

# Frederick County 2023 Situation Analysis Report

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Figure 1. Apple orchard, Frederick County, VA. (Mark Sutphin, Virginia Cooperative Extension)

## Introduction

The Virginia Cooperative Extension Frederick County Situation Analysis was updated in 2023 with the assistance of the Frederick County Extension Leadership Council (ELC) and community stakeholders. Information was compiled from the 2023 community survey responses from residents in Winchester City, Shenandoah, Frederick, Warren, Page, and Clarke Counties, as Extension Agents (with the exception of 4-H) in these counties serve all five counties.

The survey data identified several areas of concern for community members. The top ten community issues identified through the community survey are listed on page 2. Top ten issues are identified for Winchester City and Frederick County as a whole and also for the Northern Shenandoah Valley which makes up Planning District 7: counties of Clarke, Frederick, Page, Shenandoah, and Warren along with the City of Winchester.

## Unit Profile

Frederick County (FC) is located at the northern end of the Shenandoah Valley of Virginia and is bordered by the state of West Virginia to the North and West, Clarke County to the east, and Shenandoah and Warren Counties to the south. FC is very geographically diverse, with suburban areas in and around the City of Winchester and the Interstate 81 corridor and agricultural and rural areas that include farms, orchards, and wooded mountains to the west. The county seat is situated in the City of Winchester. Numerous cultural and historic attractions make Frederick County a popular destination for tourists, while the county's location along the Interstate 81 corridor, just 75 miles from the nation's capital, has helped to create an attractive location for business and industry. The county is comprised of 416 square miles (266,240 acres) of land and, as of 2020, the population density is 221.3 people per square mile.

In 2022, the population of Frederick County was 95,051. According to the United States Census Bureau, this is almost a 10% increase from 2017. During the same period, Virginia's population grew by a meager 2%.

As of 2021, there are 34,581 households in Frederick County, a 7.43% increase from 2019. The median household income rose from \$68,929 in 2016 to \$86,044 in 2021, a 24.8% increase. Based on data from 2017-2021, 75.9% of Frederick's population owns their home while the remaining population finds the median gross rent to be \$1,182 per month. 21% of children in Frederick County are reported to be living in single-parent households, as of 2023.

The Labor Market Information Community Profile on Frederick County reports that 8,610 people live and work in Frederick County; 15,946 non-residents commute into the county to work; and 29,079 residents commute out of the county for work. The Virginia Employment Commission estimates unemployment in Frederick County was at 2.4% in 2022, down from 4.8% in 2020, and lower than the national rate of 3.6%. The largest employers in FC are Valley Health System, Frederick County Public Schools, Navy Federal Credit Union, Amazon, FEMA, Trex, and Walmart.

There are still many families and individuals living in poverty throughout the county; 6% of the population. The county's rate for children living in poverty is 10%; 3% less than the state average. The Bureau of Labor Statistics evaluates community economic conditions using *ALICE*, an acronym for asset limited, income constrained, employed individuals that earn more than the federal poverty level but less than the basic cost of living for the county, or the *ALICE* threshold. Combined, the number of poverty level and ALICE households equals the total population struggling to afford basic needs. The percentage of ALICE households in Frederick County is 33%, which is 5% higher than the state average. The percentage of ALICE and poverty-level individuals in Frederick County is subdivided by area with Middletown at 68%; Shawneeland at 51%; Stephens City at 46%; Brucetown at 44%, and Lake Holiday at 20%.

According to the 2021 data, 6.7% of the population in Frederick County were living as food insecure while the City of Winchester sat at 11.2% living as food insecure. Both of these numbers are comparable to the Virginia state average of 8.1%. 78% of Winchester's population is below the SNAP threshold, with Frederick County being 67% and Virginia overall at 57%. As of January 2020, 4,976 persons received SNAP benefits in FC and 3,222 in Winchester City. With this, the childhood food insecurity rate in 2021 was 10.7% in Winchester and 4% in Frederick County. In the public school system, all seven of Winchester City schools are eligible for free/reduced meals whereas only 4 of Frederick County's 21 schools are eligible. In Frederick County Public Schools, all 21 schools were accredited for 2022-23, meaning the institutions are maintaining a certain level of educational standards. For the same academic year, all seven Winchester City Public Schools were accredited.

In 2023, the number of Frederick County residents (over 25) reported to have graduated from high school was 88%. From 2021 Census data, 31.41% of the Frederick County population reported earning a bachelor's degree or higher, while, as of 2023, 61% reported attending some college.

Frederick County ranked number 29 out of 133 counties in Virginia in relation to health. However, premature death increased by 6.45% from 2021 to 2023. Adult obesity is 33%, almost mirroring the state average of 32%; physical inactivity is 23%, over the national average of 22%; and excessive drinking is 19% matching the national average.

Approximately 9% of the population of Frederick County, under the age of 65, is uninsured, according to the U.S. Census Bureau. Additionally, there is only one primary care physician for every 2,020 residents compared to the national average of one physician for every 1,310 persons.

In 2021, Frederick County had a drug-related death rate of 20.9 per 100,000 residents, whereas Winchester City had a rate of 32.5 per 100,000 residents. From 2020 to 2021, the commonwealth's number of overdose deaths increased by 29%.

## Frederick County Agriculture Profile:

The latest agriculture statistics come from the 2017 Census of Agriculture, published in the spring of 2019. From 2012 to 2017, Frederick County has increased its number of farms by 12%, totaling 762 farms. During this same period, a 9% increase was seen in acres of farmland equaling 109,907 acres. 98% of all farms in the county are family farms. The average size of farms decreased by 2% from 148 acres to 144 acres per farm. 41% of farmland is used as cropland, as of 2017. The top crops by acres in Frederick County are forage (hay/haylage), apples, corn for grain, soybeans, and wheat for grain. The remaining 49% of farmland is devoted to pastureland (28%), woodland (25%), or other (6%). Of these, there are 39 acres irrigated.

Average total farm expenses per farm decreased by 7% from 2012 to 2017 while cash farm income decreased by 75%. As of 2017, the average market value of products sold per farm was \$44,324. In the same year, farm-related income was down 23% from 2012 at \$9,292. From 2012 to 2017, the average farm net cash farm income drastically increased by 75% to \$1,295. 73% of these profits come from crops, and the remaining 27% come from livestock, poultry, and products. Frederick County cattle inventory was listed as 16,884 in 2017. Corn and wheat for grain totaled 5,326 acres of farmland in Frederick County.

As of August 2021, 9,669 acres in Frederick County have been protected from development in conservation programs, 4.89% lower than those of 2018.

According to the USDA National Agricultural Statistics Service, the Northern Shenandoah Valley leads the Commonwealth in the production of tree fruit (largely apples and peaches). According to the 2017 Census of Agriculture, Frederick County harvested the most acres of apples than any other county in the state: 4,400 of 10,879 total acres (40%). FC also accounted for 169 of the total 1,032 total acres of harvested peaches (16%). These crops are intensely managed, high-value crops (approximately \$2,500-\$25,000 per acre depending on processing versus fresh market prices and variety).

Please know that markets and pricing in 2012 were extremely strong for corn, wheat, soybeans, beef, and apples, thus leading to a significant decrease in farm income in 2017. As there are no published statistics since the COVID-19 global pandemic, the 2024 Census of Agriculture will give a birds-eye view of the substantial agricultural change between 2017 and the conclusion of the pandemic.

## Community and Resident Perspectives

Agents and ELCs in the Northern Shenandoah Valley (Planning District 7: Counties of Clarke, Frederick, Page, Shenandoah, Warren and the City of Winchester) conducted a 2023 Community Survey in which 547 residents responded. 188 were from Winchester and Frederick County and the responses were used to formulate the priority issues identified later in this report.

In our best attempt to reach a uniform representation of the entire community and all demographics, it should be noted that the 70% of the NSV respondents were female, 94% white, 71% have completed some level of higher education, 46% reported a household income over \$100,000, and the majority were familiar with Extension as 54% participated in a VCE program in the past year. In Winchester and Frederick, 74% of the respondents were female, 94% white, 74% have completed some level of higher education, 46% reported a household income over \$100,000 and the majority were familiar with Extension as 56% participated in a VCE program in the past year.

## Winchester and Frederick – Top 10 Issues

1. Over development; preserving farm and forest land; managing natural habitats and ecosystems
2. Food insecurity; strengthening the local food system; ensure safe, high-quality foods
3. Homelessness and lack of affordable housing; lack of affordable prices; rapid inflation
4. Public health; adult and youth mental health
5. Water quality and supply, protect freshwater resources; protect air quality; reduce misuse and overuse of pesticides and fertilizers
6. Invasive pests; develop resilience in the community and agriculture for climate change

7. Production and profitability for farmers and forest landowners; additional support for agriculture
8. Agriculture, natural resources, and environmental illiteracy in adults and youth
9. Empower youth and the next generation; lack of youth activities for low-income households
10. Nutrition and unhealthy food choices; preserve foods for home use

The top ten issues identified for the Northern Shenandoah Valley (NSV) were largely the same, just in a different ranking for 3 through 9. For the NSV, issue 10 spoke to the need for an educated community and improved education system.

Issues 1, 2, and 5 were reflected as state top ten issues. The state survey responses also noted the following as major concerns: safe food handling; addressing hunger; preventing suicide; and managing the marine environment.

Table 2. Percentage of Respondents Selecting High or Very High Effort is Needed for This Issue from Pre-Written Selections

Frederick County		Northern Shenandoah Valley		Statewide	
Protecting Water Quality	93%	Protecting Water Quality	92%	Protecting Water Quality	75%
Preserving Farm and Forest Land	81%	Preserving Farm and Forest Land	80%	Ensure Safe, High Quality Foods	73%
Strengthening the Local Food System	80%	Reducing Misuses and Overuse of Pesticides and Fertilizers	78%	Ensuring Safe Food Handling	69%
Protecting Air Quality	79%	Strengthening the Local Food System	78%	Protecting Freshwater Resources (Lakes, Rivers, Springs, Wetlands)	68%
Reducing Misuses and Overuse of Pesticides and Fertilizers	79%	Protecting Air Quality	77%	Strengthening the Local Food System	67%
Promoting Agricultural, Natural Resources, and Environmental Literacy	79%	Protecting Freshwater Resources (Lakes, Rivers, Springs, Wetlands)	76%	Protecting Air Quality	66%
Controlling Invasive Pests (Plants, Animals, Insects)	78%	Promoting Agricultural, Natural Resources, and Environmental Literacy	75%	Addressing Hunger Issues	64%
Ensure Safe, High Quality Foods	76%	Controlling Invasive Pests (Plants, Animals, Insects)	75%	Preventing Suicide	63%
Managing Natural Habitats and Ecosystems	76%	Managing Natural Habitats and Ecosystems	72%	Protecting the Marine Environment	63%
Protecting Freshwater Resources (lakes, rivers, springs, wetlands)	76%	Ensure Safe, High Quality Foods	72%	Managing Natural Habitats & Ecosystems	62%

Top 40 Rank	Open Ended Answers	Issue (black is Quliatrics provided survey info; red is open ended additions/edits)	
1	2,10	42	Preserving farm and forest land ( <i>over/rapid development</i> ); Managing natural habitats and ecosystems (stewardship/conservation natural resources)
2	3,8	37	Strengthening the local food system ( <i>food insecurity/supply</i> ); Ensuring safe, high quality foods
3		22	<i>affordable prices/inflation/affordable housing/homelessness</i>
4	34	20	<i>public health/general health</i> ; Addressing adult and youth mental health
5	1,7,4,6	20	Protect Water quality ( <i>supply</i> ); Protecting freshwater resources (lakes, rivers, springs, wetlands); Protecting air quality; Reducing misuse and overuse of pesticides and fertilizers
6	5	20	<i>develop resilience in ag for climate change/climate change</i> ; Controlling invasive pests (plants, animals, insects)
7	11	18	<i>support agriculture</i> ; Assisting farmers and forest landowners in production and profitability
8	9	17	Promoting agricultural, natural resources, and environmental literacy ( <i>youth</i> )
9		11	<i>empower youth</i> ; <i>lack of youth activities for low income households</i>
10	30,23	9	Preserving foods for home use (canning, dehydrating, fermenting, freezing); Helping consumer make healthy food choices (nutrition)

Top 21 Rank	# of Open Ended Answers	Issue (black is Quliatrics provided survey info; red is open ended additions/edits)	
1	9+2	103	Managing natural habitats and ecosystems ( <i>stewardship/conservation natural resources</i> ); Preserving farm and forest land (over/rapid development)
2	4+10	70	Strengthening the local food system ( <i>food insecurity/supply</i> ); Ensuring safe, high quality foods
3	11	56	<i>support agriculture</i> ; Assisting farmers and forest landowners in production and profitability
4		55	<i>public health/general health</i> ; <i>substance abuse</i> ; addressing adult and youth mental health
5	12+7	45	Helping youth develop leadership, citizenship, and other life skills ( <i>empower youth</i> ); Promoting agricultural, natural resources, and environmental literacy (youth)
6	1+3+5+6	42	Protect Water quality ( <i>supply</i> ); Reducing misuse and overuse of pesticides and fertilizers; Protecting air quality; Protecting freshwater resources (lakes, rivers, springs, wetlands)
7		34	<i>affordable prices/inflation/affordable housing/homelessness</i>
8		20	<i>develop resilience in ag for climate change/climate change</i>
9	8	16	Controlling invasive pests (plants, animals, insects)
10		13	<i>education</i>

# Community Issues

The top five priority issues were identified through analysis of the community survey data returned from Winchester and Frederick County residents. The responses to both scripted questions as well as detailed responses provided in open ended questions were combined and reviewed to reveal the following top five issues:

An almost 10% population increase since 2017 supported with residential, industrial, and commercial development raises this as a priority issue in a once small rural community. Additionally, solar energy production is being explored and developed as a new land use in Frederick County.

Frederick County is both a community of food consumers and food producers. Food systems and security seemed to be both a local, district, and statewide priority. Survey responses noted that many residents recognize the linkage between agriculture (food production) and food security (food consumption) including ensuring safe, high-quality foods; hunger; local food systems; safe food processing; handling; and food availability.

Local residential growth, short supplies in the real estate market, and recent periods of high inflation seemingly led to many survey responses voicing concern around family financial security, homelessness, and a lack of affordable housing in Frederick County.

Mental health concerns for youth and adults seems to be at an all-time society high following the COVID pandemic. Additional concerns include general public health and wellbeing along with high incidents of obesity, chronic disease, and substance abuse in the region.

Water Supply and Water Quality was very high ranking at the county, district, as well as at the statewide level. It was also noted as a priority issue in the 2018 Frederick County Situation Analysis. Federal and state initiatives to improve Chesapeake Bay health, local development requiring an ever-growing water supply, and local quarrying activities brought water quality and quantity to the forefront. Additionally, residents noted environmental health, pollinators, and native plants as priorities while noting concerns about pollution and invasive pest species.

## Future Programming to Address Community Issues

### **Issue: Over Development and Land Preservation:**

Engage local governments and community partners already working on land preservation.

Continue educational efforts around agriculture production and profitability; maintaining ag profitability helps preserve ag and forest land.

Collaborate with environmental organizations to organize nature preservation events. Through outreach and engagement efforts, we routinely work with environmental partners to teach environmental best management practices and offer educational events.

Engage with local schools to instill environmental stewardship among youth.

### **Issue: Food Insecurity and Local Food Systems:**

Conduct community workshops related to food systems: ag production, local foods, backyard gardening, food safety, food preservation, value added processing.

Tie food systems work to personal and family health and wellbeing with education nutrition, wellness, and family financial education.

Collaborate with community organizations and non-profits. Through outreach and engagement efforts teach production agriculture, home vegetable gardening, Family Nutrition Programs and SNAP education.

Engage with local schools and youth organizations to instill food production and horticulture knowledge in youth.

Utilize Master Food volunteers to engage with community residents.

## **Issue: Family Financial Security and Homelessness:**

Provide programs on Strengthening Personal Finances in Your Community to agencies, organizations, and civic groups to increase awareness of the need for financial education programs that improve family financial security.

Offer Poverty Simulation programs to expose participants to the realities of living in poverty including challenges of navigating the complex services system and trying to make ends meet with limited resources.

Provide educational programs through community groups, churches, schools, and workplaces to improve family financial security. Programs will include the Coping with a Money Crunch workshop, the Managing Your Money series, and other individual programs on a variety of financial management topics.

Provide financial mentoring on request to participants who complete the Managing Your Money series.

Offer youth financial simulations in 3<sup>rd</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grades to give students the opportunity to experience real world applications of the economics and personal finance topics they are learning in school.

## **Issue: Public Health and Emotional Wellbeing:**

Organize mental health awareness campaigns in collaboration with local health agencies. Promote youth mental awareness in Frederick County 4-H newsletter and during National 4-H Week.

Develop and distribute informational resources on available mental health. 4-H has Mental Health and Emotional Wellbeing curriculum available to youth members; resources that cover youths' feelings, wellness, and mind health.

Conduct workshops on stress management and coping mechanisms. Future youth stress management workshops and classes will be Frederick County Teen Council will include a special workshop session during their quarterly meeting. Education programs are available at the 4-H State events level. Potentially implement a 4-H SPIN (Special Interest) Program that focuses on stress management, productivity, and mental health.

All 4-H programs are open to youth ages 9-18.

Collaborate with schools to implement mental health education.

Engage community members as Extension volunteers to bolster their own mental wellbeing.

Continue chronic disease prevention work and initiate educational programming to address obesity and substance abuse.

## **Issue: Water Quality and Environmental Health:**

Continue to engage local governments and community partners working with protecting our natural resources.

Continue educational programming that teaches best management practices in production agriculture.

Offer annually well water testing through the Virginia Household Water Quality Program.

Engage with local schools to instill environmental stewardship among youth.

Utilize Extension Master Gardener volunteers to empower residents to implement best management practices in the home landscape.

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