should be a concerted effort of the Agriculture Advisory Board and other supporting agencies.

Funding for these and other programs should be sought from outside sources, including, but not limited to, N.C. State University through Cooperative Extension, the North Carolina Department of Agriculture Agricultural Development and Farmland Preservation Trust Fund, and other government and non-governmental agencies and/or organizations. Support for the acquisition of funds from state and federal grant programs related to agriculture and local food systems should be conveyed to the Board of Commissioners by the Agricultural Advisory Board. With the adoption of this Working Lands Protection Plan, matching funds for many grant funds projects will be markedly reduced and priority funding status acquired. The Agricultural Advisory Board should serve as a key information resource for the County Commissioners. Working together, the Board of Commissioners, the Agricultural Advisory Board, agricultural agencies and organizations can assure stability through growth of the agricultural economy.

Supporting Agencies and Organizations

U.S. Department of Agriculture (USDA). USDA provides a wide range of services to the agricultural industry and farm owners and operators through its 17 agencies. USDA is staffed by agents of the Farm Service Agency (FSA) and the Natural Resources Conservation Service (NRCS). FSA provides farm loans and services, disaster assistance and conservation programs. NRCS works with private landowners to help them conserve, maintain and improve their natural resources and administers several programs that purchase or provide grants to purchase conservation easements. Information about USDA's agencies and programs can be found at their website www.usda.gov

N.C. Department of Agriculture and Consumer Services (NCDA&CS). NCDA&CS provides many valuable services to the agricultural industry and individual farmers. It provides services covering animal health, agronomy, commodity distribution, marketing and promotion, grading, seed and fertilizer inspection, nursery and plant pest eradication and more. NCDA&CS also manages and operates the five state farmers markets and 18 state research stations and farms.

N.C. Department of Environment and Natural Resources (DENR). DENR operates One North Carolina Naturally, a program that provides the science and incentives to inform and support conservation actions of North Carolina's conservation agencies and organizations. The website, www.onencnaturally.org, contains numerous tools and information to assist conservation organizations and local governments in developing and implementing their land protection strategies. One of the three working focus areas includes working lands.

Richmond County Soil and Water Conservation District (SWCD). SWCD provides assistance to private landowners who are implementing practices to prevent soil erosion and protect water quality. Technical and financial assistance through the Agricultural Cost Share Program and the Conservation Reserve Enhancement Program are provided to landowners. SWCD also conducts several education programs for students and is working with its partners to develop a North Carolina Plan for Working Lands Conservation.

N.C. Cooperative Extension Richmond County Center. N.C. Cooperative Extension Richmond County Center provides educational programs to farmers and non-farmer residents based on research conducted at N.C. State University and N.C. A&T State University. The Richmond County Center has agents for horticulture, poultry, agriculture, livestock, forages, youth and family.

N.C. Division of Forest Resources Richmond County (DFR). DFR in Richmond County is staffed with rangers who help landowners maintain their forests, regulate and control forest fires and maintain forest health in the county. They conduct education and outreach programs to the general public as well. The rangers can help landowners write forest managements plans, review plans, assist with pesticide management and provide landowners with contact information for consulting foresters and timber buyers.

N.C. Wildlife Resources Commission (WRC). WRC has a mission to conserve North Carolina's wildlife resources and their habitats. They provide programs and opportunities that allow hunters, anglers, boaters and other outdoor enthusiasts to enjoy wildlife. An important part of their vision is to provide safe, comprehensive, effective and efficient fisheries, wildlife and boating programs that sustain working lands and their associated wildlife communities.

U.S. Fish and Wildlife Service (USFWS). USFWS coordinates the Red-Cockaded Woodpecker recovery program in the Sandhills through conservation, restoration and sound management practices of longleaf pine.

Sustainable Sandhills is a regional nonprofit organization that promotes coordinated and cooperative regional planning to maintain the green quality of life in the Sandhills region.

The Nature Conservancy is a national nonprofit group with a Sandhills region office. The organization protects ecologically important land and water through easements and education.

The Sandhills Area Land Trust works with private landowners to put land in voluntary conservation easements in the Sandhills area.

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Appendixes

Appendix A

Cumberland County Lease of Development Program

Cumberland County has developed a lease of development rights program that targets landowners who are in the "critically important" or "important" designations by the Joint Land-Use Study of 2008. A sample of a Lease of Development Rights agreement is below.

Tax Parcel PIN #(s) – _____

This instrument prepared by and should be returned to:

Grainger R. Barrett County Attorney P.O. Box 1829 Fayetteville, N.C. 28302

STATE OF NORTH CAROLINA COUNTY OF CUMBERLAND

MILITARY MISSION AND OPERATIONS AREA CONSERVATION AND PROTECTION AGREEMENT FOR A DEFINITE TERM

This MILITARY MISSION AND OPERATIONS CRITICAL AREA CONSERVATION AND PROTECTION AGREEMENT FOR A DEFINITE TERM ("Agreement") is made on this 1st day of October, 2005, by _____ ("Grantor"), and the COUNTY OF CUMBERLAND, North Carolina, ("Grantee"), a body politic and corporate and a subdivision of the State of North Carolina, P.O. Box 1829, Fayetteville, N.C. 28302.

RECITALS & PURPOSES

A. Grantor is the sole owner in fee simple of the property ("Property"), being approximately ____ acres, in the County of Cumberland, State of North Carolina and being that tract or portion of a tract identified in Exhibit A attached hereto and by this reference incorporated herein; and

B. The Grantee has authority in Part 4, Art. 19, of Chapter 160A of the North Carolina General Statutes to acquire, lease and/or enter into deeds, easements and other agreements to preserve and conserve open space and natural resources; and

C. The Property is located in the Fort Bragg Land Use Study Area conducted by the Fort Bragg Regional Land Use Advisory Commission, and is designated a military mission and operations critical or important tract in the Cumberland County Planning Department Small Area Land Use Study for such area; and

D. Fort Bragg and Pope Air Force Base missions are critical to the security and well-being of the nation, and are central to the identity, quality of life and economic vitality of the Cumberland County community; and

E. The overall aggregate pattern of development of land uses around Fort Bragg and Pope Air Force Base directly affects the suitability and compatibility of military missions which can be performed at the bases; and

F. It is in the public interest to maintain and enhance the military missions of Fort Bragg and Pope Air Force Base, and that further intense and/or urban development of tracts five acres or larger designated military mission and operations critical and important in the study area be minimized, while protecting property owners' property rights, economic interests and investment expectations; and

It is in the public interest that Cumberland County afford owners of tracts five acres or larger designated military mission and operations critical and important in the study area a voluntary opportunity to enter into Agreements intended to minimize further intense and/or urban development of their tracts during the term of the Agreement by maintaining (i) open spaces, or (ii) woodland, agricultural, or rural settings, scenic vistas and natural views, or

(iii) natural resources such as pastures, meadows, fields, rock outcroppings, creeks, streams, wetlands, croplands, etc.

NOW, THEREFORE the Grantor hereby unconditionally and irrevocably bargains and sells and conveys to Cumberland County, its successors and assigns, an easement for the term stated below for conservation and open space and natural resources protection purposes. Grantor covenants and agrees, for the direct benefit of Cumberland County, to preserve and conserve the Property substantially in the same condition and state of development as exists on the effective date hereof for the term of ten (10) years from the date this Agreement is recorded in the Cumberland County Registry, terminable as set forth herein.

The effective date of this Agreement shall be the date it is recorded in the Cumberland County Registry. Grantor may terminate this Agreement effective no sooner than five years from the commencement hereof, but only on at least one year's prior written notice to County.

Article I. Uses and Activities.

A. Definitions.

1. Current Uses include agriculture generally, such as farming, livestock, husbandry, horticulture, silviculture, nursery, timber, forest products, and other miscellaneous uses. Activities associated with livestock uses include raising, feeding, breeding, herding, moving, loading, buying and selling horses, cattle, goats, chickens, and dogs. Current Activities associated with agriculture uses include disking, fertilizing, and applying herbicides, insecticides, pesticides and fungicides to cropland and pasture. They also include planting, sowing, harvesting, cutting, raking, baling, milling, grinding, and storing row crops, hay, grass, and straw. Current Activities associated with timber uses include planting, fertilizing, burning and applying herbicides, insecticides, fungicides, and pesticides to timberland. They also include harvesting, felling, logging, loading, transporting, and selling timber, logs, poles, pulpwood, and firewood. Current Activities associated with forest products include clearing, burning, and applying herbicides, insecticides, pesticides and fungicides to timberland. They also include raking, baling, loading, storing, and selling pine straw. Other Miscellaneous Uses and Activities include hunting, fishing, trapping; leased hunting, fishing and trapping rights; riding horses, mules and ponies; clearing land, removing stumps; drilling wells; installing water and electric lines, and building driveways, unimproved roads, fire lines, farm residences, farm buildings, well houses, and sheds in support of farming and agriculture. Current Uses and Activities also include the rental and maintenance of the three dwellings that currently exist on the Property.

2. Commercial Uses. Industrial, manufacturing or commercial uses and activities not directly related to or supportive of agricultural, horticultural, silvicultural, forestry, nursery or other uses permitted under the A-1 zoning classification.

3. Development. Development includes the construction, building, sale, lease, rent, and maintenance, of houses, offices, plants, facilities, buildings, roads, parking lots, grounds and associated infrastructure not directly related to or supportive of agriculture, horticulture, silviculture, forestry, nursery or of other uses permitted under the A-1 zoning classification.

B. Prohibited and Restricted Uses and Activities.

During the term of this agreement, the following activities are prohibited or restricted:

1. “Commercial Uses” and “Development” as described in Article I, Paragraph A. are specifically prohibited.

2. Grantor may not itself, or permit others to, dump trash, ashes, garbage, waste, abandoned vehicles, appliances, or machinery, or other materials on the property.

3. Filling, excavation, dredging, mining or drilling, or removal of topsoil, sand, gravel, rock, peat, minerals or other materials, or changes in the topography of the land shall be prohibited except as necessary for the purposes of combating erosion or as incidental to Permitted Uses and Activities allowed by this Agreement.

4. Although permitted uses in the A1 zoning classification, quarries, airports, assemblies, motor vehicle service stations and borrow source operations shall not be permitted under this Agreement.

5. The Property may not be subdivided, or partitioned, except that the Property may be subdivided into tracts five acres in size or larger.

C. Permitted Uses and Activities.

1. Current Uses and Activities described in Article I, Paragraph A. are permitted and can be expanded or extended without limitation or restriction.

2. Additional Uses or Activities, i.e., any uses or activities that are not Current Uses and Activities and that are not Prohibited and Restricted Uses and Activities, but are related to or extensions of Permitted Uses and Activities shall be considered Permitted Uses and Activities, however, Best Management Practices associated with those Additional Uses or Activities must be implemented. The term "related to or extensions of Permitted Uses and Activities" shall be construed and interpreted broadly consistent with the intent of this Agreement, to allow the widest variety of agricultural uses, including, by way of example but not of limitation, directly supporting retail uses such as feed stores or blacksmith shops and retail outlets for agricultural products such as nurseries or wineries, while avoiding urban-type development not appropriate, consistent with proper land use planning, to be located near active military uses now existing or existing during the term of this Agreement. The term "related to or extensions of Permitted Uses and Activities" shall be construed and interpreted broadly to allow Grantor wide flexibility in adapting to and evolving changed agricultural conditions and best management practices.

Such Additional Activities may include, for example, farming, silviculture, husbandry, timber, forestry, horticulture, nursery or related uses or businesses (such as, by way of example but not by way of limitation, agricultural supply or nursery wholesale and retail sales). Best Management Practices may include, for example, taking appropriate steps to maintain water quality, minimize sedimentation in or over the Property or into surface waters, etc.

In adopting Additional Uses and Activities, the parties desire to conserve, where consistent with such uses, the Property's (i) open spaces, and/or (ii) woodland, agricultural or rural settings, and/or (iii) scenic and natural vistas, and/or natural resources such as meadows, pastures, fields, woods, croplands, rock outcroppings, creeks, streams, wetlands, etc.

Article II. Enforcement and Remedies.

A. Upon any breach of the terms of this Agreement by Grantor that comes to the attention of the Grantee, the Grantee shall notify the Grantor in writing of such breach. The Grantor shall have ninety (90) days after receipt of such notice to begin undertaking actions that are reasonably calculated to correct promptly the conditions constituting such breach. If the breach remains uncured after ninety (90) days, the Grantee may enforce this Agreement by appropriate legal proceedings including for injunctive and other related relief.

B. Grantee, its employees and agents and its successors and/or assigns, shall have the right, with reasonable notice and at reasonable times, to enter the Property for the purpose of inspecting the Property to determine whether the Grantor and its successors and/or assigns are complying with the terms, conditions and restrictions of this Agreement. Grantor shall not be liable to Grantee, its employees and agents and its successors and/or assigns, for any personal injury or damage which may result from Grantee's exercise of this right of inspection, and Grantee shall, to the extent allowed by law, hold harmless and indemnify Grantor against any such personal injury or damage which may result from Grantee's exercise of this right of inspection.

C. Nothing contained in this Agreement shall be construed to entitle Grantee to bring any action against Grantor for any injury or change in the Property caused by third parties, resulting from causes beyond the Grantor's control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken in good faith by the Grantor under emergency conditions to prevent, abate, or mitigate significant injury to life, damage to property or harm to the Property resulting from such causes.

Article III. Documentation and Title.

A. Property Condition. The parties acknowledge that the Property is currently developed to the following extent, as generally described in Exhibit B, attached hereto and incorporated by reference, which sets forth a narrative description of the general extent of use and/or development of the property as of the date hereof. Exhibit C, attached hereto and incorporated by reference, is an aerial photograph of the Property from the County's GIS system.

B. Title. The Grantor covenants and represents that the Grantor is the sole owner and is seized of the Property in fee simple and has good right to grant this Agreement and convey the easement rights hereby conveyed, that the Property is free and clear of any and all encumbrances, except agreements of record, and Grantor covenants that the Grantee shall have the use of and enjoy all of the benefits derived from and arising out of the aforesaid Agreement. .

Article IV. Compensation.

A. In consideration of this Agreement, Grantee shall pay to Grantor $____ annually on each February 1 that this Agreement is in effect, contingent upon (i) Grantor's compliance herewith, and (ii) Grantor's timely payment of ad valorem property taxes attributable to the calendar year preceding such February 1. Grantor acknowledges that such payment is made in consideration of the term hereof being at least ten (10) years. If Grantor shall terminate this Agreement in his, her or its discretion prior to expiration of the stated term hereof, then Grantor shall reimburse to Grantee a pro rata portion of the compensation payments made hereunder, as follows: (I) if termination occurs during the first five years, Grantor shall reimburse Grantee all amounts paid by Grantee as compensation hereunder; (II) if termination occurs after the fifth year, then Grantor shall reimburse Grantee half [50 percent] of all amounts paid by Grantee as compensation hereunder attributable to any period after the fifth year of the term hereof. Grantor shall make such payment to Grantee within 45 days after the effective date of a termination triggering such reimbursement obligation.

B. In further consideration of this Agreement, Grantee shall assess, during the term of this agreement, Grantor's Property for ad valorem property tax purposes at the lower of its current assessment or the assessment which Grantee's Tax Administrator would apply to the Property were the Property zoned CD (Conservation District). The Grantor and Grantee acknowledge that Grantee's Tax Administrator assesses CD real property at the rate of $___ per acre.

C. Nothing in this agreement shall be construed to affect or otherwise alter the zoning classification of the Property at the end of the term of this agreement. Nothing in this agreement shall be construed to affect or otherwise alter the Grantor's use of the Special Use tax program at the end of the term of this agreement.

Article V. Miscellaneous.

A. Subsequent Transfers. Grantor agrees for itself, its successors and assigns, to notify Grantee in writing of the names and addresses of any party to whom the Property, or any part thereof, is to be transferred after the effective date hereof at least ten business days prior to the time said transfer is consummated. Grantor, for itself, its successors and/or assigns, further agrees to make specific reference to this Agreement in a separate paragraph of any subsequent lease, deed or other legal instrument by which any interest in the Property is conveyed.

B. Conservation Purpose. Grantee, for itself, its successors and assigns, agrees that this Agreement shall be held by it exclusively for conservation of natural resource, agricultural, agroforestry, silvipasture, forestry, horticulture, silviculture, open space purposes or related uses as more fully described above.

C. The parties hereto agree that the benefits of this Agreement are not assignable.

D. Construction of Terms. This Agreement shall be construed to promote the purposes of the North Carolina enabling statute set forth in N.C.G.S. 160A-401 et seq., which authorizes the creation of open space and natural resource conservation agreements, easements, deeds, etc. for purposes including those set forth in the recitals herein.

E. Entire Agreement. This instrument sets forth the entire agreement of the parties with respect to the Agreement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Agreement. If any provision shall be found to be invalid, the remainder of the provisions of this Agreement, and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

F. Recording. The Grantee may record this instrument and any amendment hereto in timely fashion in the official records of the Cumberland County, North Carolina Registry.

G. Notices. Any notices shall be sent by certified mail, return receipt requested, addressed in the case of Grantor,
to_____, and
in the case of Grantee to Cumberland County, c/o County Manager, P.O. Box 1829, Fayetteville, N.C. 28302, or to such other addresses such party may establish in writing to the other.

H. Environmental Condition of Property. The Grantor warrants and represents to the Grantee that to the best of its knowledge as of the date hereof there are no hazardous materials, substances, wastes, or environmentally regulated substances located on, in or under the Property or used in connection therewith. Notwithstanding the foregoing, Grantor expressly advises Grantee that asbestos was a common building material at the time many structures on the Property were constructed, and Grantor makes no warranty or representation to Grantee as to the presence or absence of asbestos in any particular structure on the Property. Grantor further expressly advises Grantee that use of regulated or restricted chemicals incorporated into pesticides, insecticides, herbicides, etc. is customary, common and normal incidental to the activities carried on by Grantor and permitted hereunder, and Grantor makes no warranty or representation to Grantee as to the presence or absence of such regulated or restricted chemicals on the Property.

TO HAVE AND TO HOLD unto Cumberland County, North Carolina, its successors and assigns, forever on the terms above stated. The covenants agreed to and the terms, conditions, restrictions and purposes imposed as aforesaid shall be binding upon Grantor and Grantor's successors and/or assigns, and shall continue as a servitude running during the term of this Agreement with the Property.

IN WITNESS WHEREOF, Grantor and Grantee by authority duly given, have hereunto caused these presents to be executed by their respective officers and their corporate seals affixed, as of

the date first appearing hereinabove, to be effective upon the date of recordation in the public registry of Cumberland County, North Carolina.

GRANTOR:

WITNESS:

_____ By: _____

By:

_____

GRANTEE: CUMBERLAND COUNTY,

ATTEST NORTH CAROLINA

By: _____

_____ Chairman of the Board of Commissioners

Appendix B

Agricultural Producer, Agribusiness and Non-Farm Surveys

Surveys and interviews were conducted in the county to account for the trends, issues and opportunities the community as a whole identifies for agriculture. The populations targeted were producers/landowners, agri-businesses and the general non-farm public.

The county team distributed the surveys through their meetings, to their advisory boards and on their websites. The team also provided names of key people in the county to interview. All the survey and interview responses were compiled to determine the response.

Copies of the three surveys are below.