



Situation Analysis Report

Clarke County

2013

Clarke County Extension Staff

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*All data is from the VCE-Unit Profile compiled by Virginia Cooperative Extension unless otherwise noted.

Introduction

In the fall of 2013, the Situation Analysis was updated with the assistance of the Clarke County ELC. Compiled base information from the 2008 Situation Analysis for Clarke County was used as Extension in the Northern Shenandoah Valley serves a five county area in ANR and FCS program areas. Input was also obtained from other community members and stakeholders through key informant interviews and through local Extension volunteer associations.

Unit Profile

Clarke County is located at the northern top of the Shenandoah Valley of Virginia and is bordered by the state of West Virginia to the North, Fauquier and Loudoun Counties and the Blue Ridge Mountains to the east, Frederick County to the west, and Warren County to the south. The county seat is situated in the historic Town of Berryville and serves as the center of commercial, residential, institutional, and industrial activity for Clarke County. Clarke County's location along the U.S. Routes 340, 522, 50, and 17 and the Virginia Route 7 corridor, just 60 miles from the Nation's capital, along with its heritage and natural characteristics, has made it an attractive place to live, work, and visit. With nearly three-fourths of the County west of the Shenandoah River, the county covers 174 square miles (111,360 acres) of land and has a population density of 78 people per square mile (2011 census data).

Clarke County has a rich history with over 962 historic sites, dating from the early 1700's through 1941 in the rural portion of the County. Clarke County was part of a major trade route for Native Americans as they passed through on the way to New York and Georgia. Under British rule, Clarke County was parceled out as grants in payment for services rendered to Lord Fairfax. The Civil War also played prominently in Clarke County's history. Several battles took place in the county, and troops were constantly passing through the area. More than 30% of the historic properties in the county have been placed on the Virginia Landmarks Register and the National Register of Historic Places.

For the past several decades, the County has been challenged with balancing preservation of these unique resources with pressures for growth and development primarily from Northern Virginia. According to the 2010 Census, Clarke County's population increased from 12,652 in the 2000 Census to 14,034 – an increase of 10.9%. This increase is greater than the 4.5% increase from 1990-2000 and can be attributed to the housing “boom” experienced from 2001-2005. Despite this increased growth rate, Clarke still grew at a slower rate than any surrounding jurisdictions (ranging from Warren County's 19% rate to Loudoun County's 84.1% rate), and below the Commonwealth of Virginia's growth rate of 13%. The Clarke County Planning Commission released in its 2013 annual report that 2012, estimates had Clarke County's population at 14,434.

Population density within Clarke County (persons per square mile) increased from 72 in 2000 to 78 persons per square mile in 2010. This level of density remains considerably lower than in all surrounding counties, being half that of the next most dense jurisdiction, Warren County. The 60 miles to Washington, D.C. and the buffer afforded by the Blue Ridge along the County's eastern border have in the past shielded Clarke County somewhat from urban

development pressures. Because of this continued growth in surrounding counties, it can be expected that Clarke County's desirability for residential and economic growth will continue to increase. It thus becomes increasingly important to provide Clarke County's residents with land-use planning that balances diverse community interests. One method of such rural land preservation is sliding-scale zoning. This is accomplished by limiting the number of parcels that may be created, limiting the size of new parcels and keeping residual parcels as large as possible. Over 21,000 acres of the County has been placed in permanent open space easement- nearly 20% of the County.

Clarke County is experiencing an aging population with a 3% growth in age brackets over 45 years of age. Population growth remains the same for age brackets 20-34 years of age while figures of 0-14 year olds only increased by 0.5% from 2007 to 2011. The County also had a higher rate of deaths versus births from 0% to -0.5%.

The 2010 Census also revealed that Clarke County had an increase of people moving into the county versus moving out from 9.5% to 11.4%. Currently, the County is relatively homogenous. When race is considered in Clarke County, a majority (91%) of the residents are white. In 2000, African-American residents made up 6.7% of the County's population, but decreased to 5.5% in the 2010 Census. However, over the same time period, the most notable change in ethnicity was an increase in the County's Hispanic population from 1.5% to 3.6 % reflecting national trends.

In Clarke County, the per capita income was \$37,551 per the U.S. Census 2007-2011 estimates – up from \$24,844 reported in the 2000 Census. This exceeds the state average of \$33,040. In 2010, the median household income was \$77,048 – a significant increase from the 2000 Census figure of \$59,750. This figure exceeds the statewide median of \$63,302. The Labor Market Information Community Profile on Clarke County reports 1.29% of the population speaks English less than well. This same report also shows 1,185 people live and work in Clarke County, 2,768 non-residents commute into the county to work, and 6,290 residents commute out of the county for work. The Bureau of Labor Statistics computes Clarke County unemployment at 4.8% in July of 2013, recovering from 6.5% in 2009. Yet, there is still poverty and great need in the county. Per the U.S. Census 2007-2011 estimates, 6.7% of Clarke County's residents were determined to be below the poverty level of \$23,114, though this figure is well below the statewide average of 10.7%. 2013 statistics state that 10% of Clarke County children are in poverty and that 19% of children are in single-parent households.

In 2013, 99% of Clarke County's residents over 25 years of age were reported to have graduated from high school. This figure is higher than the statewide average of 88%; however, only 65% have attended some college, falling far short of the state statistic of 67% and the national statistic of 70%. The US Census Bureau's American Community Survey 5-year Estimates (2007-2011) indicated that 31.6% of persons over 25 years of age have completed a four year college degree which is slightly below the statewide average of 34.4%.

Premature death dropped by 3% from 2010 to 2013; however, adult obesity is 28%, well above the national average of 25%; physical inactivity is 25%, also over the national average of 21%;

and excessive drinking is 11% compared to the national average of 7%. 14% of Clarke County residents in 2013 find themselves uninsured for health care compared to 11% of the rest of the nation. The county also only has one primary care physician for every 1,759 residents; a very staggering number knowing the national statistic is one physician for every 1,067 persons. STD infections as well as teen births are also above the national averages.

Land use in Clarke County is predominantly agricultural, forested, and open space. The land west of the Shenandoah River is the agricultural heartland of Clarke County. Almost 70% of this land is used for agriculture-related operations, and almost 85% is in parcels of 20 acres or more.

The latest agriculture statistics come from the 2007 Census of Agriculture. Nearly 48% of the land in Clarke County is suitable for some type of cultivated crop. Approximately 32,530 acres of the 111,360 acres in the County is planted in crops. Today Clarke County is primarily a rural county with agriculture remaining one of the main sources of income; however, land in agricultural use has declined by over 6,360 acres from 2002 to 2007 (NASS, County Census Data 2007). During this same period, the county realized a reduction in total cropland by 15,396 acres (38.3% loss); a growth of harvested cropland by 38 acres (0.08% rise); as well as a growth of 189 acres of irrigated land (44.9% rise). Small farms ranging from 1-49 acres increased in quantity as well as the county gained one farm ranging from 500-999 acres. The average size of a farm in Clarke County decreased 13% from 157 acres in 2002 to 137 acres in 2007.

Average farm expenses per farm increased from \$37,231 in 2002 to \$59,056 in 2007 while net operating income per farm also increase from \$3,290 in 2002 to \$10,488 in 2007. Landowners saw an increase in property values with the average farm value at \$848,148 in 2002 to \$934,784 in 2007; per acre values increased from \$4,781 in 2002 to \$6,827 in 2007. This holds well above the 2007 Virginia average price per acre of \$4,213 and far exceeds the nation value of \$1,892 per acre in 2007.

Clarke County has approximately 14,905 head of cattle and calves with this number being composed of 1,860 dairy cows and 5,718 beef cows. These numbers have decreased from 2002 when there were 16,887 head of cattle and calves in Clarke County. Northern Virginia has seen rapid growth in the equine industry over the past several decades and Clarke County is no exception. In 2007, there were 2,891 head of horses and ponies in Clarke County. Unfortunately 2012 Census of Agriculture statistics are not due out until Spring 2014. The 2007 information is now six years old and prior to 'The Great Housing Recession' of 2007-2009; therefore, rendering much of this data inaccurate and obsolete.

Priority Issues

Based on the unit profile and resident perspectives from our survey, key informant interviews and focus group interviews, the Extension Leadership Council identified the following top priority issues for Clarke County, Virginia.

AGRICULTURE

Issue 1: Farm Business Management: Increased Regulation, Increased Property Value, Decreased Profitability, Future Land Use, Farm/Business Transition

Agriculture is still very significant to the Clarke County economy; however, smaller farms seem to be the trend. In addition, the price of land prohibits people from going into farming on a large scale and they are forced to farm intensively on smaller acreage. These factors force the farmer to become savvier in marketing (BFBL/agritourism/direct marketing) and more informed about diverse farming opportunities (vegetables/ornamentals/small fruit). In an attempt to improve food safety, upcoming added regulations from the FDA and the Food Safety Modernization Act will impact fresh produce growers significantly.

If the farmer can produce a product and make a reasonable profit, like any business, farming can be a successful enterprise. If not, the land will likely be sold for development. Many farms are family businesses and have been in operation for generations. The producers are in the business because they like what they do and enjoy being self-employed. Farmers love the land and often hope their children could join them in farming and follow in their footsteps. Many times this doesn't happen because the farm isn't profitable enough to support multiple families or younger generations are not interested and/or don't see farming as a viable career.

VCE addresses these issues by assisting with marketing strategies and supporting the "Buy Fresh Buy Local" (BFBL) concept. We provide educational programs for farmers that are interested in alternative and value added products that may be produced in our region. VCE can also offer classes to assist with retirement and estate planning, including transitioning the family farm to the next generation. VCE can work with farmers and their children to become more profitable by offering instruction in various cost efficient production practices, energy alternatives, financial management, and marketing options. In addition to Extension addressing this issue, the Extension Leadership Council also identified the following entities that should help address this issue: county government, county economic development committee, state government, Virginia Outdoor Foundation, conservation and private organizations and the Virginia Farm Bureau.

Issue 2: Water Quality, Conservation and Environmental Issues

Ensuring that the quality of Clarke County's natural resources (land, air, water, and wildlife) is protected is very important to county citizens. Specific aspects of this issue include:

- Finding a solution to animal waste problems
- Ensuring there are adequate public utilities for waste treatment

- Ensuring there is an adequate water supply (public and private) and utilities for population growth
- Ensuring protection and/or improvement of surface and ground water quality
- Educating and helping commercial landscape maintenance companies deal with new regulations concerning urban nutrient management

In 2013, 51 private well water samples were provided by Clarke County residents for testing during the VA Household Water Quality Program. The following are the percentage of samples showing levels exceeding the EPA recommendation for various quality parameters:

- Iron – 5.9%
- Manganese – 3.9%
- Hardness – 43.1%
- Total Dissolved Solids – 21.6%
- Sodium – 47.1%
- Lead (first draw) – 11.8%
- Total Coliforms – 74.5%
- E. coli – 27.5%

While citizens want to ensure adequate protection of county resources, there is an overall concern desirous that environmental regulations not impede livelihoods and operations. VCE-Clarke County and Planning District 7 play a major role in education, dissemination of information, and hands-on help related to this issue, but a review of programming in light of its alignment with these concerns is warranted. This issue is being addressed to some extent by VCE resources (for example: VA Household Water Quality Programs). Additional efforts need to be explored to better address this issue.

Issue 3: Farm Production and Profitability

Concerns tie to those in issue one but also include agriculture education, training, creating and expanding new agriculture markets, alternative agriculture, pesticide education, hay storage and quality, and nutrient management. Related to these were supporting and protecting agriculture and farming as an occupation, farm profitability, government programs, and the adequate supply of farm labor.

A needs assessment was conducted among the three Extension Advisory Committees for Crop and Soil Environmental Science in the Northern Shenandoah Valley. In early February 2012, meetings were held with the three Extension advisory committees to develop and refine a list of potential educational goals. Throughout the spring and summer of 2012, the needs assessment was refined based on dialogue with these advisory committees. In the fall of 2012, the needs assessment was mailed to 58 people. This needs assessment included 40 potential goals and a short narrative describing most of them. Thirty six advisors responded to the survey (9 from Page, 14 from Clarke/Frederick/Warren, and 13 from Shenandoah). Meetings were held with each of the three advisory committees to review the survey methodology and results.

Based on the results of this survey and discussions with the three Extension Advisory Committees, the educational goals listed below will initially receive the highest priority in terms of Extension educational efforts. There are additional priority goals that may also be pursued in the near future. Virginia Cooperative Extension will continue to answer individual requests for information and administer to other educational needs related to Crop and Soil Environmental Science and Animal Science. This means that efforts will be made to provide the latest research-based information, as it is generated/ provided by Extension specialists. However, the greatest priority will be placed on the goals listed below.

Long-Term Crop and Soil Environmental Science Education Goals in the Northern Shenandoah Valley:
1. Teaching farmers how to use no-till to enhance soil quality, farm profitability, and water quality.
2. Increase cow/calf profitability and improve water quality by: (1) increasing the acreage of grazing land under managed grazing systems; (2) using of management strategies that extend the grazing season; and (3) reducing machinery cost.
3. Improve farm profitability and water quality by pursuing next generation nutrient management technologies.
4. Improve weed control cost and effectiveness in both new and established forages.
5. Developing solutions to orchard grass persistence and vigor problems.
6. Continue supporting pesticide application recertification programs, pesticide disposal programs, and pesticide container recycling programs.
7. Continue developing technologies for large animal mortality disposal (primarily composting but may include other alternatives).

VCE-Clarke County and Planning District 7 have many programs related to this area including: area fruit production schools, commercial greenhouse production meetings, beef production meetings, private and commercial pesticide applicator recertification training, marketing educational efforts for many agriculture products, crop production schools, education about animal waste management, education on agribusiness management, and many related areas.

Continuation of the always present assessment of programs versus needs and adjustments as needed is warranted. This issue is currently being addressed with VCE resources; in addition to Extension addressing this issue, the Extension Leadership Council also identified the county government as an entity to assist with this issue. No further action is needed.

FAMILY AND CONSUMER SCIENCES (FCS)

Issue 1: Overweight, obesity and increased risk for chronic diseases

A lack of physical activity and poor nutrition are contributing factors to overweight and obesity and to a wide range of health problems and chronic diseases among all age groups, including high cholesterol, hypertension, diabetes, heart disease stroke, some cancers, and more. Nationally, the increase in both the prevalence of overweight and obesity and associated chronic diseases is well documented and has negative consequences for individuals and society. Clarke County overweight and obesity statistics mirror national averages.

FCS agents offer evidence-based programs to help encourage youth and adults to adopt healthy eating and physical activity practices that follow recommendations from the 2010 U.S. Dietary Guidelines and the 2008 Physical Activity Guidelines for Americans. This is accomplished by direct teaching; partnering with agencies to reach diverse audiences; training teachers and day-care providers; in-school nutrition education; and parent education.

Issue 2: Increased Education in Financial Management, Especially with Regard to Family Budgets, Housing, and Nutrition for All Populations

As housing, food and health expenses soar, and debts accumulate, families need to know how to manage money and make wise choices. They need to be proficient at budgeting and encouraged to save. They need ideas as to how to cut motor fuel and heating costs and how to live more efficiently. The following issues were identified: land and housing prices have increased dramatically in recent years; expensive homes are being built in new housing developments; poor planning and money management (no retirement plan); increased taxes; increased general health care costs (i.e. prescriptions) and/or increased long-term health care costs.

FCS agents can provide families with information to reduce costs and live more efficiently. We can educate them as to wise spending choices and ways to save money without losing quality of life. Other organizations identified by the Extension Leadership Council to address this issue were county government, state government, federal government, Help with Housing, Habitat for Humanity, Social Services, and financial institutions.

Issue 3: Nutrition and Wellness: Promote healthy homes and families

Healthy home environments that support healthy family units are an important issue for Clarke County. Many families struggle with care-giving issues for children and aging parents. Single parenting and other economic issues can lead to additional stress within families dealing with care-giving concerns.

Areas of concern with this topic, which included both youth and adults, included heart disease, diabetes, hypertension, obesity, cancer and lack of fitness (particularly regarding youth). Data reviewed while developing the unit profile also helped to support this topic as one of the top concerns in Clarke County.

FCS agents partner with other social agencies in Clarke County to provide education that supports parenting, particularly in the areas of health and financial management. FCS agents work directly with parents, as well as day-care providers and senior centers to ensure that healthy family programming is across the life-span. Other organizations identified by the Extension Leadership Council to address this issue were Social Services, Virginia Health Department, Valley Health Systems, AARP, local senior centers, and the private industry.

YOUTH DEVELOPMENT (4-H)

Issue 1: Offering Positive Youth Activities through After-School Programming

The quality of child care for youth before and after school was identified an important issue in Clarke County. Issues include the need for more options for early morning and after school childcare, particularly due to many parents commuting out of the county to work each day. Data reviewed while developing the unit profile also helped to support this topic as one of the top concerns in Clarke County.

The need for children to be engaged with each other in a positive way is becoming more and more urgent. Such activities will not only keep them away from trouble and harm, but would also teach them tolerance, patience, and appreciation for others as well as other valuable life skills.

Clarke County VCE is initiating efforts to rebuild the afterschool 4-H program and strengthen relationships with community partners and members, education professionals and school board officials. Whether we need to target and harness more at-risk youth or just offer more of the programs that are being offered, this is an area that is being addressed and needs to be evaluated and brought to its fullest potential. In addition other organizations identified by the Extension Leadership Council to help address this issue were local and county governments, schools, Parks & Recreation and Social Services.

Issue 2: Character Education and Fostering a Healthy Social Environment through Anti-Bullying Programs

Character Education is taught in Clarke County Public Schools, but no set character education program has been adopted by the school system. The subject of Bullying has been a hot topic over the last couple of years. From physical harassment to Cyber-Bullying, the number of youth being abused by their peers has increased at an alarming rate. The main concerns with this topic included morality issues, anger management and ethics.

Clarke County VCE can address these issues with its 4-H youth through well-directed workshops, trainings, and presentations at club meetings. The programs can be presented cooperatively by the local Extension Office, volunteer leaders, and local guidance counselors and educators. These programs can be developed using the Character Counts! program along with information shared by the State 4-H Office and National 4-H Council. Incentives and scholarships can also be offered to encourage increased attendance at character education

trainings and conferences. Other organizations identified by the Extension Leadership Council to address this issue were churches, schools, parents and the Sheriff's Department.

Issue 3: Reinforcing Positive Youth Development through Effective Volunteer Development

Taking into consideration our volunteers' busy schedule and unpaid status, it is often difficult to reach all volunteers with the training that they need in order to deliver a quality youth development program. Traditionally, Clarke County VCE has trained its volunteers based on an annual session offered at the beginning of the enrollment year, along with encouragement to attend District and State training conferences. It is evident that additional development opportunities are needed, specifically at the local level.

VCE can develop and deliver quarterly programs, giving volunteers options and flexibility, and increasing the number of volunteers that will be able to attend at least one. This would not only increase the number of volunteers reached, but also the different types of training received, as more subjects would be covered in a given year. Incentives and scholarship can also be offered to encourage increased attendance at District and State training conferences.