Situation Analysis Report

Warren County

2013

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Introduction

Warren County conducted a comprehensive situation analysis update during the calendar year 2013. The situation analysis process was led by the Extension Leadership Council (ELC) and involved the development of a Warren County Unit Profile as well as gathering community and resident perspectives on issues and problems in the county. Data and information from these two activities was combined with data collected in a 2013 Northern Shenandoah Valley Agricultural producer needs assessments process. Producer advisory groups were contacted with data collected, analyzed and priority issues were identified.

The ELC participated in a SWOT analysis and several individual interviews with non-extension clientele were conducted during the situation analysis process. An overview of the situation analysis process was covered and an initial situation analysis plan was developed that included tasks and timelines for ELC members and VCE staff. Based on this, the first task was development of the unit profile. Using the data sets from the VCE Situation Analysis Resource website, Virginia.gov, Virginia LMI, Community Health needs Assessment and from the Virginia Agricultural Statistic Service. ELC members and VCE staff analyzed pieces of the data sets and a unit profile was developed. A number of issues were identified from this look at the county. Based on these findings, the ELC determined that the best way to gather perspectives from residents was to conduct a SWOT analysis and to do key informant interviews with local leaders in the community. The results of the focus groups and key informant interviews were presented and discussed and the top priority issues for Warren County identified, including those that could be addressed with current VCE resources and those that were outside the scope of current VCE resources.

Unit Profile

Warren County is located in the Northern Shenandoah Valley of Virginia. It is bounded by Frederick and Clarke Counties on the north, Fauquier and Rappahannock Counties on the east, Page County to the south, and Shenandoah County to the west. Warren County is a fairly rural county in Northwest Virginia, approximately 1 hour from Washington DC. Warren County has a total land area of 219 square miles. The rural part of the County contains 209.9 square miles and the Town of Front Royal covers 9.1 square miles.

The community’s vision is that it must maintain and enhance the quality of life for the residents of Warren County. To do so, the quality and character of Warren County’s natural resources should be preserved, conserved, and used effectively to ensure that future citizens will enjoy the benefits of:

- An adequate, sustainable, clean, and potable supply of both surface water and ground water
- Clean air
- Farming and open spaces
- The beauty of its rivers, mountains, and scenic views
- Protection of its rural character
- Quality educational facilities and system
• A balanced tax base
• Sound fiscal management

This community vision mandates that the county plan for sustainable growth based on these limited resources. This can be translated to say the annual residential growth rate should be maintained at approximately 2%, no more than 3% annually and the industrial/commercial tax base sustained at 20 to 25%. Only by doing so can the county provide quality schools, safety on the roads and communities, a balanced tax base, equitable paying jobs, reduced out-of-county commuting, and other social amenities associated with expressed quality of life expectations.

The current county government consists of a five member Board of Supervisors, representing the Shenandoah, North River, South River, Fork, and Happy Creek districts, a county administrator, various other county offices, a Sheriff’s Department and the Department of Fire and Rescue Services. The County of Warren has 188 full time employees and 96 part time employees. Warren County offers a variety of jobs in various industries including: agriculture, manufacturing, government, and transportation. The Economic Development Authority provides technical and financial assistance to existing, expanding, and emerging companies to encourage investment in Warren County. Since 1995, fourteen international and domestic companies, both large and small, selected Warren County for investments exceeding $185 million.

Demographics

Population in 2011 .............................................. 38,070
Median Age .............................................................. 39
Total Households ................................................. 13,368
Total Housing Units ........................................ 16,184
Median Household Income .............................. $61,379

Population estimates from 2012 indicate a population of 38,070, an increase of 1.7% from 2010. This indicates lower growth than the state rate of 2.3%. The town of Front Royal is the county seat.

Twenty-six point eight four percent (-1 % over 2007) of the population in Warren County is under 19, with 12.74% being 65 and older (+.74% over 2008). Warren County is predominately white (92.15%), with other major ethnic groups totaling 10.78% being Black or African American, American Indian, Asian, Pacific Islander, some other race, two or more races and or Hispanic. While data indicated that the Hispanic population is only 2.92% (-.059% since 2008) of the total population, public perception is that this audience is growing. While the number as still relatively small as a percent of the total population, this is a population with specific needs such as addressing language barriers that should be investigated.

In 2011, the median household income was $61,379 – a significant increase from the 2007 figure of $56,443. This figure is below the statewide median of $63,302. The Labor Market
Information Community Profile on Warren County reports 1.34% of the population speaks English less than well. This same report also shows 4,589 people live and work in Warren County, 6,160 non-residents commute into the county to work, and 12,276 residents commute out of the county for work. The Bureau of Labor Statistics computes Warren County unemployment at 5.9% in June of 2013, recovering from 7.8% in 2009. Yet, there is still poverty and great need in the county. Per the U.S. Census 2007-2011 estimates, 8.8% of Warren 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%. The number of children in poverty has grown from 11% in 2010 to 16% in 2013 and is above the national average of 14%. Premature death dropped by 4.9% from 2010 to 2013. Adult obesity is 29%, well above the national average of 25% while physical inactivity stands at 25%, also over the national average of 21%. Excessive drinking is 13% compared to the national average of 7% but is down 3% from 2010. 17% of Warren 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 2,086 residents which is alarming when the national statistic is one physician for every 1,067 persons.

Many residents hold a strong belief in the value of education and its importance to families. Warren County offers enrollment to children from kindergarten through 12th grade. All schools are fully accredited by the Commonwealth of Virginia Board of Education. Current Enrollment in Grades K-12: 5,296. Schools consist of Hilda J. Barbour, E Wilson Morrison, A.S. Rhodes, Leslie Fox Keyser, and Ressie Jeffries elementary schools, Warren County Middle School, Warren County High and Skyline High School.

The following private schools are located in Warren County or within a reasonable distance of county residents:

- Randolph-Macon Academy
- Riverfront Christian School
- Front Royal Christian Schools
- Guardian Angel Academy
- Wakefield Country Day School
- Mountain Laurel Montessori School
- Seton Home Study School

Warren County is the location for Christendom College, which offers four year and two year degrees. Christendom College is located at 134 Christendom Drive, Front Royal, VA. Lord Fairfax Community College is located in Middletown, VA, right outside of Warren County. Even with the high availability of educational opportunities, the percentage of high school graduates, percentage of persons with bachelor’s degrees or higher, median household income, and per capita income are all below state averages. However, so are the percentage of persons below the poverty line, the persons per square mile, and the crime rate for violent and property crimes.
### Top 10 Employers in Warren County

<table>
<thead>
<tr>
<th>Employer</th>
<th>Range of Employment</th>
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</thead>
<tbody>
<tr>
<td>Warren County School System</td>
<td>796</td>
</tr>
<tr>
<td>Valley Health System—WMH</td>
<td>503</td>
</tr>
<tr>
<td>Family Dollar Services</td>
<td>400</td>
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<tr>
<td>DuPont</td>
<td>400</td>
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<tr>
<td>Warren County Government</td>
<td>326</td>
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<tr>
<td>Northeast Cooperative, Inc.</td>
<td>317</td>
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<tr>
<td>Wal-mart</td>
<td>313</td>
</tr>
<tr>
<td>Ferguson Enterprises</td>
<td>234</td>
</tr>
<tr>
<td>Interbake Foods, LLC</td>
<td>222</td>
</tr>
<tr>
<td>United Parcel Service</td>
<td>171</td>
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</tbody>
</table>

Preservation of open space and agricultural land is important to the county. 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.

The latest agriculture statistics come from the 2007 Census of Agriculture. Unfortunately, 2012 Census of Agriculture statistics are not due out until Spring 2014. Since 2002, The county has actually increased the number of farms +1% although farm size has decreased as now the average farm size is 123 acres which is down 10% from 2002. Small farms ranging from 1-49 acres increased by 17.6% since 2002, while the county gained one farm ranging from 1000+ acres.

Approximately 47,635 acres of land is in farms which is a reduction of 3% from 2002. Of this 47,635 acres - approximately 13,354 is devoted to crops (down 56% from 2002) with the remaining in pasture, woodland and other uses. Corn and forage hay for the horse and cattle markets are the primary commodities produced.

Average farm expenses per farm increased from $13,323 in 2002 to $20,579 in 2007 while net operating income per farm also increase from $1,909 in 2002 to $4,875 in 2007. Landowners saw an increase in property values with the average farm value at $545,878 in 2002 to $781,852 in 2007; per acre values increased from $3,827 in 2002 to $6,352 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.

Most of the farm operators in Warren are male and the average age is now over 60 years old. Attracting young, new/beginning farmers will help retain or expand the agricultural operations in the county.
Community and Resident Perspectives

Based on issue areas identified in the unit profile, key informant interviews were conducted with local families, youth, and agricultural producers.

The key informants were from the following agencies and organizations: Department of Social Services, Department of Health, Circuit Court, Extension volunteers, local farmers, the local newspaper, 4-H youth, and Virginia Cooperative Extension. Issues Identified . . .

Affecting Families

- Engaging audiences in parenting programs
- Availability of Mental Health/Medicare Providers
- Cost or lack of insurance
- Affordable child care services
- Additional public transportation routes
- Homelessness
- Child abuse/Neglect
- Inadequate financial resources (food, housing, transportation)

Affecting Youth

- Juvenile delinquency/Gang violence
- Underage drinking and drug use
- Lack of educational advancement/degree attainment
- Teen Pregnancy
- Sexually Transmitted Diseases
- Obesity
- Lack of entertainment/activities for youth
- Engaging youth

Affecting Producers

- Cost of production (feed, seed, fertilizer, fuel)
- Farm profitability
- Growing demand for Organic/Sustainable farm production
- Marketing agricultural products
- Farm transition management
- Availability of land (development pressure)
- Attracting young, new, and beginning farmers
- Cost or lack of insurance for self-employed
- Farm Safety
- Animal health/welfare and product safety
Priority Issues

Based on the unit profile and resident perspectives data from above, the following top priority issues were identified for Warren County:

Issue 1:

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

Agriculture is significant to the Warren 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 or on rental ground that may not have long term security. These factors force the farm manager/owner to become more critical in making business related decisions.

Many farmers have considered shifting the traditional enterprises on farm or the markets where these traditional products are sold. Many are seeking information and education on market alternatives like Buy Fresh Buy Local/agritourism/direct marketing and about diverse farming opportunities vegetables, ornamentals and 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. Other farmers are actively seeking ways to improve efficiency, improve product quality and or performance. Livestock producers are facing increasing regulatory challenges for the movement of livestock as well as quality control and security.

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. Local agents provide VCE lead “Quality Assurance” or Master Producer certification programs for producers. 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 Farm Bureau, conservation and private organizations.

Issue 2:

Farm Production and Profitability

Overall concerns are broad and include agriculture education, training, creating and expanding new agriculture markets, alternative agriculture, pesticide education, forage(hay) storage/quality/marketing, nutrient management and farm profitability/sustainability.
A needs assessment was conducted among the three Extension Advisory Committees for Crop and Soil Environmental Science in the Northern Shenandoah Valley then again in fall 2013 with the addition of a additional livestock emphasis. 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.

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

**Issue 3:**

**Water Quality, Conservation and Environmental Issues**

Ensuring that the quality of Warren 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 wildlife, 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, 72 private well water samples were provided by Warren 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 – 5.6%
- Manganese -11.1%
- Hardness -12.5%
- Fluoride - 1.4%
- Total Dissolved Solids - 12.5%
- PH -16.7%
- Cooper - 8.3%
- Sodium - 30.6%
- Nitrate - 1.4%
- Lead (first draw) - 6.9%
- Total Coliforms - 56.9%
- E. coli – 9.7%

While citizens want to ensure adequate protection of county resources, there is an concern that environmental regulations not impede livelihoods and operations. VCE-Warren 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 from Lord Fairfax Soil & Water Conservation District, Friends of the Shenandoah River etc. need to be explored to better address this issue.
Issue 4:

**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. Warren 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. The local VCE staff have partnered with the Northern Virginia 4-H Educational Center and the members of the Warren Coalition to apply for grant funding in support of a community wide obesity education program.

Issue 5:

**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 to address this issue were county government, state government, federal government, Help with Housing, Habitat for Humanity, Social Services, and financial institutions.
Issue 6:

**Engaging Families in Youth Activities**

Engaging families in youth activities was identified as a priority issue in Warren County. Parents are often working outside of the home, commuting long distances to work, leaving children without access to youth activities and more. This issue is currently being addressed with current VCE unit resources through 4-H Youth Development Programming. Engaging whole families in youth activities and teaching youth to self-lead activities of interest to them and their peers is important. This issue should continue to be addressed in the coming years. Further collaboration with local service agencies should be initiated to address these needs.

A list of local organizations to collaborate and providing programming in these areas could potentially address these issues was identified. The list included the following:

- The Warren Coalition
- Healthy Families
- Teen pregnancy Center
- Northwestern Community Services
- Warren Memorial Hospital
- Department of Parks and Recreation
- Warren County Public Schools
- Area agency on aging
- The Court system
- Virginia Cooperative Extension
- The United Way
- The Warren County Ministerial Association

Issue 7:

**Nutrition and Wellness: Promote healthy homes and families**

Healthy home environments that support healthy family units are an important issue for Warren 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 Warren County.

FCS agents partner with other social agencies in Warren 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.

Issue 8:

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 Warren 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 Warren 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.

Warren County VCE is initiating efforts to establish in school and after school 4-H programs 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 to help address this issue were local and county governments, Public and Private schools, Parks & Recreation and Social Services.

Issue 9:

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

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.

Warren 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 10:

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, Warren 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.