

**NC STATE**

EXTENSION



**LEADING THE WAY**

2019 ANNUAL REPORT

## **OUR MISSION**

NC State Extension extends research-based knowledge to all North Carolinians, helping them transform science into everyday solutions that improve their lives and grow our state.

## **OUR VISION**

We are the model of excellence in non-formal, research-based education that advances agriculture, the environment, human health and well-being, youth and communities, while creating prosperity for all North Carolinians.

## Message from the Director

Extending knowledge and enriching lives. It seems like a simple concept, but North Carolina's challenges are as unique as its 532 cities and towns.

Already the ninth most populous state, North Carolina is growing by the day. We welcome new neighbors who've heard the word about the opportunities, communities and innovation that our state cultivates. Regardless of who arrived or when, we're all locals somewhere.

Wherever folks call home in North Carolina, Extension is there.

At NC State Extension, we're familiar with growth. In 2019, we grew to over 1,000 employees, who alongside our partners created more than \$2 billion in economic impact to the state. Yet we pride ourselves in being community-based. Our people live, work and contribute in all 100 counties and the Eastern Band of Cherokee, growing a network of relationships and partnerships that span the state, from Murphy to Manteo.

With growth comes change and the need for forward-thinking communities that have the know-how and tools to lead and succeed. NC State Extension is committed to engaging, serving and inspiring people across North Carolina — reaching communities in the ways they need us most. In 2020, we'll continue to lead the way toward a bright and prosperous future for North Carolina, as we grow talent, economies, opportunities and solutions for our state, one community at a time.

Because all of our youth deserve access to educational programs that can nurture and mold them into future leaders.

Farmers who increase their productivity and profits will help create jobs, grow our economy and feed our families.

Families that learn to cook nutritious meals today, will buy fresh produce from their local farmers market tomorrow.

And a community member using facilitation skills will help volunteers support their town's Main Street revitalization efforts.

Thank you for taking time to discover how NC State Extension is leading the way and growing North Carolina in this report, which is available at [go.ncsu.edu/ExtensionImpacts](https://go.ncsu.edu/ExtensionImpacts).

Sincerely,



**A. Richard Bonanno**

Director, NC State Extension

Associate Dean, College of Agriculture and Life Sciences

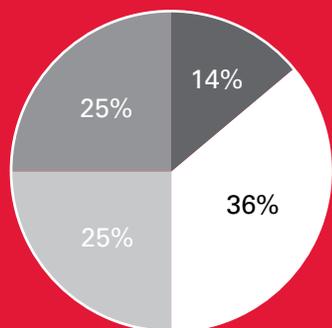
***"Wherever folks  
call home in North  
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A. Richard Bonanno



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### EXTENSION EXPENSES

Federal	\$16.4M
State	\$42.9M
County	\$29.1M
*Other	\$29.2M

TOTAL \$117.6M

\*Grants, contracts, donations, etc.

## A System of Solutions

NC State is proud to be a leading land-grant university. It's an important obligation and a major part of what distinguishes us among other universities and institutions.

NC State Extension serves as a bridge between North Carolinians and our state's preeminent research university. We don't stop at the classroom or lab, we put research into action and deliver practical solutions across the state through our vast Extension network.

### 1 IDENTIFY ISSUES

Extension experts in every county collaborate with campus specialists to confirm local needs

### 2 RESEARCH SOLUTIONS

Apply science and technology to better understand and address the issue

### 3 TRANSFER RESULTS

Deliver research-based recommendations back to the communities, translating knowledge into practical applications



### Progress through Partnerships

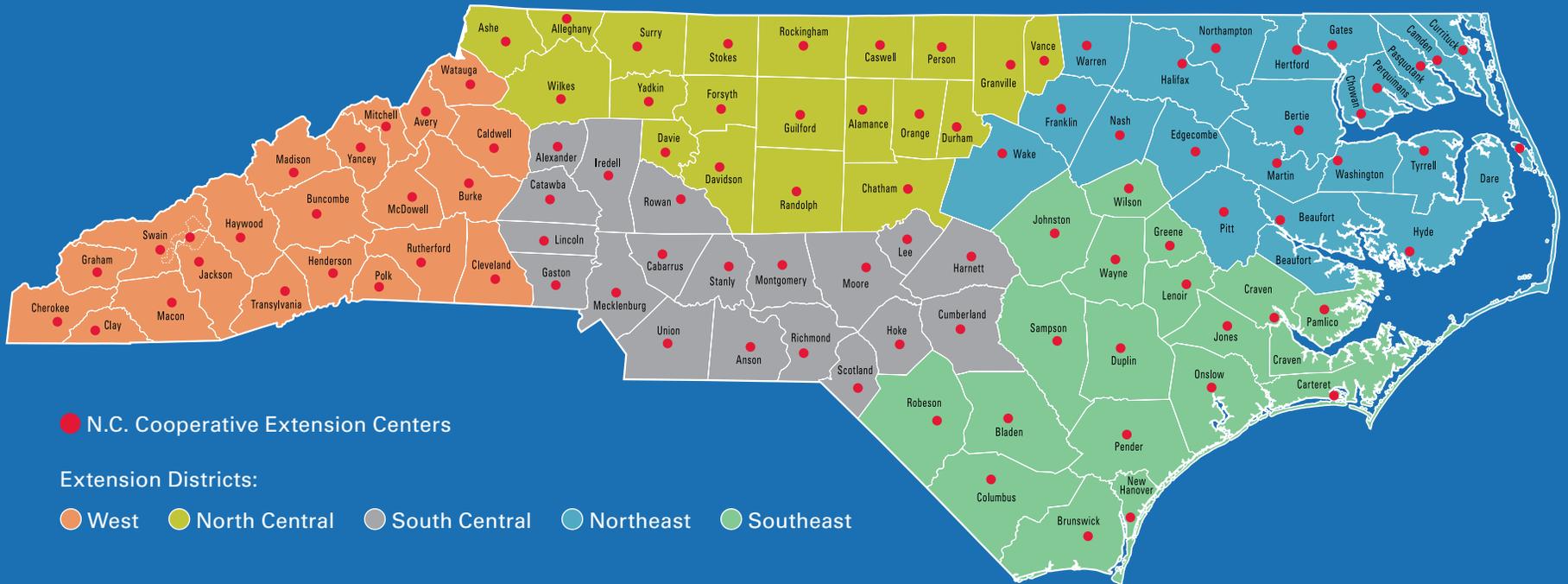
Essential to Extension's mission to grow the state is our collaboration with the U.S. Department of Agriculture's National Institute of Food and Agriculture (USDA-NIFA), N.C. A&T State University and local governments across the state. This strategic partnership is called N.C. Cooperative Extension.

Together our network of partnerships and technical expertise helps to create economic, societal and intellectual prosperity in every corner of the state.

# Extension is Everywhere for North Carolina

## 101 Local Centers, 1,058 Professionals

NC State Extension supports locally-focused services in every North Carolina county and the Eastern Band of Cherokee. County centers house 619 NC State professionals, while another 439 faculty and staff on NC State's campus work with Extension in some capacity.



In 2019, we connected with  
**1,544,159M**  
 people face-to-face via  
 13,000+ programs\*

\*Directly engaged in the learning process individually or as part of a group.



**\$2.1B**

Extension's annual economic impact on North Carolina^

^TEconomy Partners, LLC, independent analysis of economic impact, including N.C. Cooperative Extension partnership, in 2018.



**2.6M**

Unique visitors to Extension sites

**8.1M**

Total pageviews



**27-1  
ROI**

Economic return on government investments in Extension

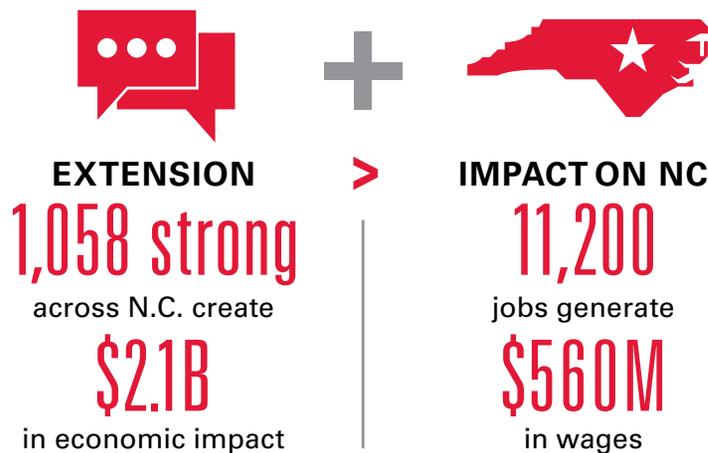
# Extension Drives Rural North Carolina's Economy

North Carolina is only as strong as its individual communities. In order for the state to prosper, work must be done at the local level, particularly in rural areas, to catalyze stakeholders, develop partnerships and strengthen infrastructure.

Extension's statewide network of centers and partnerships uniquely position us to support North Carolina's rural communities, where the majority of our food and agricultural products are produced. Through efforts like Cultivate NC, NC AgVentures, local food programming and Latino services, we facilitate job creation, build sustainable agriculture and local food economies, help farmers increase productivity and profits, and promote access to education for rural youth.

**In 2019, rural areas actually saw the fastest job growth rate of any other geographical zones. A few of Extension's contributions included:**

- > Provided educational services to more than 1M rural North Carolinians, most of whom live in ^Tier 1 and 2 counties (our most economically-distressed regions)
- > **85,468** producers in rural counties adopted Extension best management practices (from production and pest control to business management and marketing)
- > **4,407** participants gained knowledge and/or skills to increase their families' economic security
- > **33,360** youth in our rural counties gained key career and employability skills through Extension's 4-H programs
- > **65,998** youth in rural counties increased their knowledge of local food and agricultural systems



## Connecting Rural Communities

In the past year, Extension upgraded 22 county centers to broadband internet services through the N.C. Research and Education Network (NCREN), one of the nation's first statewide education and research communications networks. As trusted hubs of knowledge and expertise in rural North Carolina communities, these Extension county centers are better equipped to promote access to 21st century learning and solutions. This new future-proof network is a vital building block for growing our state's rural communities and economies.



**Each of the 22 Extension centers that transitioned to broadband internet are in \*rural counties.**

^N.C. Department of Commerce county tier designations based on economic development conditions, with Tier 1 representing the "most distressed" counties and Tier 3 the "least distressed"

\*N.C. Rural Center-defined counties with an average population density of 250 people/sq. mi. or less

## Local Foods Movement Brings Big Economic Potential for Rural Downtowns

Extension local food programming is on a mission to work with local development teams in rural North Carolina towns to create vibrant main streets and downtown communities. In 2019, Extension staff acted as liaisons between development groups, restaurants and local farmers to encourage the promotion of local food systems for economic gain.

Extension encouraged the local operations to strengthen relationships with city and county personnel tasked with downtown development, including planners, town managers, downtown developers, tourism offices and chambers of commerce. Local groups were also advised to build connections with entrepreneurs as a resource for local products, and to educate restaurateurs on the availability of local food products while highlighting farms they source from on their menus or other signage.

With well-attended workshops in Kinston and Shelby, among others, developers and farmers alike learned that collaboration would enhance both of their goals.

By leveraging the state's agricultural diversity and strong rural roots, as well as capitalizing on the popularity of the local foods movement with farm-to-table restaurants, convenient farmers markets in downtown spaces and new chef-farmer relationships, Extension is helping North Carolina's rural communities plan for a future with more tourists, a growing local economy and thriving main streets.

Discover more at [go.ncsu.edu/ExtensionCRD](https://go.ncsu.edu/ExtensionCRD).

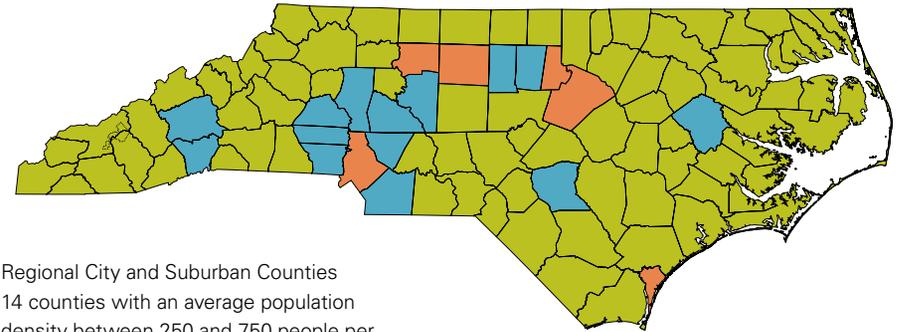


# Meeting the Needs of Growing Urban Populations

The needs of urban areas are not always different from their rural neighbors, but the context in which Extension delivers services often varies greatly. North Carolina's six urban counties continued to grow in 2019 – roughly 35 percent of the state's population now resides in six of the state's 100 counties – with expectations of increased migration from rural areas in the future.

This presents new challenges for Extension, including finding ways to reach and support an urban customer base that is further removed from agriculture.

Extension has embraced an increased population size and density, greater diversity of citizens and the complex organizational environment of N.C. urban centers, where multiple partners often work toward similar goals. And Extension continues to adapt and develop programs and services for a vastly different physical environment that still has familiar needs.



**Regional City and Suburban Counties**  
14 counties with an average population density between 250 and 750 people per square mile.

**Urban Counties**  
6 counties with an average population density that exceeds 750 people per square mile.

**Rural Counties**  
80 counties with an average population density of 250 people or fewer per square mile.

*Densities calculated by the Rural Center based on 2014 U.S. Census population estimates.*

## Extension in Urban Areas - What Programming Looks Like



### FOOD and AGRICULTURE

- > Increasing agricultural awareness
- > Tailoring gardening and food production services to urban environments
- > Strengthening local food systems
- > Promoting farmland and open space preservation



### NATURAL RESOURCES

- > Promoting water conservation and protecting water quality
- > Improving waste management practices
- > Providing information on how to develop and maintain a healthy tree canopy in urban environments



### HEALTH and NUTRITION

- > Promoting healthy lifestyles and decreasing risk of chronic disease through nutrition education
- > Educating families on food safety, food preservation, nutrition and physical activity
- > Certifying retail food managers in food safety practices



### 4-H YOUTH DEVELOPMENT

- > Teaching life skills
- > Developing future leaders
- > Strengthening STEM education
- > Preparing underserved youth for college and careers
- > Promoting healthy minds and bodies through holistic wellness strategies



### FAMILIES and COMMUNITIES

- > Increasing food security
- > Promoting physical, mental, environmental, social and financial wellness
- > Building capacity of local non-profits
- > Leading collective impact initiatives to address critical community issues

# Master Gardener Volunteers Dig into Community Education and Healing

Urban areas in North Carolina face many issues – rapid development at the expense of native plants, engagement of at-risk youth, food safety and sustainability among others. For the past 40 years, NC State Extension has facilitated a program that combats these issues in perhaps an unlikely way: gardening.

In 2019, 3,315 Master Gardener<sup>SM</sup> volunteers – trained and coordinated by Extension county staff – provided unbiased, research-based information that empowered residents to cultivate healthy gardens, landscapes and ecosystems through safe and sustainable gardening practices. Operating in 84 counties, they donated more than 229,000 hours of volunteer service and directly reached over 450,000 North Carolinians.

Across our urban counties, the Extension Master Gardener education series taught participants to reduce pesticide use through pollinator workshops, the importance of planting and sustaining native plants, and how proper landscaping can reduce energy costs. To help build relationships between at-risk youth and senior mentors, the program's Garden Corps Intergenerational Partnership's participants learned about nutrition, food safety and cooking at the Food Bank vegetable garden in Wake County. Elementary-aged children and their families in New Hanover County learned why it is important to take a break from digital screens, while engaging in hands-on, discovery-oriented outdoor learning through the Explorer's Backpack Program.

These and other programs facilitated by the Extension Master Gardener program are positively impacting North Carolinians in urban counties, planting the seeds for new partnerships and healthy communities through gardening.

Find more at [go.ncsu.edu/AboutEMGV](https://go.ncsu.edu/AboutEMGV).



# Translating Cutting-Edge Research into Practical Applications

NC State Extension helps grow North Carolina with programs and partnerships focused on agriculture, food and nutrition, and 4-H youth development. Our programs and partnerships grow the economy, ensure food safety and production, protect public health, and create opportunities for youth to grow and learn.



## FEEDING OUR FUTURE

NC State Extension keeps North Carolina's agriculture industry – the state's leading economic sector – growing and sustainable by connecting growers with research-based information and technology.

### Agriculture Impact

**248** county employees

**542,507** face-to-face contacts

**124,521** participants attended programs

**96,792** farms adopted Extension best management practices

**\$92B** value of N.C. agriculture industry



## IMPROVING OUR HEALTH

Extension helps people make healthier decisions, reduce their risk of chronic disease and live better lives through programs from gardening and nutrition to local food systems and food safety.

### Food & Nutrition Impact

**112** county employees

**219,860** face-to-face contacts

**71,973** participants attended programs

**4,646** food service employees trained

**13,313** adults and **33,241** youth increased their consumption of fresh fruits and vegetables



## ENRICHING OUR YOUTH

Extension's 4-H program addresses the diverse issues and backgrounds of today's youth, helping to grow more than 260,000 youth into healthier, more involved citizens and future leaders.

### 4-H Youth Development Impact

**109** county employees

**591,854** face-to-face contacts

**261,210** total 4-H'ers

**8,400** youth attended 4-H camp

**16,789** volunteers supported 4-H programming

*Note: An additional 20 NC State county employees are affiliated with other/multiple program areas (not included in figures above), as well as another 130 county Extension employees that are funded entirely by county governments.*

# Protecting Our Shared Environment

Extension faculty and staff in the College of Natural Resources (CNR) are committed to solving natural resources challenges by helping communities, businesses and citizens to manage and sustain our shared natural environment. They add tremendous value to Extension through programmatic efforts in Forestry, Wood Products and Tourism.

## Extension Forestry

- Generated \$48.2B in tax savings on active farm, forest and pasture lands for landowners enrolled in the Present Use Valuation Program.
- Decreased use of pesticides among Western N.C. Christmas tree growers by 21% in the last 5 years through education and technical support.
- Educated 13,600 landowners, land managers and community leaders across the southern U.S. on fire science, wildland fire and prescribed fire through a partnership with the U.S. Forest Services Southern Research Station, Tall Timbers Research Station, University of Florida and others.

## Wood Products Extension

- Created an estimated economic impact of \$4.1M via six workshops (380 participants) addressing lumber, upholstery furniture framing, landowner education and firewood processing.
- Working in partnership with Wake County, developed a database listing wood products and requirements for wood waste feedstock. Ultimately, the database will help to reduce the 4,080 metric tons of wood waste per month in Wake County by inspiring better wood waste utilization practices.

## Tourism Extension

- Assisted farmers in generating more than \$48,000 in farm revenue through the delivery of two programs - Vacationer Supported Agriculture and Fork2Farmer.
  - 1,047 customers purchased one or more produce bags and 33,457 individuals received information on purchasing local foods and visiting local farms.
- Trained 30 National Park Service (NPS) staff in climate adaptation planning framework for archaeological stewardship. Framework revision will enhance value considerations of associated American Indian Tribes.
  - As a first step, Tourism Extension hosted value-based conversations with 75 citizens and staff from Tribal Nations about the importance of archeological materials and sites.





## Saving Our Sweet Potatoes

When a microscopic worm, known as the Guava Root-Knot Nematode (GRKN), took root in the soils of North Carolina and threatened the nation's largest source of sweet potatoes, NC State Extension specialists launched an aggressive training and infected-crop identification program that's helping save our state's \$350 million sweet potato industry.

GRKN refers to microscopic worms in the soil that can infect sweet potatoes (among other crops), forming knots or galls on the roots and ruining entire crops. The GRKN Training Program is an interactive, on-site session with a focus on creating a GRKN prevention culture in packing plants and production operations. Workers learn to detect potential symptoms of infection in sweet potato and respond to symptoms if detected on the packing line. The program also explains the impact of GRKN on sweet potato production in North Carolina, which grows more than 60% of the country's sweet potatoes.

Educators from the Extension Farmworker Health and Safety Program also offer instruction in Spanish to support worker comprehension, and involve the packing house owner, manager or senior supervisor to ensure they discuss GRKN protocols specific to each operation with workers. At this time, the training is offered to sweet potato packing facilities in eastern and central North Carolina, but there are plans to expand the program in 2020.

The GRKN Training Program was created to contribute to the campaign to combat GRKN in North Carolina. It is financially supported by NC State Extension and the Extension Farmworker Health and Safety Program.

Read more at [go.ncsu.edu/GRKN](https://go.ncsu.edu/GRKN).



## Building a Stronger Agricultural Future

NC State Extension discovers and implements better agricultural products and practices, while providing growers and agribusinesses with the resources they need to continue producing high-quality, economically-significant crops and livestock.

### N.C. Agriculture Industry

Agriculture is North Carolina's largest industry, generating **\$91.8B** annually while employing roughly **17** percent of the state's workforce. Our's is the third most diverse agriculture economy in the country, with more than **80 commercial crops** and a large animal agriculture presence.

- > **728,000** jobs
- > **47,800** farms
- > **8.1M** acres
- > **#7** in livestock cash receipts
- > **#8** in agricultural cash receipts

### Promoting Sustainable Agriculture Practices

The U.S. Department of Agriculture has awarded a five-year, \$10 million grant to NC State to help lead a nationwide research effort to improve the sustainability of agriculture, while tackling the grand global challenge of how to feed the world's growing population, through the use of cover crops. Extension specialists and researchers will conduct coordinated experiments exploring how cover crops can improve the soil and profitability of cash crops, and then convert the knowledge into decision-support tools or apps for farmers. [go.ncsu.edu/SustainableAg](http://go.ncsu.edu/SustainableAg)

### The Gift of Christmas Tree Research

Extension specialists are leading research on a Christmas tree orchard at the Upper Mountain Research Station that will provide North Carolina growers with a reliable source of certified Fraser fir seeds. Christmas tree growers will be able to select seeds based on specific characteristics consumers and farmers want, which stands to provide a major boost to the state's \$86 million Christmas tree industry. [go.ncsu.edu/ChristmasTrees](http://go.ncsu.edu/ChristmasTrees)

### Transforming Sludge into Energy

What if sludge from swine lagoons could be used not only as fertilizer, but also for renewable energy? Because sludge is made up of organic matter that was not fully broken down during treatment, it has the potential to be utilized as a bioenergy feedstock. In two-year's time, we will develop and evaluate economic systems for sludgz removal and drying, and characterize the dried sludge as a fertilizer and a combustion feedstock. [go.ncsu.edu/Sludge2Bioenergy](http://go.ncsu.edu/Sludge2Bioenergy)

## Improving Agriculture Through Plant Science Innovation

Partnering with commodity groups, agribusinesses, startups and government agencies, the N.C. Plant Sciences Initiative (PSI) is bringing together bright minds from all disciplines to increase crop yields, enhance sustainability and grow profitability.

[cals.ncsu.edu/psi](http://cals.ncsu.edu/psi)



*College of Agriculture and Life Sciences administration, including NC State Extension Director Rich Bonanno (third from right), took part in a groundbreaking ceremony for NC State's Plant Sciences Building. Scheduled to be completed in 2021, the state-of-the-art facility will harness the power of interdisciplinary research and cutting-edge technology to meet today's agricultural challenges. Extension's statewide network will play a critical role in helping farmers and industry partners utilize the discoveries to make real-time, informed decisions that grow N.C. agriculture.*

*Agriculture industry data courtesy of USDA and N.C. Department of Agriculture and Consumer Services*



## EFNEP Celebrates 50th Anniversary

Helping families since 1969, the Expanded Food Nutrition and Education Program (EFNEP) celebrated its 50th Anniversary in 2019. Federally-funded and administered through NC State and N.C. A&T State universities, the program addresses the nutrition education needs of low-income families and youth. EFNEP and its network of educators, students and volunteers tackle this challenge through programs focused on peer-to-peer, hands-on nutrition education classes—including cooking, physical activity and shopping on a limited budget—and simple strategies to help families move more together.

**In 2019, EFNEP served 2,676 families in 45 counties in North Carolina, along with 17,563 families in 4-H, helping them to:**

- › Make wise food choices
- › Increase daily physical activity
- › Manage food resources
- › Practice food safety

Read more at [go.ncsu.edu/EFNEP50Years](http://go.ncsu.edu/EFNEP50Years).



# Promoting Better Health Through Food and Nutrition

In North Carolina, roughly 32 percent of adults are obese and 1-in-5 children live in poverty. The state also ranks 34th in the country for rural healthcare, meaning many rural communities lack access to adequate resources relating to healthy foods and lifestyles.

^A one-percent decrease in hospital inpatient visits in North Carolina (for diseases associated with poor diet and/or lack of exercise) would result in nearly \$24 million in cost savings to the state. Through education and outreach, NC State Extension provides research-based programs that promote a lifetime of good health.

## Consumer Food Preparation and Preservation

Consumer programs focus on food preparation and preservation skills that help promote healthy eating and provide scientific evidence-based food safety and food information. Programs such as Extension Master Food Volunteers, Safe Plates, Med Instead of Meds and Cook Smart, Eat Smart teach healthy and safe food preparation techniques.

- > **47,041** consumers increased their knowledge of safe home food handling, preservation or preparation practices
- > **8,908** participants learned how to prepare local foods, including home food preservation techniques
- > **436,404** received information from Safe Plates Food Safety Information Center social media campaigns addressing home food safety practices

## SNAP-Ed (Steps to Health)

Through education, social marketing campaigns, policy systems and environmental systems change initiatives, the Supplemental Nutrition Assistance Program – Education (SNAP-Ed) is making a difference in the lives of limited-resource individuals and families in North Carolina. NC State’s SNAP-Ed project, Steps to Health, promotes healthy food choices within a limited budget and living a physically active lifestyle.

- > **218** sites made at least one community or organizational change to positively impact health, reaching **145,087** individuals
- > **7,392** people (6,572 adults and 820 children) participated in Steps to Health
- > **52,940** educational contacts were established within **59 counties**

## Food Safety

There are around 48 million cases of foodborne illness each year in the United States, many of which are preventable with proper food handling. Extension plays an integral role in providing consumers, growers and retail businesses with food safety education.

- > **1,801** trained in Good Agricultural Practices (GAP)
- > **4,646** food handlers increased their knowledge and skills in safe food handling practices
- > **30,000** (approximate) students on average in North Carolina public schools participate in the Safe Plates program as part of their curriculum standards in career and technical education foods programs
- > **829** school personnel increased knowledge of HACCP (Hazard Analysis and Critical Control Points) principles
- > **214** state and local regulators trained using a unique NC State Extension curriculum addressing variances to the food code and specialized processes- these food safety professionals regulate over 200,000 food businesses in North Carolina and across the nation

*^Based on analysis of state statistics from HCUP State Inpatient Databases [2014], recorded by the Agency for Healthcare Research and Quality (AHRQ), by TEconomy Partners.*



## Combating Opioid Misuse Among Youth

The misuse of opioids—prescription pain relievers, synthetic drugs such as fentanyl, and heroin—has killed more than 12,000 North Carolinians since 1999. To combat this devastating epidemic, NC State Extension’s 4-H Healthy Living team works on the front lines in North Carolina rural communities, focusing on prevention through community engagement and education of middle school-aged youth and their families.

In 2017, armed with a \$324,000 Rural Health and Safety Education (RHSE) grant from USDA’s National Institute of Food and Agriculture (NIFA), 4-H youth specialists with NC State Extension partnered with Family and Consumer Sciences specialists, Department of Agricultural and Human Sciences faculty, and East Carolina University to develop the Powerful Communities Curriculum and combine it with their grassroots effort entitled Empowering Youth and Families Program (EYFP). The program’s goals: reduce substance misuse by youth, improve parenting and communication skills between youth and their caregivers, and empower families to lead community change and support healthier lifestyles.

In 2019, a \$1.5 million grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) led to new program curricula and expanded the program’s reach from three to 11 North Carolina counties—Yancey, Burke, Richmond, Montgomery, Lee, Nash, Carteret, Onslow, Pender, New Hanover and Brunswick. To date, 51 caregivers and 58 youth have completed the program, and the participating counties have held nine separate community events with approximately 13,000 community members in attendance.

“Prevention is where we know Extension can be most effective,” said Amy Chilcote, 4-H curriculum specialist and project director with NC State Extension. “We provide [middle school-aged youth] with tools to protect themselves and help them understand that their parents and communities support them. We hope with additional funding that we’ll be able to create a study to expand the program in North Carolina and one day make it national.”

Discover more at [go.ncsu.edu/OpioidsYouthPrevention](https://go.ncsu.edu/OpioidsYouthPrevention).



## Growing the Leaders of Tomorrow

Extension's 4-H program works with North Carolina's youth "to make the best better." In 2019, more than 261,000 kids participated in 4-H programming, which equips them with the confidence and knowledge to make a difference in the world. Through clubs and camps, 4-H encourages young people to reach their full potential as they learn by doing, addressing needs through their head, heart, health and hands (each "h" forms a leaf on the iconic clover).

- > **815** 4-H clubs maintained in North Carolina
- > **31,781** youth gained career/employability skills
- > **35,509** youth demonstrated increased knowledge of natural resources and environmental issues
- > **93,982** youth improved their knowledge of local food and agricultural systems
- > **41,657** youth increased their knowledge, attitudes, skills and/or aspirations regarding leadership

### **4-H is a national leader in STEM education (Science, Technology, Engineering, Math)**

- > **141,371** youth gained valuable knowledge in STEM fields
- > **3,445** teachers used 4-H STEM curriculum in their classrooms last year

### **Cultivating Citizenship Through Camps**

For more than 80 years, Extension's 4-H camps have provided unforgettable experiences to youth across the state. 4-H camps strengthen the foundations of the diverse communities they serve and instill valuable, lifelong lessons in campers by promoting healthy lifestyles and fostering a sense of social responsibility. In 2019, 8,400 youth attended 4-H residential and day camps at three N.C. 4-H camps: Betsy-Jeff Penn, Camp Millstone and Eastern 4-H Center.

We need your help to sustain and grow these valuable 4-H programs for future generations. Your support will ensure a healthy, fit and responsible North Carolina for years to come.



Send a kid to camp at [go.ncsu.edu/ExtensionGift](https://go.ncsu.edu/ExtensionGift).





*State agricultural leaders, including NC State Extension Director Rich Bonanno (third from left), gather to cut the ribbon for North Carolina's "Spotlight State" exhibit at the 2019 Sunbelt Ag Expo.*

## **Annual Spotlight: Sunbelt Ag Expo**

The Sunbelt Ag Expo brings thousands of farmers from across the Southeast together each year for what show promoters bill as "North America's Premier Farm Show." In 2019, North Carolina was designated as the event's Spotlight State, which comes with the responsibility of outfitting a building near the center of the Sunbelt Ag Expo's grounds to showcase key attributes that make up the state's agriculture industry.

Working alongside the N.C. Department of Agriculture and Consumer Services, N.C. Farm Bureau, NC Grange and N.C. A&T State University, NC State Extension helped coordinate a virtual trip through North Carolina agriculture for show visitors, demonstrating the state's role in local and global food systems and our leadership in agricultural technologies.

More than 7,000 visitors experienced N.C. agriculture in the Spotlight State exhibit. NC State Extension participated in strategic planning for the event, and ultimately provided a dairy farm virtual reality experience, a virtual bee-keeping experience and, in partnership with N.C. Farm Bureau, the AgriPride Simulator – a retrofitted cab that offers a virtual harvesting experience with various crops. NC State Extension also showcased leadership in hemp research with an informational display.

With more than 1,200 exhibitors covering 100 acres of exhibit space, the Sunbelt Ag Expo was a major highlight of 2019 and a celebration of North Carolina agriculture and NC State Extension's central role in its ongoing growth.



*Youth and adults alike lined up to experience a cutting-edge beekeeping program from NC State Extension's apiary program.*

## Putting Knowledge to Work for North Carolina

NC State Extension offers 13,000 educational programs, 101 local centers and a network of nearly 200 websites that serves 2.6 million people each year. Whether it's on the farm, in the city or on the web, **we grow North Carolina.**

### Connect With Extension

**Our Homegrown video series** shares trusted tips and tools from Extension experts across the state - everyday solutions for everyday lives - whether that means preparing a nutritious seasonal recipe, learning the best way to start your garden, or discovering where your food comes from. Dig in with us at [go.ncsu.edu/Homegrown](https://go.ncsu.edu/Homegrown).

**NC State Extension publications** provide practical guidance, backed by science, on a vast array of topics. Extension produced 60 numbered publications this past year, while adding 132 new factsheets developed independently by specialists. We distributed over 31,000 copies through print/digital sales, all of which are available at [go.ncsu.edu/Extension-Publications](https://go.ncsu.edu/Extension-Publications).



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1,000 copies of this public document were printed at a cost of \$2.67 per copy.

# NC STATE EXTENSION

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