

Wake County Agriculture Economic Development Plan



Supporting Wake County's farm community, agribusinesses, and local food production for today and future generations

Endorsed by the Wake County Board of Commissioners

on

_____ , 2013



Photos of Wake County agriculture (clockwise from upper left): local produce from Hilltop Farms, grain farm in eastern Wake County, equine operation near Willow Spring, tobacco transplants in greenhouse in Fuquay Varina, installation of best management practices on farm near Wake Forest, tobacco farm near Rolesville, farmer sprigging coastal Bermudagrass in southern Wake County.

Acknowledgements

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Agriculture and Agribusiness Economic Development in Wake County

“In 2008, NC State University Economist Mike Walden estimated Agriculture and Agribusiness related value-added economic activity (farming, forestry, and food manufacturing and retailing) at **\$2.7 billion, or 6% of the county’s total economy**. Farms and food businesses are primarily small businesses and utilize family and local labor. Walden calculated that agriculturally related industries make up over **10% of total employment**.¹”

Executive Summary

The best way to preserve farmland and keep Wake County’s agribusiness community successful is to make agriculture as economically viable as possible. Wake County strives to be farm-friendly, reduce farm input cost, and support opportunities to help deliver agriculture, food, and fiber products for exports or to customers who want to buy local.

We can best achieve these goals by encouraging consumer spending on Wake County’s agriculture, equine operations, and forestry products. This Plan will expand the capacity of local farms, support economic development and job creation in rural areas, and as a bonus, will help address diet-related health problems. With an increased focus on consumption of local foods, we have an important and unprecedented chance to connect our rapidly expanding metropolitan areas with our rural, agricultural communities. This Plan of economic viability will not only encourage farmland preservation, but will leverage a core desire of consumers for a greater connection to the land and the farmers who grow their food.

The organizations, businesses, and individuals interviewed indicate that they support encouraging the growth of Wake County agribusiness and farms. The farmers, landowners, agricultural organizations and residents interviewed provided input on how to best strengthen Wake County’s agricultural economy. Because most of Wake County’s agribusinesses are owned by individuals, family partnerships and small family corporations, it was crucial to obtain their input to determine their needs as we move forward with the Plan.

The Plan outlines:

- A statement of need for Wake County’s support of agriculture
- An overview of Wake County’s agricultural impact
- Challenges to Wake County’s agricultural economic growth
- Opportunities to enhance profitability of Wake County’s family farms
- Action steps to ensure economic viability of the County’s agricultural community
- A schedule to implement this Plan and reevaluate as Wake County changes

The *Wake County Agricultural Economic Development Plan* provides recommendations to guide agencies and organizations that work in the agricultural community. The recommendations of this Plan are just that - recommendations. The Plan is meant to be fluid and reviewed periodically to adjust and adapt as needed.

The recommendations of this Plan are:

1. Integrate economic development with farmland protection
2. Expand County voluntary land preservation programs through conservation partnerships
3. Promote understanding and appreciation of agriculture to the non-farm public
4. Enhance business development programs to incorporate agriculture and forestry interest
5. Promote opportunities for profitability of Wake County family farms and agribusinesses

Statement of Need for Action

Wake County is well known nationally as one of the best places to live, work, play, and learn. These accolades cannot be solely attributed to business and educational amenities, but also because of the diversity of natural and rural landscapes intertwined with the metro areas inside the county. These landscapes between the townships and landmarks are valuable, productive forest and farmland.

Agriculture is the foundation of human culture. Its impact on large empires of yesterday and small communities of today has shaped our value systems throughout time. Our leaders understand the need to provide balanced support between economic growth of industry, business, and agriculture for North Carolina's future. Agriculture makes a major contribution to the quality of life for Wake County residents. Agriculture contributes to the local economy through product sale receipts, employment on farms and with agribusinesses and farm expenditures for service inputs. Farmers also make significant contributions as stewards of the land throughout the county. Their stewardship protects Wake County's soil and water resources, recharges groundwater and abates storm water runoff, connects wildlife habitat, and safeguards the scenic and historic vistas that have defined our county's character. For these reasons, it is in the county's best interest to promote the local agricultural industry and protect farmland. Enabling farmers who want to continue to farm is a cost effective way of maintaining the quality of life of everyone in Wake County.

Endorsement of this Plan will qualify Wake County for additional state funds for farmland protection and cost share assistance for conservation work.²

Article of Authority

In 1986, the North Carolina General Assembly passed the North Carolina Farmland Preservation Enabling Act³ "to authorize counties to undertake a series of programs to encourage the preservation of farmland,"⁴ in addition to enabling counties to create Voluntary Agricultural District ordinances, which Wake County adopted in 2002⁵. By a later amendment, the General Assembly created a matching mechanism for distribution of Farmland Preservation Trust Fund monies, **with preference to counties endorsing a countywide farmland protection plan**⁶.

The Act declares that a countywide farmland protection plan shall:

1. Contain a list and description of existing agricultural activity in the county.
2. Contain a list of existing challenges to continued family farming in the county.
3. Contain a list of opportunities for maintaining or enhancing small, family-owned farms and the local agricultural economy.
4. Describe how the county plans to maintain a viable agricultural community and shall address farmland preservation tools, such as networking with younger farmers, farm

infrastructure financing, estate planning, the donation of agricultural conservation easements, and voluntary agricultural districts.

5. Contain a schedule for implementing the Plan and an identification of possible funding sources for the long-term support of the Plan.⁷

The statute suggests that such a countywide farmland protection plan be formulated with the assistance of an agricultural advisory board. The Wake County Board of Commissioners delegated the creation of this board to the Wake Soil and Water Conservation District Board of Supervisors, under the county’s Voluntary Agricultural District ordinance⁸. That group, known as the Wake County Voluntary Agricultural Advisory Committee, will take the lead role in administering this Plan and reporting to the Board of County Commissioners on its progress. This will not require additional county funds. The following map shows the current Voluntary Agriculture Districts in Wake County.⁹

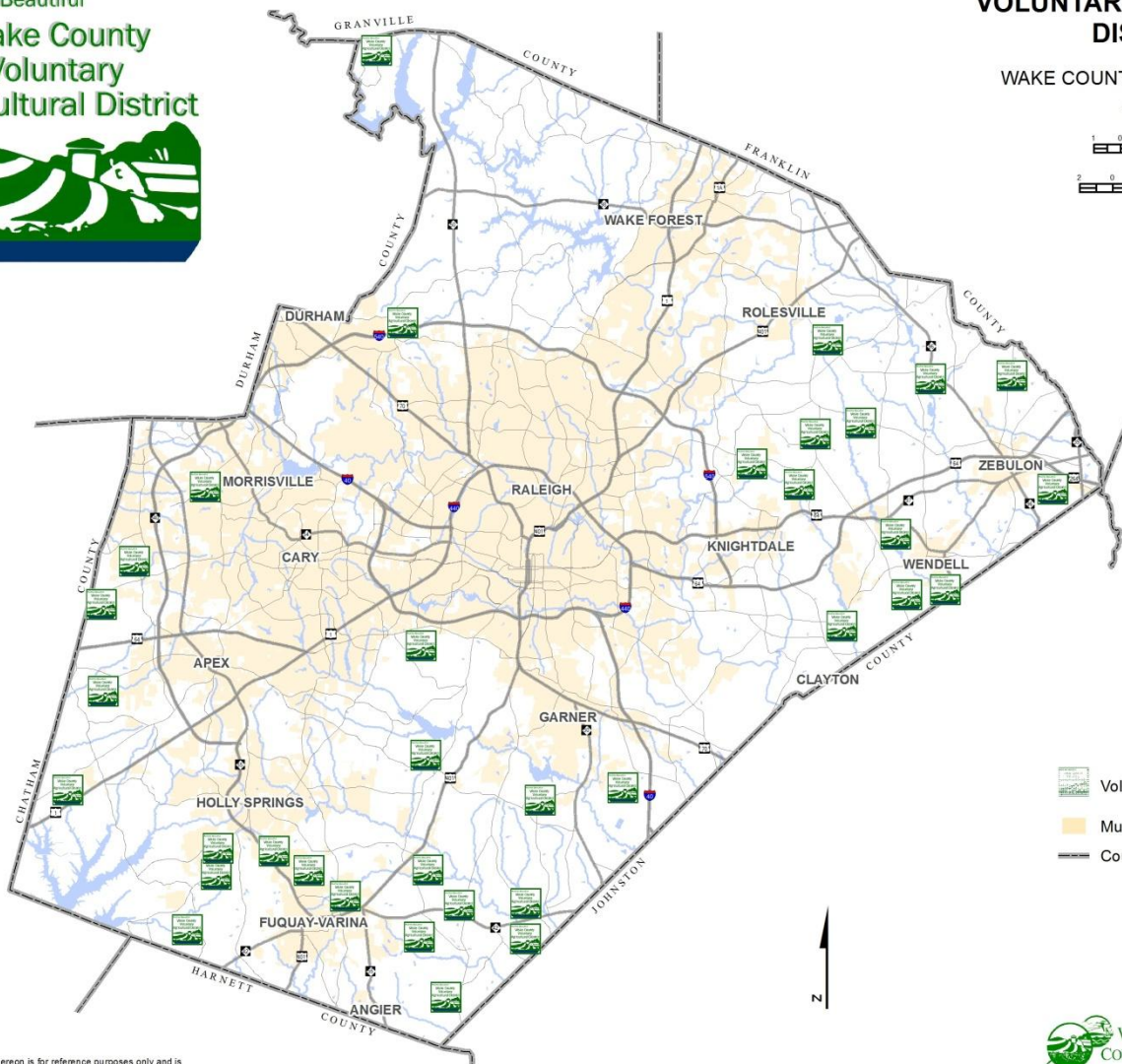
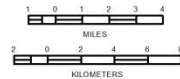
Another Beautiful
Wake County
Voluntary
Agricultural District



VOLUNTARY AGRICULTURAL DISTRICTS

WAKE COUNTY, NORTH CAROLINA

APRIL 2013



- LEGEND
- Voluntary Agricultural District
 - Municipal Corporate Limits
 - County Boundary



Information depicted hereon is for reference purposes only and is derived from best available sources. Wake County assumes no responsibility for errors arising from misuse of this map.

Overview of Wake County’s Existing Agricultural Activity & Impact

Wake County’s agribusiness industries (farms, fiber, equipment, horse, supply, nursery and other similar agribusinesses.) are valuable assets to our economy. Wake County combines two counties into one, reflecting the best of North Carolina. The urban and suburban populations form a thriving metro that rivals Charlotte, while the scenic streams, trails, and cropland mirror Alamance County. As such, Wake County is unique: there is no other county in North Carolina that is as complex in character and yet, manages the interface of urban/suburban life with rural communities so well. It is this continued coexistence of urban and farm landscapes and the resulting economic, social, environmental and aesthetic benefits that make Wake County the best place to live.



Wake County is 857 square miles in size.

The uses of this land can be categorized into:

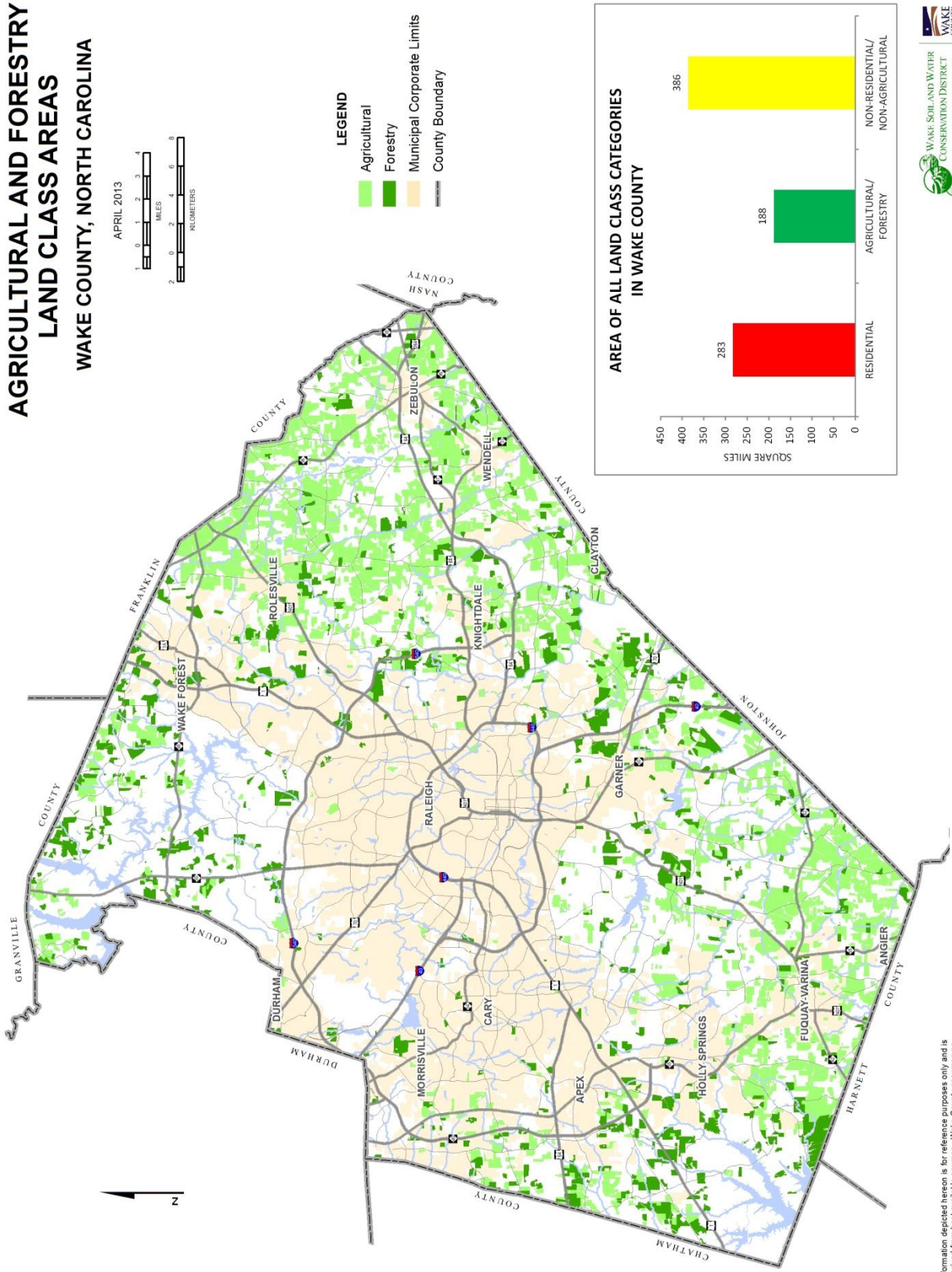
Agricultural and Forested = 188 square miles (22% of the area)

Residential = 283 square miles (33% of the area)

Non-agricultural, Non-residential = 386 square miles (45% of the area)

The following map shows parcels that have agricultural and forestry Present Use Value (PUV) classification. There are additional parcels in agricultural and forestry production but does not meet the PUV qualifiers and are not reflected on the map.

AGRICULTURAL AND FORESTRY LAND CLASS AREAS WAKE COUNTY, NORTH CAROLINA

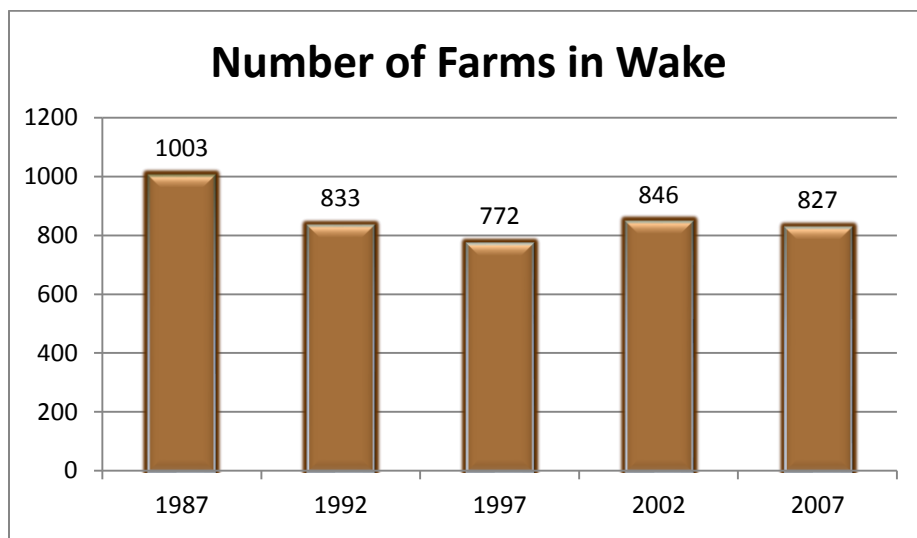


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In 2011, Wake County’s sales of crops and livestock products were **\$63,627,053**. Wake ranked 47th in North Carolina in cash receipts.¹⁰ As such, Wake is a partially urban county with agricultural receipts higher than about half of the counties in the state.

With today’s rising interest in healthy living and locally grown foods, the growth of farmers’ markets, and the creative restaurant community in the Triangle, opportunities abound for small farmers growing fruits, vegetables, and ornamental items for direct market sales.

The U.S. Department of Agriculture conducts the Census of Agriculture¹¹ every five years, offering a snapshot of land use, production, and economic impact of the local agricultural sector. There were 827 farms in Wake County in 2007, almost identical to 1992 numbers.



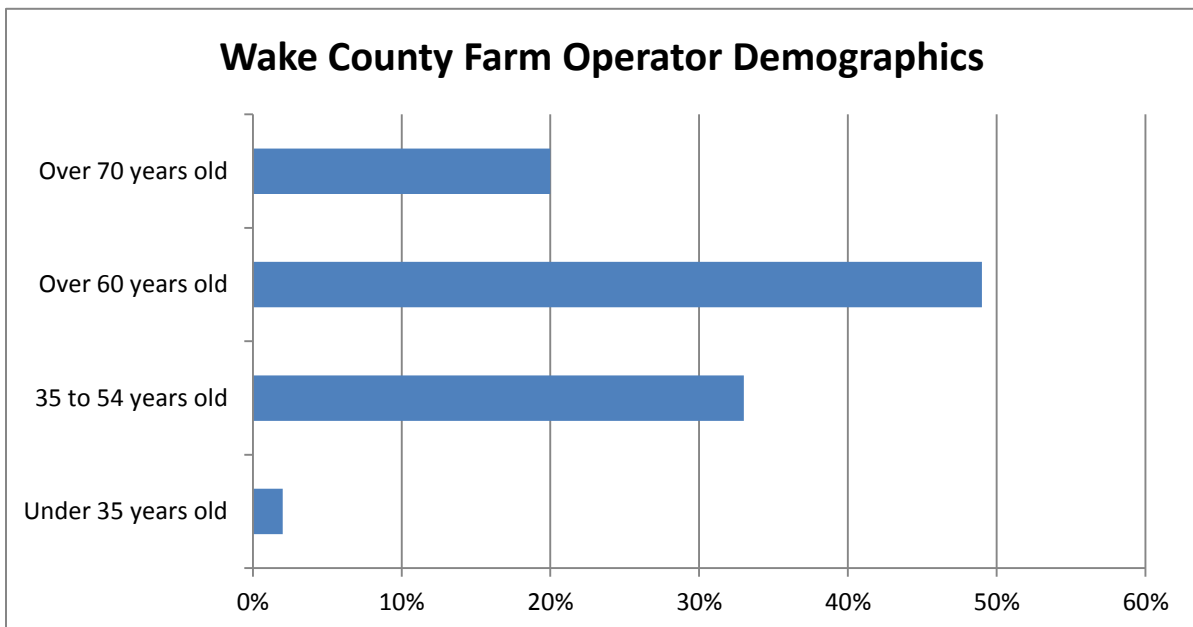
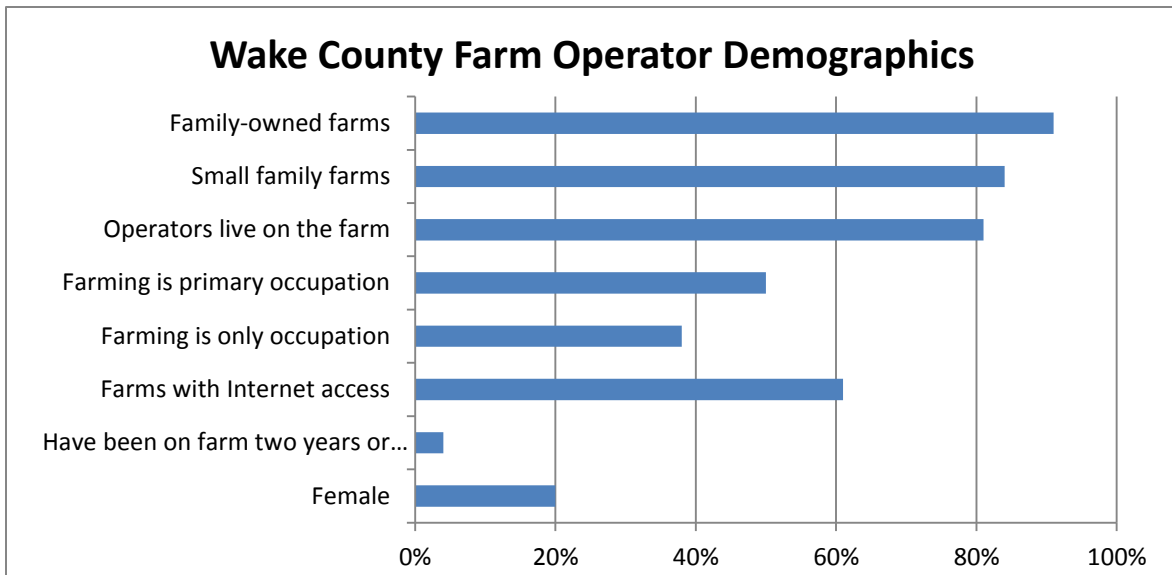
The chart above illustrates the number of farms has remained relatively stable in the past 20 years, even while the composition of agricultural sales continues to evolve. In 1950, there were 6,219 farms in Wake County, 7.5 times the number in 2007. The pressures to develop or sell the farms have been described by the landowners as intense or even “aggravating”. The farm owners and operators have demonstrated strength and resilience to maintain their farms despite challenging economic times.

By 2007, 827 farmers were tending 84,956 acres, with 55% in cropland, 18% in pasture, 27% woodland and the rest in other uses. In 2011, nursery and greenhouse production had become an important farm commodity with \$20.3 million and Wake County ranked sixth in the state.¹²

In 2011, Wake County’s tobacco also remained very important, at \$6 million and the county ranked 15th. The vegetable production ranked 17th bringing in \$8.8 million. Soybeans dominate Wake County’s farm landscape with 14,500 acres in production and tobacco on 3,140 acres.¹³

Wake agricultural rental rates¹⁴ have remained moderate in the face of rapid growth in the Triangle region. The 2009 Cash Rents Values study from the North Carolina Department of Agriculture finds that rental rates for farmland in Wake County average \$61.20 per acre for high-productivity land, the highest in the 10-county statistical district. On the other hand, rental values average \$36.20 per acre for medium-productivity land and \$26.20 for low-productivity land.

Midsize farms play a crucial role in providing natural areas, protecting air, soil, and water quality, and maintaining rural character and institutions that benefit all the county’s citizens. Wake County is not unique in facing challenges for mid-sized farms. Nationwide, government data shows continued growth in large and small farms, while those in the middle, which typically constitute the bulk of what the public considers to be family farms, are disappearing at a rapid rate. *The information in the charts below is from the 2007 Wake County farm demographics from the U.S. Census of Agriculture.*



People

2007 Wake County Farm Operator Demographics from USDA Census of Agriculture:

Half of operators list farming as their primary occupation.

20 % of operators are female.

81 % live on the farm they operate.

38 % did not work off the farm.

4 % had been on farm two years or less.

61 % with Internet access

91% were family-owned farms

84 % were small family farms

2 % were under 35 years old.

33 % were between 35 and 54 years old.

49 % were over 60.

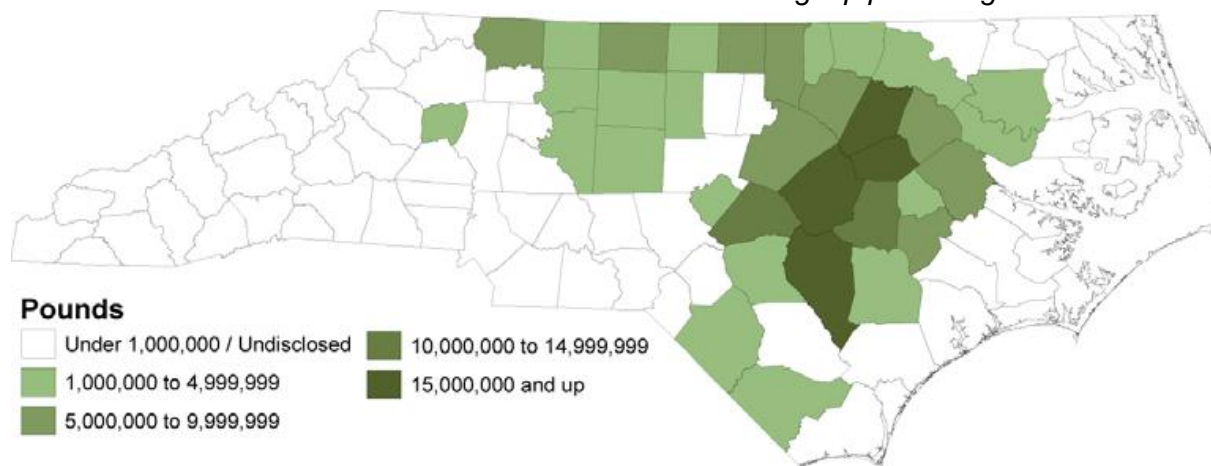
20 % were over 70.

Average age: 59.

Tobacco

In spite of being amongst the most urbanized counties in the state, Wake County has long been a leader in tobacco production. In 1949, 4,544 farms grew 23,991 acres. In 1997, 290 farms grew 12,360 acres of tobacco, making it the 5th leading tobacco county in the state. By 2007, Wake County had fallen to the 17th spot, with 55 tobacco farms producing 3,359 acres. This accounted for \$8.6 million in sales, over 20 percent of total agricultural income. However, in 2011, Wake County’s ranking moved up to 15th in tobacco production in North Carolina. This is a reflection of the overall change in agriculture production across the state.

Wake still among top producing tobacco counties



North Carolina Agricultural Statistics (NCDA&CS Ag Statistics Division)

Grains and Soybeans

In 2007, 153 farms grew 19,549 acres of soybeans, 53 farms grew 2,224 acres of corn, and 44 farms grew 3,238 acres of wheat. Altogether, this ranked Wake County in the middle of North Carolina's 100 counties in terms of grain production. In 2011, Wake County farmers harvested 14,500 acres of soybeans, 1,000 acres of corn and 3,500 acres of wheat. Wake County has an economic advantage with the Cargill Soybean Mill located in Raleigh on South Blount Street, which is the primary marketing option for most growers. As long as this facility continues to purchase local beans, soybean production should continue.

Fruits and Vegetables

In 2007, 94 vegetable growers tended 1,333 acres, resulting in over \$3 million in sales. This made it the 3rd largest agricultural sector in the county, behind nursery and tobacco. Twenty-eight farms reported 63 acres of orchards. Predominant among the vegetable crops was 806 acres of sweet potatoes on 13 farms. In 2002, only 51 farms harvested 206 acres of produce. Thus, there was a 650% growth rate in fresh fruit and vegetable production in Wake County in only 5 years.

Other than sweet potatoes, Wake County produce is generally marketed directly to consumers, either through pick-your-own, on-farm stands, community supported agriculture subscription sales or farmers' markets. Produce growers seem generally pleased with their farming conditions. They feel that they play an important role in educating the general public about agriculture. They receive positive feedback from neighbors about their effort. With the rising interest in locally grown foods, they anticipate continuing growth in this sector.

Greenhouse, Nursery, and Floriculture

In 2007, half of Wake County's total agricultural revenues came from the nursery and greenhouse sector, with \$20.9 million in sales. This made it the 5th largest county in the state in this agricultural sector. Forty-two farms sold over \$6 million worth of flowering plants, 30 farms sold \$4.3 million of bedding plants, and 28 farms sold \$12.2 million of nursery stock. In 1997, conversely, the county only reported \$8.7 million dollars of nursery and greenhouse sales. This significant growth indicated markets for local producers due to the demand for landscape plants.

In 2011, Wake County's cash receipts for greenhouse and nursery ranked 6th in the state¹⁵ bringing in \$20.3 million in sales. This shows the diversification and adeptness that producers have done to maintain viability of their farms in the county.

Livestock

In January 2012, Wake County had 4,300 cattle, ranking 51st in the state.

Wake farmers sold \$5.9 million worth of livestock products in 2007, ranking the county 74th in the state. There are no livestock markets or processing facilities in the county which no longer has the critical mass to support these businesses. Cattle producers travel to Smithfield, Oxford, or Siler City for sales and Yanceyville, Benson, or Siler City to process their livestock. Beef cattle

were the most widespread livestock species, with \$1 million of sales from 159 farms, 100 of which had less than 20 head. Fifty-six farms sold goats, 15 sold sheep and lambs, and 14 produced wool, for total sales of \$130,000. There were 6 farms with pig sales, one of which is a NC State experimental farm with over 1000 hogs. Total sales volumes for pigs are not reported due to privacy needs.

In 2011, cash receipts for all livestock in Wake County were \$5.6 million which moved the county to 73rd in the state. Good opportunities remain in the livestock sector for locally-grown, grass-fed meat which can be marketed directly to consumers. This type of operation can steward significant blocks of land due to the focus on soil health and forage quality, as well as intensive farm management strategies.

Horses

Wake County has seen dramatic growth in the equine sector in recent years, as more urban and mini-farm residents have taken up riding as a leisure activity. This has generated opportunities in custom hay harvesting, haying equipment sales, fencing services, boarding and training facilities, riding lessons and the seeding, maintenance, and renovation of pasture. A recent study by the NC Horse Council estimated 7,730 horses in the county, resulting in \$47 million in inventory value. This made Wake County the number one equine county in the state.¹⁶ In 2007, the Census of Agriculture estimated \$600,000 of horse sales from 264 farms. Although the horse business has taken a hit in the recent economic slowdown, it still offers a promising future for Wake County with a large urban population close to open farm country which can provide substantial boarding payments for farmers.

Hay and Forage

In 2010, 181 farms grew 6,172 acres of hay. This sector was the second largest agricultural land usage in the county, behind soybeans. Sales were reported at \$491,000. Because of the relatively low labor input needed, round bale hay production for beef cattle sales is a common agricultural practice to keep land eligible for the Present Use Value tax program, which requires \$1000 annual gross sales from the farm.

The large equine population discussed above indicates a strong ongoing market for high quality square bales of hay. This requires more management and labor than round bales, but offers the possibility of higher returns. Several producers indicate that each year there are new profitable opportunities to grow and market quality horse hay as well as supplemental forage for cattle.

Apiculture

Wake County citizens are engaged in an assortment of outdoor activities including beekeeping. According to the Wake County Beekeepers Association, there were 233 active members enrolled

in March of 2013.¹⁷ These small scale bee hive operations are a continuing sign of our citizen's strong connection to nature.

These operations' hives can be rented for pollination and also produce honey for commercial sales.¹⁸ Beekeeping presents the possibility of a diversified income stream, including pollination, honey, bath products, candles, and queen breeding.

Organic Farming

One production and marketing approach offers a particularly promising opportunity in the high value landscape of Wake County. The United States Department of Agriculture, in partnership with the organic community, has established production standards under which a farmer can produce and market their products as certified organic. Under this system, the farmer is required to submit a farm plan which outlines the practices and materials that will be used in production. These practices and materials are verified through an annual certification process and must comply with the USDA standards which are based on protecting natural resources and enhancing biodiversity. No synthetic fertilizers, pesticides or genetically modified organisms can be used. In return, farmers can receive a 10-100 percent price premium selling to the organic marketplace. This market saw a 15% annual growth in 2008 with sales of \$22.9 billion nationwide. In addition, 75% of the cost of certification can be reimbursed through a USDA cost share program. Wake County farmers are in a prime location for successful organic production.

Urban Agriculture

Wake County is seeing a rapid expansion of urban agriculture from community gardens and backyard chickens to beginning farmers operating micro-farms. A diverse collaboration is lending their support to many of these efforts. The Inter-Faith Food Shuttle (IFFS) sees community gardens as an important component of an active, healthy community and is committed to teaching farm and garden skills, evaluating farming/gardening as a vocation, and building healthy communities. They manage a community garden training farm and multiple community gardens. Advocates for Health in Action (AHA) organized the "Dig In" conference on community gardening and urban agriculture in Raleigh. The fourth year for this successful conference was held on March 9, 2013. North Carolina Cooperative Extension is a partner of the Center for Environmental Farming Systems' initiative to build the state's local food economy, from farm to fork. Wake County Cooperative Extension is the face of the county's local foods initiative, helping to promote North Carolina's 10% Campaign and to guide efforts to develop the local food economy. The Local Foods contact person in Wake County is Carol Mitchell with Wake County Cooperative Extension.

Agritourism

The NCDA&CS Division of Agritourism web page listed 29 agritourism operations in Wake County as of March 2013.¹⁹ They included wineries, horse facilities, educational farms, corn

mazes, petting zoos, and pick-your-own fruits and vegetables and Christmas trees. These farms play an important role in educating the public about the world of agriculture while providing a diversified income stream to the farmers. For many school kids, a visit to one of these farms may be the first opportunity to become aware of their neighboring farms in Wake County.

Forestry

In 2010, Wake County had 177,300 forested acres (33% of the county land base), with 81% in private ownership. Forested land plays a crucial role in water quality protection, wildlife habitat, and wetlands enhancement. Forestry activities are supported by the local office of the North Carolina Forest Service. Top current priorities in Wake County are fire management, urban forestry and timber management for private landowners, which includes replanting, timber stand improvement and controlled burns. The county rangers, in addition to private forestry consultants, will help landowners develop forest management plans which maximize the productivity of their woodlands and are a requirement for enrolling in the Present Use Value tax program. They also help municipalities develop urban forestry plans. In addition, the Wake Soil and Water Conservation District helps landowners convert unused farmland to forestry by implementing tree planting contracts.

There are entrepreneurial opportunities for small scale harvest and niche wood products for local buyers. Several small sawmills are doing specialty cutting in various parts of the county. Cultivation of woodland botanicals and mushrooms also offer opportunities for marketing products from woodlands.

Partnership

One existing component of agriculture in Wake County that may not be present in other counties is the exceptional network of organizations and individuals that support agribusiness, local economic development, natural resources and farmland protection. Wake County is a magnet for leading professionals and active educated citizens. Together these groups support the efforts of prosperous growth, conservation, farm heritage and healthy residents.

The **Wake County Board of Commissioners**²⁰ included support for Wake County's agriculture and agribusiness in its 2012 and 2013 Work Goals.

The **Wake Soil and Water Conservation District**²¹ (SWCD) Board of Supervisors lead in providing technical support for landowners and farm operators that address natural resources and land management problems.

North Carolina Cooperative Extension Service²² (CES) provides educational programming and information on a wide range of production and management issues through resources at North Carolina State University and North Carolina A&T University.

North Carolina Forest Service²³ delegates a County Ranger and County Foresters to assist landowners with stewardship and forest management plans to produce excellent timber stands and profitable tree farms.

The **Wake County Agribusiness Council**²⁴ is a collaboration of farmers, university researchers, government employees and industry personnel who meet monthly to support, promote, and advocate on behalf of the agricultural industry in the Raleigh area.

The **Wake County Farm Bureau**²⁵ represents the policy interests of farm and rural families as a local chapter of the North Carolina Farm Bureau, one of the state's largest advocacy organizations and insurance providers. They discuss key agricultural issues at monthly meetings and fund a variety of educational activities throughout the county.

The **Triangle Land Conservancy**²⁶ is the primary non-profit organization working on land protection in the six-county Triangle region. They use donations from individuals and foundations to reach out to landowners and seek public funding sources to protect important open space — stream corridors, forests, wildlife habitat, farmland and natural areas in the region. Their fundamental approach is to use the purchase or donation of conservation easements or fee simple purchase to preserve soils and protect water quality as resources for the future. TLC recently redirected its focus from simply preserving land to taking a public benefits approach to conservation, focusing on clean water, local farms and food, wildlife habitat, and connecting people with nature.

Inter-Faith Food Shuttle²⁷ (IFFS) started as a local response to food waste and hunger. They focused on recovery and distribution of local foods and eventually became part of the national food bank network (Feeding America). The Inter-Faith Food Shuttle feels strongly that local fresh food is necessary for ending hunger. This belief has led them to make a commitment to rebuilding the local food system in the seven Triangle counties they serve, starting with Wake.

Advocates for Health in Action²⁸ (AHA) was founded as a response to a 2006 Community Health Assessment that ranked obesity as one of the top 4 issues in the county. Three founding partners, Wake County Human Services, WakeMed Health and Hospitals, and the John Rex Endowment created the organization, which has now grown to over 50 diverse stakeholder organizations and many community members who are shaping the environment throughout Wake County so healthful eating and physical activity are the way of life.

Wake County Planning, Land Use and Zoning Division and the local municipal planning departments meet regularly to discuss the county's land use topics. This collaboration provides the opportunity for dialogue of current issues and the venue to discuss economic and environmental concerns affecting urban, suburban, and rural areas of Wake County, including opportunities for farmer markets in many of the towns.

Challenges to Wake County’s Agricultural Economic Growth

Conversations and surveys of Wake County’s farm landowners, agricultural organizations, agribusinesses, citizens and community leaders have led to the creation of a list of challenges that slow the economic revenue growth potential of the urban/rural farm opportunities in Wake County. Overcoming some of these challenges may increase revenues by helping to supply the growing suburban and urban population’s demand for local fresh food and expediting traditional crops to market and outlets.

Some of these challenges may be insurmountable, some may be easily conquered and some may take decades to overcome. The following acknowledgement of challenges, and subsequent recommendations, are for the purpose of making the active community aware of the barriers. Being aware of the challenges also helps the agricultural, rural and residential communities to continue to seek solutions that will support Wake County’s farmlands.

Summary list of Challenges

- Family heritage and generational flight
- Estate Taxes
- Conservation tax credits
- Transportation of agriculture products throughout a metro county
- Farm transition to younger generation
- Local availability of farm supplies, equipment and seed stock
- Restrictive ordinances and rules on marketing, sales, and farm stands
- Labor
- Maintaining soil quality
- Access to technical assistance
- Competition with overseas imports
- Water quantity and use demand for water
- Varied support of existing agricultural exemption rules
- Assistance to farms for whole farm profitability (horse to manure)
- Available educational classes for maintaining license and certifications
- Right to farm rules
- Excessive acreage requirement to enroll in VAD
- Assistance for permanent easement for legacy farms
- Water quality impacts
- Limited distribution support and export opportunities
- Meeting the supply and demand of consumers in region
- Managing waste from operations
- Meeting regulations guidelines
- Land price, desire for prime farmland

As land values rise and farms are divided by new roads, sewer lines and housing developments, the pressure continues to intensify for large acreage farmers to survive in the expensive Triangle region. Moving farm equipment along increasingly busy rural roads is more difficult and dangerous and it discourages farmers who manage multiple parcels of land. Here are a few detailed **specific challenges identified from surveyed farmers and farm landowners:**

A. Taxes and Rising Property values

The projected population growth rate and dwindling undeveloped land supplies will continue to increase pressure on the price of land. It is not likely that a farm enterprise would be viable if required to purchase land at development rates/prices. Small acreage farms are often too small to qualify for state or county farm tax relief programs. Some landowners are struggling with farm profitability but need to maintain present use value (PUV) taxation. The Wake County Revenue Department has been very helpful in explaining to landowners the requirements of North Carolina rules and statutes on present land use requirements. The County's elected Boards have been supportive in advocating for continued PUV rules. The uncertainty and concern from farm landowners and farmers is mostly at the state and federal level. They describe the inconsistency of support for agriculture.

B. Pressures from Rural/Suburban Interface

Recent conversations with farmers continue to describe disrespectful encounters with the non-farming community, mostly on the rural roads while moving from field to field.

Other concerns include transportation obstacles. Several farmers list lack of law enforcement's knowledge of farm exemptions rules as a serious issue. Often operators are stopped and ticketed for violations later determined to be exempt for farm equipment. There are over 15 law enforcements jurisdictions in Wake County, including county, state and municipal departments. Apparent inconsistencies exist in the training of staff and officers on agriculture exemptions.

Other problems from the rural and suburban communities center on property borders. Litigation has ensued over soil erosion moving sediment onto neighboring property, farm equipment has been vandalized, and one of the most repeated concerns is trespassing of the non-farming community on private lands. The use of off-road vehicles, horse riding and illegal dumping has also increased and constantly cost farm operations valuable labor time in making repairs, installing fencing, and cleaning up debris.

When the surveys and community meetings for the research for this Plan were held, farmers strongly voiced their concern over the rules and restrictions encroaching on them from the expansion of extraterritorial jurisdictions (ETJs). However, in July 2011, legislation was enacted in North Carolina that was supportive of agriculture and bona fide farming in ETJs²⁹. This did not eliminate all concerns, but provided some clarity to farm exemptions in a municipal ETJ.

Horses may be the first step into the agricultural world for citizens wanting to own large productive estates or invest in equine farming. Growing horse operations offer the opportunity for education and agritourism income for existing farms. However, these new horse operations also present soil-conservation and education challenges, as beginners may not have a thorough understanding of animal husbandry, forage management, or operation of traditional farm machinery.

Forest management activities continue to be constrained more by the rules of local municipalities than those of the county. Raleigh, for example, doesn't allow controlled burning of forests in city limits.

C. Water Quantity, Access to Water

Farmers expressed concerns about future water use regulations either through access to irrigation water or increasing restrictions in water supply watersheds rules. Water quality and quantity are crucial factors sustaining life in Wake County as citizens seek an adequate supply of clean water for drinking and recreation. Approximately 141,000 Wake County residents rely on groundwater for drinking and other everyday uses. Two-thirds of that total (93,000) obtain water from domestic wells and the remaining 48,000 are served by one of the 275 Community Water Suppliers.³⁰

Farmers need rainfall and irrigation capacity to grow a wide variety of crops and raise livestock. Well managed farms and open space are key contributors to water supply protection within Wake County. Farms provide filtering buffers along streams, rivers and wetlands, groundwater recharge and flood control. According to the 2011 survey, 33 farms in Wake County reported using over 10,000 gallons per day with an average daily groundwater usage of 105,000 gallons and an average daily surface water usage of 1.0 million gallons. The capacity of these 32 farms was 26 million gallons. The capacity is the potential amount of ground and/or surface water that could be withdrawn in a 24-hour period.³¹ Water restrictions have had negative impacts on the agricultural nursery sector through restrictions on irrigation water and reduced plant purchases based on drought and homeowner lawn watering restrictions. For the first time, North Carolina is confronted with the possibility that urban growth and agriculture are competing for water.

D. Generational Changes within the Farm and Non-farm Community

The aging farmer population suggests a shift in farm ownership as the next generation assumes responsibility. The tools for helping to plan for this transition are available but often not used. Emotional and financial ties to the property increase the transition complexity and often lead to dividing and selling the property. There is neither a clear process that identifies land owners who desire to keep their land in agriculture nor a comprehensive system for supporting them through the transition process. There is a unique combination of skills and experiences required to successfully transition the ownership of a farm as well. Good communication among family members, a solid understanding of the farm family assets, a clear plan for the transition with adequate liquidity of assets to satisfy everyone's needs and appropriate professional assistance to insure the plan is followed are all essential. Unfortunately, it is also rare that a family has taken all of these steps before the passing away of the land owner forces action.

There is a lack of connection between those who want to farm and those who have the land. While it may seem that a simple match up system is the answer, there are many challenges and few examples of successful systems. Deep emotional and financial ties to the land and changing production and marketing conditions all contribute to complicated relationships.

Growers who rent land from other owners also have particular concerns about the plight of their landlords. Dependent on so many aging landowners, they are acutely aware of the tenuous nature of this land for agriculture and the multiple forces pushing these landowners to sell the land for development.

E. Available Technical Assistance, Information and Funding

Providing technical, educational and informational support to local farmers is crucial to their profitability and their ability to meet industry standards. Some livestock producers have reported feeling that they are on their own and without the support of traditional information sources such as NC Cooperative Extension as Wake County does not have an agent with livestock experience. Both animal and produce growers are concerned about pending federal food safety regulations that will impact small farmers. Farm businesses require support agencies and support businesses to be local and available for assistance and repairs. If farmers have to travel further to purchase tires, oil or seeds, Wake County loses revenues not only from the sales and services but from the operation's bottom line as well. Without local farm service agencies and offices, Wake County's farmers will not be aware of support and technical assistance available to them. Some will miss deadlines for federal programs or not qualify due to the lack of local programs in the county.

Between 2008 and 2012, the Wake Soil and Water Conservation District office expended a total of \$1.7 million dollars of state and federal funds on conservation projects in Wake County.

Most counties and municipalities have a limited range of funding options available to finance farmland preservation activities. Most of the county matches for the state and federal programs mentioned above have been done through the annual county appropriations process. Even in places with a strong commitment to farmland preservation, the ups and downs of the budgetary process make it difficult to plan strategically. It may take 2-4 years before a project can be completed and landowners find it difficult to make that commitment in an uncertain funding climate. In the challenging economic climate of 2013, conservation funding sources are in very short supply. Landowners looking to protect their land and reap the associated tax benefits in the near future may find that the donation of an easement is their only option.

Opportunities to Enhance Profitability of Wake County’s Family Farms

The overall goal of a new updated Agricultural Economic Development Plan for Wake County is to unite public and private sectors of agriculture in support of our family farms and local agribusinesses as well as engaging outdoor/agritourism and equine activities that lead to healthy residents and profitable businesses. **The simple plan is to 1) acknowledge agriculture’s contribution to the cultural and economic base of Wake County, 2) describe the challenges that hinder our agribusinesses, and 3) provide strategies and options to increase profitability of family farms.** The expected outcomes of a successfully implemented plan will be positive economic growth in Wake County’s agricultural businesses; avenues for family farmers to keep their farms and remain profitable; and an increase in the stewardship of lands that are productive and valued by the entire community.

This Plan is an outline that offers options, suggestions, and references. It is **NOT** a request for mandates or regulations or additional funding. It is understood that support may be given for the conditions of today and should be amended to adapt to the changing needs of a different Wake County tomorrow. Ignoring the value of agriculture or the opportunity to increase its positive impact on the community is a loss.

Farm-friendly tax policies can reduce the financial burden of land ownership and support farm viability. Commercial farms can receive an exemption from sales tax on certain items used in their farming operations. For instance, farm machinery, containers, tobacco-drying equipment, grain-storage facilities, fuel, potting soil, feed, seed and fertilizer are already completely exempt from state and local sales taxes.³²

Privately owned and managed farms are an important and cost-effective element of the county’s scenic view-sheds. Farms have important fiscal benefits. Privately owned farm and forest lands generate more in local tax revenues than they cost in services. **A 2001 Cost of Community Services³³ study by NC State University found that farm, forest and working lands in Wake County received an average of \$0.47 in services for every dollar of revenue they provide, while residential land uses required \$1.54 in services for each dollar paid in property taxes.**

Local farms can be a significant source of economic development activity. In 2008, NC State University Economist Mike Walden estimated Agriculture and Agribusiness related value-added economic activity (farming, forestry, and food manufacturing and retailing) at \$2.7 billion, or 6% of the county’s total economy. Farms and food businesses are primarily small businesses and utilize family and local labor. Walden calculated that agriculturally related industries make up over 10% of total employment.³⁴

Continued support of productive and profitable working farms and managed forest lands in Wake County will protect these scenic and valuable parcels for future generations.

Action Steps to Ensure Economic Viability of the County’s Agricultural Community

To work with Wake County’s farm and agribusiness community and facilitate their efforts for farmland preservation and economic viability, we must explore the options that are the most effective yet are reasonable and within current allocated resources. The following suggestions and recommendations will address the challenges and provide focused areas of work.

1. Integrate economic development with farmland protection

Agricultural economic development creates an environment where traditional and non-traditional agricultural operations thrive and benefit the larger community. The focus will be on initiatives that improve the structural conditions under which agriculture operates by directing public resources to enhance industry infrastructure, recruit and retain valuable input and output industries, integrate farming and non-farming communities through education and outreach, encourage the creation of agriculturally related jobs, improve wages and proprietor’s income, enhance the tax base, support supplier/vendor networks and enhance the quality of life for all Wake County residents.³⁵

2. Expand County voluntary land preservation programs through conservation partnerships

Incentivize farmers to protect farmland by providing them with a fair return for the benefits their stewardship of the land provides to the non-farming public. Amend the current Voluntary Agricultural District ordinance to reduce the required enrollment acreage to 40 acres instead of the current 100 acres. Reinforce local land trust efforts to bring state and federal funding to Wake County for open space and working lands preservation. Nurture the family farm transition to the younger generation with educational and workshop support from local agencies. Work with Wake County Farm Bureau Young Farmer and Rancher chapter and their support for vocational training (FFA) programs in public schools.

3. Promote understanding and appreciation of agriculture to the non-farm public

Consider awareness programs about ongoing agricultural operations targeted towards new residents of development moving into existing farming communities. Support roadside farm stands and pick-your-own produce operations to build community unity between consumers and farmers. Support the local/town farmers markets and encourage citizens to shop for local, fresh and healthy foods from Wake County vendors. Support educational outreach methods in schools regarding healthy foods and eating choices.

4. Enhance business development programs to incorporate agriculture and forestry interest

Develop a partnership between government, consumers, non-farm organizations and farmers to educate consumers and elected officials on the relationship between a healthy local agricultural economy and the public benefits of working farmland. Encourage communication between the municipalities to unify their governance toward agribusiness from town to town. Encourage agricultural and partnering organizations and agencies to host conferences, training

and business networking opportunities in Wake County. Participate in discussions of advanced agricultural research with NC State University in Wake County.

5. Promote opportunities of profitability for Wake County family farms and agribusinesses

Consider impacts on agribusiness during decision making for local ordinances. Be aware of supply chains and vendor opportunities for local farmers. Analyze recommendations of new policies that impact family farm's ability to be profitable. This includes labor, inheritance and estate taxes, transportation issues, hours of operation and water use. Recruit agribusiness supply and equipment companies to Wake County to provide reasonably located access to seed and maintenance services for farmers. Provide the livestock community with conservation and technical resources assistance for the new demanding economic opportunities from consumers who want organic products, agritourism excursions and boarding for horses. Support opportunities to capture waste and nutrients for profitable conversion to a useable product for farm income.



This local farm in the Falls Lake area of Wake County produces a variety of seasonal produce, like the lettuce pictured above, to supply a 450 member Community Supported Agriculture (CSA) with year-round vegetables. The farmer sells produce at four farmers markets.

Wake County provided technical assistance to help this farm conserve water and reduce nutrient and sediment runoff into the supply watershed. Currently, they are addressing a water quantity issue by seeking State funding for additional water needs. Wake County's Natural Resource Conservationists have provided a conservation plan, engineering designs for the structure and other services needed to help this family farm be economically viable and good stewards of the land.

Schedule to implement this Plan and reevaluate as Wake County changes



Specific Action Steps	Priority Ranking	Completion Dates	Short/Long Term Support	Implementation of Work
1. Integrate economic development with farmland protection	1	4 th Quarter FY14	Long	Leaders, local economic development groups,
1.a. List support for agribusiness and farm industry with work goals	1	3 rd Quarter FY13	Completed	Wake County BOC
1.b. Work with Wake County Agribusiness Council to support supplier/vendor networks	2	4 th Quarter FY14	Long 1 st , 2 nd , 3 rd year	WCAC, VADB, SWCD
2. Amend VAD to 40 acres. Bring current VAD in compliance with July 2011 legislative rules	1	1 st Quarter FY14	Short Term 1 st year	Wake County BOC
2.a. Discuss easement programs that connect working farms for preservation with conservation partners and land trust	2	2 nd Quarter FY15	Short 1 st , 2 nd , 3 rd year	WSWCD, TLC, CTNC, NC ADFP, USDA FRPP
3. Promote understanding and appreciation of agriculture to the non-farm public	1	4 th Quarter FY16	Long	All
3.a. Develop an awareness or communication package for messaging the benefits of local agribusinesses	2	4 th Quarter FY14	2 nd year	WCFB, Agribusiness groups, SWCD
4. Enhance business development programs to incorporate agriculture and forestry interest	1	3 rd Quarter FY15	Long	WCFR, CE, SWCD, Private Financial Partners
4.a. Meet with 14 municipalities to discuss farmers markets, unity in communications for profitable local produce and agritourism opportunities for farmers	1	2 nd Quarter FY15	Long	VADB, local Planning Departments
4.b. Educate community and provide opportunities for outreach and training through conferences and events to showcase agriculture	2	4 th Quarter FY15	Short 2 nd , 3 rd year	Collaboration – Build on KTF Workshop network
5. Promote opportunities of profitability for Wake County family farms and agribusinesses	1	1 st Quarter FY14	Short 1 st year	CE, SWCD, WCAC

Wake County BOC
 WCAC
 VADB
 SWCD
 WCFB
 WCFR
 KTF
 CE
 NC ADFP
 USDA FRPP

Wake County Board of Commissioners
 Wake County Agribusiness Council
 Voluntary Agriculture District Board
 Soil and Water Conservation District Board
 Wake County Farm Bureau
 Wake County Forest Ranger, NC Forest Service
 Keeping the Farm Workshop
 Cooperative Extension
 NC Agriculture Development and Farmland Preservation Trust Fund
 US Department of Agriculture Farm & Ranch Lands Protection Program

Summary

Wake County was a pioneer in local farmland preservation efforts, having adopted a comprehensive Farmland Preservation Program in 1989. This ordinance designated the creation of Agricultural Priority Areas (APA), based primarily on protecting the most productive soils. North Carolina and Wake County offer a range of **voluntary programs** for landowners who wish to keep their land from being converted to non-farm uses. These programs require public- and private-sector partners to help landowners achieve their goals, and they can also help the county meet its current work goals of *1) Implement the County's priority to environmental stewardship by protecting open space and through partnerships increase access to natural areas through the expansion of greenways in Wake County and, 2) Work with Wake County's farm and agribusiness community to facilitate their efforts for farmland preservation and economic viability*³⁶.

A lower matching percentage will be required for funds received from the Agricultural Development and Farmland Preservation Trust Fund if county has a certified plan:

ADFP Trust Fund Matching Requirements:

- Tier Two and Three Counties
 - with a Farmland Protection Plan - 15%
 - without a Farmland Protection Plan - 30%
- Tier One Counties
 - with a Farmland Protection Plan - 0%
 - without a Farmland Protection Plan - 30%

Once this Plan is endorsed by the Wake County Board of Commissioners, it will be sent to NCDA&CS for certification. With a certified Plan, Wake County will have priority status for funding from the Agricultural Development Farmland Preservation funds and reduced matching requirements.

This Agriculture Economic Development Plan has several initiatives that will enhance the economic growth of agribusiness in Wake County but the action will rely on collaboration, cooperation and voluntary actions between public and private groups. There is great potential for family farm profitability as we implement these initiatives that address our rural and suburban interface challenges and opportunities. The results will be agricultural economic viability while protecting our natural resource and enhancing farmland preservation.

References and Appendix

- ¹ <http://www.ces.ncsu.edu/depts/agecon/counties/wake.pdf>
- ² <http://www.ncadfp.org/documents/NCADFPTrustFundBrochuredraft2011.pdf>
- ³ NCGS §106-735 et seq
http://www.wakegov.com/swcd/agriculture/Documents/NCGS_Voluntary_Ag_Article_61.pdf
- ⁴ NCGS §106-735(b). “Qualifying farmland” is defined in §106-737.
- ⁵ <http://www.wakegov.com/swcd/agriculture/Pages/voluntary.aspx>
- ⁶ NCGS §106-744 (c)(1).
- ⁷ NCGS §106-744(e)(1-5)
- ⁸ <http://www.wakegov.com/swcd/agriculture/Documents/VOLUNTARYAGDISTORDINANCEMod2e9402.pdf>
- ⁹ http://www.wakegov.com/swcd/agriculture/Documents/Wake_County_Voluntary_Ag_Districts_MAP.pdf
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- ¹² <http://www.ncagr.gov/stats/economic/TopTen.pdf>
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- ³⁵ <http://www.ncadfp.org/documents/FarmlandProtectionPlanbound2.25.pdf>
- ³⁶ <http://www.wakegov.com/commissioners/Pages/goals.aspx>

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