



# Situation Analysis Report



# Orange Unit 2018

## UNIT Extension Staff

Kaci Daniel, Unit Coordinator, Extension Agent, 4-H Youth Development  
Clare Lillard, Extension Agent, Family and Consumer Sciences  
Courtney Wesner, 4-H Educator  
Cathy Weaver & Shannon Woodcock, Unit Program Support  
Bailey Colvin, Lexie Holloway, Kelly Shifflett, Summer Interns

## UNIT Extension Leadership Council

Robert Bradford  
Dede Holmes-Perkins  
Kevin Powell  
Jeff Poole

Garret Chambers  
Sarah Gower  
Betty Madison  
Charles Woolfrey

Mutahara Mobashar  
Ron Burluson  
Ellen Pitera  
Sarah Lohr

## Introduction

Orange County Extension staff and Extension Leadership Council (ELC) members conducted a comprehensive situation analysis during Fall 2018. The process included input from county residents, Extension stakeholders, elected officials, and Extension volunteers. The unit profile was developed with data from the 2017 U.S. Census, 2012 Agricultural Census, 2007 Agricultural Census, 2018 Bureau of Labor Statistics, 2017 American Community Survey and the 2017 Youth Risky Behaviors Survey by Orange County Public Schools.

Statistical data, residents' perspectives from personal interviews, and results of an online survey were available to ELC members as they prioritized issues and made recommendations for any additional Extension efforts.

Identification of local needs is ongoing and not limited strictly to the Situation Analysis period. Extension staff regularly meet with 4-H leaders, Central Virginia Cattlemen's Association board members, the Rappahannock-Rapidan Community Services Board (RRCSB), and administrators of Orange County Public Schools, to name a few. ELC members represent all four Extension program areas - Agriculture, Youth Development, Family & Consumer Sciences, and Community Viability - and serve as key informants for the changing educational needs of local residents. In addition, ELC members represent all geographic areas of the county and share needs of their smaller communities in the context of the greater Orange County community.

## Unit Profile

Orange County is located in the northern central part of Virginia's Piedmont, 70 miles west of Richmond and between the more populated areas of Charlottesville and Fredericksburg. Comprising 341 square miles (218,240 acres), Orange County is home to 36,073 residents with a population growth of 7.5% within the past decade. The median household income is \$66,990 with an annual growth rate of 2.8%. In the past half decade, public school enrollment remained steady, with a small decline of 0.013%. Senior citizens (age 65 and older) appear to be a fast-growing population with an increase from 18.4% to 20.3% from 2012 to 2017. The median property value in Orange, VA is \$211,400, and the homeownership rate is 45.1%. Most people in Orange, VA commute by drive alone, and the average commute time is 32.8 minutes. The average car ownership in Orange, VA is 2 cars per household.

There are nine schools and almost 5,000 students in Orange County Public Schools. Private institution Grymes Memorial School serves an additional 150 children from Orange and surrounding counties. Head Start early education programs are available in three areas of the county, and several private preschools also operate. Germanna Community College is located in the far eastern end of the county (Locust Grove campus), and Orange residents are also served by Piedmont Virginia Community College in Charlottesville.

Primary employers in the county are Healthcare & Social Assistance, Construction, Retail Trade, Educational Services, and Public Administration. Agriculture, mining, and construction comprise 20% of businesses in Orange County and employ 15% of the workforce (considerably higher rates than national averages). According to the Bureau of Labor Statistics, Orange County's unemployment rate is 2.7% as of December 2018.

According to 2012 USDA Ag Census\* data, there are 587 farms in the county with 104,806 total acres farmed. Top agricultural commodities are nursery, greenhouse, floriculture and sod with sales totaling more than \$45 million, making Orange County the state's largest producer in this category. The majority of these gross sales are from two large greenhouse operations located in the county. The beef cattle industry is the second largest agricultural commodity in the county with livestock sales totaling over \$25 million in 2012. These totals are expected to be higher in the new census data.

*\*New agricultural census data is expected after the due date for this report; the last ag census was conducted in 2017 and data has yet to be published. Due to the continued anticipation of the 2017 Ag Census results, the comparative data provided is from the 2007 and 2012 Census results.*

The following trends and statistics are of importance to planners and educators:

### **Orange County Comprehensive Plan, Adopted 2013, Last amended 2018**

This policy document is used to communicate the preferred use of land in designated areas for achieving the vision of the County within in the context of land use. The county vision since 2010 has been to "sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens." The guiding principles for this vision are:

1. We wish to retain the characteristics that give identity to the mix of communities that exist within the County.
2. We understand that a vibrant economy contributes to the sustainability of our community and our quality of life.
3. Wise resource planning and land use decisions directly impact our ability to attract and support a business base while maintaining the rural nature of the County.

### **Families, Health, Housing Trends**

- Approximately 2,345 households are led by single parents (7%).
- Youth in poverty decreased from 17% in 2013 to 13.7% in 2016.
- The local Hispanic population is 4.21%, which represents a relatively small percentage of the total population.
- The obesity rate increased from 31% in 2013 to 32.8% in 2015. The physical inactivity rate is 25.7%.
- The adult smoking rate is 18.5% and the excessive drinking rate is 17.5%

## Youth Data

- 76% of Orange County High School graduates (2017) planned to pursue additional education post-high school. 4% of graduates entered the military and 16.5% entered the workforce.
- Orange County High School has seen an increase in the number of students enrolled in advanced programs including 16.33% of students enrolled in advanced placement courses and 3.05% of students completing Dual Enrollment courses
- High School graduation rates have improved 4.4 percentage points to 94.4% on-time graduation rate. The drop-out rate is 3.1%, which has remained steady from year to year.
- The rate of teen pregnancy (ages 15-19) is 25.3 per 1,000 girls (3%).
- The 2017 Youth Risky Behaviors Survey conducted by Orange County Public Schools on middle and high school youth reports the following in the executive summary:
  - Student use of tobacco, alcohol, marijuana, inhalants and other drugs has decreased but still stands at:
    - Tobacco use in the last 30 days: Middle School 6.9%, High School 17.7%
    - Alcohol use in the last 30 days: Middle School 13.6%, High School 33.5%
    - Marijuana use in the last 30 days: Middle School 8.7%, High School 18.7%
    - Unauthorized Prescription Drug use in the last 30 days: Middle School 4.9%, High School 11.9%
      - Student involvement in premature sexual activity has decreased but still stands as the following:
        - Students who have ever had sexual intercourse: Middle School 13.9%, High School 45.4%
        - Students who have had sexual intercourse and used a condom before the last intercourse: Middle School: 63.2%, High School: 59.5%
        - Of those who had sexual intercourse that drank alcohol or used drugs before the last intercourse: Middle School: 20.9%, High School: 21.7%
          - Bullying behavior is shown to decrease but still stands as the following:
            - Students who have ever been bullied: Middle School: 45.6%, High School: 52.4%
            - Students who have bullied someone else: Middle School: 19.9%, High School: 27.3%
            - Students who have been a bystander to someone being bullied: Middle School: 42.7%, High School: 47.8%
              - Students report having non-parental adults in their life that encourage them to do their best. Middle School: 84.3%, High School: 86.7%

## Agriculture\*

*\*As stated previously, 2017 Ag Census data has not been released at the time of this report.*

Expert observations and annual agriculture summary reports yield the following data:

- Total number of farms has increased 6%, from 514 in 2007 to 587 in 2012.
- Average farm size has decreased from 202 acres in 2007 to 197 acres in 2012, at a 5% rate.

- Total acres farmed has remained relatively level from the 2007 to the 2012 Census but has increased by 200 acres.
- Average sales per farm has increased from 146,877 in 2007 to 165,589 in 2012, at a 13 % increase.
- Crop acreage has decreased from 45,202 acres in 2007 to 40,460 acres in 2012, while the number of crop farms has increased from 341 to 370.
- Total pastureland of all types has decreased from 40,295 acres in 2007 to 35,768 acres in 2012, whereas the farms increased from 417 to 445.
- Land enrolled in Conservation Reserve, Wetlands Reserve, Farmable Wetlands, or Conservation Reserve Enhancement Programs has decreased from 1,301 in 2007 to 534 in 2012 with farms following from 23 to 19.
- Market value of products sold has increased from \$76,082,000 in 2007 to \$90,577,000 in 2012, having a 19% increase.
- Ranked number 1 in the state for nursery, greenhouse, floriculture, and sod.

## Community and Resident Perspectives

Based on the issue areas identified in the unit profile, Extension Leadership Council members interviewed more than 20 key informants (citizens, employees, or employers) regarding the county's greatest needs. These open-ended questions allowed informants to identify grass-roots, unprompted issues facing the county. This data was then used to craft a survey listing 24 issues for respondents to rank as very important (score of 1), important (2), somewhat important (3) or not important (4). In addition, survey respondents were asked to comment on educational programs that should be conducted to address the most important needs and to list which Extension programs should no longer be offered.

The survey was distributed electronically to all member households enrolled in 4-H Online, all members of the Central Virginia Cattleman Association, and all stakeholders and program participants for whom we had e-mail addresses. The survey link was published widely on the Orange County 4-H Facebook page and shared by Facebook pages for the Orange Chamber of Commerce and Orange Review (newspaper). Paper copies of the survey were printed and available throughout the county, including distribution by ELC members, at the Shady Grove Community Health Fair, and to Extension program participants in workshops and events.

Of survey respondents, 31% were "very familiar" with Extension's mission and programs, 31% "familiar" and 39% "somewhat familiar".

Initial survey results for prioritizing key issues in Orange County were inconclusive as the average values had little variation, even identical values in some cases. Most issues averaged a score of 1.5-1.75 on a scale of 4. As representatives of all geographic areas of the county and representatives of all four Extension program areas, Extension Leadership Council members and Extension staff ranked the issues in each programmatic area for the purpose of guiding program development and delivery for the next five years.

**The top Family & Consumer Science issues were:**

Rank	Issue
1	Family Management & Parenting (discipline, balancing activities, time management, single parent households, grandparents raising children)
2	Nutrition (youth & adults: obesity, access to healthy foods, cooking classes, etc.)
3	Aging (aging in place, elder care, long term care)
4	Poverty
5	Healthy Lifestyles (healthcare accessibility, chronic disease management, exercise, stress management, illegal drug use, etc.)
6	Food safety (home food safety, preservation, commercial restaurants)

**The top Youth Development issues were:**

Rank	Issue
1	Life Skills Development (decision making, responsibility, transition to adulthood, teamwork, leadership skills)
2	Youth Programming (out of school hours, educational subject matter)
3	Youth Employment Preparation (career exploration, soft skills, training, interviews and application preparation)
4	Youth Risky Behaviors Prevention (pregnancy, drugs, dropout, violence, truancy, bullying)

**The top Agriculture issues were:**

Rank	Issue
1	Agriculture Production Knowledge (livestock, plants, crops, timber)
2	Agriculture Business Management (profitability, employee management, land use)
3	Agriculture Marketing (selling livestock, plants, crops, timber)

4	General Knowledge of Agriculture Advocacy
5	Farm Transition Planning
6	Local Food Systems (Production, farmers' markets, food safety, home & amp; community gardens)
7	Environmental Issues ( regulations, biosolids, pests & amp; pesticides invasive species, water quality)

**The top Community Viability issues were:**

Rank	Issue
1	Financial Management ( Student loans, family budget, retirement planning, fraud, debt, income changes)
2	Employment ( job availability, training, career development)
3	Internet and Technology (accessible, affordable, high-speed)
4	Small Business (development, sustainability, marketing, competition, support)
5	Economic Development (places to shop, community growth, downtown areas, new jobs)
6	Community Planning; Development (zoning, regulations, local elected leadership, sense of community)

## Priority Issues

The final step for the ELC and staff was to identify five overall areas of priority for Extension programming in Orange County through 2023, and they are as follows:

### Agriculture Production Knowledge

Agriculture is one of Orange County's largest industries. Educating the public on livestock, plants, crops, and timber is very important in showing citizens why agriculture is so important. VCE is programming in this area using educational meetings, short courses, field days, and printed resources.

### Life Skills Development

Development of skills in youth, such as teamwork, communications, and decision making, was identified as the greatest issue facing youth in Orange County. Extension continues to

address this issue through year-round 4-H clubs, volunteer leader trainings and education, and camps and school enrichment programs that allow for hands-on learning. Partnerships are already established with public and private schools, youth organizations, and county youth agencies. Additional adult volunteers are needed for training and program outreach and delivery in order to serve a larger audience more frequently.

#### Agriculture Business Management

Most small businesses fail within the first five years. Having programming to help manage Agriculture businesses is important for the viability of the community. VCE will be focusing on profitability, employee management, farm transition planning, land use, and agricultural literacy and advocacy. Creating sustainable resources and partnerships will also be areas addressed.

#### Financial Management

Having the basic knowledge of different financial terms and practices is important. Some of these programs VCE will cover include helping community members learn about and understand student loans, family budget, retirement planning, fraud, debt, and income changes.

#### Healthy Lifestyles

VCE offers nutrition and wellness programs through in-school enrichment, Head Start, adult workshops, Farm-to-School programs and youth cooking programs. Specific programs offered include: Balanced Living with Diabetes, Diabetes prevention, Lift-seated chair program, and FitX to encourage eating fruit and vegetables.