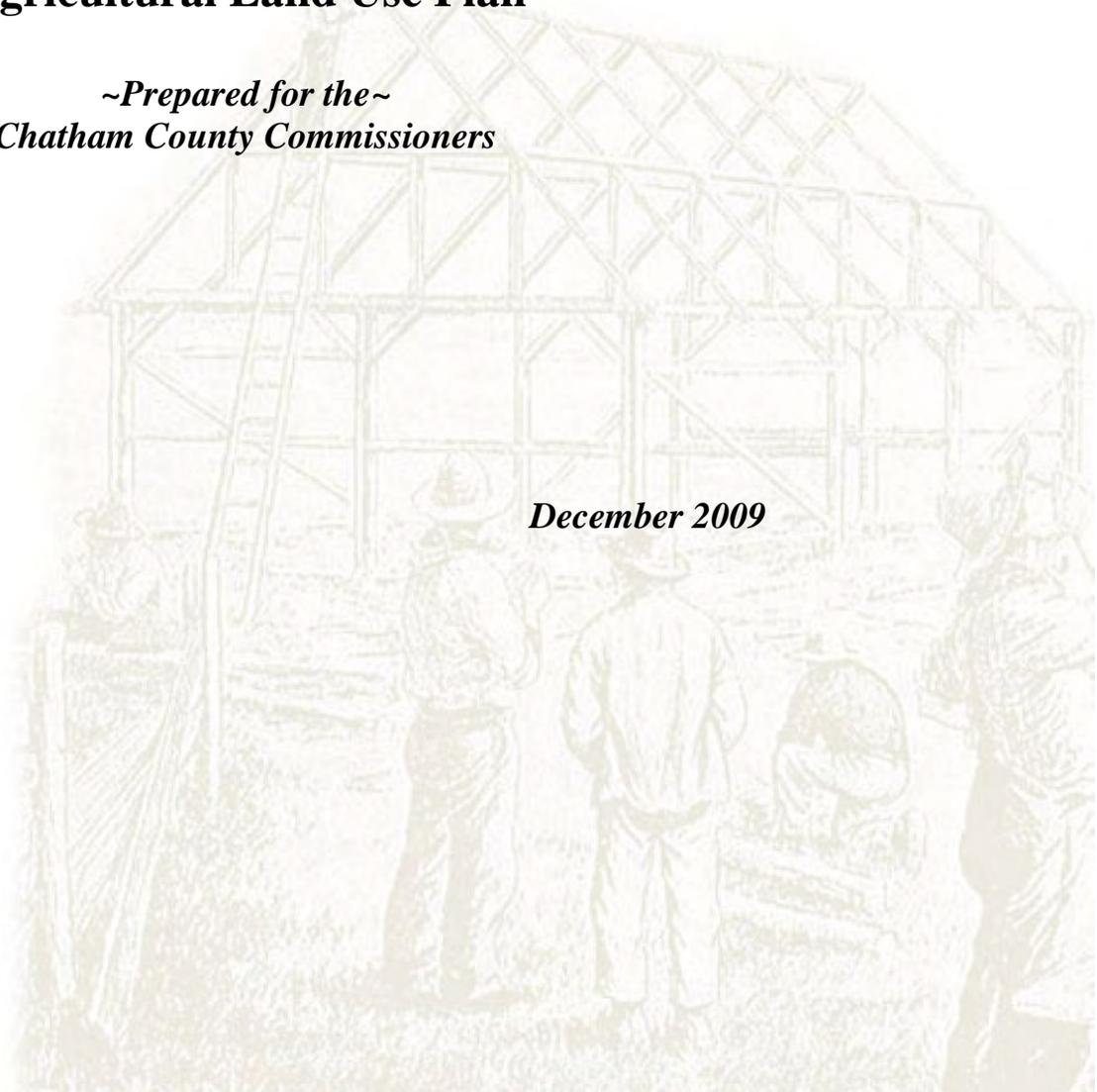




Chatham County, North Carolina Agricultural Land Use Plan

*~Prepared for the~
Chatham County Commissioners*

December 2009



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AGRICULTURAL LAND USE PLAN

Chatham County's agricultural industry is an economic stimulus and important employment base for the County. In 2007, agricultural sales totaled over \$172 million, and there were 1,602 self-employed, full-time farm operators plus 1,287 farm workers in Chatham County. Agriculture is also a significant land use in the County with 23 percent (104,171 acres) of the land in farms. Forested acres add another 248,000 acres of potential working lands, bringing the combined total to nearly 70 percent of the County's land cover.

1.0 Population and Housing

This section analyzes land use trends for Chatham County and their implications for the County's agricultural industry. For comparative purposes, housing and population trends for counties within a 40-mile radius are provided, as well as comparative agricultural and farmland statistics for adjacent counties.

As noted in Table 1, Chatham County's population is expected to increase by 26 percent, between 2000 and 2009, to a total of almost 63,000 residents. By 2019, Chatham is expected to add another nearly 16,000 residents. This makes Chatham one of the fastest growing counties in the State, as well as in the 40-mile market area. High growth is expected to continue over the next ten to twenty years, particularly given the recently announced plans for a large scale development in the Town of Pittsboro.

	2000	2009 Projection	% Growth 2000-2009	2019 Projection	% Growth 2009-2019
Chatham County	49,725	62,449	26%	78,124	25%
North Carolina	8,079,152	9,397,548	16%	11,096,732	18%

Source: North Carolina State Data Center, Projected Annual County Population, 2009

As noted in Table 2, Chatham County added households at a rate greater than the market area between 2000 and 2008, partly due to its competitive housing costs and its proximity to the Raleigh-Durham Metropolitan Area, which serves as a center for research and development that draws technically advanced companies offering high-paying jobs. The expansion of major corridors between Raleigh-Durham and Chatham County has also enhanced housing demand in the County. Demand comes from first-time home buyers, immigrant groups, and employees in manufacturing and services.¹ These groups tend to own their own homes, mostly single-family, and have much of their equity invested in their residences.

While much of the development pressure has been the result of expansion pressure from population centers to the east, future pressure may also come from the north and west.

¹ Chatham County Housing Needs Assessment Update, p. 15-16.

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Expansion of cities in North Carolina's Triad would be the driving force of such expansion which would be expected to follow Route 421.

High housing demand and generally high incomes have led to rapidly rising house values (up 39 percent since 2000) and low vacancy rates. Rising home values contribute to greater demand for farm properties which contributes to conversion pressure, particularly in eastern Chatham.

Development patterns are relatively easy to predict and are likely to occur within water- and sewer-serviced areas or within commuter routes oriented to the Research Triangle Area. Due to its demographics, commute distances to employment areas, and access to Jordon Lake, this area is likely to target moderate- to high-income families and retirees demanding moderately priced to upscale housing stock in the future. Housing has been added at a rate of more than 700 new units per year between 2004 and 2006.² The rapid rate of growth has put pressure on both the price of agricultural land as well as its availability with agricultural land selling within a wide range of values from nearly \$100,000 an acre in and around Cary to \$4,500 per acre in Western Chatham County.

Table 2: Comparative Housing Market Statistics					
Chatham County					
	Census 2000	2008		2013	
	Number	Number	Percent change from '00	Number	Percent change from '08
Total Population	49,329	61,222	24%	69,498	3%
Total Households	19,741	24,881	26%	28,374	3%
Median HH Income	42,972	55,011	28%	62,487	3%
Median Age	38.7	41.5	7%	43.3	3%
Average Household Size	2.47	2.44	-1%	2.43	3%
Total Housing Units	21,358	26,955	26%	30,604	3%
Occupied	19,741	24,881	26%	28,374	3%
Owner	15,239	19,250	26%	21,735	3%
Renter	4,502	5,631	25%	6,639	3%
Vacant	1,617	2,074	28%	2,230	3%
Median House Value	\$113,270	\$153,203	35%	\$173,725	3%
Average House Value	\$158,673	\$220,286	39%	\$249,574	3%
Median Monthly Owner Costs for Units with Mortgage				\$1,041	
Average Monthly Owner Costs for Units with Mortgage				\$1,212	
Median Rent				\$446	
Average Rent				\$517	
Average Gross Rent (with Utilities)				\$637	
40 Mile Market Area (Chatham, Alamance, Durham, Lee, Moore, Orange, Randolph, and Wake Counties)					
	Census 2000	2008		2013	
	Number	Number	Percent change from '00	Number	Percent change from '08
Total Population	1,445,475	1,770,971	23%	2,012,291	14%
Total Households	562,140	694,210	23%	790,442	14%
Median HH Income	45,949	61,678	34%	72,600	18%
Median Age	33.6	35.6	6%	36.3	2%
Average Household Size	2.48	2.48	0%	2.48	0%
Total Housing Units	607,244	760,668	25%	869,555	14%
Occupied	562,140	694,210	23%	790,442	14%
Owner	370,273	460,449	24%	519,116	13%
Renter	191,867	233,761	22%	271,326	16%
Vacant	45,104	66,458	47%	79,113	19%
Median House Value	\$ 128,261	\$ 184,879	44%	\$200,634	9%
Average House Value	\$ 156,368	\$ 226,144	45%	\$246,750	9%
Median Monthly Owner Costs for Units with Mortgage				\$1,152	
Average Monthly Owner Costs for Units with Mortgage				\$1,281	
Median Rent				\$559	
Average Rent				\$566	
Average Gross Rent (with Utilities)				\$677	

Source: ESRI, 2007.

² Chatham County Housing Needs Assessment Update, p. 24.

Infrastructure Assessment

Chatham County contains what can be best described as a rural infrastructure. The road system is comprised largely of state roads with limited sight lines and low or no shoulders. Major arterials include three limited access highways in US 1, US 64, and US 421, which run east-west (US 1 and US 64) and north-south (US 421). These routes link the County to major commercial and population centers. While road quality is generally good, the system has physical limits in capacity and flow, which challenge agricultural operations as regional population and commuter activities grow.

As is consistent with the general rural character of the County, there is limited water and sewer infrastructure outside of the incorporated municipalities. This means that all new development is either centered on a community-based system or on well and septic. Poor well flow in much of the County serves to limit some development, and is a general concern to farmers who fear that more development will further impinge on well quality and restrict growth opportunities for agriculture. Limited water and sewer infrastructure causes development to occur in a dispersed manner.

Educational and transportation infrastructure are similarly geared toward a rural community, with both public transportation and education focused around municipal centers. Theoretically, this should lead to more compact development and could serve as a central reason for providing water and sewer infrastructure.

Telecommunications coverage, both wired and wireless, is spotty throughout the County, particularly as it relates to broadband. While not an absolute limit on development potential, the limited availability of broadband has a negative effect on small business development and agribusiness integration into the electronic data interchange systems that have become common in food industry transaction systems. Expanded federal funding to improve rural broadband access may be useful in bridging this fundamental infrastructure gap.

Chatham County Land Conservation and Development Plan Policies

The Chatham County Land Conservation and Development Plan encourages growth to be concentrated in the municipalities of Pittsboro, Siler City, and Goldston. Policies for land conservation and development developed by the County strive toward 1) balanced and sustained growth and 2) an open, pro-active, and cooperative approach to conservation.

The six policies are to:

1. preserve both the form and function of rural character – the landscape, agriculture, and home-based business.
2. encourage compact communities with a mix of activities as development occurs.
3. design economic development centers in order to promote a diversified, sustainable business community.
4. develop an integrated approach to protecting and promoting high-quality open space, recreation, and historic and tourism locations.
5. ensure the long-term quality and availability of groundwater and surface water resources.

6. provide infrastructure in ways that support the land use, economic development, and environmental objectives: water supply, wastewater, and transportation.³

Land Use Controls Assessment

The County has been developing land under the long-standing vision of creating compact communities, such as small towns in Pittsboro, mill villages in Bynum, and crossroad communities in Silk Hope. Development has generally been sprawling, despite the County's intent to encourage more density in municipal centers and conservation subdivisions.

The County's land use policy is driven by the principles of:

- 1) respecting traditional development patterns that are part of the County's heritage and character
- 2) reducing the need for costly infrastructure
- 3) protecting farmland and open space
- 4) encouraging the use of light transportation (by foot, bike, or transit)
- 5) promoting a greater sense of community.

To achieve these principles, the County intends to use two distinct approaches, but efforts have been limited in application to the communities of Briar Chapel, Governor's Club, Chapel Ridge, The Preserve and Haw River, The Retreat at Haw River, and Fearington Village. The two approaches are as follows.

- **The cluster development** approach is guided by the Rural Character Policy Objective of the County's Voluntary Agriculture District Board. It generally involves development patterns that retain rural features such as large-lot zoning, preserving farming opportunities, and expanding incentives for agricultural land uses.
- **The neo-traditional neighborhood** approach orients community design to a pedestrian environment where residents can walk safely from home to various local destinations, such as stores, parks, and libraries, within a short span of time. This is also known as the "five-minute rule" in development. Such communities are often built with, or adjacent to, existing towns, crossroads, and commercial clusters.

Highway corridor zoning is a newly introduced means to control road frontage development and preserve rural character in Chatham County and will affect areas directly adjacent to major arterials, such as US 64. Development restrictions within the corridor are consistent with the intent to encourage more compact development, while ensuring that design standards are enforced on new development to integrate such projects within the existing community context. Introduction of the concept, and its implementation, have not been well received in rural areas of the County where the

³ Chatham County Land Conservation and Development Plan Policies, adopted 2001.

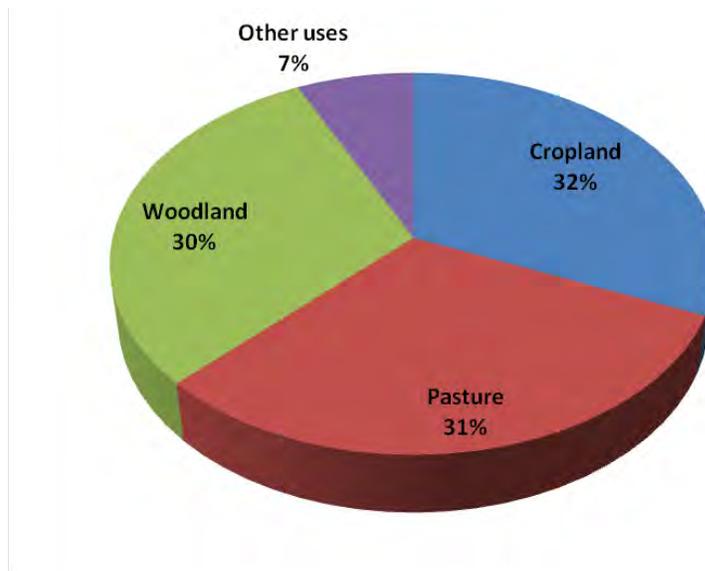
approach is viewed as a first step toward countywide zoning. Adoption is expected in late 2009 or early 2010.

Annexation, and therefore expansion of land use controls of local municipalities, is also an issue of concern to rural landowners. This concern is particularly held in and around Pittsboro and Cary where rural land owners believe that the threat of annexation and the expansion of Extraterritorial Jurisdictions (ETJs) will come at the expense of the agricultural industry through additional land use restrictions. They would, therefore, like to see greater effort by the County to preserve certain rights to farm within ETJs. Generally speaking, farmers within the Siler City ETJ feel that their interests are currently well represented.

2.0 Farmland Assessment

In 2007, approximately 23 percent (104,171 acres) of Chatham County’s 452,480 acres were estimated to be in farm ownership or farm use, making agriculture one of the largest land uses in the County. Land in farms in Chatham County includes 32,772 acres of cropland (32%); 32,428 acres of pastureland (31%), and 31,553 acres of woodland (30%) (See Figure 1.) In 2007, only 220 out of 1,089 farms were on rented farmland, indicating that farm operators in the county control much of the land on which they operate.

Figure 1: 2007 Chatham County Land in Farms



Source: 2007 U.S. Census of Agriculture.

Farmland in the County is geographically dispersed and characterized generally by poor soils and steep slopes interspersed with small pockets of Prime and Productive Soils and Soils of Statewide Importance. Generally speaking, much of the farmed acreage is found

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west of the Town of Pittsboro and is bisected by the US 64 corridor. There are differences between the northern and southern agricultural regions, with the northern area bordering Alamance County supporting a broader range of crop production. The southern region is known to have poorer soils and more challenging topography, leading to its use as a livestock production area and for production of forage and hay. Appendix A contains a summary of agricultural industry activity.

Table 3 compares agricultural land use across counties adjacent to Chatham from 2002 to 2007. Like its neighbors, Chatham is losing agricultural acreage, at a rate in excess of regional counties. Much of the acreage being displaced is cropland, of which 28 percent has been lost between 2002 and 2007. The loss of cropland is consistent with development patterns, since croplands are typically well drained and therefore generally suitable for development. This type of suburban growth causes the loss of productive soils for crops, as well as land for livestock and dairy operations. Such changes also lead to the decline of agricultural support businesses, such as milk haulers and grain dealers.

Table 3: 2007 Comparative Farm Statistics and Percentage Change from 2002		
Chatham	2007	Change
Approximate land area (acres)	506,784	
Land in farms (acres)	104,171	-12%
Percentage share of land in farms to total land area	21%	-3%
Average market value of land and buildings per acre (dollars)	5,599	40%
Farms (number)	1,089	-3%
Pastureland, all types (acres)	7,170	-59%
Percentage of total land in farms	7%	-8%
Total cropland (acres)	32,774	-28%
Percentage of total land in farms	31%	-7%
Regional Area*	2007	Change
Approximate land area (acres)	2,364,544	
Land in farms (acres)	522,652	-12%
Percentage share of land in farms to total land area	22%	-3%
Average market value of land and buildings per acre (dollars)	5,428	24%
Farms (number)	5,203	-5%
Pastureland, all types (acres)	32,772	-51%
Percentage of total land in farms	6%	-5%
Total cropland (acres)	224,514	-16%
Percentage of total land in farms	43%	-2%

**Includes Alamance, Durham, Lee, Moore, Orange, Randolph, and Wake Counties*

Source: 2007 U.S. Census of Agriculture

Despite across-the-board losses in farmland, aggregate land and building value has risen dramatically across the region. Much of this change is driven by increases in raw land value, while some is driven by increased investment in infrastructure. Chatham County land and building values increased 40 percent between 2002 and 2007, which was one of the highest growth rates in the region. According to the Census of Agriculture, acreage committed to house lots, ponds, and roads decreased from 8,651 acres in 2002 to 7,412

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acres in 2007, indicating more intense development of non-operating land assets on the farm. This may be indicative of growth in small farms since these features will have higher land cover ratios for non-production uses than will larger livestock and agronomic crop production farms.

Chatham County maintains a significant, but often-overlooked, component of the State's agricultural industry: managed forests⁴. Currently, Chatham County contains approximately one percent of the State's 17.6 million acres of timberland which supports a vibrant regional forest products industry. Of the County's 248,000 forested acres, 96 percent is owned and managed by the private sector, with three percent and one percent held by the federal government and State, respectively. As with other agricultural production, forest land cover is declining in Chatham County, falling 14 percent between 2002 and 2006, according to the USDA Forest Inventory Analysis. Logger interviews suggest that this loss of acreage restricts access to the forest resource in two ways. First is the absolute loss of acreage; second is the fragmentation of the forest resource into small blocks, which makes it difficult to operate efficiently.

⁴ Managed forests are any forested lands that are treated with silvicultural practices and intended for harvest and includes managed forests on farmland.

3.0 Land Use Tools

Loss of farmland and its associated benefits of food production, stabilization of local economies, protection of the environment, and enhancement of the quality of life are being felt to varying degrees throughout the country. Common to most situations is the threat to the land base from sprawling, low-density suburban development and the vulnerability of a challenged industry, which is often in economic transition. Given the diversity of types of agriculture and the various governmental structures, protection of agriculture and farmland takes many forms. Communities use land use regulations, agricultural economic development initiatives, and purchase of development rights to permanently secure a land base for the industry. The jurisdictions around the nation making the greatest strides are those employing some combination of the tools described in this section, as well as a robust economic development strategy – all customized to their respective circumstances.

In this section, land use planning techniques are discussed, as well as programming considerations for Voluntary Agricultural Districts, Purchase of Development Rights (PDR), and Transfer of Development Rights (TDR). The current menu of options available to jurisdictions and landowners in the State of North Carolina completes this section.

General and specific farmland preservation tools are highlighted on the following pages.

Examples of Counties with Farmland Protection in Their Land Use Planning Process

Cumberland County, Buffering Bases – In response to mounting development pressure from Fort Bragg, the County saw a need to restrict growth within an one-mile buffer from the base. The Regional Land Use Advisory Commission recommended a five-acre minimum lot size for these properties; however, the County has developed a unique solution which offers landowners with five-acre tracts a compensation payment, equivalent to a percentage of their property taxes, in exchange for five- or ten-year conservation agreements to limit residential development. This agreement allows all manner of agricultural and silviculture activities, including retail and processing facilities, to remain on the land.

Davie County, Agribusiness Ordinance – The Davie County Commissioners approved an Agribusiness Use amendment to the County zoning text, allowing a streamlined permitting process for the construction of buildings, signs, and parking areas associated with existing farm operation. According to Davie County Planning Director Andrew Meadwell, “Ninety percent of our land is zoned rural-agriculture, and we didn’t have any guidelines that addressed these situations that would encourage consumers to go directly to farms for sales or festivals. Our permitting process was too cumbersome, and we wanted to speed up the process for new investments.”

Source: American Farmland Trust.

3.1 General Land Use Management Tools and Techniques

At the county and city level, planning and zoning are important farmland protection tools. When a local area strives to sustain its agricultural economy and protect farmland, these tools should be included in the planning and zoning process. The most commonly used tools are described below.

Comprehensive Plans

Comprehensive plans, also known as master or general plans, allow communities to create a long-term vision for their future. They outline local government policies, objectives, and guidelines regarding development. Typically, comprehensive plans identify areas best suited for a variety of land uses, including agriculture, forestry, residential, commercial, industrial, and recreational activities.

Comprehensive plans can establish a commitment to local agriculture by protecting natural resources and promoting farm business opportunities. Comprehensive plans can form the basis of a local farmland protection strategy by identifying areas to be protected for agriculture and areas where development will be encouraged. They also should aim to conserve natural resources while providing affordable housing and adequate public services.

Zoning

In conjunction with water/sewer and transportation plans, zoning is usually the chief tool used to implement agreed-upon comprehensive plans. Legally, all zoning requirements must be in accordance with a comprehensive plan. Zoning controls usually function at the local level of government. Zoning ordinances segment portions of counties, cities, and towns into areas devoted to specific land uses. They also establish standards and densities for development.

Zoning ordinances, lot size requirements, and road specifications may affect agriculture immensely and should be reviewed carefully. According to North Carolina law, counties do not have the right to regulate bona fide farms or forestry activities, and agricultural properties are exempt from county zoning regulations as long as bona fide farming or forestry activities are current and within state guidelines (N.C. Gen. Stat. § 153A-452 (2006)). Swine farms are an exception to this rule.

Zoning can be used as a form of farmland protection. For instance, maintaining a lower density of development in an area may be beneficial to farming. Fewer neighbors mean fewer potential conflicts. Local governments can reduce the density of development in two ways: by increasing the minimum lot size or by reducing density without requiring large lots that may prove to be “too small to farm and too big to mow.”

Several different zoning techniques that may be used to encourage the protection of farmland are outlined below.

Agricultural Protection Zoning (APZ) stabilizes the agricultural land base by keeping large tracts of land relatively free of non-farm development. For APZ to be effective, the area's farming industry must be profitable, and farmers must be committed to keeping their land in production. APZ ordinances designate and protect areas where farming is already the primary land use. They discourage development that could impair the land's use for commercial agriculture, and they restrict the density of residential development. They generally require building on small lots, as opposed to dividing tracts into large, equally sized lots. Most ordinances make use of a fixed density, allowing, for instance, one dwelling for every 25 acres. Others are based on a sliding scale, with the dwelling and acreage allowances being more flexible.

Sliding Scale Zoning uses a scale to determine the number of lots that potentially could be developed in an area. Owners of smaller parcels are allowed to divide more land into lots than are owners of larger parcels. To keep farmland in productive use, maximum lot sizes (usually two or three acres) typically are established. Non-farm development is directed to less productive land.

Cluster Zoning ordinances allow or require houses to be grouped close together on small lots to protect open land. They increase density on part of a parcel while leaving the rest undeveloped. This allows the construction of the same number of houses, while minimizing the impact to the area's natural resources.

For example, the zone's residential density is one unit per five acres and the parcel in question is 100 acres. This parcel could be divided into either 20 five-acre parcels or 20 one-acre parcels and an undeveloped parcel of 80 acres. In both examples, the result is 20 building lots (not considering the 80-acre parcel as a separate building lot), with a density of one unit per five acres. In the latter example, however, a relatively large, agriculturally viable parcel remains.

Large-Lot Zoning (which designates minimum lot sizes as large as five to ten acres) is generally not considered a farmland protection technique. In fact, it may encourage the premature conversion of farmland since it often results in the purchase of more residential acreage than homebuilders actually want or need. Large-lot zoning is often used in conjunction with lists of "permitted by right" uses that fail to view agricultural areas as important commercial zones worthy of special protection from incompatible uses.

Performance Standards can minimize the impact of development on farming. They may be used to steer development away from prime agricultural soils and existing farm operations. They usually are applied on a case-by-case basis, and they require discretionary decisions by a local governing body. Some factors that can be used as performance standards are:

- potential for conflict with agriculture
- need to minimize the amount of converted agricultural soils

- agricultural productivity of the land and soils involved
- compatibility with existing or permitted uses on adjacent property
- types of agriculturally related activities that may occur on the farm.

Overlay Districts have been used by some communities to direct development away from prime farmland. While overlays lessen the impact of development on agriculture, they generally regulate how – not if – farmland is developed. So far, such districts have not been used to change underlying density requirements or limit non-farm uses. Agricultural overlay districts can be used to trigger cluster zoning provisions, buffer strips, or other performance standards.

Subdivision Regulations

Unlike zoning ordinances, which address whether specific uses are permitted, subdivision regulations specify how development will actually occur and exactly what form it will take. For example, zoning ordinances designate how many lots can be developed on a parcel, but subdivision regulations determine where those lots will be located and how the land is developed. Subdivision regulations are usually the home of buffer requirements – the distance of homes or wells from farm operations – that can be critical for continued operation of adjacent farms. Subdivision regulations apply in zoned and un-zoned areas.

Buffers

In rapidly growing areas, development inevitably will occur adjacent to active farm operations. Based on the concept that “good fences make good neighbors,” buffers create physical barriers between potentially incompatible land uses. Buffers may be created by strips of land (from 50 to 500 feet wide) or by vegetation such as existing hedgerows, planted trees, and shrubs. Most subdivision ordinances require the developers to provide the buffers. Often, buffers must be designed on a site-specific basis and adapted to address different types of operations. In some cases, buffers simply may not be effective.

Cluster subdivisions may keep land open for future agricultural use, but generally they are not designed to support commercial agriculture. In addition, clustering may create tension between residential and agricultural land uses if new neighbors object to the sights, sounds, and smells of commercial farming. To increase its usefulness as a farmland protection tool, provisions should be made to protect commercial farming or recognize that cluster arrangements may be more appropriate near less-intensive farming operations. Consideration may be given to managing open space parcels for working land use by protecting viable tracts of land in terms of size, configuration, and soil quality.

Mitigation Techniques

Mitigation techniques applied to high quality farmland refers to a “no net loss” approach to farmland protection. Land taken out of agricultural use and/or zoning must be replaced with either new land of equal size and productivity being brought into agricultural use, or a fee paid by a developer to permanently protect acreage elsewhere on a one-to-one basis.

3.2 Specific Farmland Protection Tools and Techniques

Voluntary Agricultural Districts

In 1985, the North Carolina General Assembly, through the Farmland Preservation Enabling Act, set forth the concept of Voluntary Agricultural Districts (VADs) as an effective and politically viable way to protect North Carolina farmland. VADs form partnerships between farmers, county commissioners, and land use planners in order to promote and protect agriculture as an integral part of the County. Chatham County began the process of forming a VAD Program in 2000. That District now includes 265 farms with 26,200 enrolled acres.

Half of North Carolina's 100 counties (including Chatham County) have passed ordinances establishing VADs since 1985, and in so doing, have established boards to oversee the program. These boards determine eligibility and guidelines for enrollment, specific to each county. The Chatham County Voluntary Farmland Preservation Program Ordinance serves to provide the following benefits to farmers and county residents:

- preserve and maintains agricultural areas within the County
- inform non-farming neighbors and potential land purchasers that the participating farm may emit noise, dust, and smells (this feature may help avoid conflicts between neighbors and potential nuisance claims)
- provide the farming community a better voice in Chatham County policy affecting farmland;
- promote the voluntary nature of the program (the farmer may terminate his/her participation at any time)
- require Chatham County Commissioners to use farmland "as a last resort" if they attempt to condemn private lands
- provide green space and natural resources as the County's population and development expands
- maintain opportunities to produce locally grown food and fiber.

An Agricultural District is initiated when interested landowners submit a proposal to the Chatham County Agricultural Advisory Board. The district shall contain a minimum of 5 acres for horticultural use, 10 acres of agricultural use, and 20 acres for forestry use. This includes leased and/or rented land.

Enhanced Voluntary Agricultural Districts

Authorized in 2005, Enhanced Voluntary Agricultural Districts (EVADs) created a new category that offers landowners an additional tier of benefits, if they are willing to waive their right to withdraw from the VAD program at any time. These additional benefits include:

1. Enrolled farms can receive up to 25 percent of revenue from the sale of other non-farm products, while still retaining their bona fide farming exemption from county zoning.

2. Enrolled farms would have lower cost-share requirements for North Carolina (NC) Agricultural Conservation Cost Share funds.
3. Counties and cities may hold all utility assessments in abeyance for any enrolled farms that choose not to connect to the utility lines.
4. State and local agencies are encouraged to tie additional future benefits and funding priority to participants in the EVAD, given their commitment to maintain their farms.
5. Municipalities are explicitly authorized to adopt their own VAD ordinances, including the EVAD option.
6. Cities are authorized to amend their zoning ordinances to provide greater flexibility and stability to farming operations. This can be particularly important to farms that are newly included within expanded extraterritorial jurisdiction lines.

Chatham County does not currently participate in the EVAD.

Agricultural Conservation Easements

In general, landowners possess a variety of rights to their property, including the rights to use water resources, harvest timber, or develop the property consistent with local regulations. Some or all of these rights can be transferred or sold to another person. The mechanism for transfer is known as Agricultural Conservation Easements (ACE), which includes both the donation of rights as well as the purchase of rights (also known as Purchase of Development Rights programs).

Such programs enable landowners to voluntarily separate and sell their right to develop land from their other property rights. Participating farmers are typically offered the difference between the restricted value of the land and the fair market value of the land. A permanent conservation easement is recorded in the land records binding all future owners. The land remains in private ownership and on the tax rolls. Donated conservation easements may qualify for federal and state tax benefits that can provide a carryover tax shelter for up to 15 years.

Conservation Easements

Whether the program is called a Purchase of Development Rights, or Agricultural Conservation Easement Program, the same basic principles apply. Restrictions are placed on the agricultural property which will limit the use of the property to agriculture and prevent its subdivision in a manner that will harm its agricultural viability. The conservation easement is attached to the deed of the property in order to ensure that the aforementioned restrictions apply to all future owners of the property. Typically, landowners either donate the easement to receive a tax shelter or receive remuneration from the sale of the easement. Property generally faces lower property taxes assessments; however, the value of the land is lowered and the use of the land is limited.

Local PDR programs can prevent development that would effectively eliminate the future possibility of farming in an area. Selling an easement allows farmers to cash in a percentage of the equity in their land, thus creating a financially competitive alternative to development. Agricultural producers often use PDR program funds to buy and/or improve land, buildings and equipment, retire debt, and increase the viability of their operations. The reinvestment of PDR funds in equipment, livestock, and other farm inputs may also stimulate local agricultural economies.

Benefits of PDR

- PDR protects farmland permanently, while keeping it in private ownership.
- Participation in PDR programs is voluntary.
- Easements allow farmers to capitalize on unrealized assets (their land).
- They can be implemented by private organizations and state/local governments.
- Farmers can use PDR to be to compete against development uses for land.
- Easements can protect ecological, as well as agricultural, resources
- PDR removes the non-agricultural value of land, which in some places helps keep it affordable to farmers

Drawbacks of PDR

- It is expensive.
- PDR programs generally are oversubscribed. In North Carolina, funding for PDR has been limited, with demand far exceeding available funds.
- Purchasing easements is time consuming. Participants in the State program generally must wait at least one year before all details regarding their easements are finalized.
- Monitoring and enforcing easements require an ongoing investment of time and resources.

Agricultural Conservation Easements in North Carolina

The conservation easement is the legal instrument that protects the land for agriculture over time. It is a voluntary deed restriction that landowners place over their own land. Ownership is maintained and the land may be sold or passed to heirs; however, future owners must abide by the easement. Most conservation easements are permanent. The farmland owner retains all other rights of ownership and can continue to farm the land as he or she did before. The land remains private and on the tax rolls.

Because agriculture is always evolving, agricultural conservation easements must be flexible and tailored to meet its ever-changing conditions. Generally, they:

- extinguish virtually all non-farm development rights (i.e., the right to build residential or non-agricultural structures).
- limit future uses of the land that degrade the agricultural value or productivity of the land.
- encourage the business of farming.
- permit the construction of new farm buildings and farm employee housing.
- do not require public access.

Landowners in North Carolina must work with a government entity (such as a County or Soil and Water Conservation District) or a conservation organization (such as the Triangle Land Conservancy) to agree to develop the conservation easement and monitor the property to be sure that the terms of the easement are fulfilled in perpetuity.

Landowners who *donate* all or part of the value of an agricultural conservation easement to a qualified conservation organization may receive a federal income tax deduction, as well as a reduction in the value of the property for estate tax purposes. North Carolina has a state conservation tax credit available for donations of property or easements for conservation purposes.

The effectiveness of PDR programs depends on how well communities address several key issues. These include deciding what kind of farmland to protect, which geographical areas to focus on, and how to set priorities; what restrictions to put on the use of the land; how much to pay for easements; how to raise purchase funds; how to administer PDR programs; and how to monitor and enforce easements.

Setting Priorities

Setting priorities for a PDR program is an exercise in achieving balance. Since the program is voluntary, it needs to be attractive to the farmers who own the county's prime agricultural resources. Flexible easement conditions and reasonable prices to facilitate participation by farmland owners are as important as raising the public funds to buy the easements. The process of setting priorities assumes funding and participation. It takes a number of forms.

With the development of Geographic Information Systems (GIS), strategic farmland mapping is a relatively new expression of a jurisdiction's priorities. It is a very effective way to graphically depict the most important and the most vulnerable land, so that purchases with limited funds can be strategic. This sort of mapping is also an indispensable tool for education of the public and local officials about the connection between the agricultural resources and public infrastructure decisions.

Eligibility criteria are minimum requirements for participation. Sometimes they are reflections of purpose clauses or other legal requirements in State PDR enabling legislation or local ordinances. They often include categories such as location, develop-ability, parcel or farm size, soil quality, and stewardship provisions. These criteria are the first round of a selection process because they decide who can apply to sell easements.

Forest Land Easements

Under a grant from the North Carolina Agricultural Development and Farmland Preservation Trust Fund (ADFPTF), the North Carolina Forestry Association is working with State Officials, private landowners, and conservation organizations to develop an easement specific to high quality Timberlands.

Once applications are received, a ranking formula is used to decide the order in which offers will be made until the funds allocated to that “batch” of properties is spent. It is a means of stating preferences among eligible applicants. Because the goal of the program is the long-term protection of the land base, ranking formulas typically are heavily weighted for soil quality and size characteristics and for adjacency to other farmed and/or protected land. However, they often contain categories of points measuring economic productivity, capital investment, ease of development/threat, and degree of public policy support (i.e., agricultural protection zoning) as context for the use of public funds to purchase easements.

Determining Easement Value

In general, the value of an easement is the fair market value of the property minus its restricted value, as determined by a qualified appraiser. For example, if the market value of an unprotected parcel of farmland is \$200,000, but worth only \$100,000 if protected with an agricultural conservation easement, then the farmer is paid the difference of \$100,000 for selling the development rights. Landowners may choose to donate some or all of the value of their development rights as a way to permanently protect their farmland and potentially reduce income and estate taxes.

Program Costs

Most PDR programs (including North Carolina’s) require a local dollar match from the land owners, a land trust, county or municipal government, or other source for the implementation of PDR projects. If a county is to implement its own PDR program, the county government must provide funding to leverage additional state and federal dollars even for basic program costs such as easement management and monitoring. A partnership with a competent entity, such as a land trust, is often an effective way to start a county program by reducing cost and developing institutional background and experience.

Delaware Agricultural License Plates

In 2004, Delaware's Division of Motor Vehicles began offering motorists the opportunity to protect farmland through Agricultural Farmland Preservation License Plates. The plates are available for a one-time fee of \$50. Seventy percent of the revenue is directed to the State's farmland protection program. As of 2006, the program has generated \$26,500.

Rules governing the availability of vanity plates differ among states. Guidelines are provided by the state departments of motor vehicles.

The following outlines several ways local communities can finance their PDR programs. There are, of course, many other innovative ways to fund land preservation.

Bonds – In the past decade, many North Carolina communities have recognized that farmland conservation is a long-term investment. While bonding has been successful in other states, no North Carolina county has bonded directly for farmland protection. Wake County issued bonds for watershed protection, with a portion being used for farmland conservation.⁵ Orange County has issued bonds for public recreation facilities and has matched the amount with a general appropriation for farmland protection.

General Revenues – Other communities have set aside annual appropriations to pay for farmland protection projects by using current revenues. Alamance County has used \$50,000 in general revenue to support applications to the Agricultural Development and Farmland Protection Trust Fund. Specifically, these funds were dedicated from the roll-back portion of Present Use Value taxes.

Real Estate Transfer Taxes – Many states and local governments fund the purchase of development rights through real estate transfer taxes at a rate of 1 - 2 percent of the transaction value. This option was not available in North Carolina until less than a year ago. A change in State law allows a community to link the revenue needed to preserve farmland to the source of development pressure that is causing farmland transition as a local option. Chatham County tried to use this approach for open space preservation, but was unable to generate the necessary public support.

PDR Grants – In 1985, the North Carolina Department of Agricultural and Consumer Services established an ADFPTF to act as the primary state-wide purchaser of agricultural conservation easements (PACE). From 1998 to 2002, the ADFPTF gave out \$2.4 million in five grant

⁵ <http://www.wakegov.com/parks/openspace/default.htm>

cycles, protecting 4,412 acres on 33 farms. The General Assembly has appropriated only minimal funding since then.

House Bill 607, in 2005, revived the fund for \$8 million, which is now guided by a 19-member advisory committee providing recommendations to the Commissioner of Agriculture, although funding was allocated until the 2007 budget. It has a particular interest in supporting local VAD programs. In 2006, five pilot programs promoting local partnerships, conservation easements, and the development of VADs received grants

Additionally, the Clean Water Management Trust Fund issues grants to local governments, state agencies, and conservation nonprofits to purchase conservation easements on farms that serve as riparian buffers to priority waterways. The North Carolina Tobacco Trust Fund Commission has provided funding to land trusts to purchase development rights on tobacco farms in transition.

All State funding for preservation programs is in question during this economic downturn. As of this writing, only \$2 million is available for land preservation and economic development through the ADFPTF and match requirements must be met. As budget conditions change, funds availability could be altered.

At the federal level, the Federal Farm and Ranch Land Protection Program (FRPP) makes grants available for conservation easements on a nationally competitive basis. Several land trusts (Piedmont Land Conservancy, Tar River Land Conservancy, Land Trust for Central NC, etc.) as well as counties (Wake and Durham) have used these funds to protect farmland in North Carolina.

Public/Private Partnerships - Some communities have successfully used partnerships with private organizations to facilitate their PDR programs. In some areas, local land trusts, once formed primarily by conservationists concerned about vanishing habitat and open space, have formed to tackle the challenges of preserving farmland. It is possible for a private land trust to have the needed easement settlement and administration expertise that communities may lack.

For example, a land trust may play a key role in assembling PDR applications; holding, monitoring and enforcing easements; managing the PDR program; or providing a portion of the local match as in-kind credit or in cash. In addition, land trust involvement may increase the incentive for farmer participation, since landowners who donate an easement or a portion of their property to a qualified conservation organization, such as a land trust or Soil and Water Conservation District (SWCD), may receive a

federal tax deduction, thus offsetting some of their capital gains tax liability.

Stewardship and Monitoring

When landowners sell or donate an agricultural conservation easement to the State, municipality, or a qualified nonprofit conservation organization, that agency or organization then “holds” the easement. The holder of an easement is obligated to monitor the land involved and uphold and enforce the terms of the agreement.

Known as stewardship, the process of holding and maintaining easements is an important consideration to any PDR program. Good stewardship will help ensure the perpetual nature of the easement. The entity holding the easement should set up a system for administering, monitoring, and enforcing the easement terms. Such a system involves creating baseline documentation, maintaining a good working relationship with the landowner, monitoring the property, and, if needed, addressing violations. As well, the stewardship organization should possess, or be able to develop, the financial and technical resources necessary to conduct the enforcement and administrative issues highlighted above.

Triangle Land Conservancy

Triangle Land Conservancy (TLC) is the non-profit local land trust serving Chatham County. The mission is to protect important open space – stream corridors, forests, wildlife habitat, farmland and natural areas. To date, TLC has protected more than 13,000 acres. Approximately 4,000 acres are in Chatham County.

TLC protects farms and forests to ensure that productive lands are available now and in the future to meet the food and fiber needs of this area, the State, and the world. TLC works with landowners to develop strategies that meet their long-term conservation and land management goals while realizing potential financial benefits, including tax incentives and available funding sources.

Triangle Land Conservancy
1101 Haynes St # 205
Raleigh, NC 27604-1455
(919) 833-3662
www.triangleland.org

Transfer of Development Rights

Transfer of Development Rights programs, also known as density exchange programs, allow landowners to transfer the right to develop one parcel of land to a different parcel of land. (By contrast, cluster zoning usually shifts density within a parcel.) TDR programs can protect farmland by shifting development from agricultural areas to areas

planned for growth. *It is important to recognize that TDR programs do not reduce the number of building rights. TDR programs simply reallocate them geographically.*

Since TDR programs are based on having a definable right to development, any area seeking to implement such a program must have a means, preferably statutory, to allocate such rights. Typically, this is done through zoned density, and in areas without zoning, may be achieved through an assignment of engineering capacity in accordance with subdivision regulations. Without a means to assign such development rights, a TDR program simply cannot be implemented with any effectiveness.

The TDR legislation itself provides the legal framework under which development rights are transferred from one lot, parcel, or area of land in any sending district to another lot, parcel, or area of land in one or more receiving districts. To implement TDR, receiving and sending districts are designated and mapped in accordance with a comprehensive plan. Sending districts may include agricultural land and the receiving districts must have the infrastructure needed to support increased development. Development rights are documented as conservation easements that are enforceable by the town or other designated entity. They may be bought or sold by the municipality for deposit in a development rights bank. Due to the complexity of implementation, developers are reluctant to endorse or use TDR programs due to the costs and additional resources required to implement them.

Flexibility is important throughout the TDR process. For TDR to work, communities must build consensus on its use as a way to protect resources and direct future growth. A market must exist for both the development rights (either in the private sector or via a community development rights bank) and the higher density development that will result. While the TDR technique holds promise in theory, it has not been greatly utilized in North Carolina due to the complexity of its administration and its unproven track record.

During the winter of 2009, legislation was introduced to authorize a Chatham County TDR program. The legislation would have required that the County conduct extensive market analysis prior to developing its program responses and envisioned a multi-jurisdictional approach to TDR with the County and municipalities cooperatively developing sending and receiving areas. The legislation did not advance.

Agricultural Tax Relief

Tax relief is an important issue for farmers. Farms need land to operate and property taxes on farmland are a significant expense. Taxes on farm buildings are often substantial as well. Farmers often say, “Cows don’t go to school,” which reflects the concept that taxes on agricultural land should be proportionate to its demand on municipal services and its ability to generate income. Based on the results of Chatham County’s own Cost of Community Services Study in 2007, Chatham County farms contribute \$1.72 in revenue for every dollar consumed in services. This compares to residential development which provides \$.87 in revenue per tax dollar generated. It follows that keeping land in working landscapes may help control the cost of community services such as schools, roads, public safety, and waste management.

Since overtaxed agricultural land may be more susceptible to conversion to non-agricultural uses, tax relief measures may also be considered a farmland protection tool. The expense of property taxes may discourage farmers from buying land and can force existing farmers to sell. Farmers' savings from property tax relief programs can be significant and may make the difference between staying in business and selling out. Several federal, State, and local programs now exist to offer various kinds of property tax relief for farmers.

Property – Present Use Value assessment allows for agricultural and forested land to be taxed at its farming value, rather than market value for development. When land is no longer in agricultural production, the owner is subject to a rollback penalty of the deferred taxes for the year of disqualification and the three preceding years, with interest. Owners of agricultural land need to apply to the county tax assessor to receive this assessment. Farmers are entitled to a state income tax credit equal to the amount of property tax paid on farm machinery, attachments, and repair parts.

Sales – Commercial farms can receive an exemption for sales tax on items used in their farm operations, such as farm machinery, containers, tobacco drying equipment, grain storage facilities, fuel, potting soil, feed, seed, and fertilizers. Farmers must obtain an exemption number from the North Carolina Department of Revenue.

Estate – The donation or sale of an agricultural conservation easement usually reduces the value of land for estate tax purposes. The Internal Revenue Code also contains certain valuation exemptions, which can reduce estate taxes for working farms.

Income – Local jurisdictions may use tax policies to stimulate investment in agricultural sectors. In other states, this has included providing incentives, such as reducing property taxes for participants in VAD programs or eliminating business taxes for value-added processing facilities.

Right-to-Farm Laws

The continued development of agricultural areas has increased the potential for conflicts between farmers and their neighbors. North Carolina implemented right-to-farm laws to protect farm and forestry operations from being declared a nuisance as long as they have been in operation for at least one year. They are, however, not protected if there is evidence of negligence or improper operation. Other state protections include the notice of proximity provision, which is provided as a benefit for participants in a VAD program, and the pre-litigation mediation of farm nuisance disputes. With state authorization, counties have the power to adopt stronger right-to-farm laws.

Forestry Term Easements

Given the long production cycle of most managed forests, term protection is often a valuable means to protect access to the resource. This is particularly true in areas with significant hardwood resources such as Chatham County, which has 102,000 acres of hardwood forest types with a production cycle of thirty years or longer. States such as Delaware and New York have developed thirty-year term easement programs that significantly restrict development rights on protected lands in exchange for a property tax abatement. Delaware's program is authorized by the Commercial Forest Plantation Act (Title 3, Chapter 26) which gives landowners a property tax exemption for forests that are managed for timber production. In order to qualify for this thirty (30) year exemption, landowners must have at least ten contiguous forested acres and follow a forest management plan approved by the Delaware Forest Service.

3.3 Farmland Protection Tools in Chatham County

<i>Protection Tool</i>	<i>Definition</i>	<i>Benefits</i>	<i>Drawbacks</i>	<i>Applicability/Status-Chatham County</i>
Comprehensive Plan	Guiding vision of what a community wants to be in the future and a strategy for achieving that.	An organized way to identify productive farmland and set growth and protection goals. Serves as basis for land use regulations.	Not legally binding. May be changed or ignored by officials as they rule on development proposals.	Chatham County has completed the Chatham County Land Conservation and Development Plan that encourages the development of agriculture and home-based businesses, town development, economic development centers, neighborhood activity centers, and crossroad commercial centers while discouraging commercial and industrial development in other settings.
Differential Assessment	Taxation of farmland based on its agricultural use rather than its development value.	Modest incentive to keep land in commercial farming.	Benefits land speculators waiting to develop land.	<p>Tax benefits through Present Use Tax Valuation are available to, and must be applied for by, farmers in Chatham County. Additional tax benefits are available to stimulate farm level investment through income tax credits, if adopted at the local level.</p> <p>Valuation of assets for tax purposes should be based on actual use in farming. Including defunct assets will increase farm asset values and taxes, affecting farmers' financial conditions.</p>
Voluntary Agricultural Districts	Designation of an area of viable agricultural land. Initiated and self-selected by landowners, adopted by county. Eligibility/minimum acreage is determined by each county. Land can go in and out at any time. Not tied to agricultural assessment.	Farmed land within a district is provided a minimum level of protection from nuisance claims and public condemnation processes. Enhanced districts allow for additional benefits, including a higher level of protection.	Area is defined by willing landowners and has no real longevity as a protection tool.	Chatham has a Voluntary Agricultural District program, but has not adopted EVAD. The program has enrolled 26,000 acres in eight years and is one of the State's most successful programs.

Chatham County Agricultural Land Use Plan

<i>Protection Tool</i>	<i>Definition</i>	<i>Benefits</i>	<i>Drawbacks</i>	<i>Applicability/Status-Chatham County</i>
Right-to-farm Laws	<p>In NC for land in agricultural district:</p> <ol style="list-style-type: none"> 1. Definition of agriculture 2. One-Year of Operation 3. Sound agricultural practices determination 	<p>Strengthens the ability of farmers to defend themselves against nuisance suits. Shields farmers from excessively restrictive local laws and unwanted public infrastructure. Available to all farms in the state.</p>	<p>Not meant to shield from all legal disputes with neighbors. Does not stop complaints from non-farm neighbors. May not protect major changes in farm operations or new operations.</p>	<p>These protections are afforded to all farms in the state under North Carolina State Law.</p> <p>Chatham County, with State authorization, may adopt a more stringent Right-to-farm Ordinance to protect against specious nuisance claims.</p>
Agricultural Zoning	<p>Typically low density zoning such as one unit per 20 acres in a predominantly farming area. Ideally, the allowed density can be built on much smaller lots rather than large lots with each residence.</p>	<p>Limits non-farm development in areas intended for agricultural use. Can protect large areas of farmland at low public cost.</p>	<p>Local government can rezone land. Landowners may complain about loss of ‘equity value’ if land values have begun to escalate due to development pressure. May create a “Constitutional Taking.”</p>	<p>Many unincorporated areas of the County are not zoned, providing no specific protection for commercial farming operations. As land use changes to include more suburban homes, this may become a serious challenge to agricultural operations.</p>
Agricultural Conservation Easements	<p>Voluntary separation and sale of the development rights from land in exchange for a permanent conservation easement. Easements can be donated or land-owners paid the difference between restricted value and fair market value. Land remains in private ownership and on tax rolls.</p>	<p>Provides permanent protection of farmland. Donated easements allow a low cost preservation option and landowners can capture benefits through tax shelter effects. Purchased easements put cash into farm and farm economy.</p>	<p>Public cost may be high. The voluntary nature may make it difficult to protect a critical mass of farmland. If a County is limited to donated easements, it may be difficult to attract landowner participation.</p>	<p>House Bill 607 revived the ADFPTF to expand the range of conservation agreements and enterprise programs. The ADFPTF gave out \$2.4 million between 1998 and 2002 to protect 4,412 acres, but received minimal appropriations until House Bill 607. The program does not currently have a dedicated funding source.</p> <p>Planners, farmers, and local officials can create local purchase of agricultural easement programs.</p>

Chatham County Agricultural Land Use Plan

<i>Protection Tool</i>	<i>Definition</i>	<i>Benefits</i>	<i>Drawbacks</i>	<i>Applicability/Status-Chatham County</i>
Transfer of Development Rights	<p>Voluntary separation and sale of development rights from land in one part of a jurisdiction to be used to increase density in another part. Conservation easement placed on sending parcel.</p> <p>Requires legislative authorization.</p>	<p>Developers compensate farmland owners. Creates permanent protection of farmland and shifts some costs to the private sector.</p>	<p>Difficult to establish and administer. Opposition by landowners in receiving areas.</p> <p>Needs to be an integral part of a jurisdiction's growth management strategy at a time that sending area resources are relatively intact and intensification of receiving areas is feasible.</p>	<p>With rising development plans along the US 15-501 and US 64 corridors in the towns of Siler City and Pittsboro, there is justification for exploring the creation of a county-wide TDR. As well, there are natural sending and receiving areas.</p> <p>Currently, no real means to assign development rights to un-zoned properties. Furthermore, a county-wide TDR program would require inter-municipal agreements with the incorporated areas of the County.</p>
Private Land Trusts	<p>Local non-profit 501.c (3) corporations designed to identify resources to be protected, accept permanent conservation easements from landowners, and monitor their provisions through time.</p>	<p>Can provide permanent land protection. Can forge public-private partnerships. Greatly facilitates the donation of conservation easements from landowners able to benefit from income tax benefits.</p>	<p>Private land trusts may focus on specific areas and or types of easements. Land trusts may not be able to fund a purchase of development program but rather typically prefer to work on projects with a donation component.</p>	<p>The Triangle Land Conservancy (TLC) is currently the most active land preservation program. The TLC preserved more than 13,000 acres of land in the six-county region, with 4,000 in Chatham County. It is funded by more than 2,000 members that include individuals, families, businesses, and organizations.</p> <p>TLC has worked on several agricultural easements in Chatham County and works with farmers to cater easements specifically to their needs for agricultural or forestry operations.</p>

4.0 Implications for the Agricultural and Farmland Preservation Plan

This analysis of land use trends and projections determined that the following issues are of particular importance to Chatham County's agricultural industry:

Residential development and population growth in Chatham County exceeds statewide and regional averages. Chatham County is the second fastest growing county in the state. Such development is impacting agriculture by competing for scarce land resources. This is particularly true in rural areas where there are few development controls.

Although Chatham County has experienced a decrease in land in farms, the agricultural land base is still relatively intact and can be supported with the development of local, small, crossroad commercial businesses, as stated in the Chatham Land Conservation and Development Plan. Once farmland is lost to development of any kind, it is rarely converted back to agricultural use. Maintaining a core land base in active agriculture is necessary for the survival of the industry.

Low density, rural residential development occurring in Chatham County has a significant impact on farm businesses. Poorly planned, scattered residential development can bring new non-farm neighbors to the doorstep of farm businesses. These new neighbors may be unfamiliar with agricultural practices and can generate time consuming and potentially expensive conflicts.

The US 15-501 and US 64 corridors will continue to be drivers of land use change in the county. It is expected that the incorporated and unincorporated areas surrounding these corridors will dominate the new residential development. It is likely that growth will radiate from urban centers along the eastern border of the county.

The rate and type of development that occurs in Chatham County will be influenced by broader economic factors, as well as by local land use policies and decisions. Planning for agriculture at the County level can positively affect development patterns within the community so that both agriculture and the broader community benefit.

Land Use Plan decisions made by individual municipalities will have a major impact on unincorporated areas of the county. This will occur through annexation and through natural expansion of development along major arterial connections between population centers. Without coordination between the municipalities and County, independent land use planning efforts can cause inter-jurisdictional conflict and unplanned development effects.

5.0 Recommendations

The following recommendations are offered to improve the integration between agriculture, forestry, and suburban land uses in Chatham County. Given the rapid rate of residential growth in Chatham, these traditionally land-dependent industry sectors suffer from neighbor conflict, land fragmentation, transportation limitations, and impairments to traditional production practices. Many of these limitations are driven by the incompatibility of mixing residential and industrial uses. Because rural zoning typically treats agriculture, forestry, and residential uses as complementary, the conflict has been built into land use regulations. That assumption is generally not accurate since both agriculture and forestry are industrial uses.

Beyond issues of inter-sector conflict, Chatham County's proximity to the Research Triangle, and its robust housing market, have made open land more valuable, often putting its cost beyond its profit-making ability to support commodity agriculture uses. Land use policies such as zoning, infrastructure development, and subdivision regulations can also detract from agricultural and forestry value while enhancing residential and commercial values. The consequences of such policies are currently being debated as part of the proposed major highway corridor overlay zone. Regional, State, and federal policies also impact agricultural use and value. Locally, such programs include Jordan Lake Watershed controls and the implementation of the Ecosystem Enhancement Program (EEP) mitigation requirements,⁶ which will compete for agricultural land.

The ten recommendations in this document fall within three broad categories or focus areas. The focus areas are largely independent, but have some level of interactivity. The focus areas are briefly described below.

1. ***Working Lands Protection*** – These recommendations target improvements in, or development of, policies and programs with the sole purpose of protecting the land base that supports the industries of agriculture and forestry. The general purpose of these recommendations is to respect the commercial needs of these industries, while providing reasonable protections for all citizens and industry constituents.
2. ***Future County Policy and Planning*** – This focus area distinguishes itself from Working Lands Protection by focusing on meeting the needs of modern agricultural and forestry practices and ensuring that future planning and policy support such needs, as necessary. Therefore, it examines a wider array of policies than just land use and includes taxation, health, transportation, and labor. The inclusion of these additional policies is intended to bring local conditions in line with regional competitors.

⁶ More information on EEP requirements can be found at <http://www.nceep.net/pages/mitigate.htm>.

3. ***State and Federal Advocacy*** – This category’s recommendations are influenced more heavily by people and groups outside of Chatham County, its local municipalities, agencies, and other entities. Effecting changes within this Focus Area will require advocacy and education.

Successful implementation of these recommendations will involve a multidisciplinary effort supported by the public sector, private industry, and agricultural operations, as well as State and local agencies. The necessary partnerships will be driven by the specific implementation needs of each recommendation. Funding support for each respective recommendation must also be built independently on the merits of the recommendation and evidenced needs.

Recommendations are presented and described on the following pages.

FOCUS AREA 1: Working Lands Protection

Access to commercially viable tracts of working land is imperative to maintaining both Chatham County's rural beauty and its rural industries, such as agriculture and forestry. The following recommendations provide policy guidance to develop protection for such working lands while integrating the increasing residential context of the county into the agriculture and forestry base.

RECOMMENDATION 1

Coordinate Farmland Protection Outreach, Education, and Policy Development

The general level of understanding of land preservation tools in Chatham County, outside of a few agencies, is quite limited. Before an effective set of land preservation programs can be implemented, or even developed, this condition must be addressed. Complicating matters is the fact that multiple agencies must be involved in designing and implementing such programs, and there is no clear lead agency at this time to take a guiding role. Keeping the public proactively informed about the importance of agriculture as an economic, ecological, and cultural element of the community will be crucial to public understanding of the industry and, ultimately, public support of agricultural and forestry uses. Furthermore, an informed citizenry that understands and accepts the industrial nature of agriculture will make better neighbors and better consumers.

ACTIONS

- Create a Farmland Preservation Coordinator position in Chatham County.
 - Examine county funding options to support the position (e.g., Rollback tax.)
 - Integrate with Chatham County Cooperative Extension programming in agriculture and forestry as well as coordinating with Chatham County Soil and Water programming.
 - Develop a farmland protection program of work
 - Introduce program and policy ideas to community.
 - Work with agencies and industry to implement protection programming.
- Develop an outreach plan.
 - Identify key audiences/stakeholder groups that impact agriculture.
 - Develop important message statements to deliver to above audiences.
 - Produce collateral material and programming to outreach to various audiences
 - print material
 - media kit
 - television and radio programming
 - website
 - special events
 - Host meetings of county administrative staff and finance officers with outside subject area experts, including public officials from counties with long standing programs and bond counsel.

- Create an agricultural speakers' bureau to carry the “message” to important community and civic groups through periodic public speaking engagements.
- Develop a series of educational tours for policy makers to highlight the benefits and challenges of implementing a land preservation program.
 - Host local tours to counties with land preservation programs.
 - Plan annual tours to counties with long standing and innovative programs such as Virginia Beach, VA; Montgomery County, MD; and Burlington County, NJ.
- Integrate local farm tours to support the “message” of agriculture as well as topical “on-farm” issues.
- Integrate forest products industry and forest landowners into outreach programming.
- Enhance the public relations network and partnerships with other agencies that have an active public outreach program, such as the Chamber of Commerce.

IMPLEMENTATION RESPONSIBILITY – Action items under this recommendation are expected to be led by the Chatham County Cooperative Extension office, with significant interagency cooperation from a range of potential task leaders.

RESOURCE REQUIREMENTS – This recommendation is expected to require significant staff resources and a modest outreach and marketing budget. An annual allocation of \$50,000 funded through Present Use Value roll back taxes is recommended as a funding method. Grant funds may be available to support tours and development of marketing materials.

ISSUE PRIORITY – Given the level of interest in farmland preservation, this is a high priority initiative that should be immediately implemented.

RECOMMENDATION 2

Strengthen the Chatham County Voluntary Agricultural District Program

The Voluntary Agricultural District is a vital first step in protecting agriculture in a rapidly growing area, but it is no substitute for a viable agricultural industry. If strengthened, however, the VAD has the potential to be a powerful focal point of education for the real estate community, the general public, and local elected officials about the benefits and needs of agriculture in their communities.

Strengthening the VAD can also bring additional benefits to farmers over and above those offered by notification of, or expansion to, an Enhanced Voluntary Agricultural District. Specific action items are recommended below.

ACTIONS

- Adopt the Enhanced Voluntary Agricultural District Program to expand options for landowners.
- Create a countywide right-to-farm law that applies to all agricultural district properties to include:
 - Enhanced real estate notification in VAD influenced areas
 - A defined dispute resolution procedure.
- Explore need for a countywide policy to protect agricultural water access to qualifying District properties
 - Include provisions to allow for lateral connections to service livestock and crop needs as a matter of right.
 - Allow sale of water to agricultural properties at commercial rates.
- Integrate VAD properties into policy and educational tours and discuss value of programs to farmers and County.
- Seek adoption of VAD by all municipalities.

IMPLEMENTATION RESPONSIBILITY – Agricultural Advisory Board, Cooperative Extension Service, Farm Bureau, Chatham County Soil and Water District, and County Planning Division staff.

RESOURCE REQUIREMENTS – This recommendation is expected to require modest staff resources and can be integrated with Working Lands Protection Recommendation 1.

ISSUE PRIORITY – Given the level of interest in farmland preservation, this is a high priority initiative that should be immediately implemented.

RECOMMENDATION 3

Develop a Strategic Farmland Map

Strategic mapping is a dynamic process that must be constantly updated and revised. The primary goal of producing a strategic farmland map is to identify where to start on permanent protection, but it can also be used to expand and hone other elements of the farmland protection program, such as targeting expansion areas for grey water irrigation systems. Preparation and adoption of the Strategic Farmland Map should occur prior to updates of the Comprehensive Land Use Plan and be integrated into the Comprehensive Land Use Plan's outreach process. As such, the map presents an opportunity for building alliances among the environmental interests in the county, developers, real estate agents, farmers, and others.

ACTIONS

- Calculate the total acreage of the farmed parcels and parcels with forest management plans.
- Calculate theoretical build-out capacity (number of houses) of agricultural lands, if those parcels are developed.
- Generate an address list of land owners of those parcels.
- Develop and update farmland protection focus areas.
- Identify the parcels that are in production (or coded for agriculture or forestry), but not in the VAD, and notify parcel owners of the benefits of participation in the district.
- Track development projects and major subdivisions.
- Identify key public infrastructure (existing and planned), such as water and sewer systems.
- Identify protected open space, parks, recreation areas, EEP easements, Chatham Conservation Partnership Open Space Plan, trails, and historic sites.
- Identify key private infrastructure such as grain and feed dealers, wood products processing, farmers markets, and similar systems.
- Highlight Comprehensive Land Use Plan elements, such as growth districts, generalized zoning categories, and ETJ's.
- Identify and include high productivity agricultural soils to include forestry sub-soils and Soils of Statewide Importance.
- Integrate map with State and regional GIS activities.
 - Meet with Department of Environment and Natural Resources GIS staff to review current and planned GIS layers.
 - Review plans for North Carolina GreenPrint mapping of working landscape and environmental features (www.onencnaturally.org) and seek inclusion of Chatham County data layers.
 - Integrate the GIS system with North Carolina State University, College of Natural Resources, Department of Forestry and Environmental Resources Forestry Extension program to specifically include biomass management data.

Chatham County Agricultural Land Use Plan

- Integrate planning data from regional Comprehensive Land Use Plans and Farmland Preservation Plans.
- Conduct seminars featuring the map to educate people about the benefits of agriculture and its integration with the broader community.

IMPLEMENTATION RESPONSIBILITY – Chatham County Board of Commissioners, Cooperative Extension Service, Farm Bureau, Chatham County GIS Office, NC Division of Forestry, and County Planning Division staff.

RESOURCE REQUIREMENTS – This recommendation is expected to require modest to high levels of staff resources and can be integrated with Working Lands Protection Recommendation 1. Some mapping elements may require additional research funding. This funding is estimated to be \$15,000 to \$20,000 and may be leveraged by grant resources.

ISSUE PRIORITY – Given the level of interest in farmland preservation, this is a moderate to high priority initiative that should be implemented within eighteen months.

RECOMMENDATION 4

Build Support for a County Working Lands Protection Program

Demand for permanent land preservation programming is high in Chatham County, particularly among young farmers. Given the current state of funding at the North Carolina Agriculture Development and Farmland Preservation Trust Fund, the ability of Chatham County to compete for funds may be stymied both by the limited funding of the program statewide, as well as by the criteria by which priority is given to funding individual easement projects. If the County is to compete successfully and meet constituent demand, new programs and funding sources may be required.

ACTIONS

- Formalize the role of the “Working Lands Committee” or similar group and charge it with establishing guidelines for developing a County farmland preservation program. This activity should be strongly linked with Recommendation 1.
- Establish initial and long-term protection goals to guide the creation of an appropriate preservation toolkit.
 - Set acreage goals for agricultural and forestry lands of 50 percent of remaining agricultural land.
 - Identify critical agricultural and forestry infrastructure.
 - Link agricultural and forestry protection goals with natural resource and water protection goals.
 - Integrate cultural and other goals as appropriate.
 - Identify funding requirements to meet goal.
- Identify target areas for conservation where agricultural operations are clustered, development pressure is expected, and/or key agricultural infrastructure is concentrated.
 - Target initial program activity in the Northwestern section of the county, bound roughly by US 87 to the east, US 64 to the south, US 421 to the west, and the County Line to the north.
 - Integrate target areas with regional plans and conservation organization activities, such as Jordon Lake Rules, river corridor protection, and other county preservation programs, such as those in Alamance County.
- Build support for conservation easement programs. (See Appendix B for program structure.)
 - Include permanent easement, e.g., Agricultural Conservation Easements (ACE/PDR), Transfer of Development Rights, and mitigation/farmland banking
 - Develop model easement language.
 - Develop an easement valuation tool (e.g., Land Evaluation Site Analysis - LESA).
 - Create an easement scoring system.
 - Explore legality of TDR in North Carolina.
 - If needed, develop TDR authorizing legislation.

- Study innovative approaches to enhancing easement value, such as water recharge overlays, watershed best practice overlays, Option to Purchase at Agricultural Value program, and highway scenic easements.
- Create flexible easement payment terms to meet land owners needs
 - Support lump-sum payments.
 - Implement Installment Purchase Agreements (IPA) to encourage participation from tax motivated landowners (See Appendix C for additional information on IPA.)
 - Develop a revolving loan fund to facilitate cash motivated transactions and to support young farmer access.
 - Provide retirement programming.
- Examine fiscal impact of implementing a 30-year term easement for forestry.
 - Target high productivity forest lands and high yielding forestry sub-soils.
 - Model after Delaware’s Commercial Forest Plantation Act.
- Examine temporary preservation and protection programs, such as term easements, tax circuit breaker programs, and lease of development rights. (See Appendix D for information on term easements.)
- Identify required agency support to hold and manage easements or contract management to existing, experienced contractors, such as a land trust or Soil and Water District.
 - Enhance institutional learning by working with an experienced project manager, such as the Triangle Land Conservancy.
- Develop a local funding option.
 - Explore legality of using funds linked to development (e.g., present use value taxes, open space funds, or recordation fee).
 - Examine use of dedicated funds to facilitate leveraging of grant resources.
- Conduct outreach with landowners and financial professionals.
 - Prepare materials directed at landowners explaining agricultural conservation easements generally and including a sample easement.
 - Prepare documents highlighting estate management and tax planning benefits of proposed programs to financial professionals.
- Conduct before-and-after easement appraisals on a representative sample of willing farmland owners to determine approximate easement values and to develop an understanding of the process.

IMPLEMENTATION RESPONSIBILITY – Working Lands Committee, Cooperative Extension Service, Farm Bureau, NC Forestry Association, Chatham County Soil and Water District, and County Planning Division staff.

RESOURCE REQUIREMENTS – This recommendation is expected to require significant staff resources at multiple agencies. Activities should be integrated with Working Lands Protection Recommendation 1. Additional resources may be necessary on an ad-hoc basis to support individual research and development needs.

ISSUE PRIORITY – Given the level of interest in farmland preservation, this is a high priority initiative. Major action items, such as formalizing the role of the Working Lands Committee, establishing preservation targets, identifying target areas, and building support for conservation programs, should be immediately implemented. Other action items will require longer development horizons and should be only undertaken as support for conservation programming is confirmed.

FOCUS AREA 2: Future County Policy and Planning

Planning is an ongoing process, particularly in a county undergoing significant structural change. Because of this, Chatham must actively and continuously support agriculture, forestry, and related industries across all policy areas. As with any policy or planning element, education and training play key roles in the successful outcome of this focus area.

RECOMMENDATION 1

Formally Adopt the Agricultural and Farmland Preservation Plan as a County Policy Guidance Instrument

Because Agricultural and Farmland Preservation Plans require the efforts of numerous county departments to be truly successful, it is highly recommended that the Agricultural Advisory Board seek formal adoption of the plan by the Chatham County Commissioners. Furthermore, the Plan should be integrated within the County's Comprehensive Land Use Plan and other, similar documents.

ACTIONS:

- Seek the explicit inclusion of the Agricultural and Farmland Preservation Plan as an element of the Chatham County Comprehensive Land Conservation and Development Plan.
- Seek inclusion of the appropriate elements of the Agricultural and Farmland Preservation Plan within the strategic and/or comprehensive plans of other, related agencies, such as the Chatham County Economic Development, Department of Public Works, Parks and Recreation, local water and sewer agencies, and others as deemed appropriate.
- Communicate with state legislators and North Carolina State Farm Bureau about the need for programs outlined in the plan. Coordinate efforts to adopt state funding and state legislation, as needed, to support full implementation of the plan, especially where regional cooperation is necessary for successful implementation.
- Encourage towns and municipalities to adopt relevant elements of the plan as part of their comprehensive land use strategies.

IMPLEMENTATION RESPONSIBILITY – Agricultural Advisory Board, Cooperative Extension Service, Farm Bureau, NC Forestry Association, and County Planning Division staff.

RESOURCE REQUIREMENTS – This recommendation is expected to require modest staff resources and can be integrated with Working Lands Protection Recommendation 1.

ISSUE PRIORITY – Given the level of interest in farmland preservation, this is a high priority initiative that should be immediately implemented.

RECOMMENDATION 2

Update Subdivision Regulations and Zoning to Meet the Needs of Agriculture and the Community

Local land use policy in Chatham County generally treats agriculture as a place holder for land destined for residential development, and thereby encourages the co-mingling of residences with ag-industrial activity. This is nowhere more evident than in the western, un-zoned, portions of the county where agricultural, residential, and commercial uses seem to be randomly mixed. The pressures created by the hopscotch pattern of mixed use development can have varied local impacts on agricultural land value. Yet, the general trend, even through the current recession, has been a steady state-wide increase in land values that favors residential development over other activities.

Agricultural operations find it difficult to operate in such an environment, and the opportunity cost of holding land in that situation often outweighs the operational gain. Local and county ordinances exacerbate some of the operational effects of farming in these areas. For instance, required setbacks for wells are minimal on a residential lot in a farming area, yet a farmer must yield production ground to keep mandatory setbacks on the application of some inputs. Farmers view these actions as a de facto taking of their right to generate an income from their property. Code written to address development pressure needs to be reviewed and managed with agriculture in mind, if agriculture in these areas is going to survive.

ACTIONS

- Seek to explicitly include farmer, forestry, and agribusiness representation on planning related boards and commissions, such as the Environmental Review Board, to ensure representation of their interests during planning processes and subdivision code updates.
- Review cluster subdivision ordinance to enhance farmland protections by encouraging protection of best agricultural soils and agriculturally viable remaining parcels. (See Greenway Guide in Appendix E)
- Improve communication between Planning Division and agricultural and forestry communities through formal and regular venues.
- Develop an online agricultural policy book to keep farmers informed of land use related development requirements.
- Build beneficial relationships with neighboring jurisdictions and municipalities so to improve inter-jurisdictional planning efforts to avoid unintended cross-jurisdictional effects, such as development spillover, orphaned water and sewer improvements, ETJ expansions, etc.
- Update subdivision code to enforce greater set-backs on residential and commercial development in VAD/EVAD impact areas. By example, well setbacks of 50 feet from a property line may be advisable for residential buildings adjacent to agricultural operations.
- Improve right-to-farm protections with the creation of a mediation board to review, as a requirement, agricultural nuisance claims. The Board should include

representatives from the North Carolina State Cooperative Extension, the farm community, community at large, planning officials, and others as necessary. (See Appendix F for a sample Right-to-Farm Law.)

IMPLEMENTATION RESPONSIBILITY – Agricultural Advisory Board, Cooperative Extension Service, Farm Bureau, and County Planning Division staff.

RESOURCE REQUIREMENTS – This recommendation is expected to require significant staff resources from multiple agencies and must be integrated with Working Lands Protection Recommendation 1. Additional resources will be required to develop a policy handbook as well as to study subdivision code enhancements and right-to-farm protections.

ISSUE PRIORITY – Given the level of community building necessary to integrate agribusiness and forestry early in the policy process, the first two policy actions are considered high priority and therefore immediate needs. Remaining action items, while of high importance, can be successfully implemented within the first eighteen months of program initiation.

RECOMMENDATION 3

Explore Means to Ensure that Agriculture Has Long-Term Access to Water Supplies

Recent drought years and poor well conditions in Chatham County have generated a level of concern amongst farmers and rural land owners that access to agricultural water supplies may limit overall growth in the industry. This is particularly true of sectors, such as horticulture and livestock (poultry), that must have guaranteed access to supply. Recent efforts by the State of North Carolina to record agricultural water use have raised suspicion among farmers that agricultural water use will be restricted in the future. This is one of the most important issues facing agriculture today.

ACTIONS

- Work with the State and municipalities to review the outcomes of the 2008-2009 agricultural water use study and develop metrics for measuring and assessing future needs.
- Assess possible impacts of water use restrictions on local farms by industry sector.
- Develop a coordinated policy statement with local municipalities to ensure agricultural water access.
- Examine implementation of land use controls, such as TDR, to allow sufficient ground water recharge within specific water sheds/aquifers.
- Encourage use of grey water irrigation systems when waste water treatment plants are newly constructed or renovated.
- Encourage development to occur in utility service areas as a means to regulate ground water utilization and maintain agricultural well flow.
- Advocate for a sensible statewide agricultural water use policy that fits the unique regulatory, infrastructure, and program needs of individual farmers and industry clusters in Chatham County.

IMPLEMENTATION RESPONSIBILITY – County Commissioners, Cooperative Extension Service, Farm Bureau, and County Planning Division staff.

RESOURCE REQUIREMENTS – This recommendation is expected to require modest staff resources and will be led largely by industry and State interests.

ISSUE PRIORITY – This is an issue of moderate importance that should be undertaken in the first thirty-six program months of plan adoption.

FOCUS AREA 3: State and Federal Advocacy

Success of agriculture is predicated somewhat on a series of private and public actions, most of which are outside of the jurisdictional control of Chatham County. In light of this, the recommendations in this focus area are influenced more heavily by people and groups outside of Chatham County, its local municipalities, agencies, and other entities. Effecting changes within this Focus Area will require advocacy and education.

RECOMMENDATION 1

Advocate for Farm- and Forestry-Friendly State Agricultural Policies

As agriculture becomes a smaller element of both the County's land use and economy, it will become increasingly difficult to keep the interests of agriculture in the forefront of policy development. Study team members found that keeping policy makers, agricultural industry leaders, and the general public informed and educated goes a long way toward developing better relations and maintaining awareness. In addition, the agricultural industry has common needs in workforce development, farm management, finance, and other issues that can be met through public training resources. Many of the programs and policies, however, are instrumentalities of the State or federal government and can be amended only through concerted advocacy efforts.

ACTIONS

- Seek review of North Carolina Department of Transportation policies related to rural road design to allow for greater shoulder depth and a requirement for tractor turn-offs to enhance traffic flow and traffic safety.
- Support full funding of the NC ADFPTF at levels that match other programs in the Mid-Atlantic.
- Advocate for fair treatment of agriculture in nutrient State management programs.
- Advocate for inclusion of forest land easements in the NC ADFPTF.
- Advocate for a state water policy that gives agriculture preferential access for irrigation and livestock watering.
- Encourage statewide funding of grey water irrigation systems for nonfood crops.
- Improve wildlife controls to reduce crop damage losses.
- Expand the EEP program to include protection of Prime and Productive Soils, important forestry sub-soil types, and Soils of Statewide Importance.
- Encourage development of an individualized, new/young farmer training program at the State level:
 - Identify feeder sources for interns and participant screening criteria.
 - Create a program of work tailored to individual farm and intern needs.
 - Develop a formal mentor program targeting newly graduating interns and other, pre-qualified, new/beginning farmers.
 - Develop evening farm start-up and management classes targeting beginning farmers.
- Work with educational institutions at the post-secondary and continuing education level to develop flexible training modules for use by agricultural operations

- Language training for managers and workers
- Advanced farm management training
- Other issue-based training as necessary.

IMPLEMENTATION RESPONSIBILITY – Action items under this recommendation require significant interagency cooperation with a range of potential task leaders. It is expected that overall leadership will be provided by the North Carolina Cooperative Extension Service with support from the Farm Bureau, NC Forestry Association, NCDACS, NC Forestry Association, Soil and Water District, Country Transportation Division staff, Triangle Area Rural Planning Organization, agricultural industry associations, as well as other agencies.

RESOURCE REQUIREMENTS – This recommendation is expected to require modest staff resources and will be led largely by industry and State interests.

ISSUE PRIORITY – This is an issue of moderate importance issue that should be undertaken in the first thirty-six program months of plan adoption.

RECOMMENDATION 2

Seek Innovative Means to Integrate Working Lands Protection into the Jordan Lake Rulemaking Process

The Jordan Lake Rulemaking process is intended to support rehabilitation of Jordan Lake and its tributaries, which are currently out of compliance with both State and federal clean water statutes. The rules are similar to those already in place in the Neuse and Tar-Pamlico River Basins. They will require all major sources of nutrients to reduce their loading (primarily for nitrogen and phosphorous) to the three arms of Jordan Lake. Nutrient sources addressed by the rules include agriculture, fertilizer application, wastewater discharges, and storm water runoff from both new development and existing developed lands. Local governments will be responsible for managing the implementation of the rules and will have threshold dates for achieving results.

Following the example of the New York City watershed programs, agricultural and forestry land uses could benefit from further refinement of the rulemaking process through the design of best management practices and financing of land preservation.

ACTIONS

- Co-sponsor speaker series with Environmental Management Commission (EMC) to introduce the Catskill Watershed project to local officials, farm bureau, elected officials, and environmental groups.
- Support and develop a grant program to promote residential landowner education programs to reduce non-point source pollutants.
- Encourage development of an easement funding program to encourage agricultural and forest land conservation within the Jordan Lake Watershed. (See Appendix G for information on Catskill Watershed Program.)
- Explore new revenue sources in the watershed area, such as retail nutrient taxes, through a special local option to enhance farmland preservation funding.
- Improve cost share support for whole farm and nutrient planning within the watershed boundary.
- Introduce funding enhancements to the EMC and North Carolina General Assembly to support economic development programming in the watershed and support best management practice adoption.

IMPLEMENTATION RESPONSIBILITY – Chatham County Commissioners, County Sustainable Communities Development Department staff, Cooperative Extension Service, regional Council of Governments, Agricultural Advisory Boards, Soil and Water Conservation, and Environmental Management Commission.

RESOURCE REQUIREMENTS – This recommendation is expected to require modest staff resources and can be integrated with Working Lands Protection Recommendation 1.

ISSUE PRIORITY – Given the level of interest in farmland preservation, this is a high priority initiative that should be immediately implemented.

RECOMMENDATION 3

Advocate for Integration of Regional Agricultural and Land Development Policies

By design, most agricultural land preservation tools are designed to be implemented where there is strong, existing development pressure. In Chatham County, as well as surrounding jurisdictions, development pressure is often spotty, driven by commuter routes to nearby urban centers. This makes programs like Transfer of Development Rights and Purchase of Development Rights impractical in most places and raises the need for more proactive tools to consolidate blocks of working lands that cross jurisdictional lines. Regionally, Orange and Alamance Counties have advanced policies and programs to protect working lands and Wake County is in the process of developing such a program. Targeted preservation areas within Alamance County border critical agricultural lands in Chatham and present a leveraging opportunity. Similarly, development areas in Orange and Wake County border Chatham and pose the threat of pushing development into Chatham, if proper controls are not in place.

ACTIONS

- Review neighboring jurisdictions' Farmland Preservation Plans and Comprehensive Land Use Plans on a regular basis.
- Conduct joint Agricultural Advisory Board/Voluntary Agricultural District Board meetings on a regular basis to encourage regional planning.
- Encourage regular meetings of planning and public utility/highway departments to encourage better integration of agricultural planning.
- Explore use of a multi-county term easement program, modeled after California's Williamson Act (for agriculture) and Delaware's Commercial Forest Plantation Act, to manage regional growth over the short term.
- Work with regional partners to advance agriculture district enhancements and/or term easements at the State level to improve the functionality of the Voluntary Agricultural District program as a true land preservation tool.

IMPLEMENTATION RESPONSIBILITY – Chatham County Commissioners, County Sustainable Communities Development Department staff, Cooperative Extension Service, regional Council of Governments, NC Forestry Association, Agricultural Advisory Boards, Soil and Water Conservation, and Environmental Management Commission.

RESOURCE REQUIREMENTS – This recommendation is expected to require modest staff resources and can be integrated with Working Lands Protection Recommendation 1.

ISSUE PRIORITY – Given the level of interest in farmland preservation, this is a high priority initiative that should be immediately implemented.

APPENDIX A
Agricultural Industry Summary

Agricultural Trends Profile for Chatham County, NC

**Developed by
Agriculture and Community Development Services Inc.**

1

Agricultural Trends Profile

•Agriculture in Chatham County is being shaped by a number of trends that both offer opportunities for growth in the county. Farm receipts continue to rise, on the back of surging livestock production.

•The growth in the livestock sector is a result of growing poultry operations not just in the county , but also throughout the state. But, growing poultry operations and more active international trade arrangements for poultry products make operations more sensitive to factors that cause shifts in the international market (e.g., avian flu concerns).

•The shifts in the international market have contributed greatly to the volatility in both livestock receipts and total farm receipts, but. But the general trend has been a continuous increase in receipts.

2

Agricultural Trends Profile, continued

•The increase in farm receipts has led to a widening gap between in per capita income between farm and non-farm sectors.

•This report provides a barometer of the general health of the area's agricultural industry. As a means of comparison, data and trends from neighboring counties and states are used. These trends can be used to identify strengths and weaknesses, opportunities and threats in the farming community, as well as serve as a guide for development efforts in the future.

3

Agricultural Trends Profile, continued

•The increase in farm receipts has led to a widening gap between in per capita income between farm and non-farm sectors.

•This report provides a barometer on the general health of the area's agricultural industry. As a means of comparison, data and trends from neighboring counties and states are used. These trends can be used to identify strengths and weaknesses, opportunities and threats in the farming community, as well as serve as a guide for development efforts in the future.

3

Methods

•The methods used to prepare this report are commonly accepted econometric practices. Data were gathered from several federal government sources, including the Census of Agriculture, the Regional Economics Information System (REIS), and County Business Patterns. The data were downloaded from CD-ROM disks or from Internet sources, and imported into Microsoft Excel spreadsheets. Here the data were adjusted for inflation, by inflating the data to recent dollars (usually 2005 dollars). In some cases, where noted, the [Farmers] Prices Received Index (PRI) maintained by the USDA or the Consumer Price Index (CPI) was used.

•This trend profile includes an analysis of (1) the financial health of agriculture in the County of Chatham (for example, sales, expenses and income trends), (2) trends in the structure of agriculture in the four counties (for example, change in number of farms, types of farms), and (3) an examination of the linkages between agriculture and the balance of the four counties' economies .

•**Interpretation Note:** Analytical tools chosen from one analyst to another may be different and the resulting data vary. Furthermore, charts and graphs are subject to different interpretations. Care should be taken not to accept this information as absolute truth. Instead, we recommend that this information be used to supplement local stakeholders' observations, provide some new insights, and raise issues for further study.

Summary

Agriculture in Chatham County, North Carolina is a large and extensive industry consisting of 926 farm enterprises. Farm receipts amounted to over \$99 million in 2006 and is led by \$95 million in receipts from livestock production.

The growth in livestock production has led to increases in (per capita) farm income compared to non-farm income. Annual per capita farm income averaged \$20,000 from 1970 to 2006 for the three counties compared to \$8,300 for non-farm operations.

But the growth in farm receipts is accompanied by indications of reduced farm operations. This suggests some trends in consolidation and integration of larger operations.

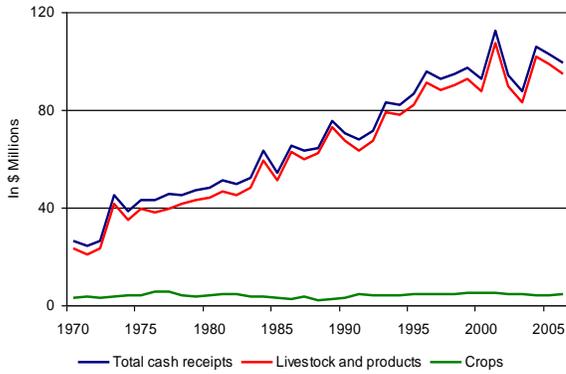
The opportunities for value-added operations are intact, as the continued presence of agricultural services establishments and food manufacturing firms in the area did not decline between 2000 and 2006.

5

SECTION 1

FINANCIAL HEALTH

**Chatham County Farm Cash Receipts, 1970-2006
Gross Farm Sales On A Steady Upward Trend**

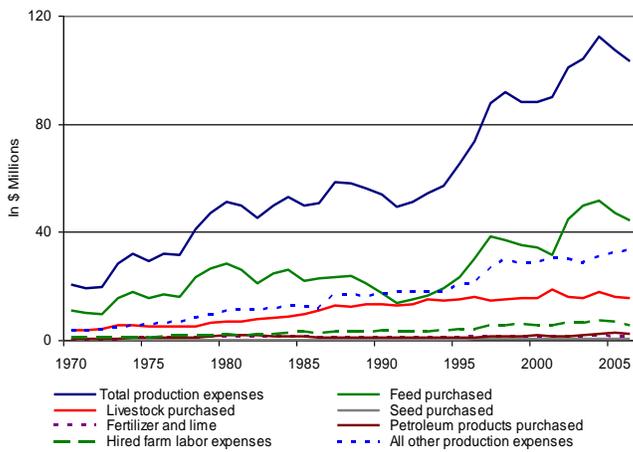


Gross farm sales have been on a strong upward trend from 1970 to 2006 due to continuously growing livestock sales. Some volatility has been seen since 2000 but the major trend appears intact. As of 2006, crop receipts totaled \$99 million while livestock sales amounted to \$95 million.

Source: Regional Economic Information System (REIS).
Data in 2005 dollars, using Prices Paid by Farmers Index.

7

Chatham County Farm Expenses, 1970-2006

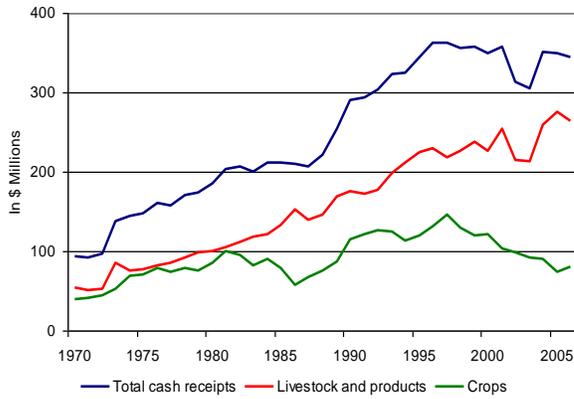


Expenses for feed are the biggest determinant of total farm costs. It accounts for 43% of all expenses between 1970 and 2006 while other production expenses and livestock purchased make up 18% and 6%, respectively.

Source: Regional Economic Information System (REIS).
Data in 2005 dollars, using Prices Paid by Farmers Index.

8

Chatham County Regional* Receipts, 1970-2006

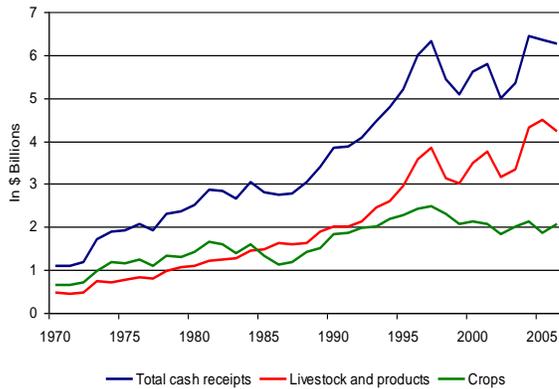


Farm receipts from counties neighboring Chatham have also followed the general upward trend from 1970 to 2006 with some consolidation since 2001. Livestock sales make up 64% of total sales and the share has been rising since 1998 following the decline in crop receipts. Chatham's receipts are 27% of the region's, suggesting the county's sales are relatively stronger than other counties'.

*Regional counties include Alamance, Durham, Lee, Moore, Orange, Randolph, and Wake counties.

Source: Regional Economic Information System (REIS).
Data in 2005 dollars, using Prices Paid by Farmers Index.

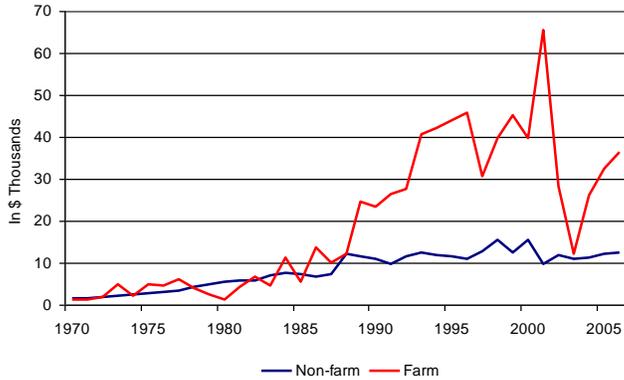
North Carolina Farm Receipts, 1970-2006



North Carolina also has the trend of rising farm receipts due to rising livestock receipts but some volatility has been seen since 1997 with a slight downward trend since the high of \$6.44 billion seen in 2004. The growth in receipts is mainly from poultry operations while the volatility is due to trend shifts in the international trade of poultry products.

Source: Regional Economic Information System (REIS).
Data in 2005 dollars, using Prices Paid by Farmers Index.

Chatham County Farm and Non-Farm Income per Capita, 1970-2006

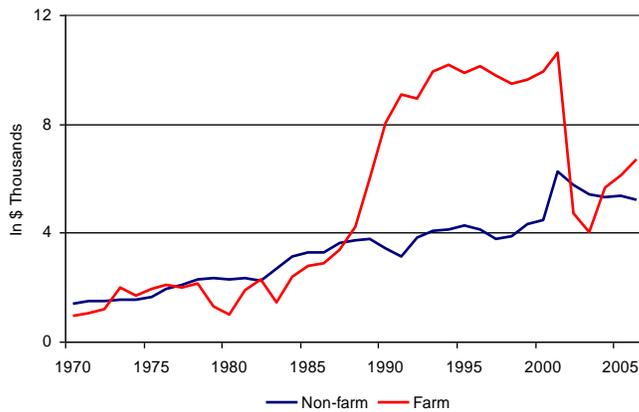


Farm income has exceeded non-farm income in Chatham County since 1987. Annual per capita farm income also surged to \$65,000 in 2001 before retreating to \$12,000 two years after. But incomes have picked up since, with an average increase of 52% from 2003 to 2006.

Source: Regional Economic Information System (REIS).
Data in 1997 dollars, using Consumer Price Index.
Per-capita farm income is total county farm income divided by the number of farm proprietors in the county.

11

Chatham Region* Farm and Non-Farm Income per Capita, 1970-2006



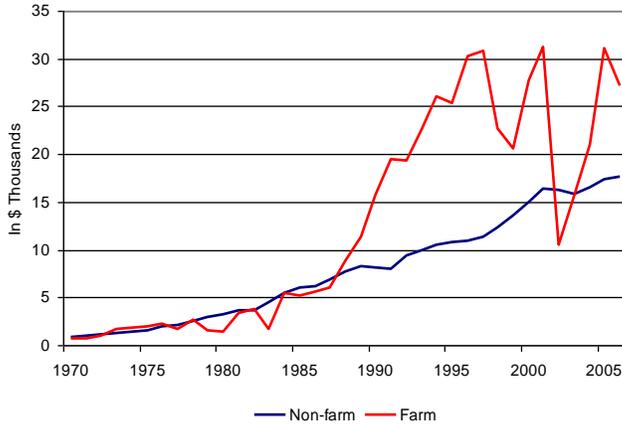
Despite the surge in farm income between 1990 and 2001, per capita farm income between 1970 and 2006 exceeded per capita non-farm income by only \$2,000. Income levels for the region are also lower than those from Chatham County alone.

*Regional counties include Alamance, Durham, Lee, Moore, Orange, Randolph, and Wake counties.

Source: Regional Economic Information System (REIS).
Data in 1997 dollars, using Consumer Price Index.
Per-capita farm income is total county farm income divided by the number of farm proprietors in the county.

12

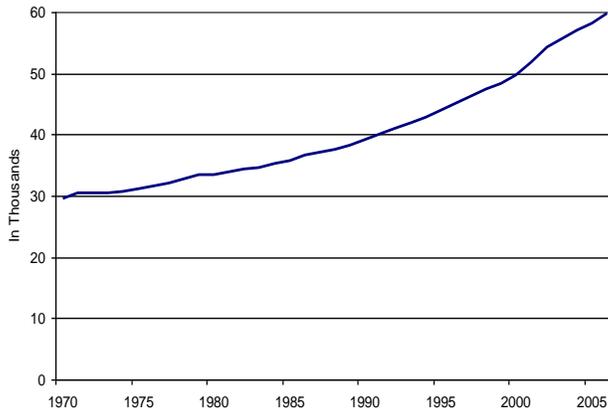
North Carolina Farm and Non-Farm Income per Capita, 1970-2006



After roughly following the same trend as non-farm income, the state's per capita farm income surged in 1988 and reached a high of \$31,200 in 2001 and again in 2005. But income trends have also been volatile since 1997 and reached a low of \$11,000 in 2003.

Source: Regional Economic Information System (REIS).
 Data in 1997 dollars, using Consumer Price Index.
 Per-capita farm income is total county farm income divided by the number of farm proprietors in the county.

Chatham County Population, 1970-2006



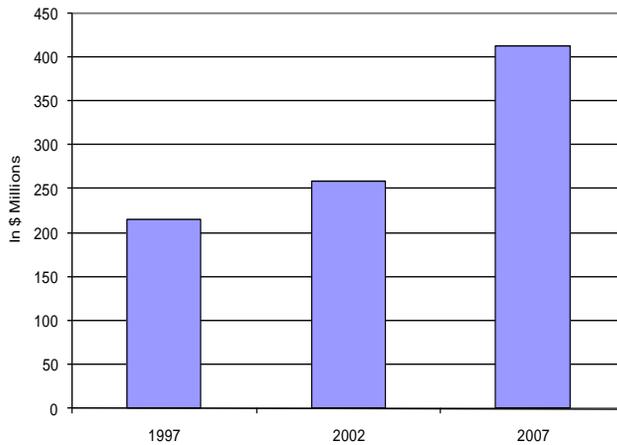
The population growth rates in Chatham County averaged 2% between 1970 and 2006, with the highest recorded level at 60,000 in 2006. The population has consistently increased over the period largely due to the increasing livelihood opportunities.

Source: Regional Economic Information System (REIS).

SECTION 2

CHARACTERISTICS AND STRUCTURE

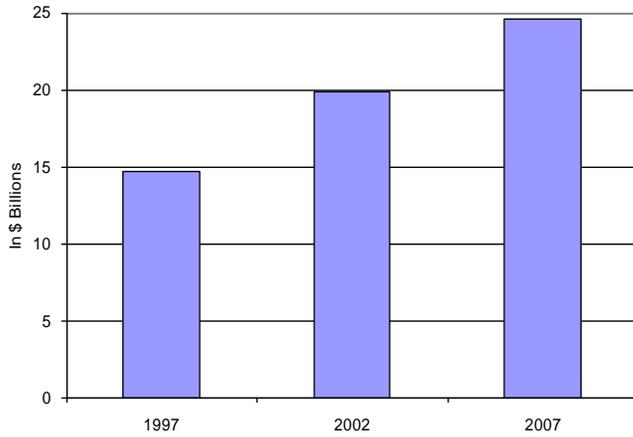
Chatham County Market Value of Land and Buildings



Farm property values increased 20 percent from \$216,000 in 1997 to \$259,000 in 2002. Further growth was seen between 2002 and 2007 when values grew 60 percent to \$414,000. The growth was one of the highest in North Carolina and even outpaced the 35 percent increase throughout the state.

Source: U.S. Census of Agriculture.
Data deflated by the Prices Paid by Farmers Index.
Farm real estate values include land and buildings.

**North Carolina
Market Value of Land and Buildings**

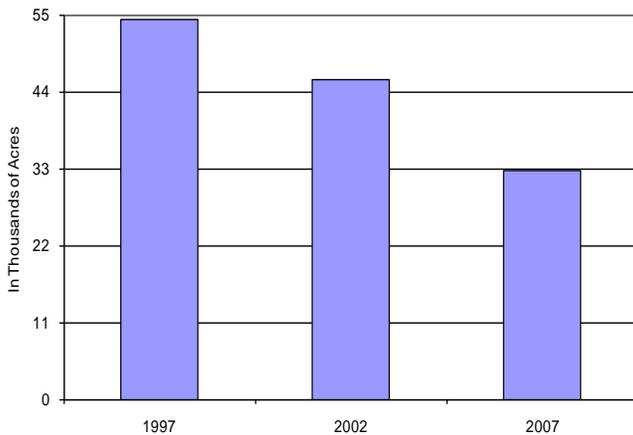


Farm property values increased 35 percent from \$20 billion in 1997 to \$28 billion in 2002. The growth slowed to 24 percent between 2002 and 2007, with values reaching \$25 billion. The rise in farm property values throughout the state is a result of growing demand for land for non-farm purposes as well as increasing profitability in farming operations.

Source: U.S. Census of Agriculture.
Data deflated by the Prices Paid by Farmers Index.
Farm real estate values include land and buildings.

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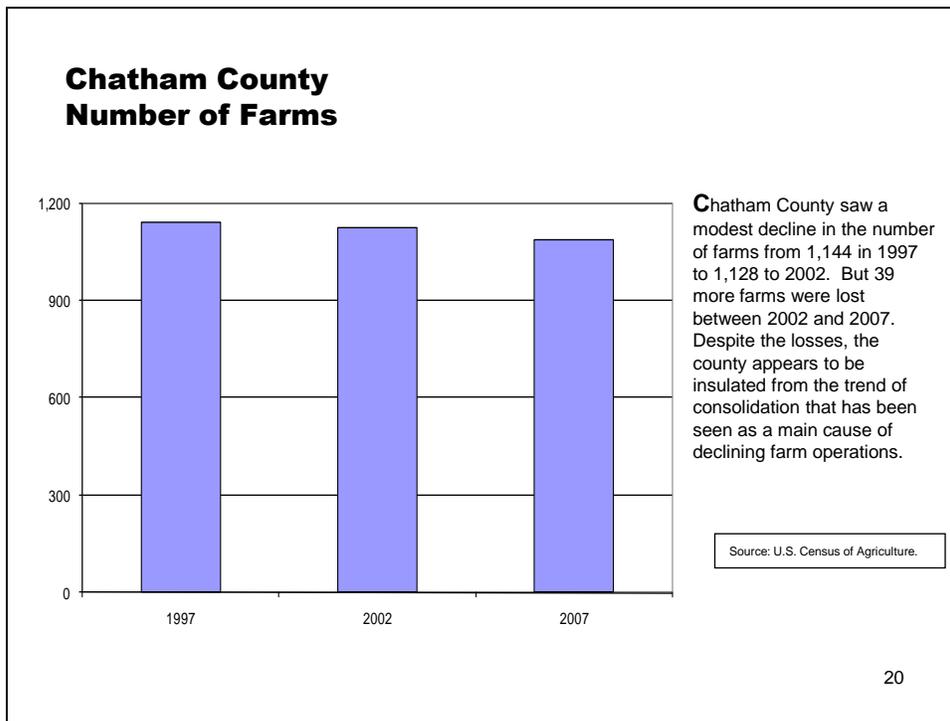
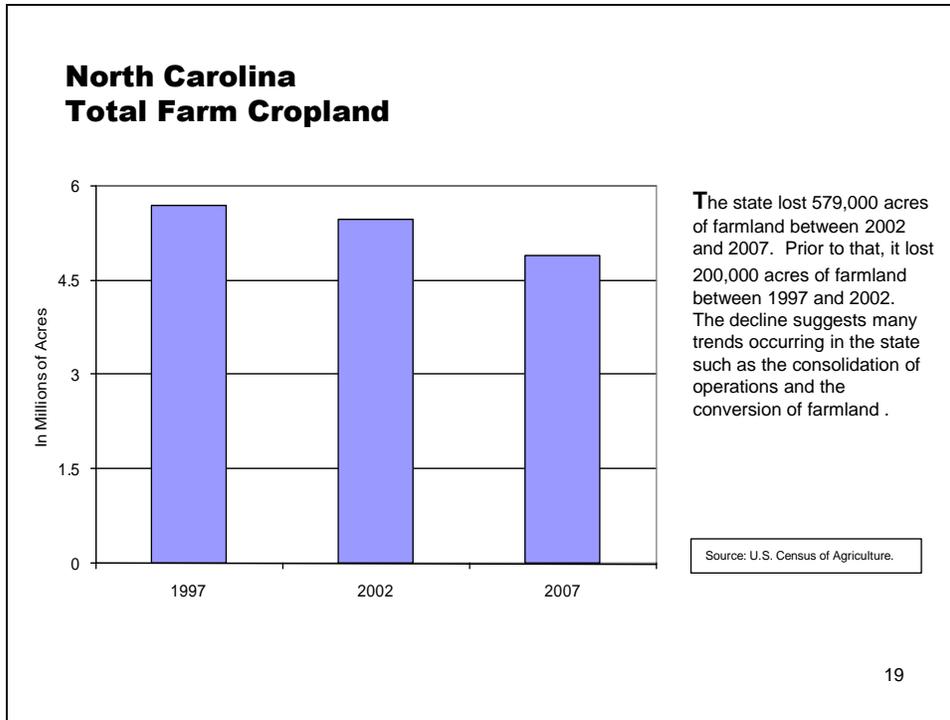
**Chatham County
Total Farm Cropland**

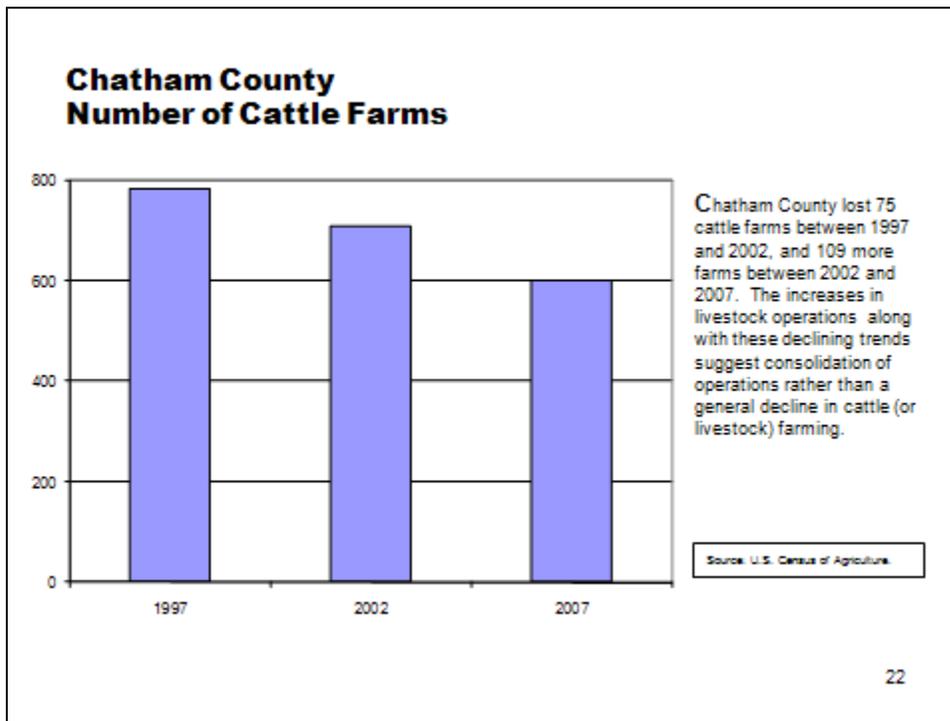
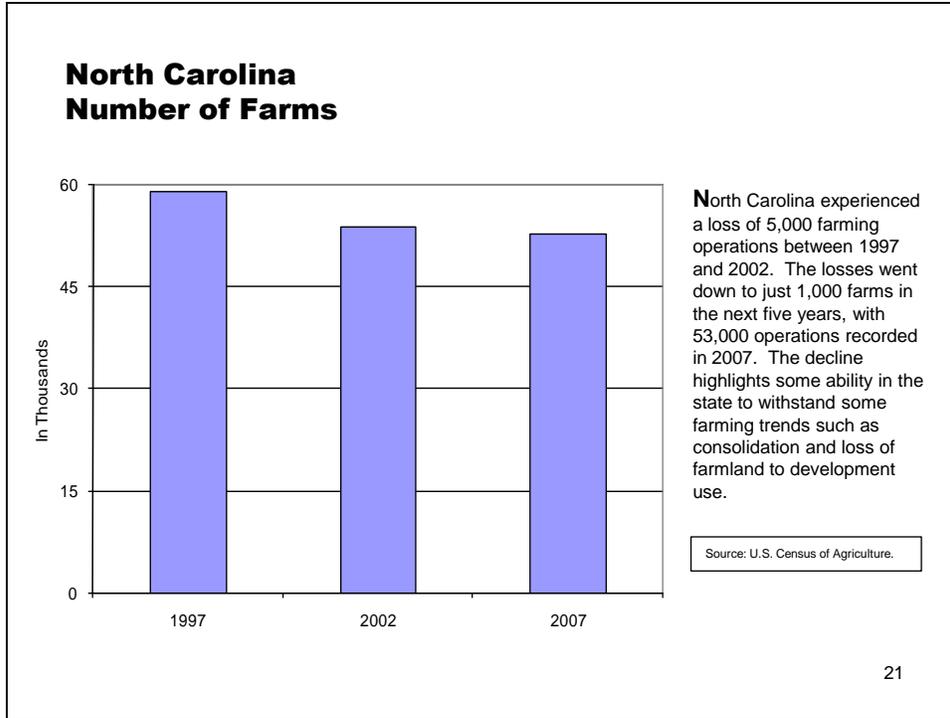


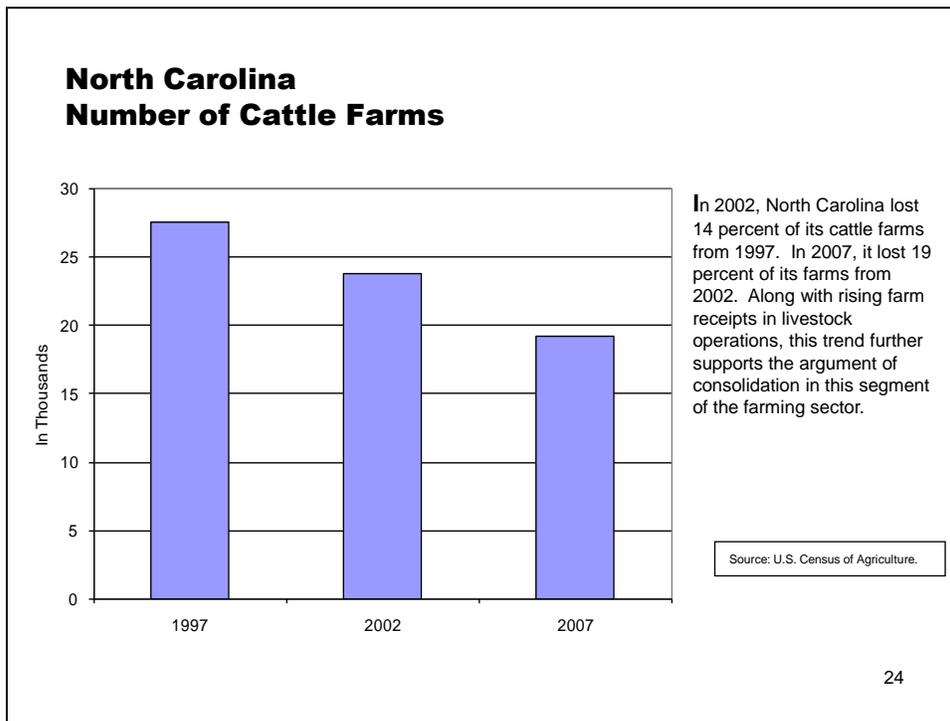
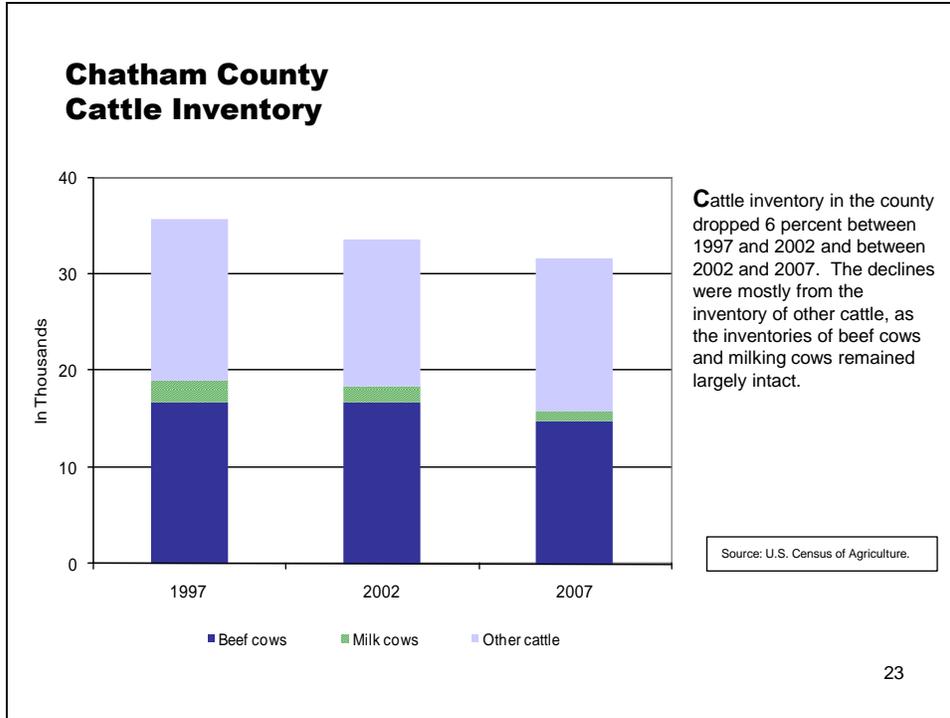
Total cropland has been on a steady decline the last 10 years. It dropped from 54 acres in 1997 to 46 acres in 2002. It dropped further to 33 acres in 2007. As with many other areas, the drop in acreage is the result of the conversion of farmland for non-farm purposes such as residential development.

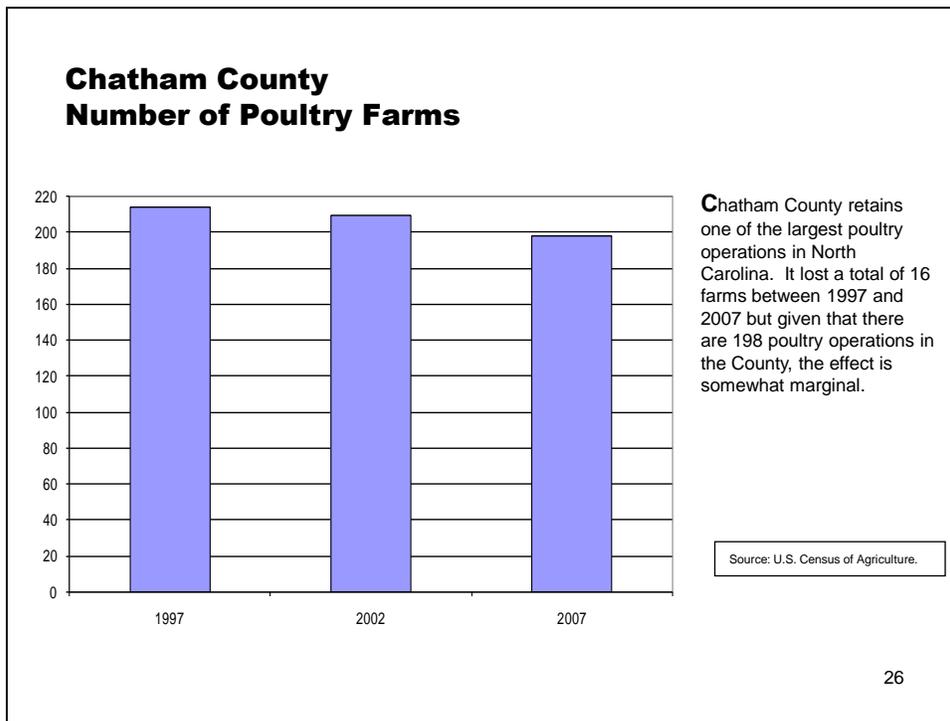
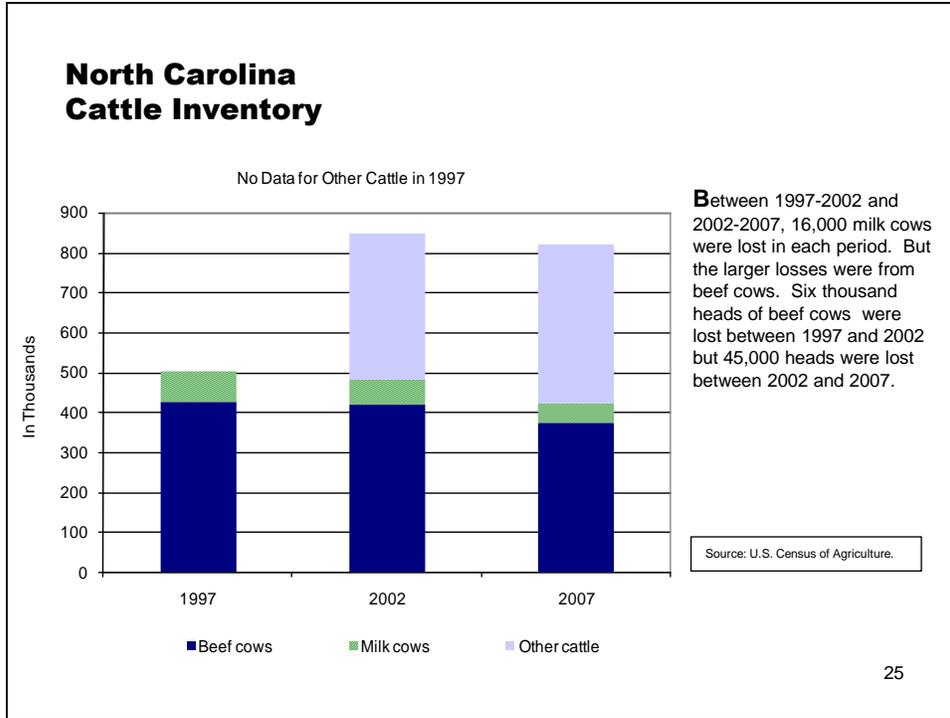
Source: U.S. Census of Agriculture.

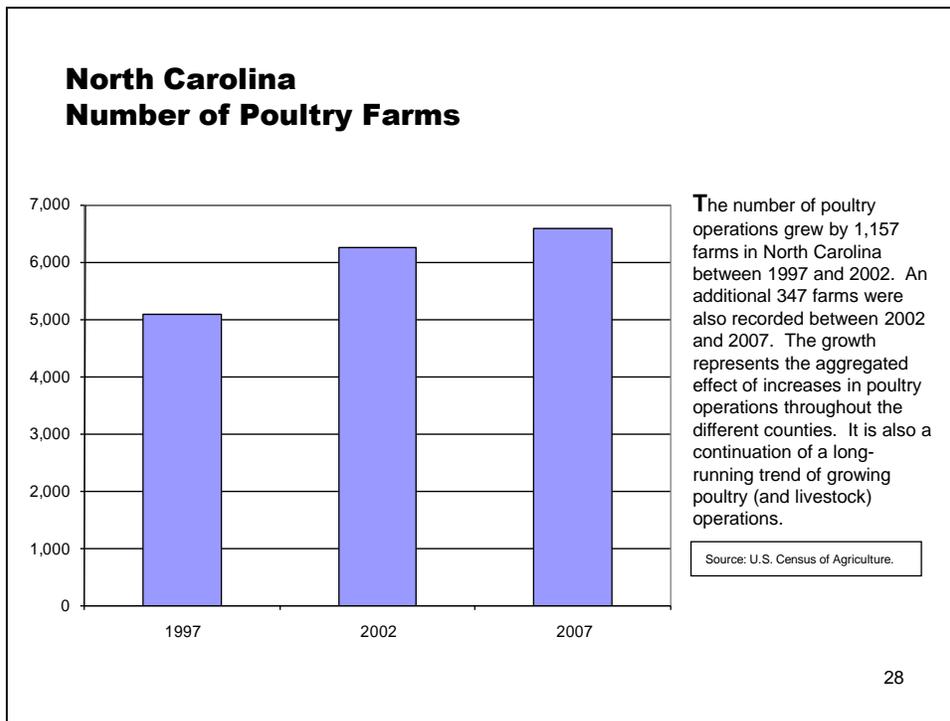
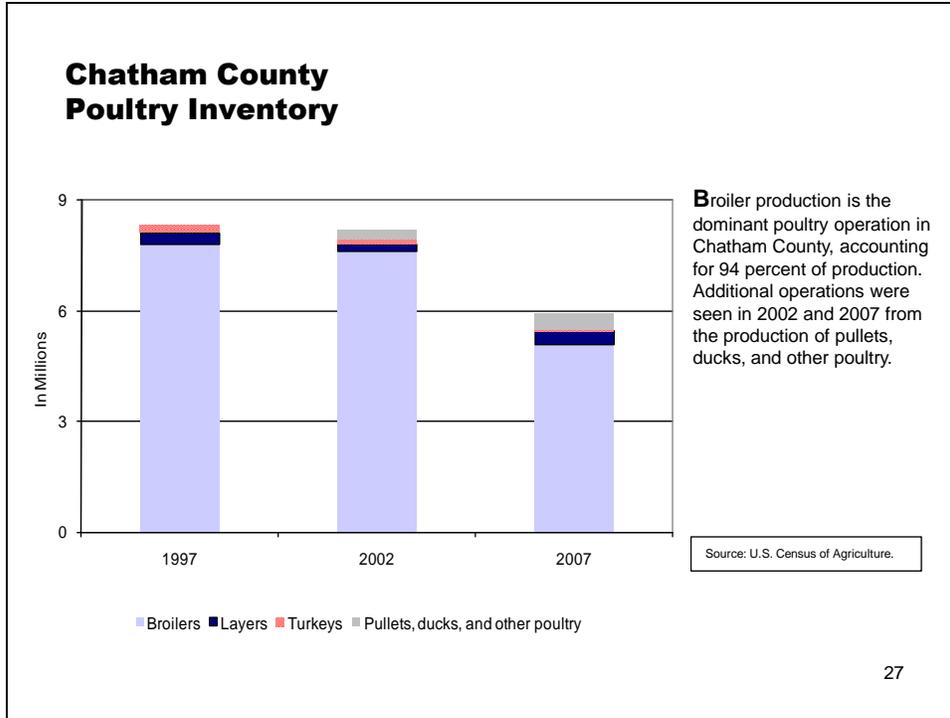
18

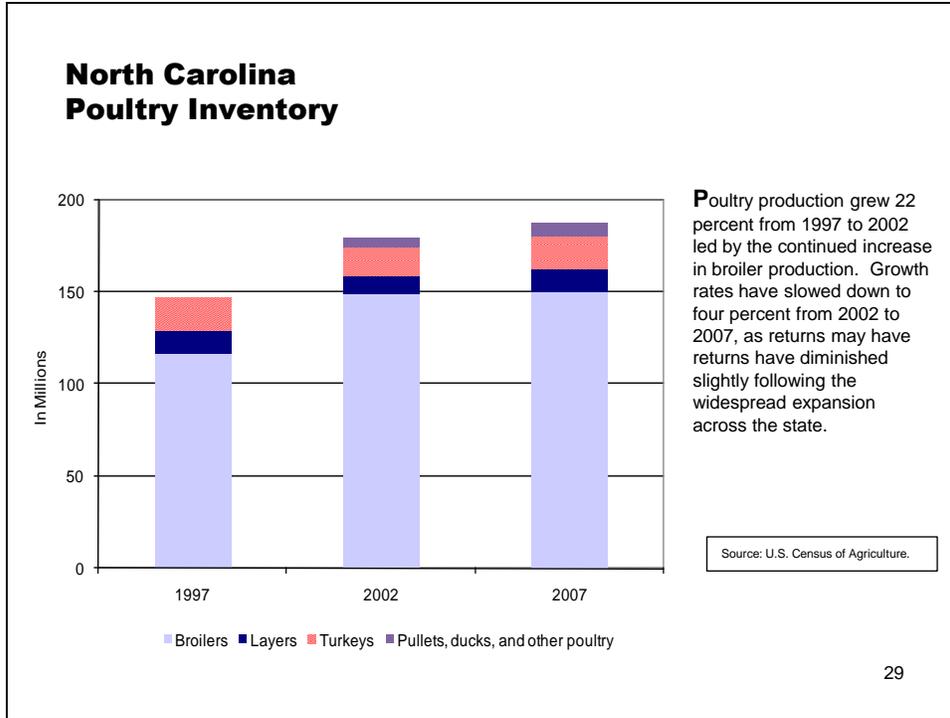








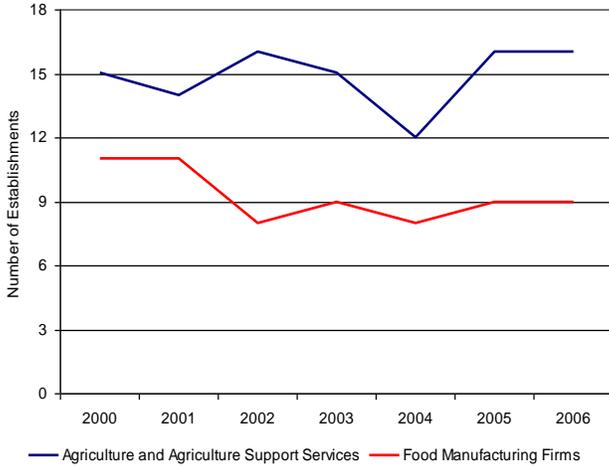




SECTION 3

SECONDARY INDUSTRY IMPACT

**Chatham County
Agriculture Support and Food Services Firms**

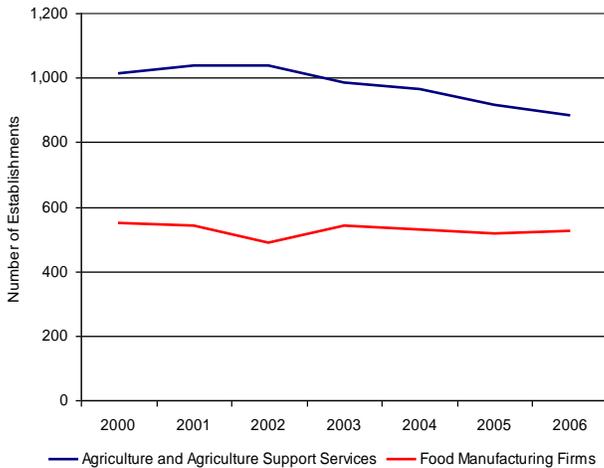


The establishments related to agriculture and food services have maintained their presence from 2000 to 2006. As trends in production and receipts are expected to continue in some agricultural sectors, the presence of these establishments is expected to continue.

Source: U.S. Census of Agriculture.

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**North Carolina
Agriculture Support and Food Services Firms**



No significant declines could be seen among agricultural support and food manufacturing establishments in the state from 2000 to 2006. Along with rising farm production, this could present some value-added opportunities in farming.

Source: U.S. Census of Agriculture.

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APPENDIX B

Conservation Program Structures

Structure Options

Depending on the County's interests and capabilities, as well as those of other public and private partners in the region, there are several different structures that a Chatham County PDR program could assume. The benefits and drawbacks of three potential structures are described below.

STRUCTURE 1: County staff manages program and completes PDR projects

Benefits

- Provides County greater control of projects
- Reduces administrative costs for other partners

Drawbacks

- Increases County staff costs and potential legal liability
- Limits use of other public and private sector resources
- Requires significant staff expertise in land transactions

STRUCTURE 2: County hires contractor to manage program and projects (e.g., New York City Catskill Watershed Program)

Benefits

- Provides County greater control of projects
- Utilizes private sector expertise in land transactions

Drawbacks

- Increases cost to Chatham County and potential legal liability
- Limits use of other public sector resources

STRUCTURE 3: County staff oversees grants to towns or land trusts

Benefits

- Reduces County cost, staff requirements, and potential legal liability
- Leverages significant public and private sector resources

Drawbacks

- Affords County less control of projects

It is recommended that Chatham County pursue the third program structure and establish a matching grants program. This program would provide up to 50 percent of the funds required to purchase conservation easements on priority farmland. This approach is appropriate for Chatham County as it would compliment other public and private farmland protection efforts currently underway and would reduce the County's overall program costs.

Governance

Several entities could have official oversight over a Chatham County PDR program, including:

- Chatham County Agriculture Advisory Board
- Chatham County Environmental Review Board
- Chatham County Commissioner Committee
- a newly created PDR Program Committee.

It is recommended that Chatham County pursue the fourth option by creating a new Chatham County PDR Program Committee. This approach is beneficial as it: 1) dedicates a specific body to overseeing the county PDR program, 2) is best suited to integrating Chatham County's interest in protecting farmland and open space, 3) can integrate the multiple groups interested in protecting farmland and open space in Chatham County. This newly formed committee should have representatives from:

- Chatham County Environmental Review Board
- Conservation organization(s)
- Local farmers
- Local Forest Products Operators
- Municipal Government
- Chatham County Commissioners
- Chatham County Agriculture Advisory Board
- Chatham County Soil and Water District
- Chatham County Cooperative Extension
- Chatham County Planning Division

This new committee should have formal oversight responsibilities for the Chatham County PDR program. Specifically, the committee should:

1. define program objectives, including conservation targets for overall farmland protection goals
2. develop formal ranking criteria for evaluating potential projects
3. create an application form for all potential open space and farmland projects
4. establish an application process
5. coordinate public outreach efforts about the Chatham County PDR program
6. review pending applications and select program recipients
7. identify transaction tasks that must be completed prior to distribution of Chatham County funds
8. oversee the completion of accepted projects to insure program requirements are fulfilled
9. evaluate the operations of the Chatham County PDR program and make recommendations to the Chatham County Commissioners about ways to improve the program.

Operations

It is recommended that the Chatham County Department of Planning provide staff support for the previously described Chatham County PDR Program Committee.

However, this staff support will differ depending upon the structure selected for the program (see *Structure Options* for more detail).

Agricultural Conservation Easements

Agricultural conservation easements are designed to keep land available for farming and to support continued farm viability and productivity. In general, agricultural conservation easements limit subdivision of the property, non-farm development, and other uses that are inconsistent with commercial agriculture. Most of these agreements permit commercial development related to the farm operation and the construction of farm buildings. However, they do not restrict farming practices or require public access to the property.

One issue that Chatham County should pay close attention to is the affordability of farmland after it has been protected by an agricultural conservation easement. Some parts of the country – most notably in Massachusetts – have seen the price of protected farmland grow beyond the capability of farmers to purchase. These rising values are caused by competition from non-farmers that seek small farm estates who have the ability to pay significant sums of money for these properties.

As a result, the State of Massachusetts has required that all agricultural conservation easements (known as agricultural preservation restrictions) purchased by the State have a clause that gives the state a transferable right to repurchase the property at its agricultural value. Thus, when a protected farm property comes up for sale, the State has the right either to purchase the property at its agricultural value and re-sell it or transfer this purchase right to another farmer interested in buying the property. Under the state law, the land must remain in agricultural use.

This clause has been somewhat controversial in Massachusetts as it can be seen as having the effect of reducing the resale value of a protected farm property. However, Massachusetts' officials have responded that any diminution in value should be accounted for by an appraisal at the time of purchase so there should be no loss to the original landowner.

Chatham County should well heed the issue of farm affordability. Due to its proximity to Raleigh, it is likely that there will be strong competition between farmers and non-farmers for purchases of protected farmland. This competition could lead to the same problems noted in Massachusetts. Chatham County is strongly advised to consider requiring the inclusion of an option to repurchase at agricultural value clause in any conservation easements it helps purchase on farmland.

Assuming that the recommended program structure is accepted (a matching grants program), Chatham County Planning Division Staff should undertake the following limited operations:

1. assist the PDR Program Committee in the previously described functions

Chatham County Agricultural Land Use Plan

2. create educational materials for local officials and landowners about the Chatham County PDR program
3. collaborate in conducting educational workshops for local officials and landowners about PDR programs and conservation easements
4. assist in writing grants to leverage State, federal, or private funding
5. evaluate proposed agricultural conservation easements to insure consistency with principles outlined in the Chatham County Agricultural and Farmland Preservation Plan
6. work with partner organizations, such as TLC, in the completion of accepted projects
7. review monitoring and stewardship efforts of grantees.

Application Process

Chatham County should establish an application process to solicit applications from interested towns and land trusts. In the program's first year, it may be desirable to have a Request for Proposals (RFP) to broadly announce the new program and its availability to towns and land trusts on the behalf of landowners.

However, in future years, Chatham County should consider establishing minimum acceptance criteria and accepting applications year-round. If an application met the determined standard, it would be placed on a program waiting list. When funds become available, they would be allocated in the application order. Applications should be screened with the following evaluation criteria.

DRAFT Eligibility Criteria

To be eligible to participate in a County support Purchase of Development Rights program, the applicant property(s) must meet the following basic requirements:

- AGRICULTURAL DISTRICT:** Property must be enrolled in a Voluntary Agricultural District or Enhanced Voluntary Agricultural District.
- DEVELOPABILITY:** Applicant property must be developable based on zoning, soils, and other physical characteristics of the property (wetlands, steep slopes, etc.).
- ENCUMBERANCE:** Applicant property may not be wholly encumbered by another restrictive easement or similar encumbrance.
- SIZE:** Applicant property offered as a single easement, or in combination with others, must comprise at least 100 acres. *Note: Individual applicants with fewer than 100 acres must demonstrate that the acres are contiguous to permanently preserved parcels and will serve a valuable in-fill purpose.*
- SOILS:** Applicant property must contain at least 50 percent Class I, II, or III soils or soils classified as "Unique" by the Natural Resource Conservation Service.

Chatham County Agricultural Land Use Plan

- STEWARDSHIP: Land must have a Soil Conservation and Water Quality Plan, Forest Management Plan, Nutrient Management Plan, Concentrated Animal Feeding Operation (CAFO) Plan, or similar plan.
- TAX STANDING: Applicant must be in good standing with local, state, federal tax authorities.

DRAFT Ranking Formula

Once an applicant has passed the initial screening outlined above, the applicant will be ranked against concurrent applications using the following formula. (Maximum score is 160)

Farm Characteristics (Maximum: 60 Points)

1. Soil Quality (Maximum: 30 points) _____ Points
 - Applicant property has 60% or greater Class I and II soils (30 points)
 - Applicant property has 40% to 59% Class I and II soils (20 points)
2. Size of Application (Maximum: 30 points) _____ Points
 - Application represents more than 200 acres (20 points)
 - Application represents 100 to 199 acres (10 points)
 - Application represents less than 100 acres, but is contiguous to permanently preserved parcels of more than 100 acres (5 points)
 - Application represents contiguous acreage (10 points)

Location Factors (Maximum: 75 points)

3. Adjacency to Agricultural Land (Maximum: 20 points) _____ Points
 - Applicant property is adjacent to permanently protected land (20 points)
 - Applicant property is within ½ mile of permanently protected land (10 points)
 - Applicant property is adjacent to actively farmed land (10 points)
4. Adjacency to water and sewer service, highway access points, or principal/major arterial roadway (Maximum: 20 points) _____ Points
 - Adjacent to water or sewer lines (10 points)
 - Adjacent to highway access points or principal/major arterial roadway (10 Points)
 - Proximate to (within ½ mile) water or sewer lines (5 Points)
 - Proximate to (within ½ mile) highway access points or principal/major arterial roadway (5 Points)
5. Adjacency to developed areas (Maximum: 10 points) _____ Points
 - Adjacent to municipalities and designated development areas (10 points)
 - Adjacent to Extraterritorial Jurisdictions (5 points)
6. Road Frontage (Maximum: 10 points) _____ Points
 - Total feet of road frontage (up to 5,000 feet) _____/500

Chatham County Agricultural Land Use Plan

7. Development Pressure (Maximum: 5 points) _____Points
Town growth rate (5-yr simple average of new housing units) exceeds
County growth rate (5 points)

8. Adjacency to critical environmental areas or unique natural resources
(Maximum: 10 points) _____Points
Adjacent to or within a critical or unique environmental resource (e.g. Rocky
River watershed, Jordan Lake watershed, etc.) (10 Points)

Discretionary Points (Maximum: 25 points) _____Points

At its own discretion, the County may award up to 25 points to an applicant's ranking score based on qualitative considerations or specific, localized conditions at the time of the application. The rationale for awarding such points should be clearly delineated and may include factors such as:

- value of the easement purchase (cost of easement relative to appraised value)
- consistency of application with County, town, and municipal plans
- imminent sale or intergenerational transfer
- operational continuity
- exceptional scenic value
- economic productivity
- cultural or historic significance
- important agricultural infrastructure.

APPENDIX C

Installment Purchase Agreements

Introduction

The use of installment purchase agreements to save farmland is an innovative funding mechanism that has generated a great deal of interest as PACE programs gear up around the country. Its two-fold purpose is to help programs successfully compete with developers by providing unique financial and tax advantages to landowners and to enable jurisdictions to leverage present and future revenues to protect land while it is still available. First applied to the purchase of development rights in Howard County, Maryland in 1989, installment purchase agreements are now being used in a number of other jurisdictions as well to protect farmland.

What is an installment purchase agreement?

An installment purchase agreement (IPA) to save farmland is an alternative to a lump sum payment for the purchase of an agricultural conservation easement (PACE). Jurisdictions with PACE programs may use this landowner payment method if it suits their goals and conditions are right. An IPA is used by a governmental entity to buy agricultural conservation easements and pay for them over time, with dedicated revenues and maturing zero coupon bonds purchased at closing.

What are its components?

An *agricultural conservation easement* is a binding legal instrument, recorded in the land records, that restricts land to its agricultural and natural resource uses. The landowner continues to own the land and may sell it for its restricted value. The easement is permanent and binds all future owners as well.

An *installment purchase agreement* is the vehicle of payment by the jurisdiction to the landowner. Instead of cash at settlement, the landowner is given an installment purchase agreement, which is a legal, valid, and binding promise to pay in 20 or 30 years (typical time periods). While the principal will not be paid until the end of that time period, tax-free interest on the face value of the IPA will be paid to the landowner (or whomever holds the IPA) twice a year for the term of the agreement. While IPAs are used to buy permanent easements that bind all future owners of the land, the IPA itself is separate from the land and the easement and can be transferred to someone other than the original grantor of the easement.

A *dedicated revenue source* is a steady income stream to the jurisdiction during the term of its IPA commitments that is used to make the interest payments to the holders of the IPAs.

A *zero-coupon bond* is the means of financing the principal “balloon” payment at the end of the term of the IPA. A jurisdiction buys these U.S. Treasury bonds at a deep discount from their face value because they pay no periodic interest payments. Instead, the interest from the zero-coupon bond builds up over time (accreted) and is paid in a lump sum at maturity when the bond is redeemed at its face value. After buying the “zero,” the

government entity simply holds it until maturity in order to make the final principal payment to the holder of the IPA.

How does it work?

A landowner voluntarily applies to sell an agricultural conservation easement to a government farmland preservation program. After going through a process of eligibility determination, public notice, priority ranking, price determination, and official approval action, a date is set for settlement of purchase of the easement. The day before settlement, the jurisdiction purchases a zero-coupon bond with a face value equal to the purchase price of the easement. Because these bonds are deeply discounted, the jurisdiction only spends a small percentage (approximately 27 percent to 18 percent for a 20- to 30-year obligation) of the purchase price of the easement at the time of sale. On that same day, the interest of the IPA is locked into an amount at least equal to the yield on the zeros purchased. A jurisdiction may choose to guarantee a minimum interest rate on the IPAs for predictability during the easement acquisition process. If this is the case, on the day of settlement, the interest rate to the landowner from the IPA is the higher of the jurisdiction's minimum or the zero's yield. This interest remains the same throughout the term of the IPA.

At settlement, the landowner grants a permanent agricultural conservation easement to the jurisdiction that is recorded in the land records. An IPA, which has the full faith and obligation of the jurisdiction behind it, is given to the landowner to hold until the end of its term (typically 20 or 30 years). The jurisdiction makes twice yearly interest payments to the holder of the IPA over this term. These interest payments come from whatever identified revenue source the jurisdiction has established.

Why use it?

The use of installment purchase agreements has advantages for both the landowners and the jurisdiction purchasing conservation easements.

The **landowner**, who has sold the easement and accepted an installment purchase agreement as compensation, receives semi-annual interest payments on the face value of the IPA. This stream of **interest income** over the term of the agreement (typically 20 or 30 years) is **tax exempt** from federal, State, and local income taxes. By entering into an IPA for the sale of a conservation easement, landowners may **defer capital gains** until they actually receive the principal amount at the end of the term.

If the landowner needs to realize the purchase price of the easement during the term of the agreement, the IPA can be securitized, that is, sold on the bond market. This particular course of action does trigger capital gains, however. The ability to sell the IPA offers **flexibility for better estate planning**. If they choose, the heirs can sell the IPA, rather than having to sell the land to pay estate taxes.

As with lump sum payments for easements, if landowners agree to a price for the easement that is less than its appraised value, they may be able to realize a **charitable tax deduction** on their federal income taxes for the difference.

All of these financial and tax advantages are in addition to the traditional advantages to selling an easement, rather than selling out to development – namely, the ability to keep one’s home, land and livelihood. As one Howard County farmer said when weighing his choices, “It’s not what you get; it’s what you get to keep!”

When a jurisdiction enters into an IPA with a landowner, it purchases zero-coupon bonds for the face value of the easement. The “zeros” cost the jurisdiction approximately 10 percent of their face value. The jurisdiction holds this bond while it accrues in value and then uses it to pay the “balloon” principal payment at the end of the term of the IPA. The use of these two components offers several **advantages to jurisdictions**. Payment with an IPA requires **minimal depletion of program funds** while protecting large numbers of acres at a critical point in time. By financing the principal payments with zeros, the jurisdiction **leverages dollars over time** but does not leave future governments with balloon payments.

The landowner’s “bundle of benefits” – financial, tax, flexibility, and intangibles – can make the jurisdiction’s offer competitive with developers and may make some landowners willing to sell easements at less than full easement value. This allows for further leveraging of current dollars by the jurisdiction.

History

The use of installment purchase agreements for farmland protection was pioneered in Howard County, Maryland in 1989. Equidistant between Baltimore, Maryland and Washington, D.C., Howard County experienced intense development pressure in the 1970s and 1980s. The county participated in the state purchase of development rights program for a number of years, beginning in 1980. In 1982, after a public referendum, the county began its own program, funded by a dedicated portion of a 1 percent real estate tax. By 1987, the state and county programs had protected 7,500 acres. The late eighties brought intense development pressure and the purchase of development rights program stalled because land prices had risen dramatically and the lump sum payments were not nearly enough to be a viable option for farmers. The farmland available for protection was rapidly diminishing and the county was challenged to find a way to make the program work or give up on ten years of farmland protection.

The solution came in the form of a reinvigorated program, conceived by financial advisor Daniel P. O’Connell, that combined installment purchase agreements and zero-coupon bond financing with traditional elements of a farmland protection program. Directed by the County Executive, county agencies, financial advisor, and bond counsel worked together to develop the innovative approach. Once up and running in 1989, the county began buying easements at a rate that allowed it to double, in the first three years, the acreage accomplishments of the previous ten years. It became a viable alternative to

development for almost 80 landowners, preserving another 9,000 acres, to date. In the process, it has allowed the county to leverage \$9 million upfront and \$3 million annually to enter into \$55 million worth of IPAs. Ten of the IPAs have been sold by landowners through competitive bids to local brokerage firms in order to liquidate them. In 1990, the new program won the Government Finance Officers Association Award for Excellence in Financial Management.

Since then, Harford County (Maryland), Burlington County (New Jersey), Peninsula Township (Michigan), and Virginia Beach (Virginia) have developed PACE programs using installment purchase agreements and zero-coupon bonds.

Transferability

The basic concept of paying for preservation easements through a long-term installment purchase agreement offering tax-exempt interest income and principal at the end of the term should be applicable in other public jurisdictions. The financing plan is adaptable for use by a jurisdiction that 1) seeks to preserve for public purposes valuable assets owned by individuals, 2) is enabled under State and any applicable local laws to enter into bonding multi-year obligations, and 3) has a predictable cash flow for the term of the obligation.

Issues to Consider

Dedicated revenue stream – Since IPAs have the “full faith and obligation” of the jurisdiction behind it, the interest payments must be made throughout the term of the agreement. The ability to make the interest payments should be secured with a dedicated revenue source to ensure the smooth operation of the financing mechanism. The act of dedicating a revenue source to farmland protection, rather than leaving it to the uncertainties of annual budget allocations, reinforces the notion that farmland protection is a long-term investment, both in the land base for agriculture and in growth management.

Administrative costs – Once the program is set up, most of the operating expenses are those that accompany the running of the easement program itself, rather than the IPA. Somewhat more support from the county’s legal and finance departments may be needed and the county’s bond counsel assists in each settlement. A bank, serving as paying agent, mails semi-annual checks to IPA holders.

Authority – Since IPAs constitute long-term debt, each agreement will require approval of the purchaser’s governing body in the same manner that bonds require approval. Different state and local laws may mandate voter or State regulatory/legislative approval, and may dictate the time and terms of each IPA. Finally, any State or local limitations on negotiating the sale of IPAs with balloon payments at the end will need to be addressed, potentially by using another government agency or authority as a conduit for payments. In general, however, a local government can enter into IPAs if it can negotiate the sale of general obligation bonds.

Chatham County Agricultural Land Use Plan

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PAYMENT COMPARISON			
<i>Farmer Jones – 102 acres</i>			
<i>Lump Sum Method</i>		<i>Installment Purchase Agreement</i>	
102 acres Easement valued at \$3,500/acre	\$357,000	102 acres Easement valued at \$3,500/acre	\$357,000
Direct cash payment	\$357,000	Installment purchase agreement 6.5% tax free interest for 30 years \$357,000 x 6.5% = \$23,205 annually (in semi annual payments)	\$23,205
CUMULATIVE EFFECT			
		Total Tax free interest paid over 30 years	\$696,150
		Principal payment after 30 years (subject to capital gains)	\$357,000
Total benefit to farmer minus 25% in taxes	\$357,000	Total benefit to farmer	\$1,053,150
Depletion of Farmland Protection Fund	\$357,000	Initial county cost to secure easement	\$35,700

APPENDIX D
Term Easement Programs

Program Descriptions

Agriculture Term Easements or Leasing of Development Rights (LDR) are perhaps best described as “*Term Agreements*.” All are phrases used to describe a voluntary mechanism to temporarily suspend the potential development of agricultural real estate for a definitive time frame in exchange for some contractual (monetary or otherwise) consideration.

The length of the term of the agricultural agreement will vary depending on the goal of the program. Unlike most PDR programs that remove the development right for a perpetual period, the agreed upon price for a shorter term should require less monetary consideration (or other types of compensation) as the term is shortened.

For example, the price offered for a PDR typically uses an approach of taking the difference of the current “best use” appraised value minus the agricultural value. This method results in areas with the most development pressure attracting the higher PDR values. This has proven to be effective, but does require significant capital investment and commitment to buy PDRs.

Conversely, term agreements do not necessarily result in the same “lost value” approach. Such would be the case when the term (speculation period) is reduced within a reasonable planning horizon. Factors that affect an acceptable price for a willing seller may change considerably when the term is much shorter and do not necessarily coincide with the loss of the land’s development value.

At the purest level, term agreements are very similar to a landowner leasing a property to a farmer to be used entirely for an agricultural operation. If, during the term of the lease, the land owner wanted to change the use of the property, the lease would have to be renegotiated with all parties agreeing to make the changes.

Examples of Usage

In Southern Maryland, an effort to entice farmers to halt production of tobacco included payments made over a ten-year period to the farmer based on the quantity of voluntary forgone tobacco production. In return for the money, the farmer entered a covenant that included a promise to keep the real estate in farming. This met the region’s goal of stopping the production of tobacco and protecting the agricultural land base without disadvantaging the underlying agricultural infrastructure.

The Massachusetts Farm Viability Program requires farmers that accept grants and technical assistance to place a development term agreement on the farm real estate. Depending on the size of the farm, the owner enters term agreements of either five or ten years. The State anticipates the benefit of the training, improved economics from the farm, and the time afforded for the various land planning and PDR strategies.

Issues Associated with Term Agreements

Term agreements, by themselves, do not easily fit long-term farmland protection goals. Several states have tried to use term agreements of 25 years or more only to find them expensive and cumbersome. Both Vermont and Pennsylvania found the capital expended to attract a long-term easement was not much different than the capital needed for perpetual PDRs.

Term agreements can be attractive when the goal of the program is not solely to preserve the real estate. Term agreements are best used when both the farmer and the municipality share the burden of *enhancing farm viability*. The combination of a relatively short-term period (less than 10 years) and decoupling the monetary consideration with a perceived “lost development” value communicates the goals and can better balance the pricing mechanisms.

Applicability of Term Easements in Chatham County

Chatham County has a very diverse base of agricultural real estate due to the various degrees of development pressure and types of soils. This diversity results in towns having very different land planning and economic policies. Compounding the problem is the rapid rate of the change in the demographics and current weak farm economy.

The municipalities’ need for immediate attention to the development pressure, along with the present economic concerns of land owners, has put some towns in the position of considering various types of development moratoriums and/or rezoning. The rate of change is making it extremely difficult for political policies to be lasting and widely accepted. Raising funds for PDR programs at a pace that properly abates the concerns may not be practical.

Using term agreements allows time for the planning process to catch up, while providing an incentive for farmers to maintain farm real estate, thus meeting both land planning and economic goals. For example, a five-year term agreement that is equivalent to a real estate tax or the price a farmer would pay to lease a property for five years will prohibit the real estate from being sub-divided, while improving the income of the farmer.

The pricing of the agreement does not necessarily need to be solely based on a monetary price per acre. Instead, the agreement may be in exchange for technical or non-specific funding programs. Programs similar to the Massachusetts program that requires recipients of loans, grants etc., to participate in a term agreement are practical. But not all farmers have the same needs. Therefore, a term agreement program could include the real estate easement in exchange for a variety of services such as: training, loan or grant programs, flat out price-per-acre offers, or a combination of the factors. For example, if the farmer enrolls in an education program that further enhances the long-term viability of the farm community, he/she may be eligible for a higher value term agreement than the farmer who doesn’t want to participate in other programs. Or, if loans or grants are offered, there may be no additional monetary consideration for the term agreement, etc.

Other options to consider include the County establishing a minimum price per acre, with the option of the towns enhancing the value based on their own needs. In this example, the price set by the County may be based on the lowest denominator with the expectation that the towns could increase the value for the more developable properties.

Contractual agreements are necessary, but do not need to be cumbersome. They need to incorporate features that prohibit the property from being entered into a development process. Furthermore, they need to provide a “make whole” provision that fairly compensates the County and provides a reasonable disincentive to keep farmers from pulling out of an agreement. Of course, since these are not perpetual agreements, the key to success will be to keep the program simple, yet attractive, to landowners of the developable farms.

APPENDIX E

Development Supported Agriculture

GREENWAY GUIDE **A4** **Protecting the Countryside**

SAVING FARMLAND WITH DEVELOPMENT

Create farm conservation and development plans that allow future home sites to co-exist with active farmland, conserve the best agricultural soils, and discourage roadside sprawl.

Many farmers rely on the occasional sale of home sites to supplement farm income. The result can be piecemeal or strip residential development that undermines a town's rural qualities. Farm conservation plans offer an alternative strategy that protects equity, farmland, and views. Land owners subdivide home sites as needed over time according to a pre-approved plan based on conservation design principles.

The primary goal is the conservation of productive farmland for the long-range continuation of farm operations. Maintenance of open land is not an issue when conserved farm acreage continues to be part of the working landscape.



When farm conservation and development plans work, agricultural operations and views will still look like this.

Because every farm is different, each farm conservation plan will be unique. The location of acreage that is most appropriate for residential development will depend on the natural features of the landscape and on the density that the farm owner considers most compatible with the long-term operation of the farm. Plans may also identify potential acreage for a farm-related business or cottage industry.

A simple example:

On a 100-acre farm in a five-acre zoning district, the total potential density, excluding farmstead, roads, steep slopes, wetlands and water, may be 15 five-acre lots.

Locate development pocket on 25 acres of marginal land, hiding the houses and roads within woodlands and along the far edges of open fields.

Approve incremental subdivision plan for up to 12 lots within the 25-acre development pocket, reducing minimum lot size.

Negotiate a **density easement** allowing 3 additional lots on the remaining 75 acres. Full density (15 lots) may be reached over time at the discretion of the farm owner. Even at full density, more than 50 percent of the farm is protected.



Conservation and Gradual Development on a Working Farm

Limited Development Option

Reduce density by subdividing large tracts of land on which development is restricted by conservation easements.

The Dutchess Land Conservancy created a limited development plan for a 340-acre farm in the Town of Amenia, allowing only one home site on each of three subdivided parcels, and protecting the remainder of the subdivided acreage with easements. The farm owners were able to capitalize on the residential value of home sites on scenic but marginal farmland and continue to cultivate a significant portion of subdivided cropland through lease-back arrangements with their new neighbors.



- Shared access via existing farm road
- Leased farmland under easement
- Homes located off farmland

Flexible Farm Incentives

1. Use conservation design guidelines to locate residential development, reserving the best farmland. (See "Fitting into the Landscape," A-1.)
2. Determine density option that best meets farm owner's goals, securing easement appropriate for concentrated density.
3. Locate home sites within identified development pocket; waive road frontage requirements and road standards to allow access via shared driveways or reduced-width local roads.
4. Review and approve conservation plan, waiving time limits and fees for incremental subdivision.
5. Incorporate approved plan as an addition to a municipal Farm Conservation Map.
6. Assure fast-track approval for future subdivisions based on pre-approved plan, maintaining agricultural assessment until subdivision occurs.



Dutchess Land Conservancy

Help is available from planning staff and land conservancies for farm owners who wish to prepare farm conservation plans and for municipalities that encourage farm planning.

Who Benefits?

Farm conservation planning offers **the farm owner...**

- capital for reinvestment or expansion
- a broader range of density options
- more flexibility in locating home sites
- control over the pace of subdivision
- incremental extension of shared access roads
- reduced costs when planned lots are actually subdivided

Farm conservation planning helps **the community...**

- prevent repeated, uncoordinated subdivision
- move home sites away from scenic roads
- keep farmland on its tax rolls
- protect important farm soils
- support the agricultural economy
- retain the defining character of our countryside

Sources:

Regional Plan Association, *Tools and Strategies: Protecting the Landscape and Shaping Growth*, 1990

Dutchess County Planning & Development Poughkeepsie, NY www.dutchessny.gov

APPENDIX F
Sample Right-to-Farm Law



Chapter 173, RIGHT TO FARM

[History: Adopted 12/2/94 by Ord. No. 127. Amendments noted where applicable.]

§ 173-1. Findings and policy	§ 173-5. Right to farm notice and real estate transfer disclosure
§ 173-2. Definitions	§ APPENDIX A
§ 173-3. Limitation of actions	§ APPENDIX B
§ 173-4. Resolution of disputes and procedure for complaints; investigation and declaration	
§ 173-1. Findings and policy.	

A. It is the declared policy of the county to preserve, protect, and encourage the development and improvement of its agricultural land for the production of food and other agricultural products. It is the purpose of this chapter to reduce the loss to the County of its agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance, trespass, or other interference with the reasonable use and enjoyment of land, including, but not limited to, smoke, odors, flies, dust, noise, chemicals, or vibration, provided that nothing in this chapter shall in any way restrict or impede the authority of the state and of the County to protect the public health, safety, and welfare. *[Amended 11/21/02 by Ord. No. 02-18]*

B. It is in the public interest to promote a more clear understanding between agricultural operations and nonagricultural residential neighbors concerning the normal inconveniences of agricultural operations which follow generally accepted agricultural practices and do not endanger public health or safety.

C. This chapter is not intended to and shall not be construed as in any way modifying or abridging local, state, or federal laws relating to health, safety, zoning, licensing requirements, environmental standards (including those standards which relate to air and water quality), and the like.

D. An additional purpose of this chapter is to promote a good-neighbor policy by advising purchasers and users of property adjacent to or near agricultural operations of the inherent potential problems associated with such purchase or use. These potential problems include, but are not limited to, noises, odors, dust, flies, chemicals, smoke, vibration, and hours of operation that may accompany agricultural operations. It is intended that, through mandatory disclosures, purchasers and users will better understand the impact of living near agricultural operations and be prepared to accept attendant conditions as the natural result of living in or near rural areas. However, this chapter shall be effective regardless of whether disclosure was made in accordance with § [173-5](#) herein.

Chatham County Agricultural Land Use Plan

§ 173-2. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

AGRICULTURAL LAND -- All real property within the boundaries of Carroll County that is lying in the Agriculture and Conservation Districts, or that is lying in other zoning districts if carried on the tax rolls of the State Department of Assessments and Taxation as agricultural or that is lying in other zoning districts if it has been used as an agricultural operation continuously for one year. *[Amended 11/21/02 by Ord. No. 02-18]*

AGRICULTURAL OPERATION -- Includes, but is not limited to, all matters set forth in the definition of “operation” in the Courts and Judicial Proceedings Article of the Annotated Code § 5-308(a), as amended from time to time; the production of all matters encompassed within the definition of “farm product” in the Agriculture Article of the Annotated Code § 10-601(c), as amended from time to time; the cultivation and tillage of the soil; composting; production, harvesting, and processing of agricultural crops; raising poultry; production of eggs; production of milk and dairy products; production of livestock, including pasturage; production of bees and their products; production of fish; production of fruit, vegetables, and other horticultural crops; production of aquatic plants; aquaculture; production of timber and any commercial agricultural procedure performed as incident to or in conjunction with such operations, including preparation for market, delivery to storage or to market or to carriers for transportation to market; and usage of land in furtherance of educational and social goals, such as 4-H, Future Farmers of America, and the like.

GENERALLY ACCEPTED AGRICULTURAL PRACTICES -- Those methods used in connection with agricultural operations which do not violate applicable federal, state, or local laws or public health, safety, and welfare and which are generally accepted agricultural practices in the agriculture industry. “Generally accepted agricultural practices” includes practices which are recognized as best management practices and those methods which are authorized by various governmental agencies, bureaus, and departments, such as the Carroll County Cooperative Extension Service of the University of Maryland, the Carroll County Natural Resource Conservation Service, and the like. If no generally accepted agricultural practice exists or there is no method authorized by those agencies mentioned herein which governs a practice, the practice is presumed to be a generally accepted agricultural practice.

§ 173-3. Limitation of actions.

A. A private action may not be sustained with respect to an agricultural operation conducted on agricultural land on the grounds that the agricultural operation interferes or has interfered with the use or enjoyment of property, whether public or private, if the agricultural operation was, at the time the interference is alleged to arise, conducted substantially in accordance with generally accepted agricultural practices.

B. Notwithstanding any provision of this section, no action alleging that an agricultural operation has interfered with the reasonable use or enjoyment of real property or personal

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well-being shall be maintained if the plaintiff has not sought and obtained a final judgment of the agricultural reconciliation committee, as defined in § [173-4](#) herein.

§ 173-4. Resolution of disputes and procedure for complaints; investigation and declaration.

A. Nuisances which affect public health.

(1) Complaints. A person may complain to the Carroll County Health Department to declare that a nuisance which affects public health exists.

(2) Investigations. The Health Officer may investigate all complaints of nuisance received against an agricultural operation. When a previous complaint involving the same condition resulted in a determination by the Health Officer that a nuisance condition did not exist, the Health Officer may investigate the complaint, but the Health Officer may also determine not to investigate such a complaint. The Carroll County Health Department may initiate any investigation without citizen complaint.

(3) Declaration of nuisance. If the Health Officer determines that a nuisance exists, the Health Department may declare the existence of a nuisance. In determining whether a nuisance condition exists in connection with an agricultural operation, the Health Officer shall apply the criteria provided in this chapter. Further, the Health Officer may consider the professional opinion of the Carroll County Cooperative Extension Service of the University of Maryland, or other qualified experts in the relevant field in determining whether the agricultural operation being investigated is conducted in accordance with generally accepted agricultural management practices.

B. Resolution of disputes regarding agricultural operations.

(1) Should any matter arise regarding an interference with the use or enjoyment of property from agricultural operations conducted on agricultural land, the parties to that matter shall submit the matter to the Agricultural Reconciliation Committee by first contacting the Agricultural Land Preservation Program Administrator, Carroll County Department of Planning, 225 North Center Street, Westminster, Maryland, 21157.
[Amended 11/21/02 by Ord. No. 02-18]

(2) There is hereby established the Carroll County Agricultural Reconciliation Committee, which shall arbitrate and mediate disputes involving agricultural operations conducted on agricultural lands and issue opinions on whether such agricultural operations are conducted in a manner consistent with generally accepted agricultural management practices.

(3) The Agricultural Reconciliation Committee shall be composed of five persons. The Carroll County Board of County Commissioners shall appoint the members of the Agricultural Reconciliation Committee, one member shall be from a municipality and chosen from a list of recommendations submitted by the Carroll County Chapter of the Maryland Municipal League, one member shall be a member of a homeowners'

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association and a resident of Carroll County, one member shall be a resident of Carroll County who is not engaged or otherwise has a pecuniary interest in the commercial practice of agriculture, and two members who shall be members of the Agriculture Commission and selected as set forth herein. The Agriculture Commission shall select from among its members on a case-by-case basis, two people with competence in the subject matter of the dispute at issue, whose names shall be submitted to the Board of County Commissioners and upon the Board's approval shall serve as members of the Agricultural Reconciliation Committee.

(4) The Agricultural Reconciliation Committee will conduct its proceedings in an informal manner, and the rules of evidence shall not apply. The Agricultural Reconciliation Committee has the power, but is not required hereunder, to hold hearings, to compel testimony under oath and the production of documents. In each case before it the Agricultural Reconciliation Committee shall issue orders settling or otherwise resolving controversies arising out of agricultural operations, including but not limited to the invasion of property and personal rights by agricultural operations conducted on agricultural land. Proceedings shall be conducted in accordance with the duly adopted Rules of Procedure for the Carroll County Agricultural Reconciliation Committee which may be amended from time to time. The Reconciliation Committee will render a written decision within 30 days of the final proceedings and may extend the decision deadline for one additional 30-day period. *[Amended 11/21/02 by Ord. No. 02-18]*

(5) Orders of the Agricultural Reconciliation Committee shall be binding on the parties as a matter of law, but their enforcement shall be suspended by operation of law if, within 30 days of the date of the Committee's judgment, a party appeals such order to the Circuit Court for Carroll County. Appeal from orders of the Committee shall be by a trial de novo.

(6) If the Agricultural Reconciliation Committee or a Court finds that the conduct of a party in bringing or maintaining an action in connection with an agricultural operation conducted on agricultural land was in bad faith or without substantial justification, the Reconciliation Committee or Court may require that party to pay to the owner of the agricultural operation (or any other party opponent) the costs of the proceeding and the reasonable expenses, including reasonable attorney's fees, incurred by that party in defending against the action.

§ 173-5. Right-to-farm notice and real estate transfer disclosure.

A. Upon any transfer of real property by any means, the transferor shall provide the purchaser or lessee a statement specifically advising the purchaser or lessee of the existence of this chapter which shall be in substantially the form set forth in Appendix A at the end of this chapter.

B. Any person who violates any provision of this section is guilty of an infraction punishable by a civil penalty not exceeding \$100.00. Failure to comply with any provision of this right-to-farm notice and real estate transfer disclosure section shall not prevent the recording of any document, or the title to real property or any mortgage or

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deed of trust made in good faith or for value, and it shall not affect the application of this chapter. *[Amended 11/21/02 by Ord. No. 02-18]*

APPENDIX A
REAL ESTATE TRANSFER DISCLOSURE STATEMENT

THIS DISCLOSURE STATEMENT CONCERNS THE REAL PROPERTY LOCATED IN THE COUNTY OF CARROLL, STATE OF MARYLAND, DESCRIBED AS _____. THIS STATEMENT IS A DISCLOSURE OF THE EXISTENCE OF THE CARROLL COUNTY RIGHT TO FARM ORDINANCE IN COMPLIANCE WITH CHAPTER 173 OF THE CODE OF PUBLIC LOCAL LAWS AND ORDINANCES OF CARROLL COUNTY (RIGHT TO FARM).

SELLER'S INFORMATION

THE FOLLOWING ARE REPRESENTATIONS MADE BY THE SELLER AND ARE NOT THE REPRESENTATIONS OF THE AGENT(S), IF ANY. THIS INFORMATION IS A DISCLOSURE AND IS NOT INTENDED TO BE PART OF ANY CONTRACT BETWEEN THE BUYER AND SELLER.

AGRICULTURAL OPERATIONS (as defined in the Carroll County Right to Farm Chapter) LAWFULLY EXIST IN ALL ZONING DISTRICTS WITHIN THE COUNTY. You may be subject to inconveniences or discomforts arising from such operations, including but not limited to noise, odors, fumes, dust, flies, the operation of machinery of any kind during any 24-hour period (including aircraft), vibration, the storage and disposal of manure, and the application by spraying or otherwise of chemical fertilizers, soil amendments, and pesticides. Carroll County has determined that inconveniences or discomforts associated with such agricultural operations shall not be considered to be an interference with reasonable use and enjoyment of land, if such operations are conducted in accordance with generally accepted agricultural management practices. Carroll County has established a reconciliation committee to assist in the resolution of disputes which might arise between persons in this county regarding whether agricultural operations conducted on agricultural lands are causing an interference with the reasonable use and enjoyment of land or personal well being and whether those operations are being conducted in accordance with generally accepted agricultural practices. If you have any questions concerning this policy or the reconciliation committee, please contact the Carroll County Planning Department for additional information.

Seller _____ Date: _____

Seller _____ Date: _____

I/WE ACKNOWLEDGE RECEIPT OF A COPY OF THIS STATEMENT:

Buyer _____ Date: _____

Buyer _____ Date: _____

IF YOU DESIRE LEGAL ADVICE, CONSULT YOUR ATTORNEY.

APPENDIX B
CARROLL COUNTY RIGHT TO FARM NOTICE

Carroll County recognizes and supports the right to farm agricultural lands in a manner consistent with generally accepted agricultural management practices. Residents of property on or near agricultural land should be prepared to accept the inconveniences or discomforts associated with agricultural operations, including but not limited to noise, odors, flies, fumes, dust, the operation of machinery of any kind during any 24-hour period (including aircraft), vibration, the storage and disposal of manure, and the application by spraying or otherwise of chemical fertilizers, soil amendments, herbicides and pesticides. Carroll County has determined that inconveniences or discomforts associated with such agricultural operations shall not be considered to be an interference with reasonable use and enjoyment of land, if such operations are conducted in accordance with generally accepted agricultural practices. Carroll County has established an agricultural reconciliation committee to assist in the resolution of disputes which might arise between persons in this county regarding whether agricultural operations conducted on agricultural lands are causing an interference with the reasonable use and enjoyment of land or personal well being and whether those operations are being conducted in accordance with generally accepted agricultural practices. If you have any questions concerning this policy or the reconciliation committee, please contact the Planning Department.

APPENDIX G
Catskill Watershed Program

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Nine million residents of New York City rely on a series of reservoirs in upstate New York as the source of their drinking water. New York City owns less than 10 percent of this watershed, which covers approximately 2,000 square miles. The Catskill/Delaware watershed has a year-round population of around 77,000, as well as a significant number of summer residents. Dairy farms comprise a majority of the 350 farms there.

For many decades, relations between New York City and the watershed areas were marked by controversy and conflict, focusing on the city's past acquisitions of reservoir lands and the use of regulatory and management authority in the Watershed. In 1989, the Environmental Protection Agency (EPA) required filtration of all surface water supplies (rivers and lakes) to protect against contamination of the drinking water. In 1993, the EPA issued New York City a waiver of the filtration requirement on the condition that the city would take numerous steps to maintain and protect the watershed's water quality. The EPA then urged New York State to convene a group representing New York City, the State, and watershed communities to negotiate an effective and equitable Watershed program. It was hoped that such a program would enable the City to meet the waiver conditions, protect the City's water supply and avoid the multi-billion dollar cost of a filtration plant for Catskill/Delaware water supplies, and address the concerns and goals of residents in the upstate counties.

The negotiations produced a landmark agreement that successfully resolved long-standing controversies and set forth responsibilities and benefits for all the major parties. Out of this process, the Watershed Agricultural Council (WAC) was created in 1993.

WAC programs apply only to the Watershed area; however, a far larger Catskill/Delaware region is affected by land use and agricultural practices within the Watershed. This region includes the counties of Ulster, Sullivan, Delaware, and Greene, and stretches from the Hudson River to the Delaware River, containing all of the Catskill Park and most of the Catskill Mountain Range. This four-county region contains over 365,000 people and has more than \$170 million in annual farm income, according to the Bureau of Economic Analysis.

The region is demographically disparate due, in large part, to the isolation of the mountainous geography. Much of the region, especially in Delaware, northern Ulster, western Greene, and northern Sullivan counties, is composed of rural poor, in the northern terminus of Appalachia. In the lower lying areas to the south and east, closer to the Hudson River and New York City, the economy is more diverse and affluent. There is also a substantial amount of wealthy weekend residents, predominantly from New York City, especially in the "High Catskills," and in northern Ulster and southern Greene counties, around the village of Woodstock. These residents are often not counted in demographic indexes, although in some towns, they may represent a significant percentage of the summertime population and economic activity. As a whole, the region has a per capita income of \$25,360 and a median household income of \$49,709. Twenty-three percent of the households make under \$25,000 per year, and thirty percent of adults twenty-five and older have a college degree, associates or higher. Of significant interest for the region is the fact that only 54 percent of housing units are owner occupied and 25

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percent are considered vacant (which includes temporarily occupied), further indicating the influence of summer tourists on the region.

As of the last Census of Agriculture in 2002, there were 2,043 farms and nearly 400,000 acres in farmland in the four-county region. Eighty-seven percent of the farms produce crops, although the majority of these farms grow hay and silage for the 763 dairy and beef farms in the counties. Sixty-seven percent of sales were of livestock, accounting for \$92 million in annual sales.

Table 8: Catskill Region Agricultural Income Profile

Catskill/ Delaware Watershed	1971	1976	1981	1986	1991	1996	2001	2006
Cash receipts from marketings (\$000)	84,435	121,651	184,972	151,310	149,901	142,414	147,578	170,021
Cash receipts: livestock and products	67,487	95,910	144,881	115,796	99,076	92,418	95,229	104,999
Cash receipts: crops	16,948	25,741	40,091	35,514	50,825	49,996	52,349	65,022
Other income	1,891	2,970	4,543	7,161	4,460	5,554	11,883	10,066
Government payments	317	252	522	2,540	1,000	1,687	5,723	3,545
Imputed and miscellaneous income received 1/	1,530	2,689	4,021	4,621	3,460	3,867	6,160	6,521
Total production expenses	73,065	113,064	179,010	135,543	133,339	130,168	138,042	151,632
Feed purchased	24,110	38,842	52,227	33,150	27,186	20,717	20,476	23,413
Livestock purchased	6,805	6,865	10,759	5,812	5,703	6,679	10,802	14,646
Seed purchased	632	1,207	1,771	1,330	1,951	2,135	2,279	2,480
Fertilizer and lime (incl. ag. chemicals 1978-fwd.)	2,530	4,136	7,018	5,723	7,080	5,825	5,414	5,715
Petroleum products purchased	1,769	4,033	8,921	4,456	4,508	4,589	4,407	6,707
Hired farm labor expenses 2/	9,753	13,525	17,415	17,082	20,065	21,542	20,961	20,144
All other production expenses 3/	27,466	44,456	80,899	67,990	66,846	68,681	73,703	78,527
Value of inventory change	-158	-662	2,173	-2,856	-16	1,366	1,030	1,822
Value of inventory change: livestock	-336	-1,341	5,081	-3,264	203	617	156	1,105
Value of inventory change: crops	216	679	-2,908	391	134	-537	1,563	559
Value of inventory change: materials and supplies	0	0	0	0	-398	1,184	-687	63
Total cash receipts and other income	86,326	124,621	189,515	158,471	154,361	147,968	159,461	180,087
less: Total production expenses	73,065	113,064	179,010	135,543	133,339	130,168	138,042	151,632
Realized net income	13,261	11,557	10,505	22,928	21,022	17,800	21,419	28,455
plus: Value of inventory change	-158	-662	2,173	-2,856	-16	1,366	1,030	1,822
Total net income including corporate farms	13,103	10,895	12,678	20,072	21,006	19,166	22,449	30,277
less: Net income of corporate farms	491	552	855	1,202	3,362	6,115	5,586	11,340
plus: Statistical adjustment	0	0	0	0	0	0	0	0
Total net farm proprietors' income	12,612	10,343	11,823	18,870	17,644	13,051	16,863	18,937
plus: Farm wages and perquisites	8,819	12,641	15,284	13,942	16,634	15,715	16,594	15,850
plus: Farm supplements to wages and salaries	1,003	1,850	1,985	1,853	3,419	3,282	3,985	3,149
Total farm labor and proprietors' income	22,434	24,834	29,092	34,665	37,697	32,048	37,442	37,936

1. Consists of the value of home consumption and other farm related income components, such as machine hire and custom work income and income from forest products

2. Consists of hired workers' cash pay and perquisites, employers' contributions for social security and medicare, and payments for contract labor, machine hire, and custom

3. Consists of repair and operation of machinery; depreciation, interest, rent and taxes; and other miscellaneous expenses including agricultural chemicals (1969-77).

The WAC is fully funded by New York City's Department of Environmental Protection (DEP) and consists of a 16-member council representing farm and forestry landowners in the New York City watershed counties of New York State. The DEP oversees the programs and implementation by field and headquarter staff.

In 2007, the DEP's budget for the WAC was \$12.9 million. Additional funding of \$1.2 million was provided by federal and private grants. The WAC's programs are focused on four areas: Clean Water, Land Stewardship, Economic Initiatives, and Education Programs. Of greatest interest for this case study are WAC's land preservation programs,

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in particular the conservation easements, the economic development programs, and the extensive education and research programs.

The WAC's easement program currently covers 16,000 acres on 80 easements. In 2007, the NYC Department of Environmental Protection committed \$20 million to the program. In addition, the WAC is committed to raising \$10 million to fund additional conservation easement programs over the next ten years.

The WAC's programs not only promote land preservation, but support the long-term sustainability of agriculture so that optimal benefit is achieved for both land preservation and economic development objectives. The main programs and initiatives are: (1) forestry market development; (2) farm-to-market projects; (3) farm beautification grants; and the (4) "Buy Pure Catskills" program.