Craven County Agricultural Development Plan

Grace Lawrence

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Acknowledgements

The North Carolina's Eastern Region (NCER), with funding from the North Carolina Department of Agriculture and Consumer Services Agricultural Development and Farmland Preservation Trust Fund, contracted with Mount Olive College's Lois G. Britt Agribusiness Center to create agricultural development plans for a three-county region. NCER's mission is to identify barriers and generate regional strategies for economic growth. NCER supports the agricultural industry in eastern North Carolina and is committed to the identification of economic development opportunities for agricultural producers and agribusinesses.

The Craven County Agricultural Development Plan was researched and written by Grace Lawrence. A native of Lee County, Ms. Lawrence has a master's degree in education from Minnesota State University Mankato. She has worked in environmental education and with N.C. State University Cooperative Extension for more than 15 years.

Dr. Sandy Maddox served as principle editor for the plan. Dr. Maddox has a doctorate degree in adult education, is the director of the Lois G. Britt Agribusiness Center at Mount Olive College and has more than 30 years of experience in agriculture.

A county team of local agencies, boards and citizens reviewed the Craven County Agricultural Development Plan and provided comments. Members of the team were:

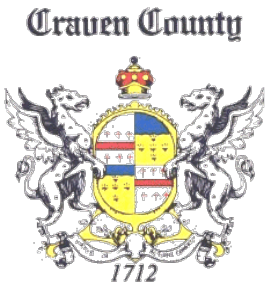
Craven County Agricultural Advisory Board

North Carolina Cooperative Extension, Craven County

New Bern Area Farmers' Market

North Carolina Forestry Service, Craven County

Craven County Soil & Water Conservation District



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NORTH CAROLINA'S EASTERN REGION

This project received support from the N.C. Agricultural Development and Farmland Preservation Trust Fund.

Executive Summary

Craven County is a rural county in the coastal plain of North Carolina. Its economy is influenced by two of the top economic engines in the state: agriculture and the military. Agriculture is the number-one industry in North Carolina, and Craven County's agriculture and forestry contribute a significant amount to the state total. The military is the second-largest industry in North Carolina, and the Marines have operated in Craven County since World War II. Marine Corps Air Station Cherry Point was authorized in 1941 and established in Craven County because of the rural and coastal nature of the county. Tourism also is recognized as the third-largest industry of economic impact in North Carolina behind agriculture and the military[1]. In 2011, domestic travelers spent $18.4 billion across the state, an 8 percent increase from 2010, and a record-high visitor spending figure. Historic landmarks such as Tryon Palace and New Bern bring visitors to the area each year. The 160,000-acre Croatan National Forest is also located in Craven County and is a much visited natural resource for bikers, hunters, campers and other visitors[2].

The military views agriculture as an important part of its readiness since agriculture is a compatible use for its operations. An example of the military's commitment to working lands and compatible land use is exemplified by the recently initiated and funded Market-based Conservation Initiative in North Carolina. This initiative offers payments from Department of Defense funding to owners of working lands under specific military flight paths. The goal is to encourage landowners to limit development of working lands and forests into less compatible uses through long-term reverse auction lease payments. The military's influence is extremely important to the county's economy and to the future of agriculture. In a presentation to the Craven County Commissioners in December 2010, the Craven County Economic Development Commission stated that defense industries dominate Craven County's top 10 employers including the 2nd Marine Aircraft Wing, the Fleet Readiness Center East, the Marine Corp Air Station and the Naval Health Clinic. To ensure that these industries remain in Craven County, compatible land use must be considered. Agriculture and forestry are essential to this planning.

The county's location has also made it a popular destination for vacationers and those who wish to live by the water or in a rural area. As a result of this influx, development has grown along the county's rivers and creeks, and agricultural lands have been lost to this growth. The 2009 Craven County N.C. Coastal Area Management Act (CAMA) Core Land Use Plan Executive Summary reported a 30.4 percent growth in population from 1980 to 2007 and an expected additional increase of 12.4 percent from 2007 to 2030. Additionally, since 1980, Craven County has been the 12th-fastest growing CAMA county. From 1980 to 2000, the county's year-round dwelling units increased by 48.9 percent, and seasonal housing units increased by 100 percent. While agricultural lands still remain the most prominent land use in the county, planned development is essential to a balanced economy[3].

Only three of the top 25 ranking employers listed by the N.C. Department of Commerce's AccessNC for Craven County are denoted as agribusinesses. This ranking however does not recognize the effect of individually owned and operated family farms. These agricultural operations greatly impact the economies of allied businesses including food service industries, governmental agencies (schools), retail sales, service entities and others. Additionally, when evaluating the economic impact of agriculture to Craven County, the production of agricultural commodities by these farming operations has a significant influence on the state of the county's economy. The impact of agriculture and forestry are noted:

- Craven County ranked 14th in the state for corn production in 2010.
- Craven County was 20th in the state for hogs and pigs in 2010.
- Craven County ranked 22nd in the state for soybean production in 2010.
- Craven County ranked 6th in the state for timber harvested and delivered to mills in 2010.
- The forest industry served as one of the county's top employers in 2010.
- The most current agricultural economic data available (2008) reported that total county income from agriculture and agribusinesses in Craven County was $312,760,854.

Agriculture and forestry in Craven County face numerous challenges. An aging farmer population, loss of agricultural land, the increased costs of production and other issues are changing the agricultural landscape in the county. However, opportunities do exist to educate, enhance and support agriculture and forestry. Some of the challenges and opportunities noted by resources used for the plan are:

- Craven County experienced a population increase of 13.2 percent from 2000 to 2010.
- The number of acres of land in agricultural production decreased 15.4 percent from 1997 to 2007.
- The average age of farmers in the county increased from 54.8 years old in 1997 to 58.3 in 2007.
- More than 41 percent of the farmers surveyed for this plan reported that less than 24 percent of their income came from agriculture.
- 100 percent of the producers and agribusinesses surveyed felt that agricultural education should be taught in the schools.

- 100 percent of the producers and agribusinesses surveyed felt that consumer education on buying "local" and the importance of agriculture and forestry to the economy of Craven County was needed.
- Almost 60 percent of the non-farm public surveyed for this plan felt that agriculture provided steady to growing economic opportunities and may have potential for future growth.
- More than 90 percent of the non-farm public surveyed supported farm and forest preservation efforts in the county.

Changing demographics create opportunities for county leaders to seek a balance between the attractive rural nature of the county and planned development that can benefit all. The Craven County Agricultural Development Plan can provide guidance for a progressive county that is ready to face the challenges of the 21st century. Agriculture and forestry are important components of planning as Craven County seeks this balance.

The intent of this plan is to help family farms and forests remain viable. Recommendations are made based on the data and research collected from national, state and local databases as well as from surveys and interviews conducted with three target audiences in Craven County. These recommendations are not regulatory. Rather, these guidelines assist those who work with family farms and forests. The recommendations also provide a framework in which to work to meet the challenges and opportunities that exist in Craven County. The recommendations are:

Maintain agriculture's economic viability.

- Endorse the Craven County Agricultural Development Plan.
- Promote the Voluntary Agricultural District and the Enhanced Voluntary Agricultural District Programs and the Agricultural Advisory Board.
- Support agriculture and forestry as an industry in Craven County.
- Support NCSU Cooperative Extension in Craven County, Craven County Soil and Water Conservation District, N.C. Forest Service Craven County, and other farm and forest support agencies.
- Encourage and promote agriculture and forestry as career opportunities in Craven County.
- Conduct estate and farm transition educational programs.
- Establish a county forestry association.
- Conduct educational opportunities utilizing available resources and information for producers, landowners and the general public.

- Support funding of a Cost of Services Study for Craven County.

Increase public awareness and provide access to agriculture and forestry to increase understanding and appreciation of the importance of these industries to the county.

- Conduct business development training.
- Develop and implement a Craven County Agriculture marketing campaign.
- Develop a feasibility study for an agricultural arena/farmers' market to serve agriculture in Craven County.

Encourage young farmer-agribusiness development.

- Encourage landowner enrollment in Craven County's Present Use Value Program.
- Develop educational programs and create career opportunities for young people in agriculture, forestry and agribusiness.
- Utilize the Agricultural Advisory Board to ensure agriculture is represented in local governmental decisions impacting agriculture into the future.

This Agricultural Development Plan is a guide for Craven County to maintain its strong agricultural and forestry heritage. The plan is not to remain static but to be revisited and revised periodically by the Craven County Agricultural Advisory Board. Changes and updates are to be made in order to maintain the plan's feasibility in its support of family farms and forests in Craven County.

A Need for Action

In recent years, Craven County has experienced population growth at a double-digit rate. The attractiveness of open space and shoreline areas within the county has made Craven County attractive to development. The county's population grew 13.2 percent from 91,426 in 2000 to 103,505 in 2010 according to the U.S. Census and is on track with the 18.5 percent growth rate experienced statewide over the last decade[4]. This growth has presented agriculture producer many challenges, including loss of farmland, loss of land rental opportunities and a general loss of non-farming citizens' appreciation and understanding of agriculture and its importance to the county.

Another challenge facing agriculture includes the increasing cost of production versus cash income. Input costs for farming have continued to surpass farm income over the past 10 years. Farm expenses per farm exceeded farm income per farm by 122 percent, according to the 2007 U.S. Department of Agriculture's Census of Agriculture.

Craven County's aging farming population tends to be a universal issue for agriculture in North Carolina. The average age of a farmer in the county has steadily increased from 54.3 years old in 1997 to 58.2 in 2007[5]. The age of farmers and landowners in the county present challenges that will likely have repercussions for family owned farms and forests. This increase in the average age of farmers implies that fewer young people are pursuing agricultural production as a career.

While challenges abound, opportunities were also identified. Responses received from surveys and interviews that Mount Olive College conducted in the county noted a growing appreciation for the scenic value farms and forests bring to the county. The surveys and interviews also acknowledged the potential for agricultural growth and diversification through the emergent local foods movement. Employment opportunities for farm workers, agribusinesses, researchers and those with agricultural and forestry skills are ever present. In surveys and interviews, producers, landowners and agribusinesses lamented the need for qualified people to provide the necessary research, support and materials to sustain their enterprises.

Awareness of agriculture and forestry in the county must be cultivated and continued, especially among the non-farm residents. Craven County has a significant urban population around New Bern, and only 0.6 percent of the county population lives on a farm[6]. Only 3 percent of the non-farm citizens who completed the survey for this plan were able to correctly identify the economic impact of agriculture in Craven County. The small percentage of the population that lives on a farm and/or owns forested acres face a lack of understanding and appreciation among non-farm residents for what farms and forests bring to the county.

These challenges and opportunities have not gone unnoticed. In 2011, the N.C. Department of Agriculture and Consumer Services' (NCDA&CS) Agricultural Development and Farmland Preservation Trust Fund awarded a grant to the N.C.'s Eastern Region to develop agricultural development plans for three counties: Craven, Nash and Pamlico Counties. Mount Olive College's Lois G. Britt Agribusiness Center partnered with N.C.'s Eastern Region and directed the creation of these plans.

Agriculture in the Craven County Agricultural Development Plan is defined in the broadest sense to include all aspects of agriculture including horticulture, row crops, aquaculture, livestock and other farming and forestry production systems. The plan follows the definition of agriculture that is set by the N.C. General Assembly General Statute: G.S. 105-277.2 through 105-277.7:

Minimum acreage of production land:

- Five acres for horticulture use
- 10 acres for agricultural 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 be following a forest management plan.

The data used in this plan were from the most recently published resources available. The U.S. Department of Agriculture's Census of Agriculture will be updated in 2012 so many of the facts used in this document are from the 2007 USDA Census of Agriculture. In order to augment what the reported facts and figures were in Craven County and provide on–the-ground viewpoints, surveys and interviews of three target audiences—farmers, agribusinesses and non-farm residents—were conducted. The results of these surveys and interviews further illustrate the challenges and opportunities to farms and forests as well as the current state of agriculture in the county.

The surveys were distributed in paper format and electronically at www.SurveyMonkey.com. Links to the on-line survey were featured on websites, and the team distributed paper surveys to the populations they served. Interviews were conducted face-to-face and by telephone with people from all three target audiences. These interviews also contributed to the overall picture of agriculture in the county. All responses are confidential and anonymous as required by Mount Olive College's Collaborative Institutional Training Initiative. The data collected serves as a snapshot of the overall state of agriculture in Craven County and the opportunities and challenges that exist.

Overview of Craven County

Craven County is located in eastern North Carolina where the Trent and the Neuse Rivers drain into the Pamlico Sound. The county is part of the Neuse, the Tar-Pamlico and the White Oak River Basins. Craven County is comprised of 754 square miles or 464,000 acres in the coastal plain of North Carolina. The Croatan National Forest encompasses 160,000 acres [7], and the Cherry Point Marine Air Station covers more than 29,000 acres in the county[8].

Craven County is relatively flat and has significant wooded acreage. The county has several pocosins, or Carolina Bays, which are unique hydrological features in the southeastern part of the state. Water, which makes up 8.49 percent of the county's total area (Figure 1)[9] is a major component of the county.

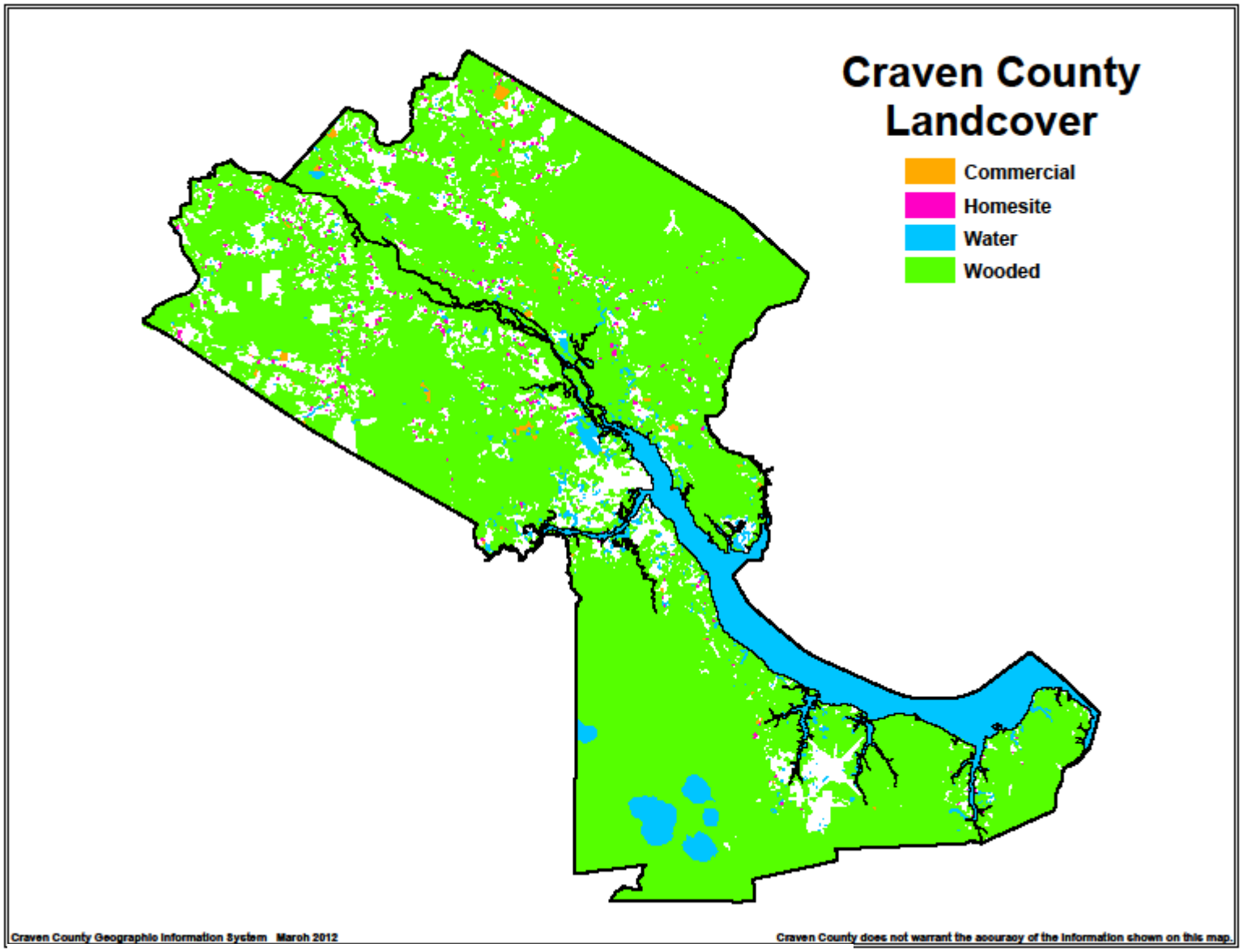

Figure 1 Landcover Craven County Source: Craven County GIS/Mapping 2012

Craven County has a moderate climate that is typical of the region. The average daily temperature was 62.1 Fahrenheit in 2010. The maximum average air temperature was 73.4 Fahrenheit, and the minimum average temperature was 51.4 Fahrenheit. Just over 34 inches of precipitation fell in 2010 in the county, far below the 54-inch annual average rainfall reported for the county [6].

As a coastal county, Craven County is part of the 20 coastal counties that must follow the Coastal Area Management Act (CAMA) regulations administered by the N.C. Department of Coastal Management. The state created CAMA to help coastal counties maintain the environmental qualities that make the coastal plains so attractive while allowing for continued planning and economic development[10].

Craven County is bisected by U.S. Highway 70, which connects the county to the west, and U.S. Highway 17, which runs north and south (Figure 2). These highways help serve the Morehead City and Wilmington ports and give the county excellent access to markets to the north, south, east and west.

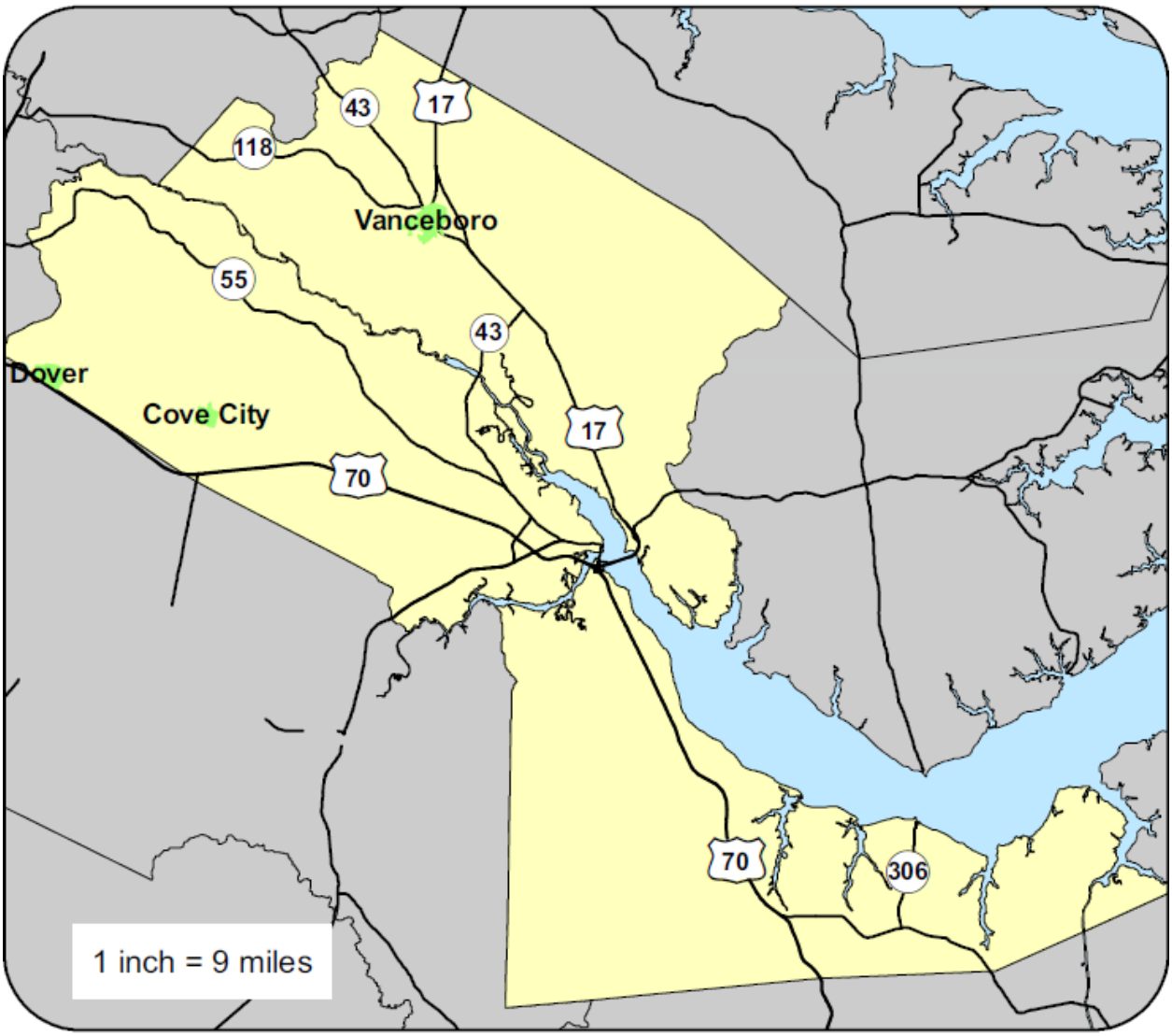

Figure 2 Major Roads Craven County Source: Craven County CAMA Land Use Plan 2009

There are eight municipalities in the county: Bridgeton, Cove City, Dover, Havelock, New Bern, River Bend, Trent Woods and Vanceboro (Figure 3). Craven County was established in 1712, and New Bern is the county seat[11]. According to the U.S. Census, the population of Craven County in 2010 was 103,505. This represents a 13.2 percent increase from 2000[12]. The N.C. Department of Commerce projects the county's population to increase to 104,911 by 2015[13]. This continued increase in population will have significant impacts on county resources and agriculture.

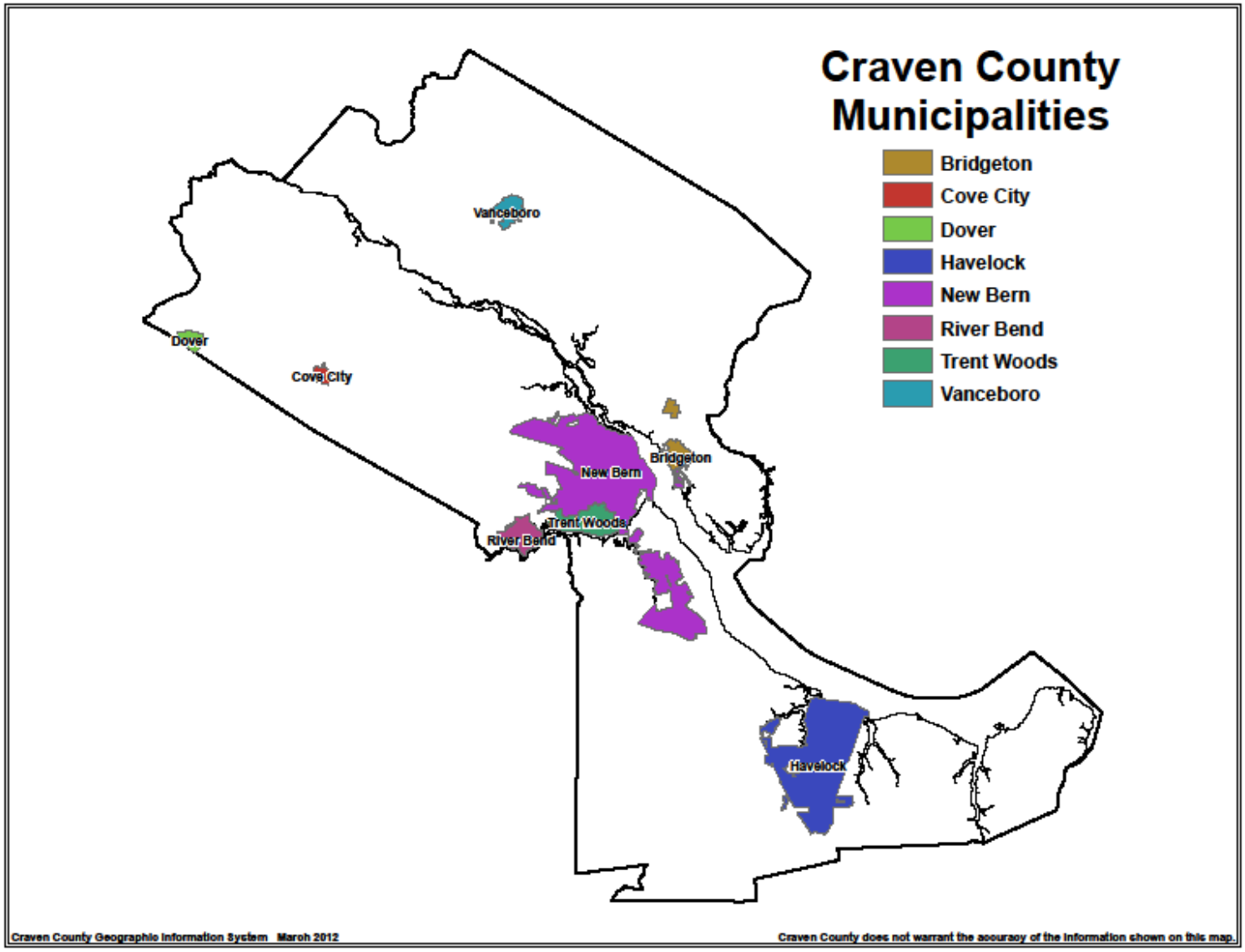

Figure 3 Municipalities in Craven County Source: Craven County GIS/Mapping 2012

Craven County's population density of 146 people per square mile in 2010 qualified the county as rural.[14] However, more than 57 percent of the population in Craven County lived in municipalities in 2010 according to the N.C. Office of State Budget and Management. Forty-two percent were considered non-municipal population[15]. The N.C. Department of Commerce reported that 0.6 percent of the population in Craven County lived on farms in 2000[16]. Craven County's abundant natural resources have brought steady growth and development over the years. The county also has a long history of farming and forestry, which rely on these natural resources. This situation creates challenges for farmers and foresters as they manage these resources and urban citizens who rapidly lose connection to agriculture.

The N.C. Department of Commerce annually assigns tier designations for each of the 100 counties based on the economic status of the counties. In 2012, Craven County was designated a Tier 2 county. The rankings are based on an assessment of each county's unemployment rate, median household income, population growth and assessed property value per capita. Those counties that are most distressed are assigned a Tier 1 status, and those that are least distressed are given a Tier 3 ranking.[17]. Craven County's Tier status indicated a change in economic well-being from 2011 to 2012 as the Tier status move from a Tier 3 status in 2011 to a more distressed Tier status of 2 in 2012.

Retail trade represented the greatest number of businesses (18.3 percent) in the county in 2009 according to the U.S. Census. Construction was 11.3 percent, and health care and social assistance were 11.2 percent in 2009. Agriculture, forestry, hunting and fishing made up 0.8 percent of the total businesses in Craven County in 2009. However, agriculture and forests support retail trades and services through the purchase of equipment, supplies and services. The unemployment rate in Craven County was 10.8 percent in January 2012, which was 0.3 percent more than the state unemployment rate, but a 0.7 percent increase from January 2011.

Additionally, the defense industries are located in Craven County for many of the same reasons that attract the general population to the county. Access to the waterways, the rural open space of the county and the nearby port of Morehead City allow the armed forces to train and deploy with relative ease. The Department of Defense, the Marine Corps Air Station at Cherry Point and other defense industries are among the top 10 employers in Craven County[18].

Overview of Agriculture in Craven County

Land Use

In 2009, more than 70 percent of the land use in Craven County was in agriculture. Government and institutional use, the second-largest land use, was 19.4 percent as seen in Figure 4.

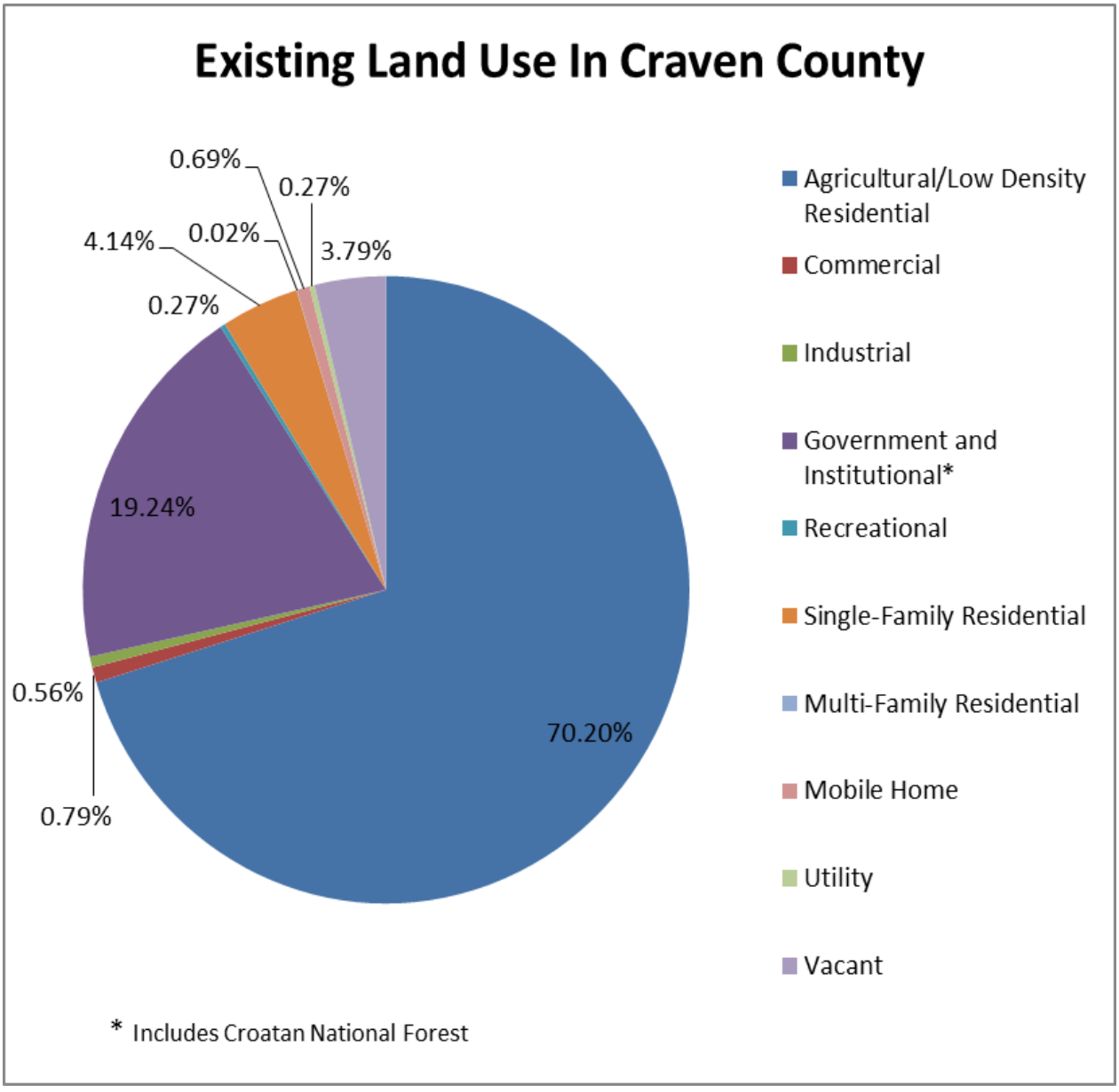

Figure 4 Existing Land Use Source: Craven County CAMA Core Land Use Plan 2009

The Present Use Value (PUV) tax program is one way to measure the number of parcels that are in agricultural, horticultural or forest use. Figure 5 shows the number of parcels in Craven County that participated in the program as of March 2012. Figure 5 also illustrates that agriculture is widespread throughout the county, but the majority is found in the northwestern portion. The southern portion is equally suited for agriculture based upon soil types and increased rainfall. However, municipalities, urban development and military lands greatly limit the feasibility of agricultural production within this area.

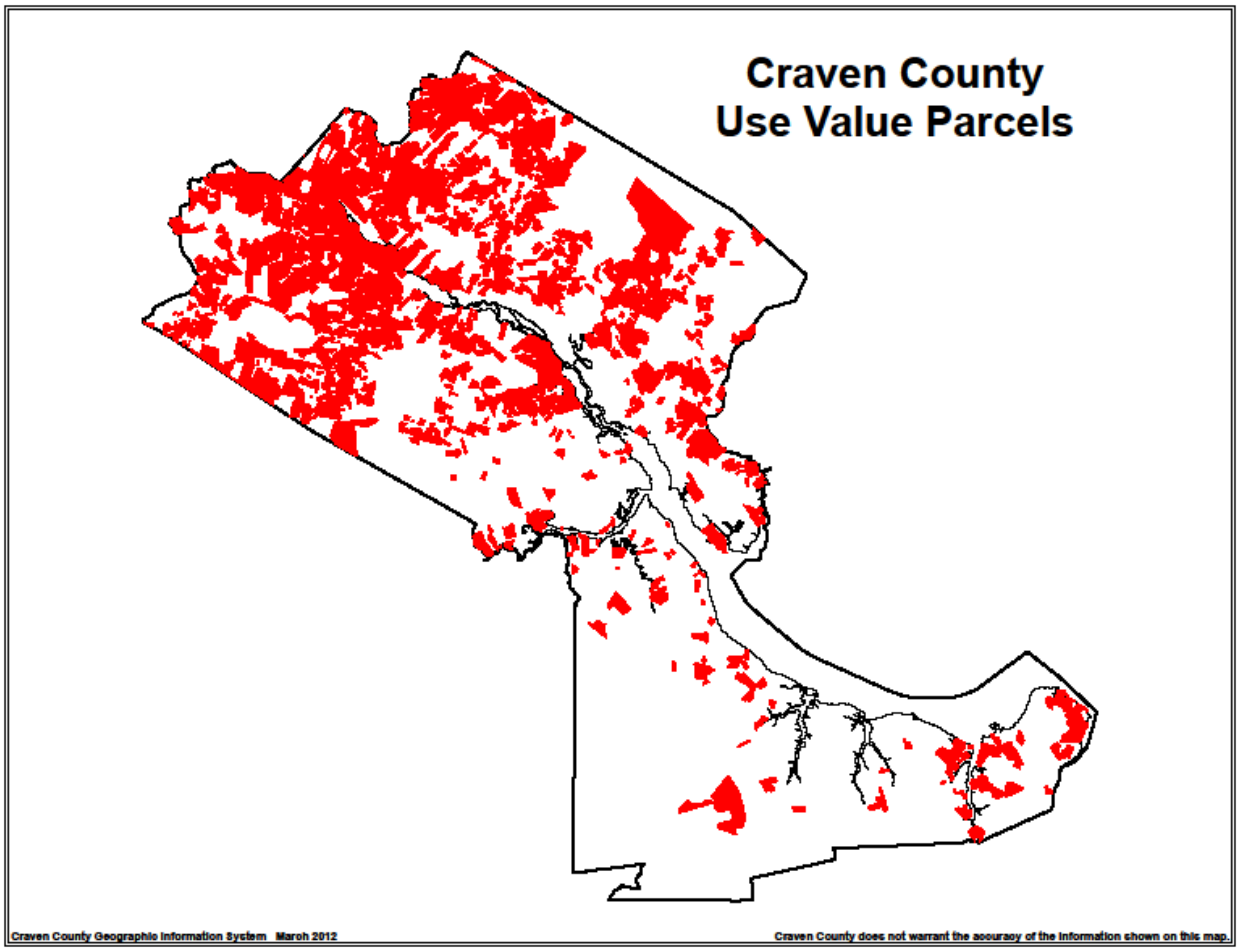

Figure 5 Land in Present Use Value Tax Program Source: Craven County GIS/Mapping 2012

According to the U.S. Department of Agriculture's Census of Agriculture, there were 70,886 acres in farms in Craven County in 2007. This is a 15.4 percent reduction from the number of acres in farms in 1997. The average size of a farm also decreased from 303 acres in 1997 to 248 acres in 2007, representing an 8.1 percent decrease. However, the number of farms increased by 9.6 percent during that same time period. This could indicate that more farmers are moving to smaller operations.

The majority of farm use in Craven County (70 percent) was in cropland in 2007. Woodland made up more than 20 percent of the land in farms (Figure 6).

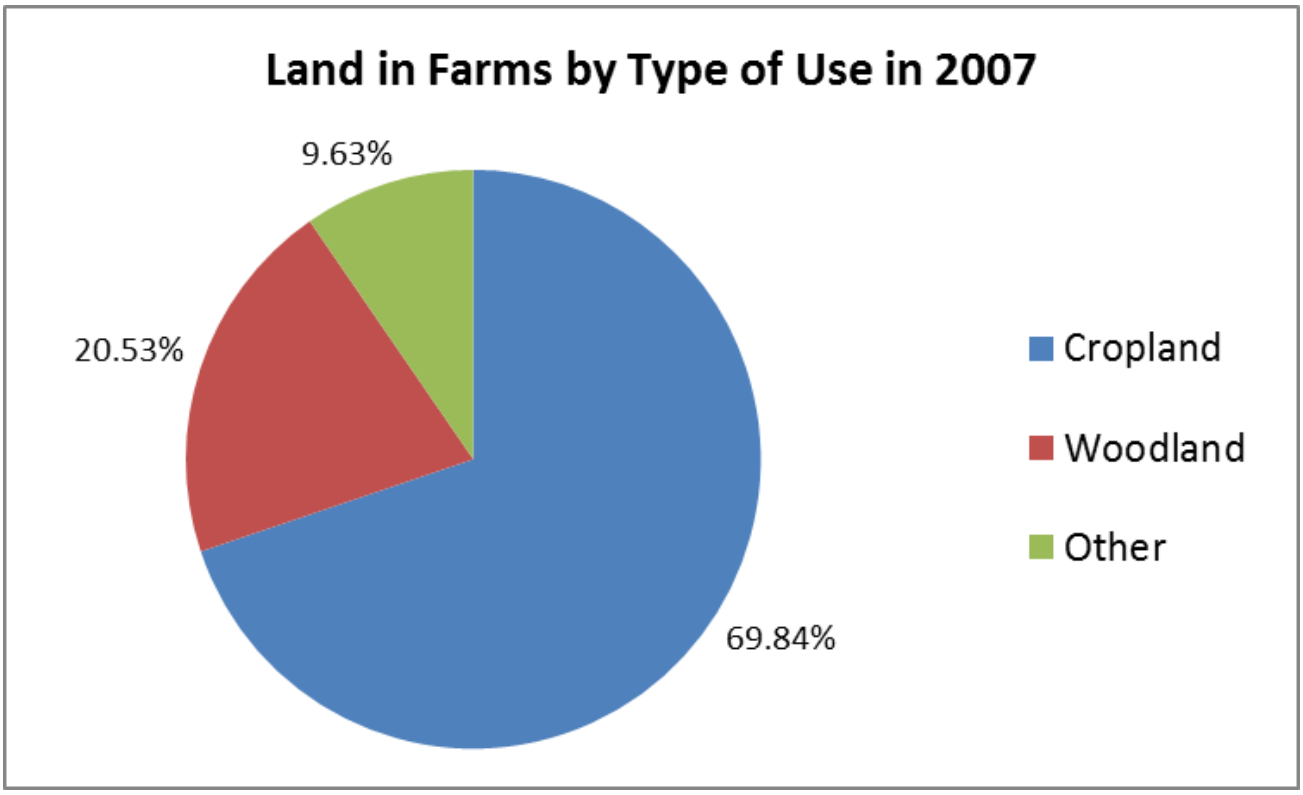

Figure 6 Land in Farms by Use of Source: USDA Census of Agriculture 2007

Figure 7, which shows where residential development has taken place in the county, indicates that residential development is sparse in the northwestern part of the county and concentrated along the waterways. Neither residential developments nor agricultural production are located in the southeastern portion of the county where the Croatan National Forest is located.

The southern/southeastern part of the county has good agricultural soils, and there has been agricultural production there in the past. However, many of the same soil qualities that make land attractive for agricultural use are also qualities appropriate for development. It is easier and often cheaper to develop cleared farmland compared to woodland. Thus, development of municipalities and Cherry Point is concentrated in this area.

The soils in the northern/northwestern part of the county tend to be poorly drained. Thus development is limited to soils that will support a septic system. Recently, access to sewer/septic disposal to Kinston has been granted to the southwestern part of the county between Cove City and Dover. This can present potential conflicts for agriculture as urban encroachment and sprawl create pressure on agriculture by inflated land values, restricted or reduced travel of equipment, safety concerns and limited scope of production.

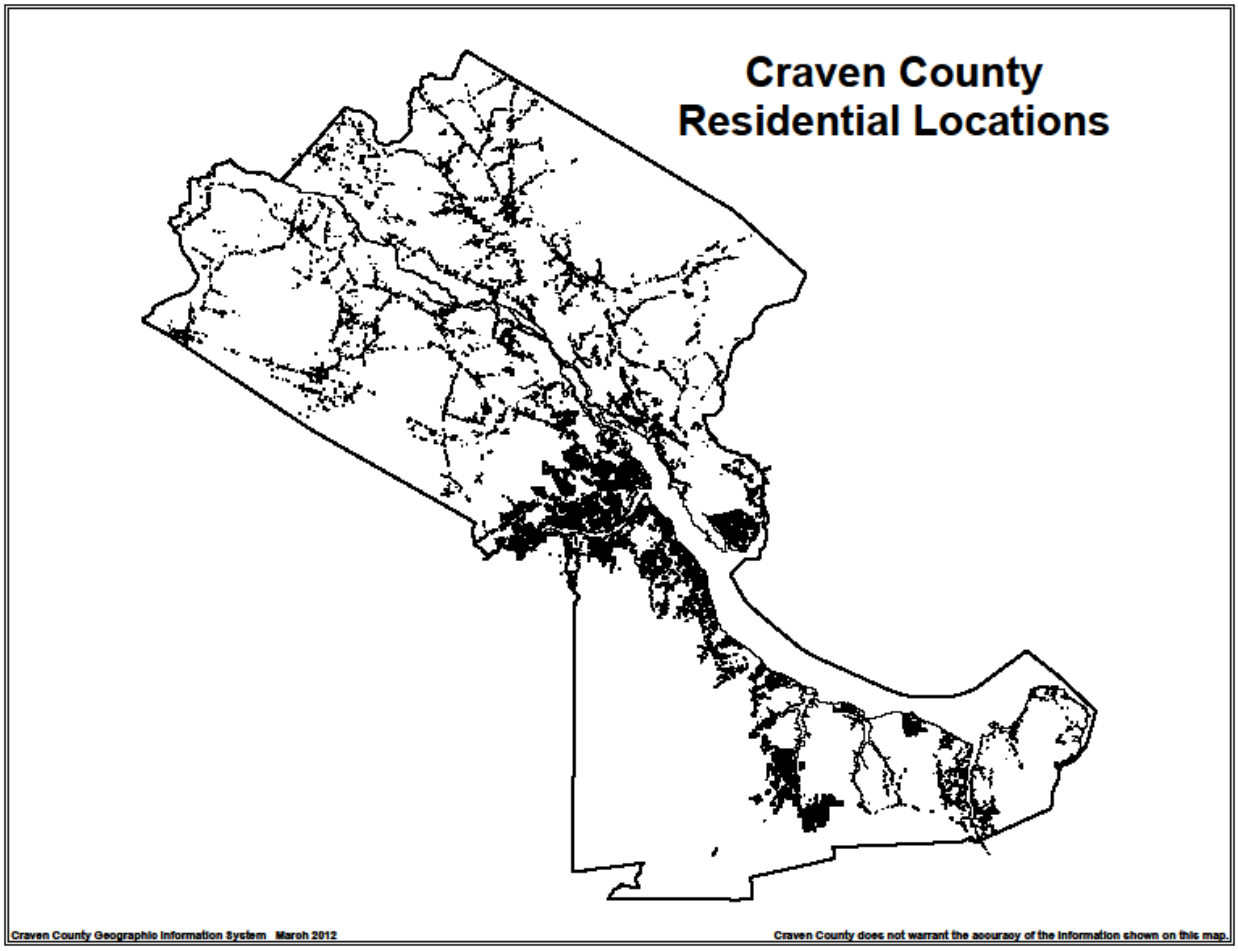

Figure 7 Residential Locations in Craven County Source: Craven County GIS/Mapping 2012

Soils

Agriculture and forestry depend on good soil quality to produce maximum yields, and farmers must practice good stewardship of the soil to maintain operations. The diversity of soil types affords differing soil qualities allowing for a diversity of products to be grown. Figure 8 and Table 1 identify the major soil types and the locations of those soils in Craven County.

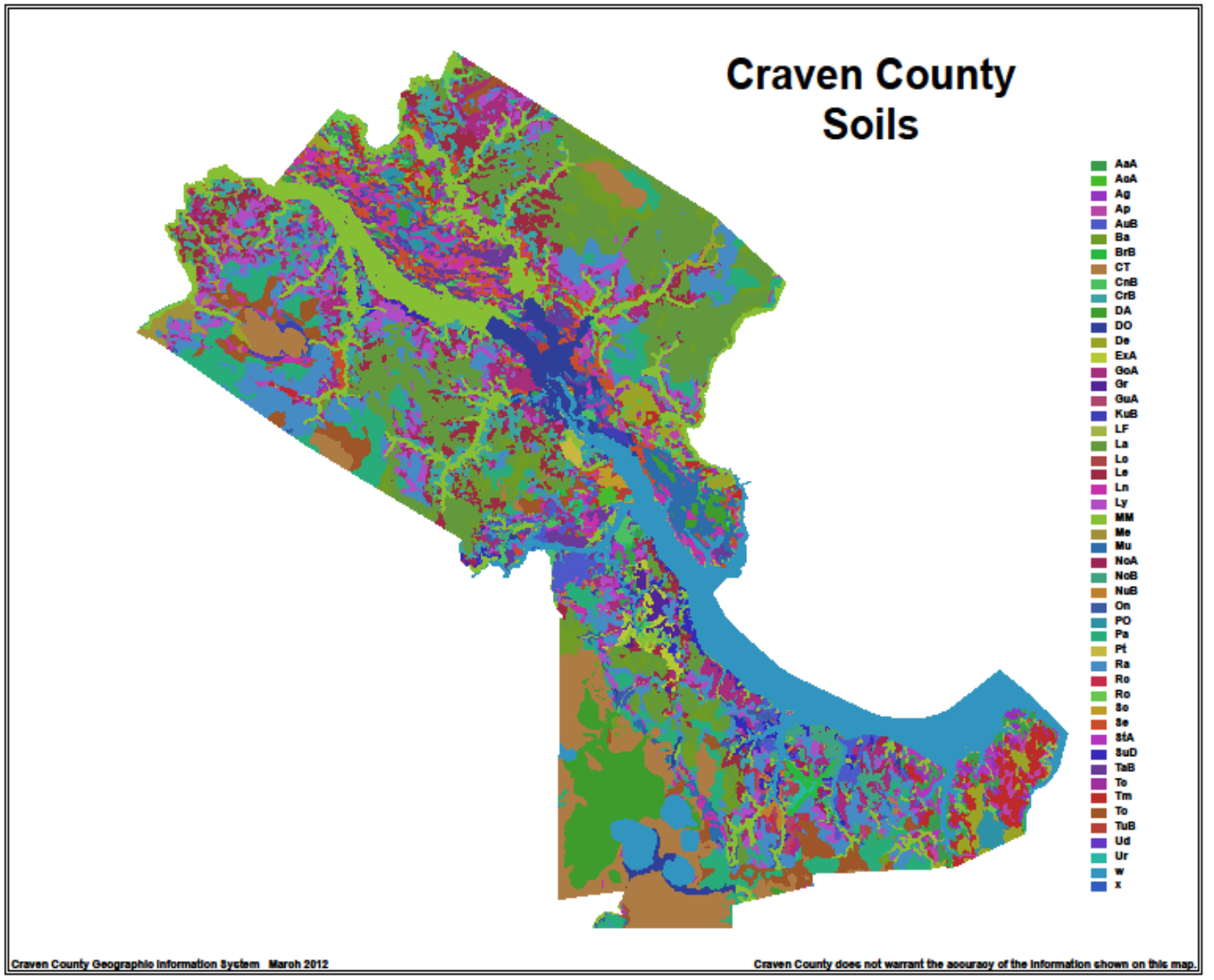

Figure 8 Soils in Craven County Source: Craven County GIS/Mapping 2012

Map Unit Symbol	Map Unit Name	Acres in AOI	Percentage Of AOI
AaA	*Altavista fine sandy loam, 0 to 2 percent slopes*	*9,117*	*1.9*
AcA	*Altavista-Urban land complex, 0 to 2 percent slopes*	*456*	*
Ag	*Augusta fine sandy loam*	*5,871*	*1.2*
Ap	*Arapahoe fine sandy loam*	*11,733*	*2.4*
AuB	*Autryville loamy sand, 0 to 6 percent slopes*	*5,626*	*1.2*
Ba	*Bayboro mucky loam*	*13,908*	*2.9*
BrB	*Bragg soils, 0 to 8 percent slopes*	*1,121*	*0.2*
CnB	*Conetoe loamy sand, 0 to 5 percent slopes*	*6,943*	*1.4*
CrB	*Craven silt loam, 1 to 4 percent slopes*	*18,265*	*3.7*
CT	*Croatan muck*	*24,740*	*5.1*
DA	*Dare muck*	*19,611*	*4.0*
De	*Deloss fine sandy loam*	*11,796*	*2.4*
DO	*Dorovan muck*	*8,069*	*1.7*
ExA	*Exum silt loam, 0 to 2 percent slopes*	*2,311*	*0.5*
GoA	*Goldsboro loamy fine sand, 0 to 2 percent slopes*	*24,714*	*5.1*
Gr	*Grantham silt loam*	*2,281*	*0.5*
GuA	*Goldsboro-Urban land complex, 0 to 2 percent slopes*	*991*	*0.2*
KuB	*Kureb sand, 0 to 6 percent slopes*	*916*	*0.2*
La	*Leaf silt loam*	*41,604*	*8.5*
Lc	*Lynchburg-Urban land complex*	*316*	*
Le	*Lenoir silt loam*	*21,599*	*4.4*
LF	*Longshoal muck, very frequently flooded*	*2,609*	*0.5*
Ln	*Leon sand*	*5,964*	*1.2*
Ly	*Lynchburg fine sandy loam*	*18,973*	*3.9*
Me	*Meggett sandy loam*	*2,509*	*0.5*
MM	*Masontown mucky fine sandy loam and Muckalee sandy loam, frequently flooded*	*27,874*	*5.7*
Mu	*Murville mucky loamy sand*	*8,739*	*1.8*
NoA	*Norfolk loamy fine sand, 0 to 2 percent slopes*	*2,724*	*0.6*
NoB	*Norfolk loamy fine sand, 2 to 6 percent slopes*	*7,031*	*1.4*
NuB	*Norfolk-Urban land complex, 0 to 6 percent slopes*	*1,073*	*0.2*
On	*Onslow loamy sand*	*3,046*	*0.6*
Pa	*Pantego fine sandy loam*	*29,750*	*6.1*
PO	*Ponzer muck*	*5,672*	*1.2*
Pt	*Pits*	*576*	*0.1*

Ra	*Rains fine sandy loam*	*37,341*	*7.7*
Rc	*Rains-Urban land complex*	*768*	*0.2*
Ro	*Roanoke fine sandy loam*	*1,608*	*0.3*
Sc	*Seabrook-Urban land complex*	*712*	*0.1*
Se	*Seabrook loamy sand*	*11,409*	*2.3*
StA	*State loamy sand, 0 to 2 percent slopes*	*3,492*	*0.7*
SuD	*Suffolk loamy sand, 10 to 30 percent slopes*	*4,080*	*0.8*
TaB	*Tarboro sand, 0 to 6 percent slopes*	*10,165*	*2.1*
Tc	*Torhunta-Urban land complex*	*325*	*
Tm	*Tomotley fine sandy loam*	*11,765*	*2.4*
To	*Torhunta fine sandy loam*	*11,564*	*2.4*
TuB	*Tarboro-Urban land complex, 0 to 6 percent slopes*	*943*	*0.2*
Ud	*Udorthents, loamy*	*680*	*0.1*
Ur	*Urban land*	*1,450*	*0.3*
W	*Water*	*42,383*	*8.7*
Total		*487,213*	*100.0*

Table 1 Soil Types and Proportions Source: Craven County NRCS * Less than 0.1 percent

Because Craven County is part of the Neuse River and the Tar Pamlico River basins, all agriculture and forestry operations must follow *The Neuse Agricultural Rules* and the *Tar Pam Riparian Buffer Rules and Nutrient Strategies* established by N.C. Department of Environment and Natural Resources. These strategies and best management practices were implemented to reduce the average load of nitrogen that goes into rivers and streams in the Neuse and Tar-Pamlico River basins. Multiple county agencies have been tasked to assist farmers and landowners in creating plans to meet these goals. Nutrient management plans, riparian buffers and vegetated strips are some of the options available to producers and landowners to meet these nitrogen reduction goals, filter run off, cope with flood control and other environmental impacts[19]. As in the case of production, soil qualities and soil types play an important role in the management of nutrients and their off-site movement into receiving waters.

Farm Ownership and Acreage

In Craven County, there has been a shift in agriculture over the years. Since 1997, there has been a steady decrease in land in farms (Figure 9)—a drop of almost 13,000 acres, approximately 20 square miles, from 1997 to 2007. This in itself has presented challenges to agriculture in the county.

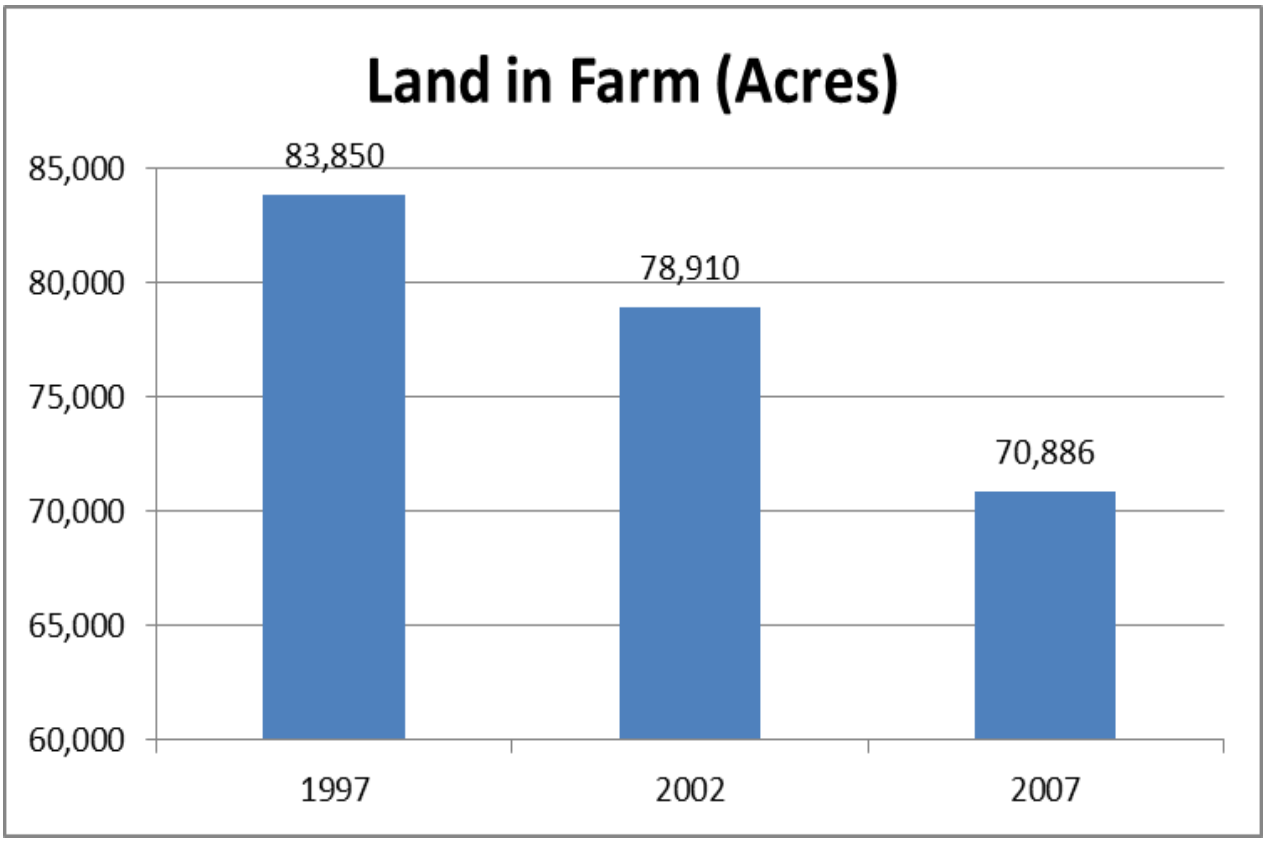

Figure 9 Land in Farms (Acres) Source: USDA Census of Agriculture 1997, 2002, 2007

The U.S. Department of Agriculture (USDA) defines a farm as "….any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the year."[20] USDA categorizes farms based on full-time/part-time/retired operators and gross sales. Small family farms are those that earn less than $250,000 in gross sales. Small family farm operators are identified as limited-resource farmers, operators who have a farm as residential/lifestyle choice, those who are retired or those who report farming as their main occupation but still report under $250,000 in gross sales. Large family farms have gross sales between $250,000 and $499,999, and the operators report that they are full-time farmers. Very large family farms have gross sales of over $500,000[21].

In Craven County, 45 farms were considered large and very large family farms with sales from $250,000 to more than $500,000 according to the 2007 USDA Census of Agriculture. These farms operated on more than 37,000 acres. There were 229 farms in Craven County that had $250,000 or less in gross sales in this same census. These farms operated on 31,734 acres[22]. The majority of farms in the county are thus classified as small family farms. However, when evaluating overall agricultural sales, large or very large family farms contributed the most to the county's economy. This is most assuredly related to the increased cost of operation and the efficiencies of scale as a shift to large-scale farming occurs.

Changes in agriculture are reflected in the number of farms, the tenure of operators' acres farmed and the average size of farms in Craven County. According to the USDA Census of Agriculture, the number of acres in farms decreased by 12,964 acres in 10 years—from 83,850 acres in 1997 to 70,886 acres in 2007. Of those acres farmed, 58.5 percent were tended by part owners (farmers who operate land they own and also land they rent from others) in 1997 which dropped to 54.3 percent in 2007. Acres farmed by tenants (farmers who operate only land they rent from others or work on shares for others) went from 17.4 percent in 1997 to 15.7 percent in 2007. These decreases can be tied to the decrease in acreage farmed. The acres tended by full owners (farmers who operate only land they own) remained steady from 1997 to 2007 (Figure 10)[23]. The average size farm in the county decreased by 18.1 percent during the same time period (Figure 11)[24].

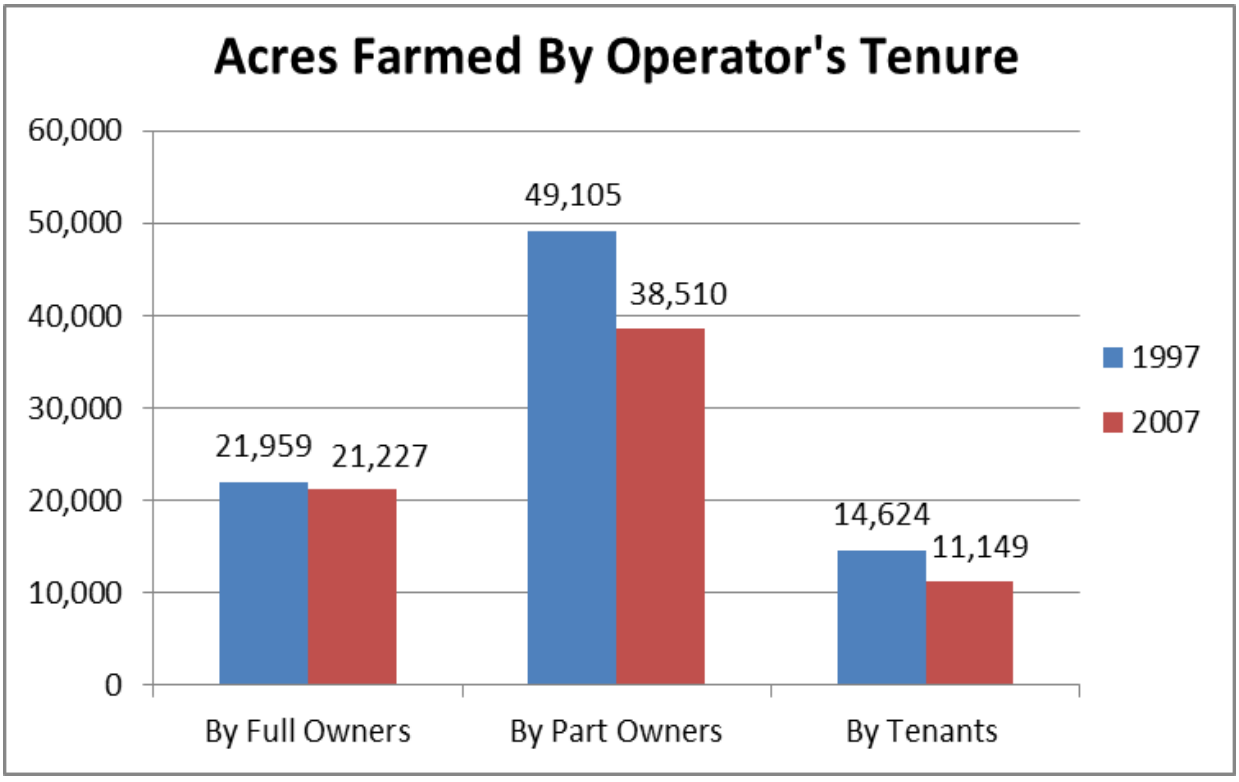

Figure 10 Acres Farmed by Full, Part Time and Tenant Operators Source: USDA Census of Agriculture 1997 and 2007

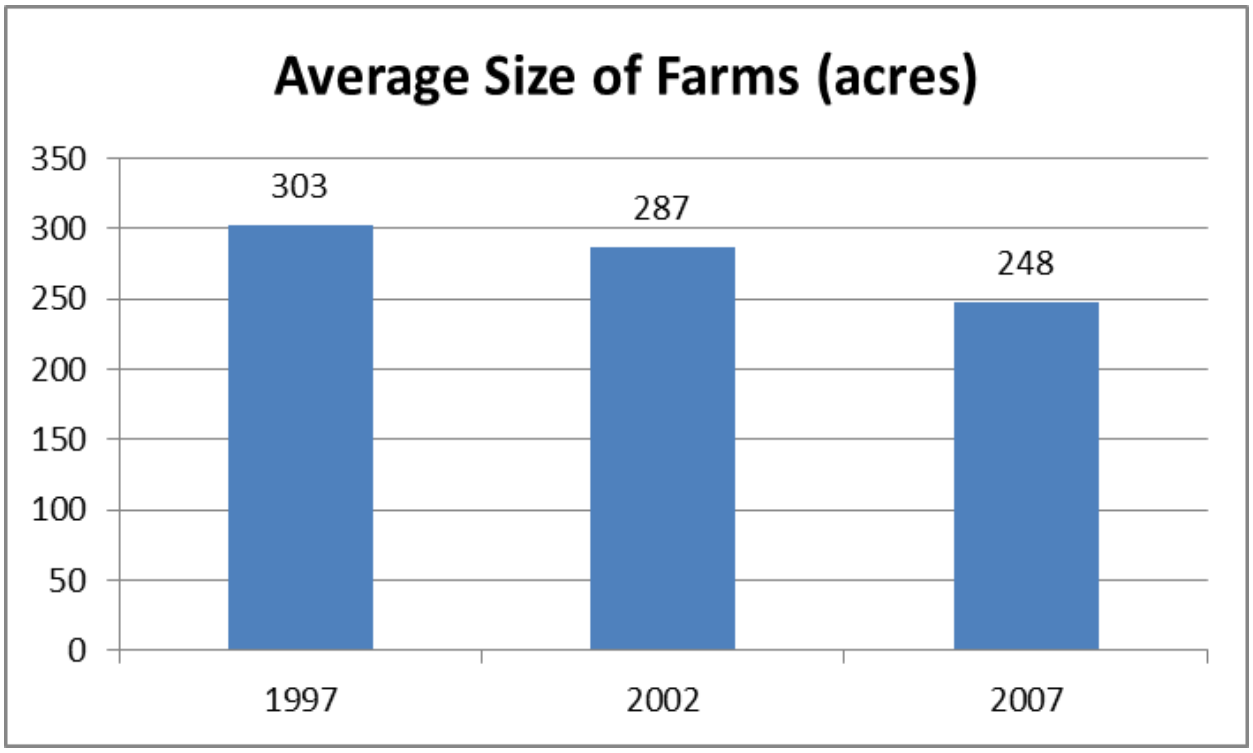

Figure 11 Average Farm Size Source: USDA Census of Agriculture 1997-2007

The demographics of producers and landowners have changed over the years as well. Table 2, Demographics of Craven County Farmers, illustrates some of the changes that have occurred. The average age of a farmer in Craven County steadily increased from 1997 to 2007 by 3.9 years. There was a 7.7 increase in female principal operators from 1997 to 2007. At the same time, the number of male principal operators went down 17.3 percent. The majority of farm operators were white, and this number has increased in the last decade. However, farms operated by black/African American farmers decreased by 66.6 percent from 1997 to 2007.

	1997	2002	2007
Average operator age	54.3	53.9	58.2
Number of farms operated by principal operators according to sex:			
Male	299	250	247
Female	22	25	39
Number of farms operated by all operators according to race			
American Indian or Alaska Native	0	2	2
Asian	0	0	0
Black or African American	27	14	9
White	250	263	277
More than one race	0	0	2
All operators of Spanish, Hispanic, or Latino Origin	0	1	3

Table 2 Demographics of Craven County Farmers Source: USDA Census of Agriculture 1997, 2002, 2007

Agriculture and Forestry

In Craven County, agriculture and forestry contributed cash receipts of $33,611,000 for crops and $20,581,000 for livestock in 2010[25]. N.C. State University ranked Craven County sixth in the state for income of timber harvested and delivered to mills in 2010[26]. This is income from stumpage (price paid to landowner for standing timber) and the price paid to timber buyers upon delivery of timber to the mills.

World production and demand has contributed to increased commodity prices. There is hope that this pricing structure will remain at these levels to help offset the ever-increasing cost of production inputs.

Crops

As income from crop sales declined from 1997 to 2007, the production of crops still accounted for the majority of income from agricultural sales in Craven County (Figure 12).

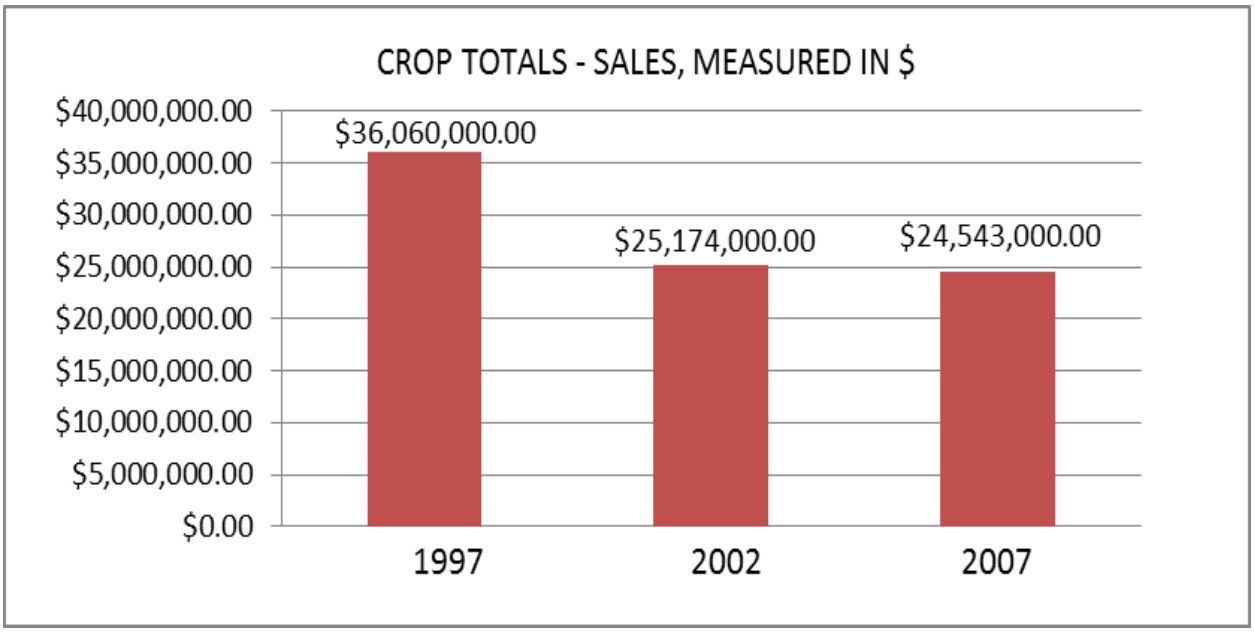

Figure 12 Crop Sales Total Source: USDA Census of Agriculture 1997, 2002, 2007

The impacts of commodity price shifts and the tobacco buyout have resulted in a drop in tobacco production and a production increase in grain, soybeans and horticultural. Between 1997 and 2007, tobacco sales dropped 69.3 percent. This was most probably due to the tobacco buyout program, which occurred in 2004. With the decline in tobacco production, producers sought other crops to grow such as grain, soybeans and horticultural products.[27] Other factors that influenced crop production were market demands, pricing and changes in crop support programs.

USDA Census of Agriculture tracks selected crops over several decades. Such data can indicate production shifts and movement toward diversification of farming operations. The USDA Census of Agriculture's Selected Crops for Craven County profile shows fluctuation in acres grown (Figure 13). Over the years, crops grown in Craven County have changed due to market demands, pricing and changes in crop support programs. Some of this fluctuation was also related to increases in oil prices that affected fertilizer and fuel costs. All of these factors made some crops more profitable and feasible to grow than others. As an example, corn production increased 59.3 percent from 1997 to 2007. In 2010, the county ranked 14th in the state for corn production[28]. Part of this increase is likely due to the increase in demand and price resulting from ethanol production. However, new biotechnological traits and varietal improvements have also increased corn yields according to N.C. Cooperative Extension Craven County.

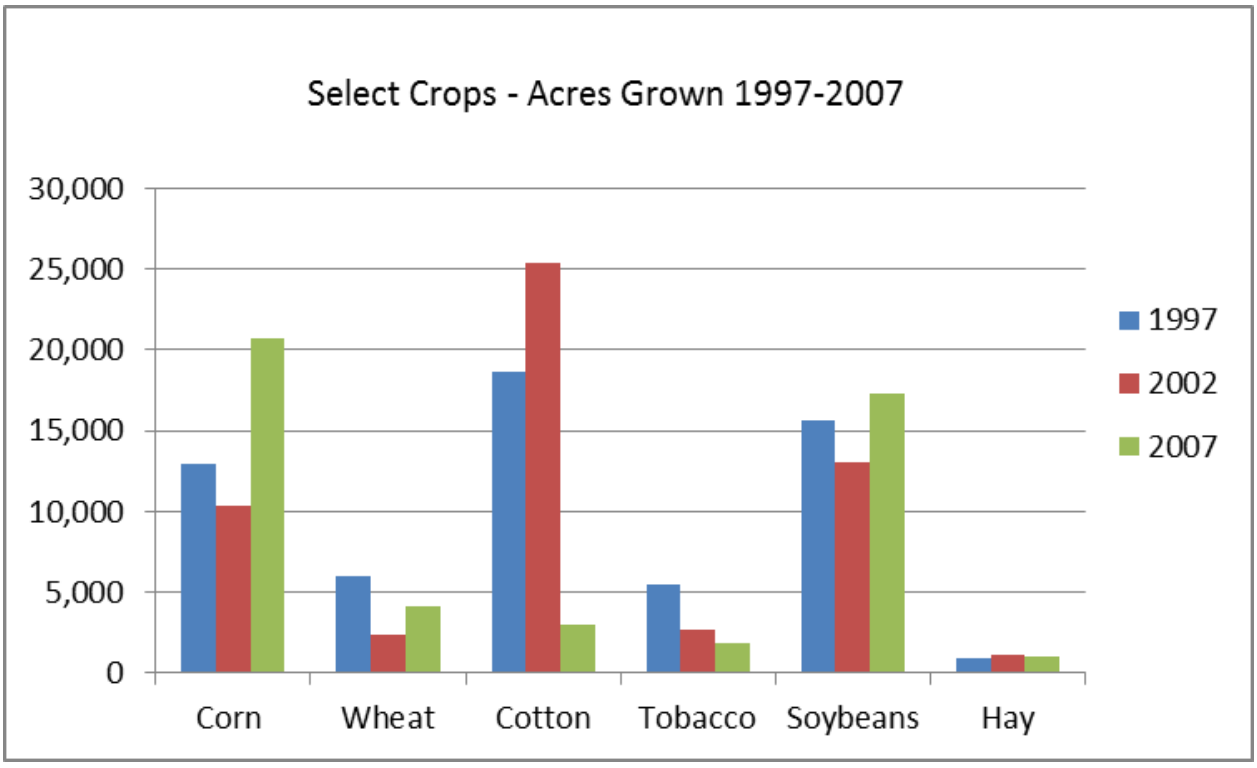

Figure 13 Selected Crops Acres Grown Source: USDA Census of Agriculture 1997 2002 2007

Soybean production had a slight increase of 10.4 percent in acres grown from 1997 to 2007 and in 2010 ranked 22nd in the state[29]. In contrast, cotton production during the same time period increased by 36.2 percent. However, in 2007, there was a dramatic drop of 22,410 acres grown (88.3 percent) in cotton [30] due to a rapid decline in price. World cotton price remained between $0.55 and $0.623 per pound from 2007 to 2009. Cotton production increased by 3,435 acres to 6,400 acres in 2010. This sharp increase was in response to the dramatic drop in supply and corresponding dramatic increase of prices (high of $1.95 per pound) resultant from severe drought and flood in other cotton producing countries.[31]

Tobacco has continued to decline in production from 11,999,433 pounds harvested on 5,452 acres in 1997 to 4,255,023 pounds harvested on 1,854 acres in 2007. This decline is attributed to the tobacco buyout program that moved farmers from the quota program to a free market program. Some farmers opted to cease tobacco production completely while others contracted direct sales with tobacco companies resulting in larger tobacco production systems. Others left tobacco to diversify operations in the absence of tobacco.

In 2009, the N.C. Department of Agriculture and Consumer Services (NCDA&CS) did not report wheat production numbers in Craven County. However, in 2010, the department reported 1,400 acres, which brought the county to a rank of 63rd in production statewide. The importance of wheat is increasing for most growers in the county, but timing of critical wheat management operations conflicts with other high-value crops such as tobacco, peanuts and

cotton. Rising commodity prices have resulted in increased wheat acreage as well as demand from livestock producers for locally produced wheat.

Hay production gradually increased in the county between 1997 and 2007. In 1997, there were 932 acres in production. This increased to 1,029 in 2007[32]. The N.C. Department of Agriculture and Consumer Services stated that in 2010, Craven County harvested 1,500 acres of hay and ranked 76th in the state[33].

According to NCDA&CS, Craven County horticulture production operations ranked 38th in the state in 2010. Sales of nursery, greenhouse, floriculture products and Christmas trees generated more than $4.1 million dollars in 2010[34]. This represents an increase of $2,894,000 from 1997 when the county reported $1,252,000 in nursery and greenhouse sales[35].

While vegetable production exists in Craven County, it is limited. Vegetable production has included asparagus, snap beans, cabbage, cantaloupe, cucumbers, sweet corn, sweet potatoes, squash, strawberries, tomatoes, greens and watermelons. In 1997, there were 23 acres of vegetable production. In 2007, 59 acres were reported to be in vegetable production, a modest increase[36].

Farmers have remained innovative and willing to adapt to new markets. In 2007, five farms in the county produced and sold value-added commodities according to the USDA Census of Agriculture[37]. There was one farm that sold its products through a Community Supported Agriculture (CSA) program and two farms that reported they had USDA organic pastureland[38].

Livestock

Livestock production in Craven County is a major contributor to cash receipts. Sales have fluctuated with an overall decline of 17.7 percent in sales of animals and products from 1997 to 2007(Figure 14). Livestock tends to perform better in inflationary times when prices stay ahead of costs[39].

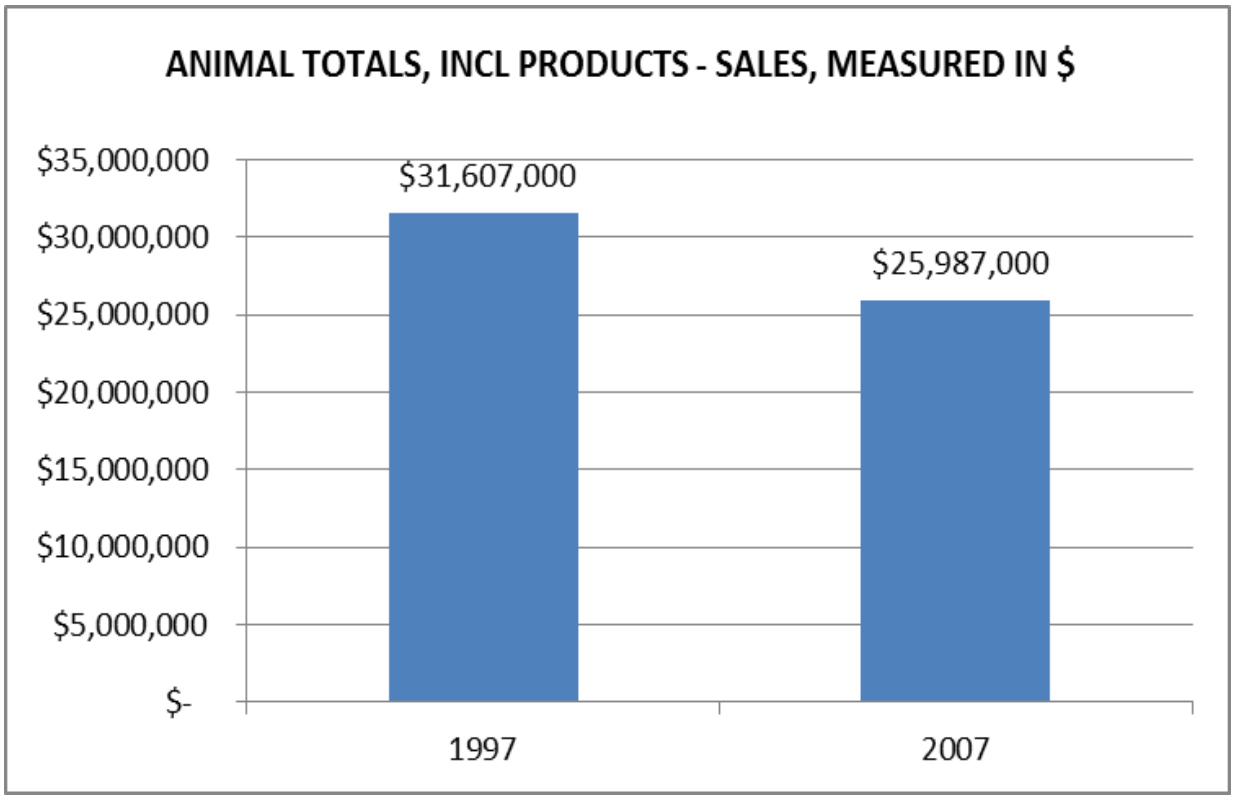

Figure 14 Animal Sales Total Source: USDA Census of Agriculture 1997, 2002, 2007

The majority of livestock operations located in Craven County were swine operations with an inventory of 1,000 hogs[40]. In 2002, there were 20 swine farm operations with production contracts for a total of 446,791 animals. In 2007, there were 19 farms under production contracts that had a total of 531,543 animals—an 18.9 percent increase in animals from 2002[41]. No data for production contracts were gathered in 1997 by the USDA Census of Agriculture. However, swine sales in 2007 were below the 1997 level, but there was an increase of 8.6 percent from 2002 to 2007(Figure 15)[42].

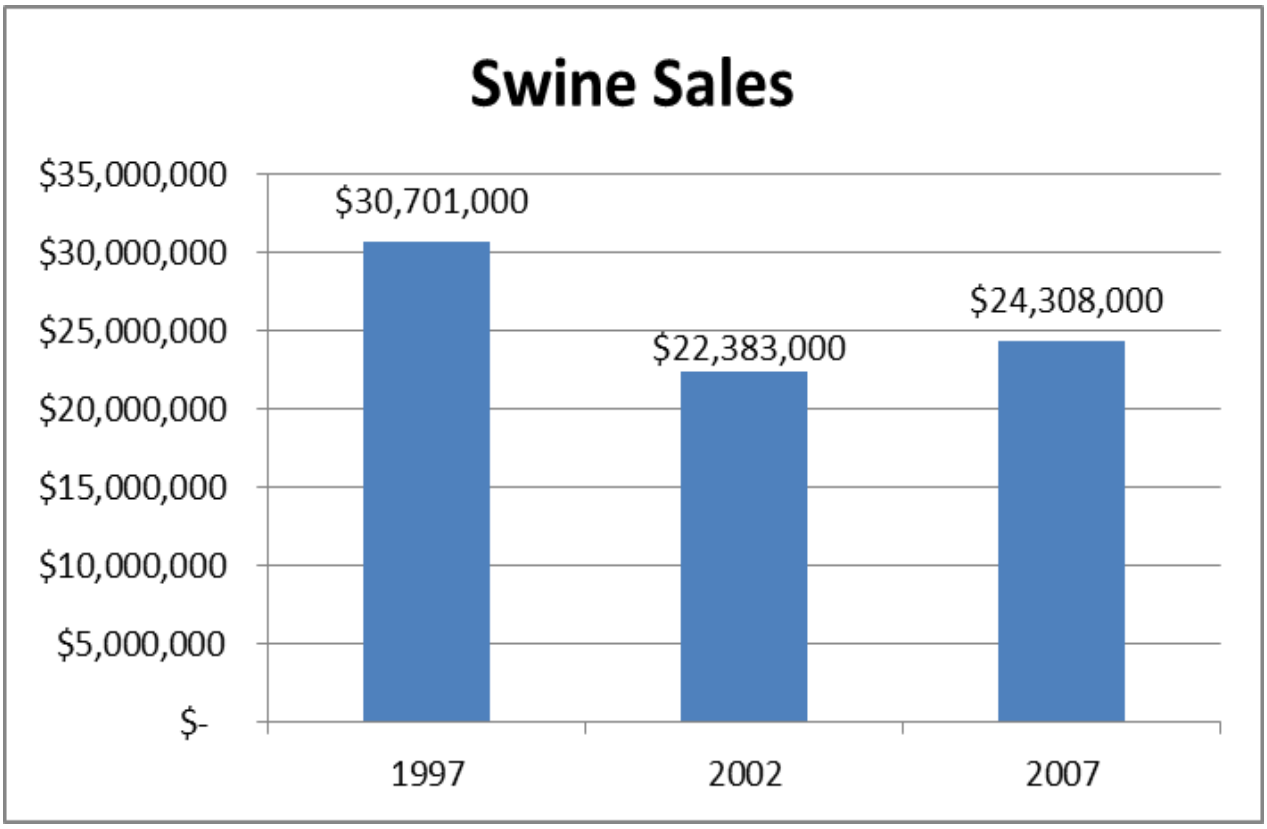

Figure 105 Swine Sales Source: USDA Census of Agriculture 1997, 2002, 2007

A steady increase in the number of farms with horses indicates a growing equine industry in Craven County. In 1997, there were 30 farms with 123 horses while in 2007, there were 40 farms with 278 horses according to the USDA Census of Agriculture[43]. Many of the horses were kept for pleasure, but large numbers were kept for breeding or for work. As with other livestock, prices of fuel, feed and other costs affect production and numbers.[44]

Goat production has increased in Craven County. This is tied to the growth in the immigrant population, which uses goat milk and meat. In 1997, there were three farms with a total of 110 milk goats[45]. By 2007, there were 34 farms with a total of 423 goats[46], two of those farms were milk goat production[47], and 28 farms were for goat meat production[48].

Aquaculture

Catfish operations represented the largest component of aquaculture in the county. There were seven operations that sold catfish with $1,282,000 in sales in 2007. These sales represented 1,321, 000 pounds of catfish sold. There were seven operations that were classified as "other food fish" operations (tilapia, perch, striped bass, etc.) and one operation that dealt with prawn, but the sales data for these categories were suppressed[49]. In 2003, there were 22 licensed aquaculture operations in the county, but in 2012, the number of operations was down to 16. It is estimated that currently there are eight catfish, five hybrid striped bass, one freshwater

prawn and one fee fishing and/or fish bait operations[50]. There were some shellfish leasing operations, such as oysters and clams, in Craven County. However, according to N.C. Sea Grant, those operations were so small they could not be counted[51].

This decline in operations can follow the decline in demand for domestic use and increases of imported aquaculture products. The decline is also tied to an increase in the price of feed and fuel in the United States[52].

Currently, Craven County aquaculture production has somewhat stabilized. Innovation, marketing and an emphasis on domestic product have been key elements to reach and educate consumers. Demand, a change in stance toward imports in the United States and input costs are still factors to contend with in this field.

Forestry

Nearly 65 percent of Craven County is forestlands. Of the 275,100 acres of forestland ownership reported by the N.C. Forest Service in the county, 87,900 acres are privately owned, 117,300 acres are owned by the forest industry, 2,600 are owned by county and municipal governments, and 67,200 acres make up Croatan National Forest and Marine Corps Air Station Cherry Point which are owned by the federal government[53]. As such, forestry is a major component of the county's economic infrastructure.

In 2010, Craven County ranked sixth in the state for harvested timber income. In 2010, the stumpage value, the price paid to the landowner for standing timber, was $13,142,537, and the delivered value, the price paid to timber buyer upon delivery to mill, was $22,322,947[54].

Weyerhaeuser operates a pulp mill near New Bern and owns timberland that the company manages for harvest. Weyerhaeuser was ranked as the 11th largest employer in the county in the first quarter of 2011[55]. More important, the Craven County tax office reported that Weyerhaeuser was the largest principal taxpayer from fiscal year 2009 to the present. In the New Bern metropolitan area, forestry and logging were among the top ten industries ranked on greatest growth in employment between 2010 and 2011[56].

In North Carolina, more than 50 percent of the private forests owned by individuals were part of a family farm in 2006 (Figure 16). The majority of these farmers own the land to pass on to their heirs[57]. Forests offer diversification for the farmer and landowner. With proper management, income can be generated through thinning for the general health of the tract and a final harvest. Hunting leases and pine straw harvesting are other income streams that landowners could capitalize on. All can contribute to the economy of the county.

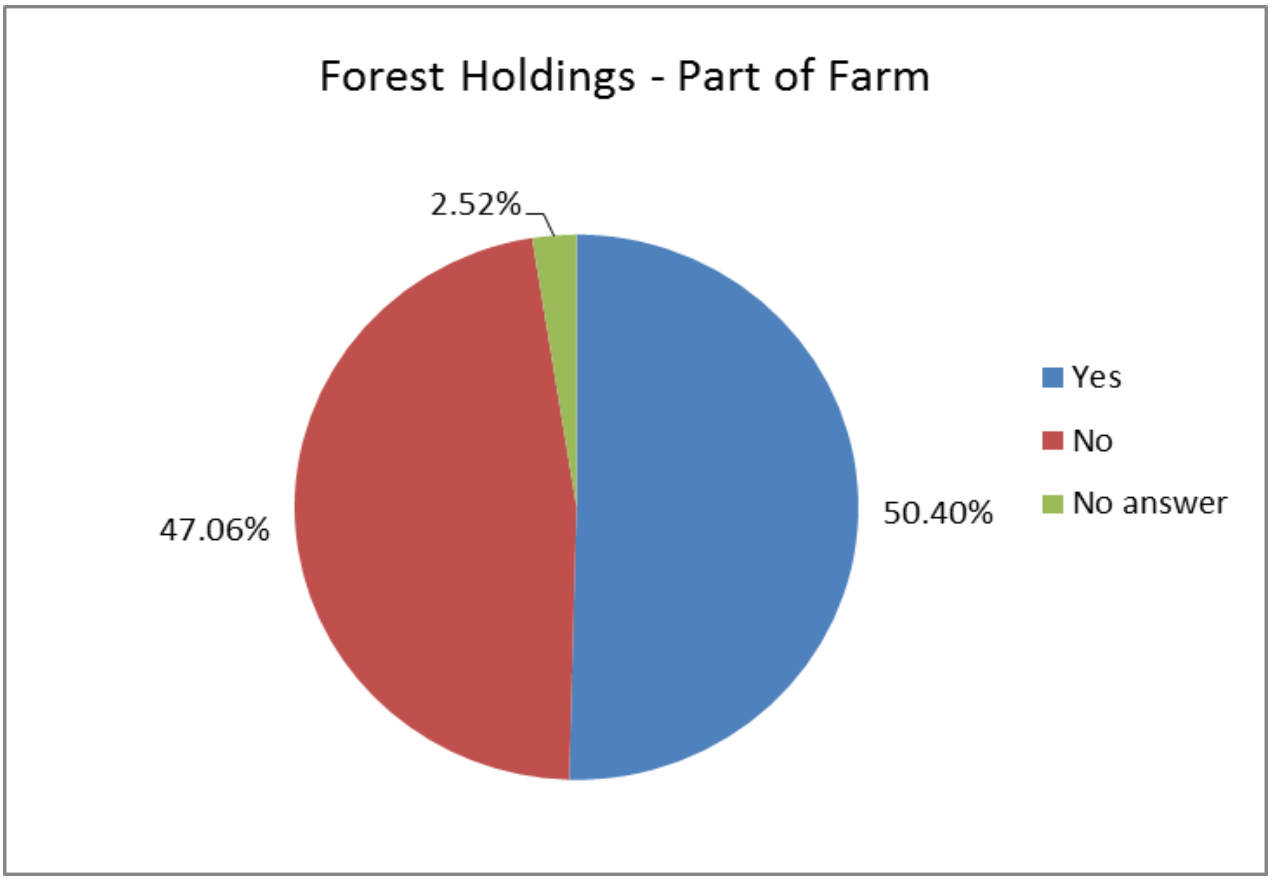

Figure 16 Forest Holdings Part of Farm Source: USDA Forest Service Woodland Owners Survey 2006

The economic downturn and global economic turmoil that started in 2007 affected the forestry industry and forest landowners by decreasing the demand for forest products related to new construction. Those products and prices have not returned to their pre-2007 peak. In 2006, stumpage was $27.91 million in Craven County. By 2008, this had dropped to $21.09 million. In 2011, stumpage had dropped to $11.45 million in the county—a decline of 58.9 percent[58]. North Carolina lost more than $100 million between 2007 and 2008 that the forest industry contributed to the state gross product[59].

Woody biomass represents a potential market for forest by-products. The Craven County Wood Energy (CCWE) facility is a biomass-fired power plant. The plant's main source of fuel is wood waste provided through area manufacturing processes and managed forest initiatives. CCWE is an integral part of the community with millions of dollars invested annually through fuel procurement, equipment purchases, taxes and salaries[60] .

Economy

Economic Impacts

Agricultural production adds significant value to Craven County. According to a North Carolina State University report completed in 2008, total agricultural income in Craven County was $312,760,854. The value added to the Craven County economy during that year was $4,277,979,122 and accounted for 10.4 percent of the employment. Despite the economic downturn that occurred during that period, agriculture, forestry, natural fibers and the industries associated with it continued to add to the county's economy in a significant manner[61].

Land Rent

To maintain viability, many farmers in the county have to rent additional land to support expansion efforts and profit. According to the NCDA&CS, the state average rent per acre was $48 in 2009. High agricultural productive land averaged $66.90 per acre in the state; medium agricultural productive land averaged $45.60; and low agricultural productive land averaged $31.50 per acre in 2009.

Craven County is in District 80, a designation from the NCDA & CS that organizes counties by similar agriculture and geography. Other counties in this district include Beaufort, Carteret, Greene, Hyde, Johnston, Jones, Lenoir, Pamlico, Pitt, Wayne and Wilson. In 2009, the average rent in the district was $78.70 for highly productive land, $55.70 for medium productive land and $41.40 for low productive land.

Craven County land rental prices have remained lower than the average district prices, and these prices changed from 2006 to 2009 (Figure 17). Highly productive land in Craven County received the most cash rent over this time period, but dropped from a high in of $64 per acre 2008 to $60.60 per acre 2009. Medium productive land rents rose by 24.4 percent during these four years. Low productive land rents were relatively steady in this same time period but experienced a slight increase in 2009[62]. These prices have an impact on agriculture since they contribute to production costs. USDA cash rent reported from 2008 to 2012 remained fairly stable, ranging during this time from $57 dollars to $53 dollars on non-irrigated cropland. This information does not take into account land productivity rating but tends to agree with the prices reflected for medium to highly productive land[63].

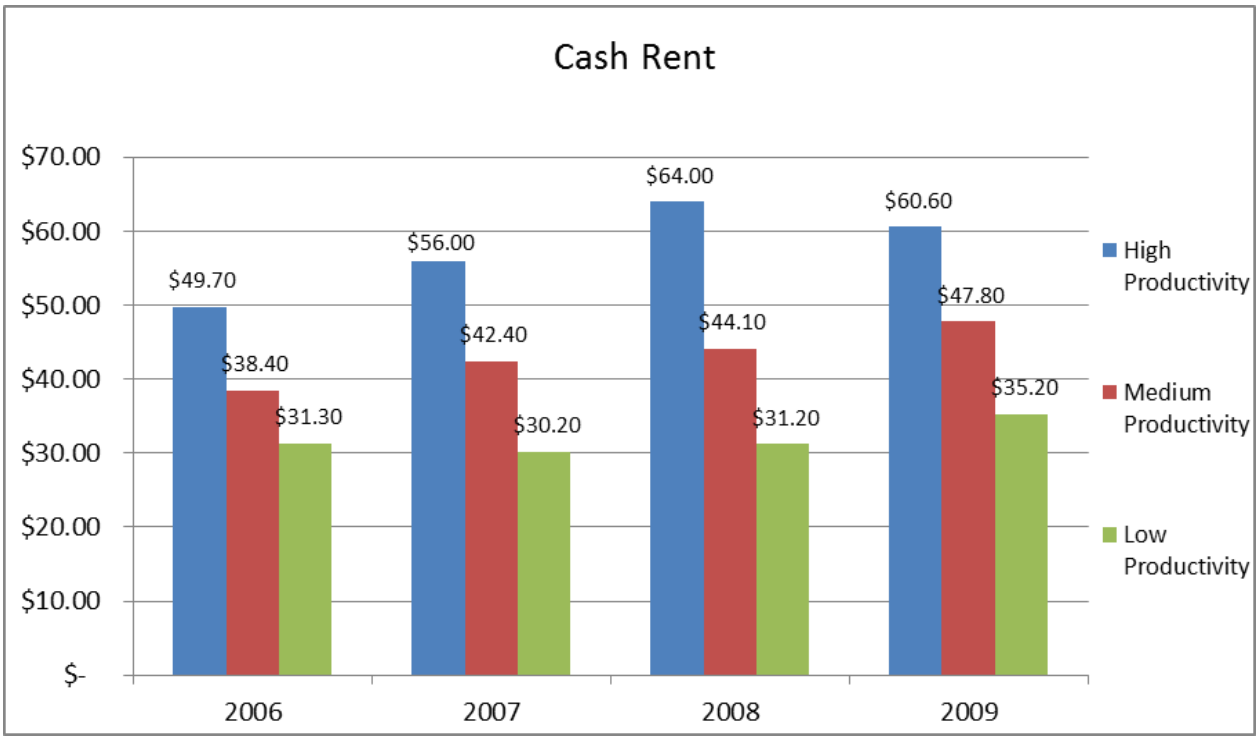

Figure 17 Average Cash Rent Source: NCDA&CS Agricultural Statistics 2006-2009

Production Costs

In Craven County, profit margins for producers have narrowed. Net cash return in the Census of Agriculture is calculated by subtracting total farm expenses from total sales, government payments and other farm income. Production expenses included feed, livestock purchased, seed, bulbs, plants and trees, fertilizers, chemicals, fuel, labor and other related expenses. Historically, farm expenses outweighed net cash income over 100 percent from 1997 to 2007. In 2007, expenses were 122 percent more than income (Figure 18). Tax incentives, cost-share programs, government subsidies and support programs have allowed farmers to remain in operation during times of low commodity prices. This has allowed the general public to continue to afford a safe and consistent food supply. As these support programs are re-evaluated and discontinued, farmers must find ways to manage risk to continue to stay in business. Without affordable risk management tools available to farmers, citizens and government alike will face uncertainty in food prices and supplies.

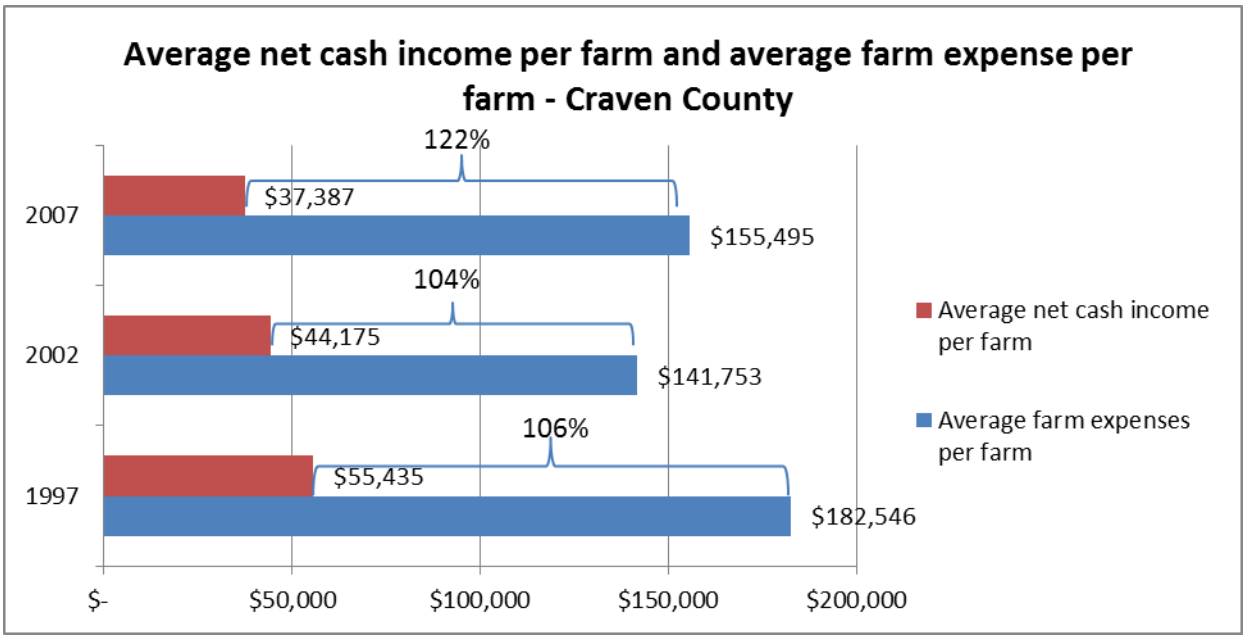

Figure 18 Average Net Cash Return/Income Per Farm and Average Farm Expenses Per Farm Source: USDA Census of Agriculture 1997, 2002, 2007

Figure 19 illustrates major agricultural production expenses between 1997 and 2007. Two expenses have been constant between 1997 and 2007: livestock and poultry purchased and feed. Farm labor was the third-highest expense in 1997 and 2002. However, in 2007, fertilizer was the third-highest expense due to a rapid increase in oil prices and associated costs of fertilizer production and transportation. Fuel costs rose 117.7 percent between 2002 and 2007 (Figure 19)[64].

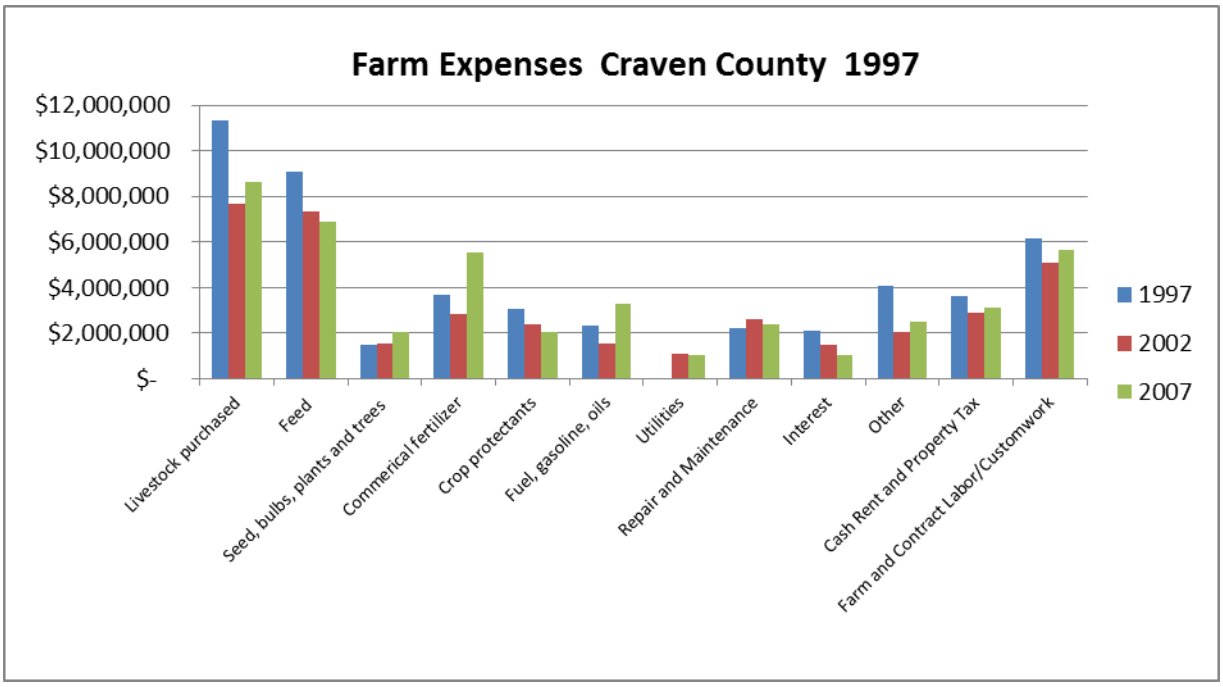

Figure 19 Farm Expenses Source: USDA Census of Agriculture 1997, 2002, 2007

Taxation and Present Use Value Tax Deferred Program

Across the state, counties employ a present land use taxation program to enable agricultural, forestry and horticultural land to be taxed at its present-use value instead of its market value. Bona fide agricultural and forested lands are allowed to defer to a lower tax rate, which offers protection for continued present use.

Citizens of every county pay taxes to provide services to the county as a whole. Property taxes provide a bulk of the revenue for sheriff services, emergency medical services, schools and other county-related services. But there is a disparity that exists for the cost of services that are received by farms and those received by residential developments. In studies done across the state, residential developments require more services than their revenue streams are able to pay. Conversely, commercial land use and farm and forestland uses require fewer services and generate excess revenue through property taxes.

Table 3 shows the results from counties studied. This table represents a wide range of counties in the state in terms of population and size, but the trend is similar and can be extrapolated for other counties in Eastern North Carolina. Mount Olive College has completed a cost-of-community-services study for Wayne County to reinforce the importance of planned development and farm and forest preservation in counties in the eastern part of the state.

County	Residential	Commercial/Industrial	Farm/Forestland	Source
Chatham	$1.11	$ .47	$ .92	Renkow, 1998
Wake	$1.54	$ .18	$ .47	Renkow, 2001
Union	$1.30	$ .41	$ .24	Dorfman, 2004
Orange	$1.31	$ .24	$ .72	Renkow, 2006
Alamance	$1.47	$ .23	$ .59	Renkow, 2006
Wayne	$1.24	$ .34	$ .47	MOC Agribusiness Center 2012
National Average	$1.15	$ .29	$ .37	AFT, 2006

Table 3 Cost of Services Source: NCDA&CS ADFP Trust Fund 2008 Annual Report and Mount Olive College Agribusiness Center Wayne County Cost of Community Services Study 2012

Counties require income to provide services to county residents. Counties often increase property tax rates instead of sales tax to generate additional revenue for services. Craven County retained its 2010-2011 property tax rate of $0.4728 per $100 value for the 2011-2012 fiscal year. This rate is lower than the tax rate of $0.6100 per $100 value from 2006 to 2010 when property re-evaluation occurred[65]. In 2007, farm owners realized a 65.6 percent increase in property tax payments from 1997 (Figure 21)[66]. The economic base of the county depends heavily on property taxes. Agriculture, because it requires fewer community services generates an excess in revenue through property taxes and other taxes paid much like commercial and industrial land uses.

Challenges and Opportunities for Agriculture in Craven County

In order to better understand existing and emerging trends, opportunities and challenges in Craven County agriculture, surveys and interviews were conducted. Target audiences were agriculture producers and forest landowners, agribusiness and the general public. These target audiences provided insight into the current state of agriculture in Craven County.

Farm Operators and Land Owners Agricultural Survey

Respondent Profile

The average age of Craven County producers and landowners responding to the survey was 53 years, 5.3 years younger than the average county resident according to the USDA Census of Agriculture in 2007. Three-fourths of the survey respondents stated that their farms had been in operation for more than 20 years. More than 63 percent of the respondents stated that farming was their primary occupation, but only 33.3 percent received 75 to 100 percent of their income from farming (Figure 20). This was mirrored in interviews conducted in the county, and many expressed the belief that farming was becoming more part time.

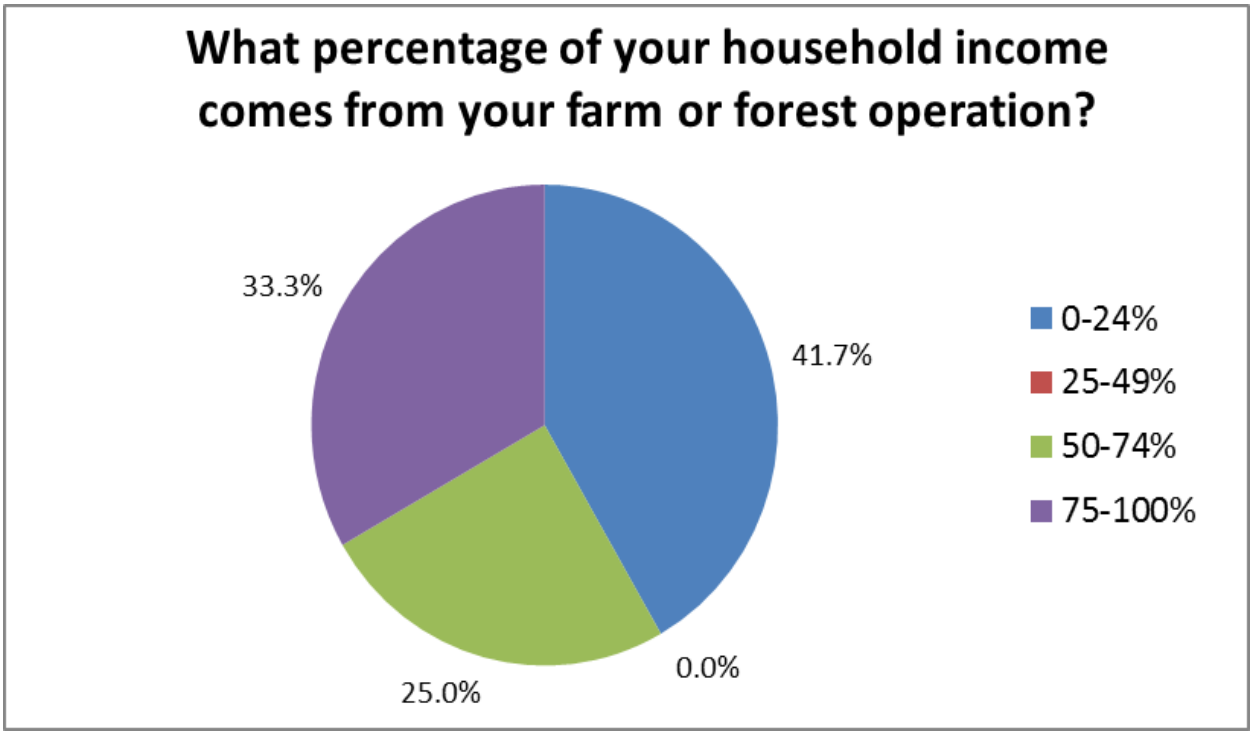

Figure 20 Source: Craven County Producer/Landowner Survey 2012

Of the farmers who responded to the survey within the county, the average production size was 664 acres. Agricultural producers reported that 552.8 acres of this production was rented (83 percent). Thus, on average, producers own 111.2 acres (16.8 percent) of their farming operation. This differs from the 2007 USDA Census of Agriculture, which reported that just below 30 percent of total farm acres were rented. Fifty-three percent of survey respondents described their operations as farm production only, and one-third described it as farm production with some timber production.

The average total acreage of timber owned by those surveyed was 46.9 acres. Of this, an average of 35 acres (75 percent) were managed for timber production. Of those that had forestland, 72.7 percent did not have a forest management plan. This plan is required to enroll forested acres in the county PUV program and can outline steps to maintain a healthy forest for future income and enjoyment.

Of the producers surveyed, only 58.3 percent stated that their farm or forest was enrolled in the PUV program. In interviews conducted, enrolled landowners in the county felt the PUV program was very beneficial and imperative to their continued viability. There was concern expressed by those interviewed that numerous landowners were not aware of the PUV program.

Expansion of existing agricultural operations is limited partly by available land. Over 91 percent of the survey respondents stated they did not own enough land to expand or diversify. Additionally, 43 percent responded that the main reason for not expanding was a lack of available land to rent. Other reasons that prohibited expansion of existing operations included: age of owner, risk, satisfaction with current size and personal reasons. This has created competition for available land for producers and those who seek other uses for land.

This may create long-term conflict since producers surveyed and interviewed for this plan anticipated farming for several more years. Fifty percent of those surveyed stated they would farm for another 20 plus years. While 83 percent stated that they had shared their thoughts on farm transition with family, 53.8 percent of those surveyed did not have a farm transition plan in place. Additionally, seventy-five percent of those interviewed felt that estate taxes were an unreasonable burden. A complete document and clear communication with family is needed to navigate farm transition to ensure families are prepared.

One hundred percent of the producers surveyed for this plan felt that it was important to promote agriculture and forestry as career opportunities. In producer interviews this was reiterated with the need to promote the services and industries that support agriculture. A majority of the producers felt that agriculture, horticulture and forestry should be taught at the high school and community college levels. The FFA program at West Craven High School was often mentioned as an outstanding program to promote agriculture to young people. At these educational levels, the different aspects of agriculture, animal science and forestry could be

taught to emphasize GPS technology, agronomics, silviculture, plant and animal research, and other components of the agricultural field.

Community Support

As Craven County's population has grown, development has impacted agriculture. Farmland sold for development often brings citizens face to face with unexpected farming activities including noise, odors and slow moving traffic. Producers interviewed felt there was a disconnection between the consumers and agriculture, and that many citizens in the county were not aware of agriculture and its economic, scenic and environmental importance. One producer interviewed said, "People see agriculture as a slow tractor that gets in the way of going to the beach."

However, farm and forest landowner respondents did indicate that some awareness issues were changing. The farmers' market in New Bern was often cited in interviews as a powerful and valuable resource to raise awareness of agriculture in the county. As more consumers come into contact with the producers of their food, they become more cognizant of the value that agriculture brings to the community[67].

Other interactions with the non-farm public were noted by producers surveyed. Over 66 percent reported no problems with neighbors over agricultural practices. The third that did report problems listed boundary and trespass issues as the main source of conflict. Trespass and dumping issues were experienced by farmers where individuals would use their farm or forest land to dispose of unwanted trash and would access the land without permission. These issues can cause friction and conflict that often require costly resolutions such as clean-up costs or court costs for prosecution.

While most non-farm residents lack awareness of the importance of agriculture in Craven County, the data from the surveys and interviews revealed that producers and forest landowners also lack knowledge and participation in beneficial programs available to them. While there is awareness of the Voluntary Agricultural District (VAD) and the Enhanced VAD (EVAD) programs in Craven County, the surveyed group was divided on participation in the programs. Only half of those surveyed had land enrolled in the VAD, and only 10 percent had land enrolled in the EVAD (Figure 21).

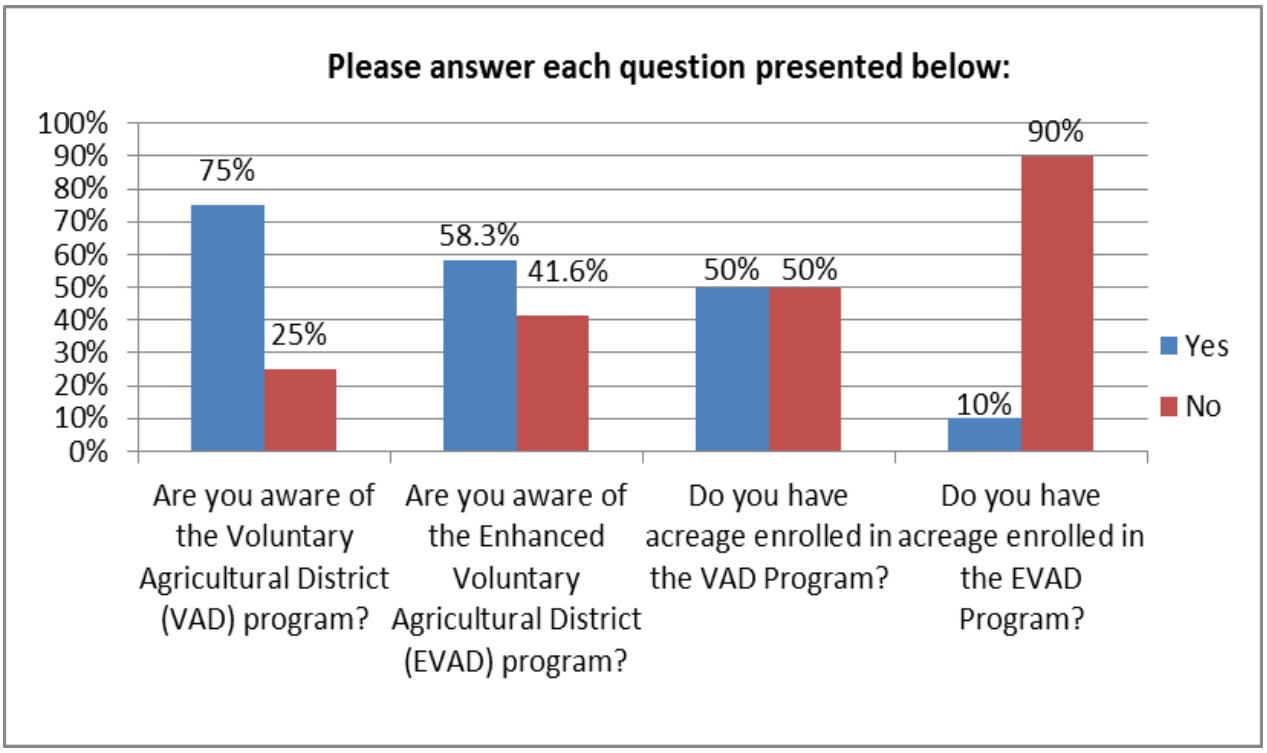

Figure 21 Source: Craven County Producer Survey 2012

Surveyed producers felt that educational efforts and awareness of agricultural programs and conservation of natural resources needed improvement. All of the survey participants felt that non-farm citizens need to be educated on the economic and social impacts of agriculture in Craven County. The respondents felt that this heightened awareness would improve operation conditions. A Craven County farmer who was interviewed felt there was a perceived lack of respect for farming even at the county government level.

Diversification is one way to deal with agricultural production volatility and is a point of growing interest among farmers in Craven County. Part of this diversification is developing new markets. The military presents an underserved potential market since it has a strong presence in Eastern North Carolina.

Furthermore, agricultural interviews show that farmers desire to provide produce and goods to the military bases in the area. Over 90 percent felt there was opportunity for market-based compatible use incentives to be arranged between the military and farm and forest landowners to support continued agricultural land use or to develop options for producers and landowners. As an example, N.C. State University College of Natural Resources is working with the N.C. Foundation for Soil and Water Conservation (FSWC) and the N.C. Association of Soil and Water Conservation Districts to implement the Market Based Conservation Initiative, a "market-based" economic incentives program associated with the Sentinel Landscapes Project. This focuses on preserving mission-critical military flight paths extending over 16 counties in Eastern North Carolina. Through this effort the department of defense is offering yearly

payments to landowners under specific flight paths to encourage the enrollment of these lands in 10-, 20- or 30-year contracts to remain as working farms and forests.[68]

While diversification is embraced as a way to ultimately reduce risk, producers understand the need to engage market development and assess costs prior to expansion. Producers interviewed were exploring or had expanded into production systems such as sweet potatoes, peanuts, edamame and greenhouse production. These producers showed that market access and the determination of input costs were essential to their decision to diversify. More than 54 percent of the farmers surveyed felt that outlets such as farmers markets, food festivals, agricultural fairs and other similar venues are local market options to explore for expansion efforts. Currently, there are as many as 84 vendors who offer products at the New Bern Farmers Market.

Agritourism is often noted as a potential market diversification prospect. Agritourism brings visitors to the farm or forest to participate in agricultural activities such as hay rides, pick-your-own operations, hunting, roadside stands and other similar activities. Of those producers surveyed in Craven County, more than 54 percent did not see agritourism as a diversification opportunity (Figure 22). Only 22.2 percent of the landowners surveyed leased their land for hunting. Agritourism, hunting leases and wildlife management are opportunities for landowners and producers to consider.

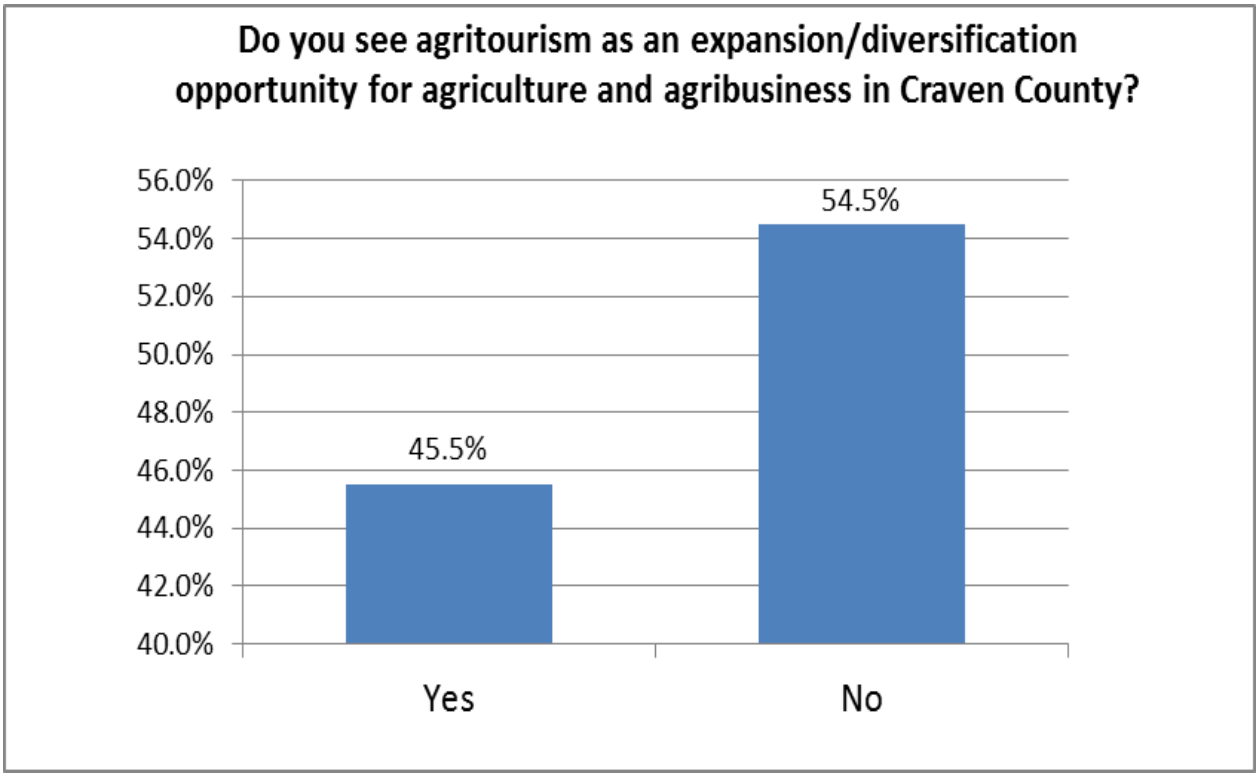

Figure 22 Diversification Opportunity Source Craven County Producer Survey 2012

Training Challenges

Interviews conducted in the county revealed concern for increasing and changing regulations affecting farming operations. Regulations were viewed as necessary but burdensome. Regulations require money, time and paperwork that increase the workload and ultimately impact the profitability of the individual producer. Often producers are limited in their abilities to spread these costs among the products sold.

Another challenge stated from these interviews regarding regulatory actions was a fear of excessive regulation and infringement on landowner rights. Producers noted an increase in regulatory permits from government agencies for certain practices on the farm. However, those individuals also reported better water quality due to these permits and Best Management Practices (BMPs) incorporated in agricultural and forestry productions. Many of those interviewed felt that farmers who followed regulations and BMPs did a good job, but the small minority that did not follow regulations and BMPs caused problems for all. County agencies such as N.C. Cooperative Extension Craven County and Craven County Soil and Water Conservation District were often cited as reliable sources of information and training on regulations.

An additional challenge noted by producers was labor. Fifty percent of the producers and landowners surveyed felt that affordable labor would affect their expansion in the next five years. Housing, securing legal labor and training good workers are all components of this issue. Farmers who were interviewed noted that it was hard to find knowledgeable labor able to operate complicated and expensive equipment. Many participated in the federal H2A guest worker program. It was noted as expensive but worthwhile to guarantee legal labor.

In order to meet these numerous challenges, these agencies and others have opportunities to educate and train producers in Craven County. As an example, more than 66 percent of producers surveyed said that they would attend training on production of biofuel feedstock or woody biomass. Over 58 percent stated that they would attend training on Good Agricultural Practices (GAP) certification for produce and processing, and over 72 percent would attend training on GAP certification to ensure BMPs are followed in the production of tobacco and grains. More than 83 percent said they would attend training on farm transition planning, which is significant since many of those surveyed do not have such a plan.

Agricultural producers and forest landowners in Craven County realistically recognize the opportunities and challenges that exist for their operations to remain viable in a changing global economy. They are aware of the impact of growth and development in the county on the future of their operations and have noted the potential prospects and pitfalls. They also know they must manage risk through education and training (Figure 23). These producers and landowners recognize the need to be an integral part of improving awareness of agriculture's impact on the local economy to ultimately preserve their agricultural heritage.

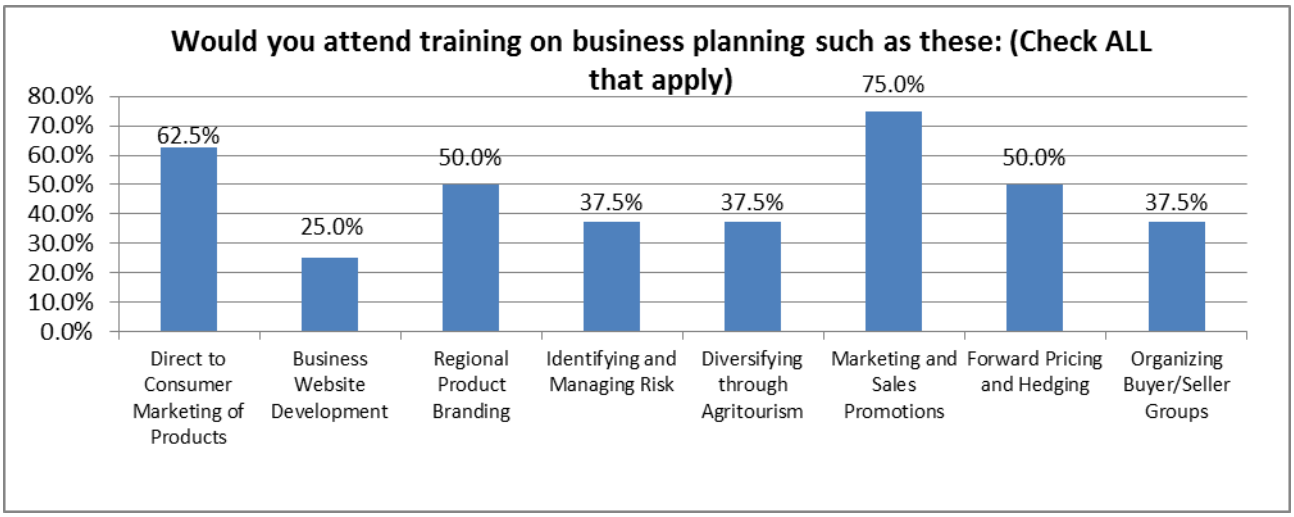

Figure 23 Business planning topics Source: Craven County Producer Survey 2012

In summary, the producer survey revealed:

- Almost 98 percent of the farmers do not own enough land to expand or diversify their operations.
- Almost 60 percent of the producers do not have a farm transition plan/estate plan.
- A third of the producers are not sure if their property is enrolled in the county's PUV program.
- Career opportunities in agriculture and forestry and all aspects associated with those industries should be promoted.
- 100 percent of the farmers felt that education and outreach to non-farm citizens concerning the economic and social contributions of farming and forestry would increase community support for agriculture and improve agricultural operating conditions.
- Producers want training on a variety of topics such as business planning, forestry management and farm transition/estate planning to maintain their farm and forest viability.

Agribusiness Survey

Agribusinesses are an integral part of the future of agriculture in Craven County. These businesses have to adapt to production diversification shifts, changing regulations, advances in technology, an unskilled workforce and a changing customer base to best serve their clients. Fifty percent of the agribusinesses surveyed in the county noted what they interpreted as a shift toward more sophisticated farming operations. Fifty percent of these businesses also noted a shift to fewer small farming operations and an increase in the number of large farms. Half of those surveyed said they would adapt their businesses to these changes. However, from 1997 to

2007, the U.S. Census of Agriculture noted a decrease in farm size in Craven County. As the new census has not yet been published, the agribusinesses surveyed could be reporting more recent trends.

Agricultural technology continues to change and force the agricultural field and agribusinesses to remain knowledgeable in order to service their clients. Agribusinesses that were interviewed noted that farmers in Craven County are using technology more and rely on agribusiness advisors to help them make decisions on technology and biotechnology. To meet these advancing needs, agribusinesses are developing staff through technology training. An agribusiness that was interviewed for this plan noted that the company's staff had participated in technology training seven times in two years in an effort to keep up with technological changes.

Many agribusinesses noted that development is another challenge facing agriculture. As farmland is being sold for commercial or residential development, the amount of available farmland decreases and the potential customer base also shifts. Fifty percent of survey respondents indicated that they would add new product lines or services for non-farmers in the next five years.

Agribusinesses also said that debt load is a factor in the sale of farmland for development as well as heirs who are no longer interested or involved in agricultural production. Such development and encroachment has caused farmers to seek lands to farm in other counties. Additionally, this limits current farming operations and prohibits further expansion to future generations.

All of the agribusinesses interviewed reported that it was very difficult in the current business climate for a young person to engage in a new agricultural enterprise due to high capital investment requirements. Both young farmers wishing to pursue careers in agricultural production as well as heirs who want to continue farming find it difficult to enter the agricultural profession as land and equipment costs continue to rise. This same challenge was noted by agribusiness owners as 75 percent acknowledged transition planning as an issue facing agribusinesses in Craven County, and 100 percent indicated that agribusiness owners needed assistance with transition planning.

Crop production changes in Craven County have resulted in changes in agribusinesses. As commodity prices shift, farmers diversify to new crop production systems to manage risk. Agribusinesses interviewed pointed to a sizable shift from tobacco to peanut and sorghum production. These shifts result in the purchase of new equipment or adaptation of existing equipment to effectively manage these less traditional crops. These changes extend to the products needed as well as treatment and management of these new crops such as seed sources, fertilizers, pesticides and other products. Agribusinesses have to adapt to these changes to effectively meet the needs of producers.

N.C. Cooperative Extension and N.C. State University were often cited as resources for agribusiness and producers. The agricultural research and technological support from these entities provides information for all involved in agriculture.

Agribusinesses that were interviewed felt that the agribusiness field presented multiple opportunities for career development and expansion. Expansion opportunities were directly tied to the availability of qualified people to train and hire. One agribusiness owner interviewed pointed out that it takes time to groom someone for the business and even more time to train someone to take over the business. One hundred percent of the agribusinesses surveyed felt that youth agriculture education should be conducted in Craven County. This will also expose more young people to the possibilities in agriculture and agribusinesses.

Craven County agribusinesses noted a number of challenges and opportunities:

- Development is one of the major pressures on agriculture in Craven County.
- Agricultural technology (GPS soil sampling, variable rate application, utilization of yield monitors/mapping, biotechnological traits) is an expanding field that requires constant updates and training for agribusinesses and producers.
- A shift from tobacco to other crop production systems has resulted in new equipment or adaptation of equipment as well as treatment and management of these new crops that agribusinesses have to provide and service.
- Career opportunities are available in the agribusiness fields and need to be developed and promoted.
- Youth agricultural education should be promoted throughout Craven County.

Non-Farm Residents Survey

The non-farm public that participated in the surveys did recognize the presence of agriculture in Craven County. Nearly one third of those who completed the survey felt that agriculture was holding its own as an industry and had potential for future growth. While the majority of those that responded had not owned or operated a farm or timber operation, 61.1 percent lived near such an operation. Almost half lived near a farm and nearly 69 percent of the respondents felt that the farmer or landowner was a good neighbor (Figure 24). Almost 50 percent of these Craven County non-farm residents had visited a farm or forest operation within the last year.

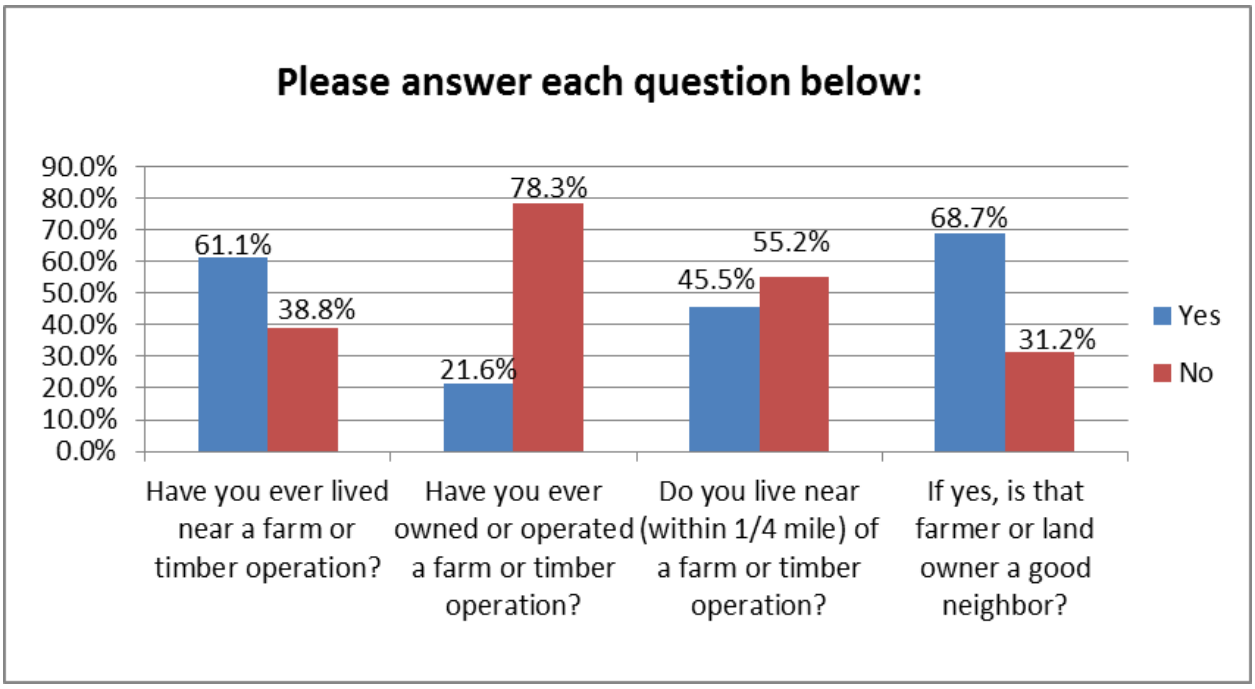

Figure 24 Source: Craven County Non-Farm Survey 2012

However, the majority (96.8 percent) of those surveyed were not able to correctly identify the size of Craven County's agriculture industry. In 2008, the total income generated by agriculture within Craven County was $312,760,854 according to Mike Walden at N.C. State University. While residents who were surveyed saw agriculture as a big part of the county's economic engine, only a very small percentage (3.2 percent) were able to estimate the economic impact of agriculture in Craven County.

There is strong support for agriculture nevertheless. Over 84 percent of the non-farm survey participants felt that Craven County should take steps to preserve farms and forests and 91.5 percent would support farmland preservation efforts. Nearly 84 percent would support the use of county funds for farm and forest development.

Many of those surveyed supported agriculture through their buying power. Nearly 82 percent bought local produce through the farmers' market or Community Supported Agriculture (CSA) and over 75 percent bought from local nurseries and greenhouses (Figure 25). Most were able to verify that the products purchased were produced locally since face-to-face purchases create relationships between the consumer and the producer/vendor.

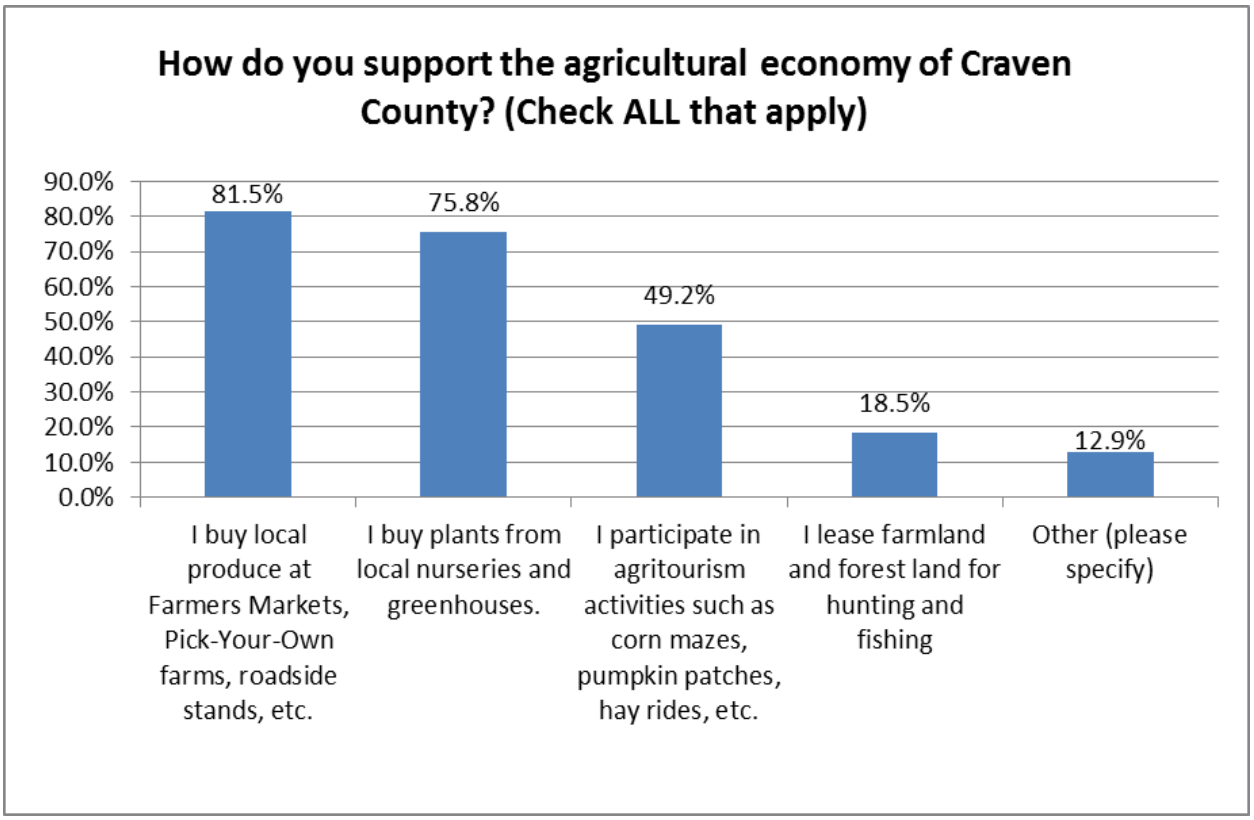

Figure 25 Source: Craven County Non-Farm Survey 2012

Other interactions with farmers and landowners were seen in a positive light among the non-farmers who were surveyed. Nearly 70 percent reported no problems with a neighboring farm or forest operation. The smaller percentage that reported problems indicated that slow moving equipment was the primary issue. Of those that did report a problem with a farmer or landowner, sixty-nine percent did nothing about the issue. When the issue was dealt with, 44.8 percent gained a better understanding about those activities. However, 31.3 percent felt that they still did not understand why the activity was necessary. This indicates a strong need to educate the public about farm and forest activities and why certain agricultural activities are necessary.

More than 86 percent of the surveyed non-farm residents agreed that agriculture and forest land contributed to the scenic beauty and open space of Craven County. This was substantiated in that 76.3 percent felt that farming was positive for the environment. Almost 80 percent felt that local farmers delivered high quality products. Sixty-one percent, though, did not see agriculture and farming as high tech industries. Only 52.7 percent of those surveyed felt that farming presented a good career opportunity. However, 67.8 percent disagreed with the statement that Craven County wasn't a farm area anymore and that encouraging farm and forest operations was pointless. Non-farm citizens who were interviewed for this plan pointed out that agriculture needs to do more to increase awareness about its impacts on the county both fiscally and environmentally.

When asked to list challenges facing agriculture in Craven County, residential development topped the list. Non-farm citizens who were surveyed were very aware of the impact that development has on perpetuating the trend of losing farms and forests. The survey participants realized the rising costs of agricultural production and noted population growth, municipality expansion, fuel prices, over taxation among several issues facing agriculture in the county. Survey respondents noted a need to develop jobs in the agricultural industry as an opportunity to be explored as well as expansion of the local food market and contracts with the military.

- Non-farm residents surveyed would support farmland preservation efforts in Craven County.
- Development is recognized by non-farm survey respondents as a constant pressure on agriculture.
- Agricultural career opportunities should be promoted.
- Local food markets and development of potential markets with governmental agencies should be supported to encourage growth of the agricultural industry in Craven County.

Emerging Issues in Agriculture in Craven County

As Craven County's population and urban industries have grown, so have pressures on agriculture from population growth and encroachment, increasing land values, natural disasters, lack of trained workforce, infrastructure improvements and other factors. These pressures have caused producers and landowners to be creative and adapt. These challenges present opportunities and it is up to those who follow this plan to make sure each is explored and considered.

Impact of Natural Disasters

The success of those involved in agricultural production is determined by their ability to effectively manage risk. One of the greatest risks that producers face is the weather. Preparation and readiness allow some control over the impact of natural disasters and weather events on crops and livestock. In order to survive crop damage that comes from hurricanes, droughts and other weather events, producers and landowners need adequate risk management skills and knowledge to deal with these seemingly perennial events. Farmers have recognized the need for and benefit of crop insurance as these events continue to limit profitability. Additionally, producers are implementing diversification strategies as methods of risk management to alleviate the potential for losses from natural disasters.

Since 2002, Craven County has been affected by 10 tropical storms and hurricanes. Four of those storms had winds over 80 miles per hour. From January 1, 2008 to December 25, 2012, Craven County had 16 periods of extreme drought conditions. One period of extreme drought lasted more than 49 days. There were seven periods of severe drought conditions and 80 periods of moderate drought conditions. Repercussions from Hurricane Irene and the drought of 2011 are still being felt in the county in 2013.

Since the early 2000s, producers have had to deal with imported Asian pests—specifically the kudzu bug and marmorated stink bug. These pests, which affect soybeans, cotton and corn, are so new to the area that there are no definite management options available at this time. All of these have impacts on agriculture and these impacts affect producers in time, money and resources to cope with them.

Water

Water is a major resource in Craven County. While water is abundant in surface water sources, groundwater reserve concerns resulted in citizens being required to follow local water-use restrictions, monitor water components for leaks and minimize non-essential use of water. Additionally, due to the severity of the drought of 2007-2008, NCDA & CS was charged by the

legislature to conduct a water-use survey among farmers in North Carolina in order to better manage this valuable resource. The survey was to target operations that used more than 10,000 gallons per day (GDP). The surveys found most of the water used in agriculture was for irrigation. The surveys found that agriculture used only 1 percent of the 15 billion gallons of water used daily statewide[69].

There are nine operations within Craven County that qualified for the survey. These operations had an annual daily average water use of 119,335 gallons from groundwater. The county had a daily withdrawal capacity of 5,434,646 gallons from ground and surface water[70]. As noted above, most of the agricultural water use was for irrigation during the peak summer months. With the increasing population and growth within Craven County, the increasing demand for water requires better use of this valuable resource.

Watersheds and wetlands are also important in Craven County. These natural areas are important for wildlife and can help mitigate excess water flow from storm events. Farms and forests also help prevent massive flooding by allowing water to seep into the ground. Development, with its impervious surfaces such as roads and roofs, increases runoff that can exacerbate flooding. The role agriculture plays in wetlands protection needs to be considered as the county grows. Best management practices utilized by farmers and foresters include buffers, water control structures, cover crops, and conservation tillage. These practices result in low erosion rates and nutrient inputs (nitrogen and phosphorus) generally below recommended levels—an important component in the protection of surface waters in the Neuse River Basin[71].

Change in Demographics and Encroachment

In 2007, the USDA Census of Agriculture reported that the median age group for farmers in Craven County was 60 to 64 year[72]. When compared with the overall median age of 37 years for residents in Craven County, the disparity in ages between the farming population and the general population is stark. This data supports the trend that few young people pursue agriculture as a viable occupation. Almost universally, producers and landowners in interviews stated that a young person cannot have the financial resources or knowledge to go into agriculture unless they are part of a farming family. This issue can create pressure on landowners and producers who may not have heirs willing and able to maintain the family farm or forest.

The rural/urban/suburban interface inherently creates an environment that can encourage conflict between farmers and new homeowners. Complaints such as dust and slow moving equipment as well as smoke from prescribed burns in forests, which are essential to best management practices, are among the practices that can instigate these conflicts. In interviews and surveys, agribusinesses and producers said that a priority is to make the public more aware of agricultural methods and practices. This awareness can increase support for agriculture and forestry especially as the county continues to grow.

Craven County grew 13.1 percent from 2000 to 2010 and is projected to grow another 6.6 percent from 2010 to 2016. In 2000, more than 67 percent of Craven County residents lived in urban clusters. With the increase in development since then, the number of people living in urban clusters is higher[73]. In order to meet this population growth, land must be developed for houses, schools, roads, shopping centers and all other services needed. Agricultural land is attractive for development because the land is cleared.

The demand for land for development competes directly with land available to farm. Often land that could be rented for farming is sold for development. Sometimes selling farmland for development is the best option for the family. It allows the family to clear debt, pay for college and save for retirement. This conflict between competing demands is a challenge that both farmers and non-farm citizens recognize. When asked what challenges existed for agriculture in the county, farmer and non-farmer survey participants both noted development.

One tool used to protect farm and forest lands in Craven County is a Voluntary Agriculture District ordinance. Craven County Planning Department has placed all VAD parcels on subdivision maps as required by the VAD ordinance, and the office also lists the parcels on the county GIS maps. This can visually raise the recognition of agriculture and increase the appreciation for the pastoral setting agriculture brings to Craven County.

However, the county does not have countywide zoning. Zoning could protect agriculture as well as reduce the potential conflict between residential and business development and agriculture. However, zoning, which can deter development, can conflict with a family's wish to develop their land. This topic needs careful consideration with involvement of all parties to make sure the best decision can be made for all in the county.

Jobs in Agriculture and Agribusiness

Agriculture is more than a farmer on a tractor in the field. Crop consultants, pesticide dealers and seed scientists, soil scientists, crop researchers, equipment maintenance, forestry consultants, extension agents, regional agronomists and others have roles in the success of a farmer or forest landowner. The various aspects of agriculture need to be promoted as career opportunities in order to grow and sustain the industry.

By recognizing the diversity of jobs that agriculture and forestry can offer, avenues such as an Economic Development Commission or a Workforce Development entity could work with existing resources and structures to make sure those jobs are created and filled by qualified workers. When producers and agribusinesses who were interviewed were asked if they were involved with a Commission or the Chamber of Commerce, all said no. This is another opportunity that needs to be developed.

In surveys and interviews, producers and agribusinesses said that job opportunities in agriculture could be publicized more. Across the board, the farmers and agribusinesses who were surveyed and interviewed thought that agriculture should be taught in the schools. Most

felt that this should be done at all grade levels but particularly at the high school, community college and college levels.

Producers and landowners also recognized the need to encourage younger people to go into agriculture. In the surveys, 63.3 percent of the producers said they would consider working with an intern or young farmer in order to support the next generation of farmers. Land, equipment and other costs make it difficult for someone to start in agriculture, so this support and mentoring is important.

A little more than half of the non-farm public who were surveyed felt that the agricultural industry presented career opportunities. Agribusinesses in the county were bullish on growth and felt new job opportunities and qualified people to fill these positions would be needed to meet future demand for support of the agricultural economy. These business owners also wanted to train people to take over the business so that the services they offer can continue. There is a great need to show that agriculture can and should be supported as viable career opportunities.

Infrastructure

Infrastructure is needed to create a viable climate for agriculture and agribusiness to operate. Some of the major points of sufficient infrastructure are access to markets, adequate roads for transportation and for moving equipment and commodities, venues to process and sell produce, and space for training and meetings. All of these are important to agriculture and forestry.

Ports and Rail

Craven County is less than 40 miles from the Port of Morehead City and less than 100 miles from the Port of Wilmington. The Port of Wilmington is one of the few ports along the east coast with adequate storage area for containers and cargo. Access to this port from Craven is primarily by road. The Port of Morehead City is one of the deepest ports on the East Coast and has warehouse and other open storage capacities. The port is a leading exporter of phosphate[74].

The North Carolina Railroad Company, which is fully owned by the state of North Carolina, has a line that serves the Port of Morehead. The line is operated by Norfolk Southern and goes through both Havelock and New Bern to Raleigh and Greensboro[75]. Norfolk Southern Corporation's Agriculture, Fertilizer and Consumer Products Division currently serves shippers and receivers of corn, wheat, soybeans, miscellaneous grains, animal and poultry feed, and miscellaneous other products[76].

Roads

In Craven County, U.S. Highway 70 is a growth corridor for businesses as well as a major artery for beach travel and the way to the state port in Morehead City. The highway is also utilized by

the military from Cherry Point and Camp Lejeune. This busy east-west route is important to movement of commercial, military, agricultural and general public traffic.

U.S. Highway 17 crosses the county in a north-south direction and is another major highway that serves Craven County. The N.C. Department of Transportation has allocated money to develop and improve traffic along this road for mobility, hurricane evacuations and connectivity. Highway 17 leads north to Virginia and south to South Carolina and is a link to the state port in Wilmington.

These two major highways are conduits to markets for agriculture and forestry. Growth along these roads has created stress for transportation. Agriculture has had to make changes in the way it moves on these highways. There are specific areas that agricultural equipment is allowed on the highways, and there are specific access points along the roads that producers and forest workers must use.

These impediments can slow transportation of goods to market. As the county and state plan for future road construction, agriculture must be considered. Many of those who travel on these roads see farm trucks and logging trucks as hindrances to their drive to the beach. Awareness and improvement in roads must be considered for the benefit of all users.

Facilities

Just as roads are needed to move commodities, diverse market channels are needed to ensure commodities reach consumers. Craven County is fortunate to have a thriving farmers' market that is located in downtown New Bern that encourages and accommodates direct market opportunities for producers. This farmers' market was often cited as a valuable resource to raise awareness of agriculture in the county. The market has a lease with the city of New Bern. Many of those interviewed felt that a new location for the market should be sought. It would allow for better parking, more space for products to be sold, create a sorting and packing facility and possibly use the site for shipping agricultural goods.

The Craven County fairground is owned by the Craven County Jaycees and is a designated spot for a large and small animal shelter during disasters such as hurricanes. During Hurricane Irene, there was difficulty fulfilling this agreement between the County of Craven and the Jaycees. A separate facility could fulfill this important requirement and responsibility of the county.

Livestock also requires a good location for shows, market and training. Interest was expressed in a livestock arena in Craven County for this purpose. There has not been a livestock show in the county since 2010. These shows offer opportunity for producers to meet, learn about breeds, show animals and gain new information that can benefit their production. Livestock sales could also return to a facility such as this.

Training classes are held at the N.C. Cooperative Extension Craven County Office, but due to the extreme demand for meeting space this facility can no longer meet the needs of county agencies, Extension volunteer groups, and regional and multi-county meetings. A facility that could accommodate the training needs of agriculture as well as provide a venue for livestock and the farmers' market would be an opportunity to explore. Craven County is often seen as a regional hub for agricultural and cultural events. Many producers from other counties sell their products at the farmers' market and attend training classes and workshops in Craven County. A multi-use facility could serve the needs within the agricultural community as well as for the county as a whole. A feasibility study could be conducted to determine if a new farmers' market/livestock arena would be appropriate for the county.

Craven County has two industrial parks, one located in Havelock and one five miles west of New Bern. In Craven County's CAMA Core Land Use Plan Executive Summary adopted by the Craven County Board of Commissioners in August of 2009 the importance of industrial development to the county was recognized. This report stated that:

> *Craven County supports the recruitment and siting of environmentally compatible light industrial establishments within its borders in areas that are already similarly developed or in public or private industrial parks to minimize the sacrifice of prime agricultural lands for such development. Craven County does not encourage the conversion of prime farmland to industrial use.*

Local Awareness of Agriculture

While most of the non-farm public was aware of agriculture in Craven County, particularly through the farmers' market, there was still a lack of knowledge of the resources available to them through agriculture. Many of those surveyed asked the vendor about the source of the produce or had built a relationship with the producer to ensure that the produce was local. However, less than half looked for the NCDA&CS' "Got to be NC" label or used the NCDA&CS' "NC Farm Fresh" website to find local produce, agritourism and local agricultural events

The non-farm public that was surveyed was hard pressed to name the financial impact of agriculture and forestry in the county as were those who were interviewed. Only 3 percent correctly recognized the monetary impact of agriculture ($312,760,854) to Craven County's economy. Interviews in the county also revealed a lack of familiarity with forestry. Weyerhaeuser was viewed as forestry and not the local landowners who provide the product for Weyerhaeuser.

Producers and agribusinesses interviewed felt that most people in the county were not aware of agriculture and forestry. Many felt there was disconnection between local and state officials. Miscommunication and confusion about the Present Use Value program in the county was also cited as a problem. N.C. Farm Bureau has worked to make this situation better, and there was improvement noted.

Consumers are increasingly interested in knowing the origin of their food. The farmers' market is popular and can be a venue to raise this awareness. The Craven County Agricultural Advisory Board can also be used to encourage awareness, especially among elected officials. The board's role is to be the liaison between the agricultural community and the Board of Commissioners. Periodic updates should be made to the Board of Commissioners by the Agricultural Advisory Board to ensure agriculture is considered and understood as decisions are made.

Existing Farmland Preservation Tools

Working Land Protection Programs and Tools

(Compiled by John Bonham, 2009)

There are programs and tools that can enhance farmland sustainability. Some of these programs are state programs. Other options are for the local leadership to consider.

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. The difference between market value and the present-use value 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 is to increase identity and pride in the agricultural community and to increase protection from nuisance suits and other negative impacts on properly managed farms. Craven County adopted VAD in January 2009 and can be found at: http://www.cals.ncsu.edu/wq/lpn/PDFOrdinances/CravenSearchable.pdf.

The program is currently enrolling acreage. As of November 2012, there are 1,821 acres under review for inclusion in or enrolled in the Voluntary Agricultural District program.

Requirements

- Acreage is engaged in agriculture as that word is defined in G.S. 106-581.1.
- Acreage is managed in accordance with the Natural Resource Conservation Service's defined erosion control practices that are addressed to highly erodible land.
- Acreage is the subject of a conservation agreement, as defined in G.S. 121-35, between the county and the owner of such land that prohibits nonfarm use or development of such land for a period of at least 10 years, except for the creation of not more than three lots that meet applicable county and municipal zoning and subdivision regulations.

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 or 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 (EVAD) is a VAD formed of one or more farms that are subject to an IRREVOCABLE 10-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. Craven County passed the EVAD in January 2009, and there are currently 2,512 acres enrolled.

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 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.

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. Numerous colleges and universities provide educational 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) that 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 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 has appropriated money every year since 2005.

Recommendations and Timelines

The recommendations that follow are just that—recommendations. These do not infringe on any landowner's right to do what he or she may wish to do with his or her land. The recommendations provide a framework for county agencies that work with agriculture to assist producers and landowners in meeting the challenges and pursuing the opportunities recognized for agriculture in Craven County. In order for the recommendations to be effective and relevant, they must be reviewed periodically—at least annually—to ensure that the latest information is presented to the populations targeted.

Maintain Agriculture's Economic Viability in Craven County.

For farms and forests to remain in production, they must remain profitable. With increasing production costs and tighter margins for profit, farming and forestry face great obstacles. Action must be taken to maintain existing farmlands and forestland in Craven County and to pursue opportunities to ensure the stability and growth potential of agriculture in the county.

1. Endorse Craven County Agricultural Development Plan.

The Craven County Agricultural Development Plan reveals the trends, opportunities and challenges for agriculture and forestry. Endorsement of this plan by the Craven County Board of Commissioner (BOC) and certification by the North Carolina Department of Agriculture and Consumer Services will allow the county to receive priority status for potential funds with the NCDA&CS's Agricultural Development and Farmland Preservation Trust Fund (ADFP). The county's match for this fund will be reduced from 30 percent to 15 percent with an endorsed and certified plan. Many recommendations listed in this plan can be supported by funds from ADFP, which will help ensure the future of agriculture in Craven County.

Action Steps:

- Present Craven County Agricultural Development Plan to County Board of Commissioners for endorsement.
- Submit endorsed Craven County Agricultural Development Plan to NCDA&CS for certification.

Potential Partners:

Craven County Agricultural Advisory Board

Timeline:

This plan should be presented to the Craven County BOC by Second Quarter 2013 for endorsement. Once endorsed, the plan can be sent to NCDA&CS for certification. Once certified, the Agricultural Advisory Board can commence grant applications for the recommendations listed that require funding.

2. *Promote and expand the Voluntary Agricultural District and the Enhanced Voluntary Agricultural District Programs and the Agricultural Advisory Board.*

The Voluntary Agricultural District (VAD) ordinance was passed in January 2009 and can be found at: http://www.cals.ncsu.edu/wq/lpn/PDFOrdinances/CravenSearchable.pdf. The VAD is an effective tool for farms and forests to build recognition of the presence of agriculture in the county and provide some measure of protection to landowners against nuisance lawsuits. Participation in the VAD will also allow landowners to defer water and sewer assessments.

The Enhanced Voluntary Agricultural District (EVAD) ordinance was passed in January 2009. Landowners enrolled in the EVAD program are eligible to receive a higher percentage of cost-share funds under the Agricultural Cost Share Program—as high as 90 percent. Additionally, the farm may receive up to 25 percent of gross sales from the sale of non-farm products and still maintain its status as a bona fide farm. These benefits are available to participating landowners to help expand the opportunities to keep the farm in operation.

Action Steps:
Utilize funded stipend ($500) upon certification of the Agricultural Development Plan to develop a landowner awareness campaign on the VAD and EVAD programs or other initiatives within the recommendations of this document. Campaigns would review the benefits of the programs and encourage enrollment of landowners into these programs.

- Create flyers, brochures, agency newsletter articles, public service announcements and other tools to promote the VAD and EVAD programs.

Potential Partners:
Craven County Agricultural Advisory Board, N.C. Cooperative Extension Craven County, Craven County Soil and Water Conservation District, N.C. Forest Service Craven County and other related groups.

Timeline:
Promotion of the VAD and EVAD programs should continue and information/workshops should be scheduled to coincide with upcoming festivals, meetings and training programs planned for the Fourth Quarter of 2013 and throughout 2014. Development of a brochure, flyers and other promotional tools would begin during the Fourth Quarter 2014 and be distributed by First Quarter 2015. This recommendation is to be reviewed yearly or as often as the Agricultural Advisory Board deems necessary.

3. *Promote agriculture and forestry as an industry in Craven County*

Promotion of agriculture and forestry as industries that contribute to the economic well-being of the county is important. All aspects of these two industries need to be supported and

encouraged. Educational activities should stress the economic and environmental impacts that agriculture has on Craven County and encourage marketing with new and existing tools.

Action Steps:

- Continue to review all economic data on agriculture, forestry and agribusinesses that impact Craven County annually and present to the BOC and other interested groups.
- Maintain an inventory of opportunity sites for agricultural business development. Craven County ranks number one of all North Carolina counties in available space in industrial buildings[77]. This inventory should be expanded to include farms, forest tracts and buildings suitable for research, production and manufacturing.
- Expand or create agricultural marketing campaigns to raise awareness of agriculture and agribusinesses in the county. These efforts have proven successful in other eastern counties in increasing public awareness of agriculture.
- Continue to provide GAP certification trainings and other pertinent training that affords producers the opportunity to evaluate and integrate into new marketing opportunities.

Potential Partners:

Craven County Agricultural Advisory Board and other related groups.

Timeline:

The Craven County Agricultural Advisory Board should meet by the Fourth Quarter of 2014 to determine the course of action. A strategy for cooperatively working to evaluate and pursue agricultural opportunities for Craven County should be created and presented to the Board of Commissioners for their endorsement by Fourth Quarter 2015.

4. *Support N.C. Cooperative Extension Craven County, Craven County Soil and Water Conservation District, N.C. Forest Service Craven County, and other farm and forest support agencies*

Repeatedly in interviews and in the surveys, N.C. Cooperative Extension Craven County, Craven County Soil and Water Conservation District and the N.C. Forest Service Craven County were all cited as valuable resources for the agricultural community. With budgets being strained, it is important to keep local government officials informed of the services these agencies provide and their impact on the local agricultural economy.

Support should come in the form of:

- Filling vacant positions in a timely manner.
- Providing support for professional development and subject matter training to ensure producers are receiving the most up-to-date information to assist them in meeting regulation requirements or making management decision.

- Consideration of requests for infrastructure improvements that will improve educational services to clientele countywide.
- Supporting agency efforts to promote programs through the acquisition of grants, cost share efforts or local funding sources.

In an effort to educate local leadership about the needs and accomplishments of agricultural agencies in the county, the Craven County Agricultural Advisory Board, appointed by the Board of Commissioners, should request on an annual basis an opportunity to report to the BOC about these and other pertinent issues.

Potential Partners:
Agricultural Advisory Board

Timeline:
The Craven County Agricultural Advisory Board will work with these agencies to provide updates to continue to keep the board informed on activities of the agencies and expressed agency needs. This information can also be provided by each agency through their respective annual reports to the board. Specific needs should be expressed by both the appropriate agency and the Agriculture Advisory Board to ensure consideration by the Board of Commissioners to meet the expressed needs in a timely manner. Annual reports provided to the BOC by the Agricultural Advisory Board and at annual agency reviews should continue to be provided on an annual basis.

5. Develop and promote agriculture and forestry as career opportunities in Craven County.

Agriculture and agribusinesses in the county repeatedly expressed the need for qualified workers. Career opportunities ranged from those requiring technical skills to mechanical skills to scientific skills. The demand for a trained workforce is clear. However, the interest of individuals to enter agricultural fields of work fails to match the apparent need.

Action Steps:
- Conduct and/or participate in career day events within the public schools to highlight opportunities to study agriculture at colleges and universities. Use these events to encourage awareness of careers available in agriculture, agribusinesses and forestry.
- Utilize existing programs and expand the use of such programs as Farm Bureau's "Ag in Classroom" and others to encourage youth to better understand the agriculture.
- Partner with Craven County Community College (CCC) to develop agricultural and forestry programs to address work force training needs. Encourage local agribusinesses to work with CCC and other community partners to promote agribusinesses, provide internships and create new jobs.

- Develop an apprenticeship program linking FFA, CCC students or others interested in careers in agriculture and/or forestry with producers and landowners who are willing to participate in such a program.
- Develop partnerships with economic and workforce development entities such as N.C. Eastern Region's Workforce Development to investigate opportunities for civilians and veterans to pursue jobs in agriculture, agribusiness and forestry.
- Evaluate the interest and feasibility of the military to provide data on market opportunities and after-service interest of its retiring personnel in pursuing careers in agriculture or related fields. These technically trained individuals could provide skills needed in this industry.

Potential Partners:
Craven County Agricultural Advisory Board, N.C. Eastern Region, Craven County School System, Craven County Community College, North Carolina State University, Mount Olive College, N.C. Forest Service and other related groups.

Timeline:
Discussions with Craven County School System about expansion of FFA programs and the STEM education efforts at the county schools will commence by Fourth Quarter 2015. Contacts with N.C. Eastern Region's Workforce Development will be established by first quarter 2016 to explore further development of agriculture workforce development opportunities. By the of 2016, a presentation for schools' career days will be developed. Discussions with Craven County Community College on efforts to incorporate more agricultural programs in its curriculum will start by Second Quarter 2016. Other groups such as N.C. State University, Mount Olive College and others will be called in as needed to ensure that the training and skill development is comprehensive and available.

6. Conduct estate and farm transition planning programs.

As the age of farmers and landowners increases, the future of their farms and forests is uncertain. Many heirs do not live in the county and are away from the family farm. Agribusinesses surveyed for this report think that farm transition is one of the top issues for farmers in the county. Numerous farmers who were surveyed stated that they do not have a farm transition plan in place and many of those interviewed felt that wills would cover that issue. With estate laws constantly changing, this is not the case. It is imperative that farmers and producers become engaged and educated in estate and transition planning, which will ultimately affect their farm operations and land holdings. Heirs also need to be aware of the complexities of farm and forest operations in order to make informed decisions about future land uses. There is a wealth of information available, but it needs to be consolidated for producers and their families to gain an understanding of and begin developing transition plans.

Action Steps:

- Conduct farm transition workshops annually to provide producers and agribusinesses information needed for successful farm/business transitions.
- Evaluate and educate producers about estate and tax law and disseminate information through workshops, newsletters, etc. about changes in estate and tax laws that impact farm transition.
- Develop contacts with the N.C. Cooperative Extension, SWCD, NCFS, area colleges and universities and other groups that can provide additional support and resources for workshops.
- Develop a network of beginning farmers and transitioning farmers through the workshops and work with individual farmers to determine their interest in pursuing innovative entry and exit strategies.

Potential Partners:

Craven County Agricultural Advisory Board, N.C. Cooperative Extension Craven County, N.C. Forest Service Craven County, Craven County Soil and Water Conservation District, Craven County Tax Office and other related groups

Timeline:

The Agricultural Advisory Board should plan for the first workshop on farm transition within the Fourth Quarter of 2017. Extension, NCFS and SWCD will support this through resources and contacts available to them at state and local levels. The Craven County Tax office should be available to answer questions specific to the county. Other resources such as CPAs, lawyers and similar professionals should be involved. Additional workshops should be considered to deliver details required for a farm transition plan and to work with beginning and transitioning farmers to pursue innovative and fiscally responsible strategies to enter and exit agriculture production operations and businesses. These can occur as needed and as determined by the Agricultural Advisory Board.

7. Establish a county forestry association.

Because many farmers own timberland, a local forestry association would be beneficial for educational opportunities and to build relationships among landowners, consulting foresters, the N.C. Forest Service and other groups involved in forestry. An increase in knowledge and resources would help landowners and producers manage their properties better, help families gain additional income from properly managed and harvested timber, and increase the influence of forestry in local policies.

- Develop a leadership team to investigate the creation of a forestry association to include but not be limited to N.C. Forest Service, N.C. Cooperative Extension Craven County, N.C. State University, N.C. Chapter of the Association of Consulting Foresters, N.C. Tree

Farm Program, N.C. Wildlife Commission, Farm Bureau, forestland owners, forest product companies and other agencies that can provide input and support for such an organization.

- Seek funding for the establishment of the association.
- Develop a list of objectives for the association to achieve.

Potential Partners:
Agricultural Advisory Board, N.C. Forest Service Craven County, N.C. Cooperative Extension Craven County, Craven County Soil and Water Conservation District, Craven County Tax Office and other related groups.

Timeline:
By First Quarter 2014, the Agricultural Advisory Board and the other agencies listed should establish a committee to discuss the formation of a Craven County Forestry Association. This committee should address issues including but not limited to:

- Association structure
- Association mission
- Landowner outreach
- Association membership
- Topics/educational needs

Landowners with forestry interests would be identified through the tax department by Third Quarter 2014. The first association meeting should occur by Fourth Quarter 2014 and should be held regularly as determined by the leadership.

8. *Support funding of a cost-of-community-services study for Craven County.*

A cost of community services study can present a clearer picture of the impact agriculture has in the county. In a study conducted by Mount Olive College's Agribusiness Center, agriculture and forestry repeatedly demanded fewer community services such as EMS, sheriff and schools. This topic should be discussed, evaluated and implemented if appropriate by the Agricultural Advisory Board. Funding can be sought from multiple agencies and organizations that have funded such studies in the past.

Action Steps:
- Review other N.C. counties' cost of community services studies to determine utility of information.
- Seek support for the study from the Board of Commissioners and approval/authorization for all county departments to fully provide needed information for the completion of the study.

- Seek funding for the study from various agencies including but not limited to the Agricultural Development and Farmland Preservation Trust Fund, N.C. Tobacco Trust Fund Commission, Golden Leaf Foundation and other funding agencies and organizations.
- Present results of the study to the Board of Commissioners, County Department heads, developers, and other interested groups and residents.

Potential Partners:
Agricultural Advisory Board, N.C. Cooperative Extension Craven County, N.C. Forest Service Craven County, Craven County Soil and Water Conservation District, Mount Olive College and other related groups

Timeline:
The Agricultural Advisory Board should begin discussion and investigation of a cost-of-services study in Fourth Quarter 2013. By Third Quarter 2014, the Board of Commissioners should approve access to county departments and budget information and give their approval for seeking study funding by Third Quarter 2014 with grant applications completed early Fourth Quarter 2014. If funding is secured, the study should start as soon as funds are available with a report to the Agricultural Advisory Board and the Board of Commissioners by Fourth Quarter 2015.

Marketing and Business Assistance

1. Conduct business development training.

Producers and landowners indicated a continuing need for current information to remain viable in business. Producers and landowners surveyed expressed interest in business development training on topics such as Good Agricultural Practices certification, development of a forestry management plan, and marketing and sales promotion. Also, they indicated a need to remain abreast of changing state and federal programs and opportunities for cost share.

Action Steps:
- Ensure delivery of educational materials to producers and landowners about county, state and federal agricultural programs such as PUV, cost share, crop insurance and other topics.
- Evaluate the need for an agricultural awareness website for producers through a cooperative effort between existing agricultural agencies and/or by update of existing sites. Develop a partnership with local colleges and/or universities to manage and update such websites.
- Encourage producers to participate in existing marketing programs such as “Got to Be N.C.,” “Goodness Grows in N.C.,” “N.C. Farm Fresh” and other programs.

- Partner with colleges and universities to develop internship programs for business and agriculture students to assist producers who are interested in developing websites, social media outlets or materials to develop direct market opportunities.

Potential Partners:
Agricultural Advisory Board, N.C. Cooperative Extension Craven County, N.C. Forest Service Craven County, Craven County Soil and Water Conservation District, Mount Olive College and other related groups

Timeline:
The Agricultural Advisory Board should determine topics and dates to offer workshops by Second Quarter 2013. Workshops should commence by Fourth Quarter 2013. Evaluations will determine when to offer additional workshops in the coming years.

2. Develop and implement a Craven County Agriculture marketing campaign.

In order to increase awareness of agriculture in Craven County, a marketing campaign should be initiated to focus on the importance of agriculture to Craven County. This can be modeled after the Wayne County marketing campaign, "Wayne County Agriculture: We Dig It" and its use of billboards, buttons, tags, websites, social media outlets and other marketing materials. This can be tied into a "Buy Local" campaign that can highlight agronomic and livestock products produced in the county.

Action Steps:
- Research various marketing campaigns that have been developed in other counties in N.C. and report to the Agricultural Advisory Board.
- Investigate county support for the development of a countywide marketing strategy for agriculture and agricultural products.
- Create a marketing team comprised of members designated by the Agricultural Advisory Board.
- Develop a marketing strategy and present to the Agricultural Advisory Board.
- Seek local and state funding support for an agriculture awareness campaign for Craven County.

Potential Partners:
Agricultural Advisory Board, N.C. Cooperative Extension Craven County, N.C. Forest Service Craven County, Craven County Soil and Water Conservation District, Craven County Economic Development Commission, the Chamber of Commerce, N.C. Department of Agriculture and other related groups.

Timeline:
The Agricultural Advisory Board should start research on agricultural marketing campaigns by Fourth Quarter 2017. The Chamber of Commerce should also be involved from the start. As funding becomes available, the campaign should start.

3. Develop a feasibility study for an agricultural arena to serve the residents of Craven County.

Producers who were interviewed expressed great interest in an agricultural arena/farmers' market that would help expand programming, sales, marketing and shipping for agricultural products and livestock. The current farmers' market has a lease with the city of New Bern that will expire soon. A new farmers' market/livestock arena will allow for better parking and better access to roads for ingress and egress. The arena could also support the livestock industry in the county by providing space for shows and programming. Additional space in the facility could be used for training by county and state agencies that work with agriculture.

Action Steps:

- Examine other counties' agricultural arenas/farmers' markets to determine the best fit for Craven County.
- Seek approval from the Board of Commissioners to seek funding for a feasibility study for proposed structure.
- Commission and conduct a feasibility study for agricultural arena/farmers' market in Craven County.
- Present findings to BOC and other related groups.

Potential Partners:
Agricultural Advisory Board, N.C. Cooperative Extension Craven County, Craven County Soil and Water Conservation District, Craven Economic Development Commission and other related parties

Timeline:
The Agricultural Advisory Board, with assistance from Extension and Soil and Water, continue to explore funding opportunities to conduct a feasibility study by Third Quarter 2014. The study should begin upon receipt of funding and upon acceptance of selected requests for proposal begin. A presentation to the Advisory Board, the Economic Development Commission and the Board of Commissioners should be completed within 18 months of funding receipt.

Encourage Young Farmer-Agribusiness Development

1. Encourage Landowner Enrollment in Craven County's Present Use Value Program.

Enrollment in the county's Present Use Value (PUV) is an important program that allows landowners to be taxed at present-use rather than best-use taxation rates which allows landowners to defer taxes until the property is no longer farmed or forested. In interviews conducted, it was felt that many producers and landowners did not take advantage of the program because they were not aware of it. A cost-of-services study is a fiscal analysis to provide a baseline of information to help local officials and citizens make informed land-use decisions. These studies reveal the importance of the PUV program to farm and forest landowners who receive minimal community services for the revenue dollars provided through property tax revenues paid.

Action Steps:

- Conduct periodic workshops on PUV—this can be incorporated into other workshops listed in the recommendations.
- Include in informational materials reminders for enrollment and criteria as landowner situational changes are on-going.
- Review PUV acreages in the county annually and compare to VAD and EVAD enrollment and changes to use as indicators for trends in land use.

Potential Partners:
Agricultural Advisory Board, N.C. Cooperative Extension Craven County, Craven County Soil and Water Conservation District, N.C. Forest Service Craven County, Craven County Tax Office, N.C. Farm Bureau and other related groups

Timeline:
The Agricultural Advisory Board will offer workshops to landowners and producers to learn more about PUV and how to enroll by Fourth Quarter 2013. N.C. Farm Bureau and the Craven County Tax Office will be partners. This can be an annual event if determined by the Advisory Board.

2. Develop educational programs and create career opportunities for young people in agriculture, forestry and agribusiness.

In interviews and surveys, it was strongly felt that agriculture needed to be taught at all levels of school. This is the best way to generate and maintain interest in agriculture and forestry and thus cultivate farmers, soil scientists, forestry consultants, GPS technicians, mechanics and others to work in agriculture in Craven County. Working with the Craven County School District, Craven County Community College and area colleges and universities, programs and skills can be developed to help those who are interested in these avenues. Presentations to

school groups by professionals, tours of farms and agribusinesses, and participation in science fairs and FFA activities will also raise awareness of career opportunities in agriculture and forestry.

Action Steps:

- Continue support of FFA programs at West Craven, New Bern and Havelock High Schools and encourage establishment of FFA programs in other county schools.
- Support the Craven County School System's effort to incorporate agriculture and forestry in its STEM (Science, Technology, Engineering and Math) education by continuing to offer existing and new youth programs through 4-H, Envirothon and other programs that meet these educational criteria.
- Conduct farm, forest and agribusiness tours for identified youth interested in agriculture to raise awareness of opportunities that exist in agriculture.

Potential Partners:

Craven County Agricultural Advisory Board, N.C. Cooperative Extension Craven County, Craven County Soil and Water Conservation District, N.C. Forest Service Craven County, Craven County School District, Craven County FFA, Mount Olive College, NCSU, Craven County Community College and other related groups

Timeline:

The Agricultural Advisory Board will work with appropriate agencies to develop plans for additional youth oriented awareness opportunities and designate a planning committee in Second Quarter 2013. Planning committee will meet with appropriate schools and organizations about support and marketing opportunities for youth and report back to the Agricultural Advisory Board by Fourth Quarter 2014. Presentations, tours and activities will be organized by Second Quarter 2015. Efforts should be made to keep these as annual events.

3. Utilize the Agricultural Advisory Board to ensure that agriculture is represented in local governmental decisions impacting agriculture into the future.

The role of the Agriculture Advisory Board is to serve as a liaison and appointed representative of the Board of Commissioners to advise on issues related to agriculture and forestry. This role allows for a voice in local government and direct representation of the industry. The utility of this advisory board should be maximized to ensure agricultural opportunities remain for future farmers and landowners.

- Develop formal procedures for county agencies and departments to provide information to the Agriculture Advisory Board regarding hearings and discussions relevant to agriculture.
- Utilize this Board to communicate issues of interest to VAD, EVAD and PUV participants.

- Continue to report to the Board of Commissioners through existing avenues to maximize awareness of the challenges and opportunities existing in Craven County for landowners and agriculture producers and agribusinesses.
- The Board of Commissioners should conduct an assessment of other individuals interested in agriculture in the county willing to serve on countywide boards and implement a strategy to increase the number of agriculturists on planning boards, advisory boards and elected appointed positions.

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Appendices

Craven County Non-Farm Resident Survey

1. Introduction

Your help is needed to create an Agricultural Development Plan for Craven County. This plan will contain the current state of agriculture and forestry, outline the challenges and opportunities for agriculture and forestry that exist, and develop recommendations to help maintain family farms and forests in Craven County. The general public, agribusinesses, producers and landowners are targeted audiences for this survey. Non-farm resident participation is essential to ensure that views on open space, values placed on farms and forests, and impacts of development are part of the plan.

The word "agriculture" in this survey refers to farms (row crops, livestock, fruits/vegetables, flowers/plants, aquaculture) and forests.

The North Carolina's Eastern Region received a grant from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund to create agricultural development plans for Craven, Nash and Pamlico Counties. The Lois G. Britt Agribusiness Center at Mount Olive College is directing the project.

The Craven County Agricultural Advisory Board, NC Cooperative Extension Craven County, Craven County Soil and Water Conservation District, NC Forest Service Craven County, Craven County Tax Office and Craven County Manager's Office are also involved with the development of this plan for Craven County.

Many challenges face agriculture such as a heightened awareness of the relationships between farm uses and other land uses. Farms and forests, when located adjacent to industries, military installations and communities, are considered "compatible use partners" and provide numerous benefits to the county and its residents. A comprehensive strategy will assist with the county's agriculture and land use policies and programs as well as develop these compatible partnerships. The Craven County Agricultural Development Plan will provide that strategy.

The intent of this plan is neither to limit nor restrict landowners' rights and uses. The plan will increase awareness of agricultural development opportunities and appreciation of agriculture and forestry. The preservation of agriculture is important to the well being of family farms as well as to county and its economy. However, the ultimate decision of agricultural development rests in the hands of the landowners of farms and forests.

Please note that all information will be strictly confidential. Responses to the surveys will remain anonymous and are not identifiable. Your participation in this study is strictly voluntary.

Thank you for your interest and participation. If you have additional concerns or questions please contact glawrence@moc.edu or 919-518-6463.

Craven County Non-Farm Resident Survey

2. Non-Farm Resident Survey

Please DO NOT complete this survey if you are a farmer/timberland owner OR if you receive income from renting land for farming OR if you own a business primarily dependent on farm and timber customers. These individuals will be surveyed separately.

All information is STRICTLY CONFIDENTIAL as referenced in the introduction.

1. Please tell us, by town and/or community, where you live in Craven County:

2. How long have you lived in Craven County?

- ◯ <5 years
- ◯ 5 to 9 years
- ◯ 10 to 14 years
- ◯ 15 to 19 years
- ◯ 20+ years

3. Please answer each question below:

	Yes	No
Have you ever lived near a farm or timber operation?	◯	◯
Have you ever owned or operated a farm or timber operation?	◯	◯
Do you live near (within 1/4 mile) of a farm or timber operation?	◯	◯
If yes, is that farmer or land owner a good neighbor?	◯	◯

4. When was the last time that you visited a farm or timber operation?

- ◯ Within the last year
- ◯ Within last 2 to 9 years
- ◯ More than 10 years ago
- ◯ Never

5. Which statement best represents your view of Craven County agriculture?

- ◯ Agriculture is a declining industry with no future growth potential
- ◯ Agriculture is holding its own as an industry and may have some future growth potential
- ◯ Agriculture is an expanding industry with significant future growth potential

6. Can you estimate the size of Craven County's agricultural industry?

- ◯ Less than $10 million
- ◯ $10 million to $99 million
- ◯ $100 million to $300 million
- ◯ Over $300 million

7. Do you feel that Craven County should take steps to help preserve farms and forests?

- ◯ Yes
- ◯ No
- ◯ Not sure

Craven County Non-Farm Resident Survey

8. How do you support the agricultural economy of Craven County? (Check ALL that apply)

- [ ] I buy local produce at Farmers Markets, Pick-Your-Own farms, roadside stands, etc.
- [ ] I buy plants from local nurseries and greenhouses.
- [ ] I participate in agritourism activities such as corn mazes, pumpkin patches, hay rides, etc.
- [ ] I lease farmland and forest land for hunting and fishing
- [ ] Other (please specify)

9. How do you verify that the produce you purchase comes from local farmers? (Check ALL that apply)

- [ ] I look for the "Got to Be NC" labels
- [ ] I search on line at the "NC Farm Fresh" website
- [ ] I ask the vendor
- [ ] I know my farmer/producer and see where the products come from
- [ ] I don't verify product origin

10. Have you ever experienced problems with a farm or forest neighbor regarding any of the following? (Check ALL that apply)

- [ ] No problem
- [ ] Noise
- [ ] Odors
- [ ] Smoke/Dust
- [ ] Manure application
- [ ] Slow-moving vehicles
- [ ] Drainage issues
- [ ] Pesticide use
- [ ] Timber Harvest
- [ ] Irrigation
- [ ] Boundary/trespass issues
- [ ] Fencing/cattle loose
- [ ] Other problems such as dogs, personal, etc. (please specify)

11. If you had problems with a farm or forest neighbor, how did you resolve them?

- [ ] Called authorities
- [ ] Contacted the producer/landowner
- [ ] Mediation
- [ ] Nothing

12. When you dealt with the above issues, how did you feel about the resolution?

- [ ] I gained a better understanding of why the landowner/producer did the activities that upset me initially.
- [ ] The issue was not resolved
- [ ] Litigation was pursued
- [ ] I still do not understand why that activity is necessary

13. Please tell us whether you agree or disagree with the following statements: (PLEASE SELECT A RESPONSE FOR EACH ITEM PRESENTED).

	Agree	Disagree	Not Sure
Farms and forests enhance the scenic beauty and open space of Craven County	◯	◯	◯
Farmers are good neighbors	◯	◯	◯
Local farmers deliver generally high-quality products	◯	◯	◯
Farming is positive for the environment	◯	◯	◯
Tax breaks for farmers are important	◯	◯	◯
Agriculture and farming are high-technology industries	◯	◯	◯
The price of most farm food commodities is relatively low	◯	◯	◯
Farming presents a good career for enterprising persons	◯	◯	◯
Farmers get too many tax breaks	◯	◯	◯
Farmers need to act like other businesses and compete	◯	◯	◯
Agriculture and forestry should be promoted as viable career opportunities	◯	◯	◯
This isn't a farm area anymore; encouraging farm and forest operations is pointless	◯	◯	◯

14. Would you support farm and forest preservation efforts in Craven County?

- ◯ Yes
- ◯ No

15. Would you support the use of county government funds for farm and forest development?

- ◯ Yes
- ◯ No

16. Both opportunities and threats exist for agriculture and agribusiness in Craven County.

What are two threats to agriculture/forestry/agribusiness that you see in Craven County?

What are two opportunities that exist for agriculture/forestry/agribusiness in Craven County?

17. Please add any additional comments you may have about agriculture and forestry in Craven County.

Craven County Non-Farm Resident Survey

3. Thank you!

Your time and effort on this survey will help create an Agricultural Development Plan for Craven County. This plan will provide recommendations for both short and long-term strategies to support agriculture and forestry in Craven County. Once the plan is written, it will be presented to the county commissioners for endorsement. Once it is endorsed, it will be sent to NC Department of Agriculture for certification. When the plan is certified, the county will receive priority status for funding from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund.

If you have any questions or would like more details, please contact Grace Lawrence at glawrence@moc.edu or at 919-518-6463.

Craven County Agricultural Producer Survey

1. Introduction

Your input is needed to create an Agricultural Development Plan for Craven County. This plan will show the current state of agriculture and forestry, outline the challenges and opportunities for agriculture and forestry that exist, and develop recommendations to help maintain family farms and forests in Craven County. The general public, agribusinesses, producers and landowners are targeted audiences for this survey. If the comprehensive strategies are to be meaningful, they need to be shaped by the input of the farm and forest producers. Your responses will help us to understand the needs of agriculture.

The North Carolina's Eastern Region received a grant from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund to create agricultural development plans for Craven, Nash and Pamlico Counties. The Lois G. Britt Agribusiness Center at Mount Olive College is directing the project.

The Craven County Agricultural Advisory Board, NC Cooperative Extension Craven County, Craven County Soil and Water Conservation District, NC Forest Service Craven County, Craven County Tax Office, Craven County Manager's Office and other stakeholders are also involved with the development of this plan for Craven County.

Many challenges face agriculture such as a heightened awareness of the relationships between farm uses and other land uses. Farms and forests, when located adjacent to industries, military installations and communities, are considered "compatible use partners" and provide numerous benefits to the county and its residents. A comprehensive strategy will assist with the county's agriculture and land use policies and programs as well as develop these compatible partnerships. The Craven County Agricultural Development Plan will provide that strategy.

The intent of this plan is neither to limit nor restrict landowners' rights and uses. The plan will increase awareness of agricultural development opportunities and appreciation of agriculture and forestry. The preservation of agriculture is important to the well being of family farms as well as to county and its economy. However, the ultimate decision of agricultural development rests in the hands of the landowners of farms and forests.

Please note that all information will be strictly confidential. Responses to the surveys will remain anonymous and are not identifiable. Your participation in this study is strictly voluntary.

Thank you for your interest and participation. If you have additional concerns or questions please contact glawrence@moc.edu or 919-518-6463.

2. AGRICULTURAL PRODUCER SURVEY

You should complete this survey ONLY IF you have income in excess of $1000 from the production of crops, livestock, or aquaculture OR if you own timberland OR if you receive income from renting farm acreage.

All information is STRICTLY CONFIDENTIAL as referenced on introduction page.

Craven County Agricultural Producer Survey

3. CURRENT STATE OF AGRICULTURE

Please tell us the type and the size of your farm/forest enterprise(s) in the following categories.

1. Please answer each item as appropriate for your operation:

How many total acres of land do you farm within Craven County?

Of this total acreage farmed, how many acres do you rent?

If you are a landowner who rents your land to farmers, how many acres do you rent?

How many total acres of timberland do you own within Craven County?

Of this total, how many acres are managed for timber production?

How many acres of farm and/or forestland do you manage outside of Craven County?

2. Help us understand more about your operations. Please select the statement that best describes your operation:

- ◯ Timber production only
- ◯ Farm production only
- ◯ Primarily timber production with some farm production
- ◯ Primarily farm production with some timber production

3. How long has your farm/forest been in operation?

- ◯ 0 to 9 years
- ◯ 10 to 20 years
- ◯ 20+ years

4. What is your age?

5. Is farming/forestry your primary occupation?

- ◯ Yes
- ◯ No

6. What percentage of your household income comes from your farm or forest operation?

- ◯ 0-24%
- ◯ 25-49%
- ◯ 50-74%
- ◯ 75-100%

7. Have you, in the past 5 years, expanded your farm or forest operations?

- ◯ Yes
- ◯ No

8. If you did not expand, what were the primary reasons? (Check ALL that apply)

- ☐ Satisfied with current size
- ☐ Age of owner/operator
- ☐ High cost of equipment
- ☐ Lack of available equipment
- ☐ Inability to obtain needed financing
- ☐ Low profit margin
- ☐ Market volatility and excessive risk
- ☐ Lack of available land to be purchased
- ☐ Lack of available land to rent
- ☐ Land is available, but too close to development to farm or manage
- ☐ Lack of available labor
- ☐ High cost of additional labor
- ☐ Personal or others reasons
- ☐ Environmental or other governmental restrictions
- ☐ Other (please specify)

9. Do you currently own sufficient property to expand or diversify your farm/forest operation?

- ◯ Yes
- ◯ No

10. How much longer do you plan to operate your farm/forest?

- ◯ Less than 5 years
- ◯ 5 to 9 years
- ◯ 10 to 19 years
- ◯ More than 20 years

Craven County Agricultural Producer Survey

11. Of the issues listed below which do you anticipate to most influence your operation in the next five years: (Check ALL that apply)

- [ ] Production input costs
- [ ] Marketing costs
- [ ] Regulatory costs
- [ ] Commodity prices
- [ ] Available labor
- [ ] Affordable labor
- [ ] Market competition
- [ ] Competition for available land
- [ ] Development pressure
- [ ] Export demand for products
- [ ] Local demand for products
- [ ] Land rental rates

12. When you retire, what do you expect to do with your farm/forestland?

- ◯ Sell to other farmers
- ◯ Transfer to family for farming
- ◯ Sell to non-farmers
- ◯ Transfer to family for non-farm use

13. Do you currently have a farm transition plan/estate plan?

- ◯ Yes
- ◯ No

14. Have you shared your thoughts of farm transition with your family members?

- ◯ Yes
- ◯ No

15. If you have forestland, do you have a written forestry management plan to follow?

- ◯ Yes
- ◯ No

16. Is your farm or forest enrolled in Craven County's deferred present use value tax program?

- ◯ Yes
- ◯ No
- ◯ Don't know

17. Do you currently sell/market/contract your farm/forest products to state and federal organizations, the military, hospitals, schools, etc?

- ◯ Yes
- ◯ No

18. If your operation is involved in the production of produce, have you obtained Good Agricultural Practices (GAP) certification for your farm to assure food safety?

- ◯ Yes
- ◯ No
- ◯ Do not grow produce

19. If your farm is involved in processing food products, have you obtained Good Agricultural Practices (GAP) certification for your farm to assure food safety?

- ◯ Yes
- ◯ No
- ◯ Do not process food products

20. If your farm is involved in the product of tobacco or grain crops, do you follow GAP requirements for Best Management Practices (recordkeeping, environmental protection, and worker safety regulations)?

- ◯ Yes
- ◯ No
- ◯ Do not grow tobacco or grains requiring GAP practices

21. If you are a landowner, do you currently lease any of your property for: (Check ALL that apply)

- ☐ Farming
- ☐ Military Training Operations
- ☐ Cell Towers
- ☐ Mining/Quarry
- ☐ Hunting/Fishing
- ☐ Do Not Lease
- ☐ Other (please specify):

22. If you do lease land, how many acres do you lease?

23. If you have leased your land for any of the above activities, have you had any problems?

- ◯ Yes
- ◯ No

If yes, please specify

24. Have you had neighbor problems concerning your farming or forestry operation?

- ◯ Yes
- ◯ No

25. If you answered yes to the previous question, what was the nature of the complaint? (Check ALL that apply)

- ☐ Manure application complaint
- ☐ Boundary or trespassing conflict
- ☐ Drainage issue
- ☐ Dumping/littering issue
- ☐ Impact of farming on wildlife
- ☐ Smoke or dust
- ☐ Noise complaint
- ☐ Slow-moving vehicle complaint
- ☐ Chemical use or application issues
- ☐ Adverse environmental impact of farming
- ☐ Other (please specify)

26. Please answer each question presented below:

	Yes	No
Are you aware of the Voluntary Agricultural District (VAD) program?	◯	◯
Are you aware of the Enhanced Voluntary Agricultural District (EVAD) program?	◯	◯
Do you have acreage enrolled in the VAD Program?	◯	◯
Do you have acreage enrolled in the EVAD Program?	◯	◯

Craven County Agricultural Producer Survey

4. FUTURE OF AGRICULTURE

Please answer the following questions about the future of agriculture and opportunities for agriculture.

1. Do you think local government funding should support agricultural development?

- ◯ Yes
- ◯ No

2. The military presence in eastern NC is important to the economy of the state as is agriculture. Do you feel there is opportunity for market-based compatible use incentives to be arranged between the military and farm and forest landowners?

- ◯ Yes
- ◯ No

3. Do you think educating non-farming citizens about the economic and social contributions of farming/forestry will increase community support for farms/forests and improve your operating conditions?

- ◯ Yes
- ◯ No

4. Of the taxes listed below, please select the top three that you feel impose an unreasonable burden to agriculture/agribusiness.

- ☐ Local property tax on land
- ☐ Local property tax on buildings and equipment
- ☐ Federal income tax
- ☐ State income tax
- ☐ Federal self employment tax
- ☐ Federal social security and Medicaid taxes for employees (payroll taxes)
- ☐ State unemployment tax
- ☐ Estate tax

5. Do you think the county economic development commission should provide support for agriculture and agribusinesses in Craven County?

- ◯ Yes
- ◯ No

6. Would you market your products at farmers' markets, food festivals, agricultural fairs, or other local food initiatives if such outlets were developed?

- ◯ Yes
- ◯ No

7. Do you see agritourism as an expansion/diversification opportunity for agriculture and agribusiness in Craven County?

- ◯ Yes
- ◯ No

8. Is it important to promote agriculture and forestry as career opportunities?

- ◯ Yes
- ◯ No

9. Agriculture, horticulture, forestry and agribusiness should be taught in: (Check ALL that apply.)

- ☐ Elementary school
- ☐ Middle school
- ☐ High school
- ☐ Community college
- ☐ Colleges and Universities

10. Would you consider training an intern/young farmer within your farming operation to encourage the next generation to enter production agriculture?

- ◯ Yes
- ◯ No
- ◯ Only if monetary incentives were provided.

5. TRAINING AND BUSINESS DEVELOPMENT

Please answer the following questions about training and business development opportunities to maintain the viability of your farm or forest.

1. Would you attend training on the production of biofuel feedstock or woody biomass?

- ◯ Yes
- ◯ No

2. Would you attend training in Good Agricultural Practices (GAP) certification for produce and processing?

- ◯ Yes
- ◯ No

3. Would you attend training in Good Agricultural Practices (GAP) certification to ensure Best Management Practices are followed in the production of tobacco and grains?

- ◯ Yes
- ◯ No

4. Select which of these potential trainings you would attend: (Check ALL that apply)

- ☐ Timber management
- ☐ Pine Straw Sales
- ☐ Longleaf Pine Production
- ☐ Development of a Forestry Management Plan
- ☐ Selecting Consulting Foresters
- ☐ None of the above

Craven County Agricultural Producer Survey

5. Would you attend training on business planning such as these: (Check ALL that apply)

- [ ] Direct to Consumer Marketing of Products
- [ ] Business Website Development
- [ ] Regional Product Branding
- [ ] Identifying and Managing Risk
- [ ] Diversifying through Agritourism
- [ ] Marketing and Sales Promotions
- [ ] Forward Pricing and Hedging
- [ ] Organizing Buyer/Seller Groups

Other (please specify)

6. Would you attend training on Estate Planning and Farm/Forest Transition?

- ◯ Yes
- ◯ No

7. Would you attend training on how to apply for federal and state contracts for your products?

- ◯ Yes
- ◯ No

8. Both opportunities and threats exist for agriculture and agribusiness in Craven County.

Please list two threats you perceive to agriculture/forestry/agribusiness in Craven County.

Please list two opportunities that exist for agriculture/forestry/agribusiness in Craven County.

9. Please add any additional comments you may have about agriculture and forestry in Craven County.

Craven County Agricultural Producer Survey

6. THANK YOU!

Your time and effort on this survey will help create an Agricultural Development Plan for Craven County. This plan will provide recommendations for both short and long-term strategies to support agriculture and forestry in Craven County. Once the plan is written, it will be presented to the county commissioners for endorsement. Once it is endorsed, it will be sent to NC Department of Agriculture for certification. When the plan is certified, the county will receive priority status for funding from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund.

If you have any questions or would like more details, please contact Grace Lawrence at glawrence@moc.edu or at 919-518-6463.

Craven County Agricultural Business Survey

1. Introduction

Your input is needed to create an Agricultural Development Plan for Craven County. This plan will contain the current state of agriculture and forestry, outline the challenges and opportunities for agriculture and forestry that exist, and develop recommendations to help maintain family farms and forests in Craven County. The general public, agribusinesses, producers and landowners are targeted audiences for this survey. Many of Craven County's agribusinesses are individual, independent operations with unique interests, needs and concerns. If the Craven County Agricultural Development Plan is to be meaningful, it needs to be shaped by the input of agribusiness owners.

The North Carolina's Eastern Region received a grant from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund to create agricultural development plans for Craven, Nash and Pamlico Counties. The Lois G. Britt Agribusiness Center at Mount Olive College is directing the project.

The Craven County Agricultural Advisory Board, NC Cooperative Extension Craven County, Craven County Soil and Water Conservation District, NC Forest Service Craven County, Craven County Tax Office, Craven County Manager's Office and other stakeholders are also involved with the development of this plan for Craven County.

Many challenges face agriculture such as a heightened awareness of the relationships between farm uses and other land uses. Farms and forests, when located adjacent to industries, military installations and communities, are considered "compatible use partners" and provide numerous benefits to the county and its residents. A comprehensive strategy will assist with the county's agriculture and land use policies and programs as well as develop these compatible partnerships. The Craven County Agricultural Development Plan will provide that strategy.

The intent of this plan is neither to limit nor restrict landowners' rights and uses. The plan will increase awareness of agricultural development opportunities and appreciation of agriculture and forestry. The preservation of agriculture is important to the well being of family farms as well as to county and its economy. However, the ultimate decision of agricultural development rests in the hands of the landowners of farms and forests.

Please note that all information will be strictly confidential. Responses to the surveys will remain anonymous and are not identifiable.

Your participation in this study is strictly voluntary. Thank you for your interest and participation. If you have additional concerns or questions please contact glawrence@moc.edu or 919-518-6463.

Craven County Agricultural Business Survey

2. AGRICULTURAL BUSINESS SURVEY

Please complete this survey ONLY if you own a business that is tied to agriculture, aquaculture and/or forestry through services, trainings, products, manufacturing, processing, etc.

All information is STRICTLY CONFIDENTIAL as referenced on introduction page.

1. What type of agribusiness do you operate? (Check ALL that apply)

- [ ] Feed dealer
- [ ] Equipment dealer
- [ ] Equipment repair
- [ ] Ag consultant
- [ ] Farm supply store
- [ ] Seed/fertilizer/lime/agri-chemical
- [ ] Nursery/greenhouse
- [ ] Other (please specify)
- [ ] Processor/distributor
- [ ] Veterinarian
- [ ] Logger or forester
- [ ] Dairy or other ag processor
- [ ] Landscape/horticulture
- [ ] Financial/insurance

2. How many people do you employ in Craven County? (Please provide number of employees)

Full-time

Part-time

3. How long has this business been in operation?

- ◯ 0-4 years
- ◯ 5-9 years
- ◯ 10-20 years
- ◯ 20+ years

4. Approximately what percentage of your business comes from the farm/forest community?

- ◯ 0 to 24%
- ◯ 25 to 49%
- ◯ 50 to 74%
- ◯ 75 to 100%

Craven County Agricultural Business Survey

5. Do you currently sell, market, or contract your products or services to state and federal organizations, the military, hospitals, schools, etc?

- ◯ Yes
- ◯ No

Craven County Agricultural Business Survey

3. OVERVIEW OF LAST FIVE YEARS

Please help us understand what has occurred in your business in the LAST five years.

1. Have you increased your operation size in the last five years?

- ◯ Yes
- ◯ No

2. Have you added service area to hold or expand your market share in the last five years?

- ◯ Yes
- ◯ No

3. Have you increased agricultural inventories and sales in the last five years?

- ◯ Yes
- ◯ No

4. If you have NOT expanded in the last 5 years what are the primary reasons? (Check ALL that apply)

- ☐ Satisfied with current size
- ☐ Loss of market share
- ☐ Lack of labor supply
- ☐ Age of owner
- ☐ Lack of financial capital
- ☐ Low profit margins
- ☐ Declining agricultural sales
- ☐ Lack of room to expand
- ☐ Regulatory obstacles
- ☐ Receivables collection problems
- ☐ Other (please specify)

Craven County Agricultural Business Survey

4. OVERVIEW OF NEXT FIVE YEARS

Please help us understand what you foresee for your business in the NEXT five years.

1. Do you expect to increase your operation size in the next five years?

- ◯ Yes
- ◯ No

2. Do you expect to increase the number of employees at your place of business in the next five years?

- ◯ Yes
- ◯ No

3. Do you expect to add new product lines or services for farm/forestry operators in the next five years?

- ◯ Yes
- ◯ No

4. Do you expect to add new product lines or services for non farmers in the next five years?

- ◯ Yes
- ◯ No

Craven County Agricultural Business Survey

5. TRENDS IN AGRICULTURE

1. What agricultural trends have you observed in Craven County? (Check ALL that apply)

- [ ] A change to new types of farms
- [ ] More small farms
- [ ] Fewer small farms
- [ ] More large farms
- [ ] Fewer large farms
- [ ] A shift to more sophisticated farm operations
- [ ] More part-time farms
- [ ] More specialty and direct market operations
- [ ] More diversification
- [ ] No significant changes
- [ ] Other (please specify)

2. Based on what you have observed, will you modify your business to adapt to these trends?

- ◯ Yes
- ◯ No

3. If yes, what modifications will you make?

Craven County Agricultural Business Survey

6. THE FUTURE OF AGRICULTURE

1. Do you see biofuels as an economic engine for agribusinesses in Craven County?

- ◯ Yes
- ◯ No

2. Is transition/estate planning an issue facing agribusinesses in Craven County?

- ◯ Yes
- ◯ No

3. Do agribusiness owners need assistance with transition/estate planning?

- ◯ Yes
- ◯ No

4. Is it important that agriculture and agribusinesses be promoted as career opportunities?

- ◯ Yes
- ◯ No

5. Is it important to have neighbor and/or community education about the importance of agriculture and agribusiness in Craven County?

- ◯ Yes
- ◯ No

6. Do you have labor issues at your business?

- ◯ Yes
- ◯ No

7. If you answered yes to the above question, what issues do you face? (Check all that apply)

- ☐ Lack of qualified staff
- ☐ Lack of training opportunities for staff
- ☐ Lack of capital to hire staff
- ☐ Unable to provide required benefits such as health insurance, employment taxes, etc.
- ☐ Other (please specify)

8. Is there a need for consumer education on the economic impact of buying "local" in Craven County?

- ◯ Yes
- ◯ No

9. Is there a need for youth agriculture education to be taught in the schools of Craven County?

- ◯ Yes
- ◯ No

10. Do you see agritourism as an expansion/diversification opportunity for agriculture/agribusiness in Craven County?

- ◯ Yes
- ◯ No

11. For your business to succeed, what topics are most important to you? (Check ALL that apply)

- ☐ Ability to receive adequate financing to maintain/expand business
- ☐ Succession/transition of the business to interested parties
- ☐ Training and education on new technologies that are being developed for agriculture/forestry
- ☐ Other (please specify)

12. Would you support county government funding of agricultural development?

- ◯ Yes
- ◯ No

13. Both opportunities and threats exist for agriculture and agribusiness in Craven County.

Please list two threats to agriculture/forestry/agribusiness.

Please list two opportunities that exist for agriculture/forestry/agribusiness.

14. Please add any additional comments you may have about agriculture and forestry in Craven County.

Craven County Agricultural Business Survey

7. THANK YOU!

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