



2025

The Urban Difference

*Impacts from Alabama Extension
at Alabama A&M University*



extension
ALABAMA A&M and AUBURN UNIVERSITIES



UNP-2209



Alabama Extension, From the Hill to the Community



From the President

Dr. Daniel K. Wims, *President*, Alabama A&M University (AAMU)

With support from the Alabama Cooperative Extension System (Alabama Extension), Alabama A&M University (AAMU) launched two groundbreaking agricultural initiatives in 2024: The People's Patch Community Farm and the North Alabama Ag Expo. The People's Patch is quickly becoming a hub in Madison County that combats food insecurity and promotes agricultural research and community outreach.

The North Alabama Ag Expo serves as a regional gathering point for farmers, agribusinesses, and educational institutions, encouraging greater engagement in agriculture and strengthening community ties throughout North Alabama. I want to express my gratitude to Alabama Extension for their leadership on these initiatives and for their ongoing efforts statewide to educate and empower individuals and communities through practical, research-based knowledge.



From the 1890 Administrator

Dr. Majed Dweik, *Vice President for Research & Economic Development, Interim 1890s Extension Administrator*, AAMU

Alabama Extension remains a trusted resource for practical solutions to everyday challenges—from animal health to financial management. Our dedicated staff not only provide valuable information, but also find fulfillment when those they serve share their success stories and personal testimonies.

The impacts highlighted in this report represent just a glimpse of what we offer. We encourage you to explore this publication, visit our website, and follow us on social media to learn more about the many ways Alabama Extension is making a difference. The best part? Even more exciting opportunities lie ahead as we continue to positively impact communities across the state.



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2024 | At-a-Glance

Operating out of nine urban centers across Alabama, Alabama Extension at AAMU works within a network of experts, educators, and volunteers to impact all 67 Alabama counties.

By the Numbers

January – December 2024

- Direct & indirect programming contacts: **474,300**
- Urban Extension website views: **213,012**
- Facebook User Reach: **43,897**
- Extension Website Views: **4.5 million**
- Digital Media Contacts: **6.2 million**

External Funding Comparison

- FY 2022/23: \$9.8 million
- FY 2023/24: \$10.9 million
- FY 2024/25: \$8.3 million

Alabama Extension Week

September 15-21, 2024

Alabama Governor Kay Ivey proclaimed September 15-21, 2024, as Alabama Extension Week. Throughout the state, Alabama Cooperative Extension System staff held various activities in their counties. AAMU Extension made **2,079** direct contacts and **611,555** contacts through digital media.

This report includes our latest impacts from reporting year 2024. Alabama Extension reports on the previous year's efforts and implements programming in the current year while planning for the following year.

Photos: Largemouth bass, Alabama state fish and Gulf State Park, Gulf Shores, Alabama.





Map Legend



Alabama Extension Urban Centers

Calhoun County - Anniston
Houston County - Dothan
Jefferson County - Birmingham
Lauderdale County - Florence
Madison County - Huntsville

Mobile County - Mobile
Morgan County - Decatur
Montgomery County - Montgomery
Tuscaloosa County - Tuscaloosa

Urban Extension In-Person Service Areas

Autauga, Baldwin, Blount, Calhoun, Chilton, Coffee, Colbert, Cullman, Dale, Elmore, Etowah, Franklin, Houston, Jefferson, Lauderdale, Lee, Limestone, Madison, Marshall, Mobile, Morgan, Montgomery, Russell, Shelby, St. Claire, Tuscaloosa, and Walker counties.



Rodeo at the Agribition Center.



4-H youth attend the Ag Expo.



37th Annual Senior Fun Fest event by TARCOG.
Photo shared by Collin Daly.



2024 North Alabama Ag Expo leadership pictured from left to right, Madison County Commissioner Violet Edwards, Agribition Center Manager Donna Gilbert, VP of Research & Economic Development Majed El-Dweik, and Madison County Commission Chair Mac McCutcheon.



Youth robotics competition at the Agribition Center.



The Agribition Center

The Building on Moores Mill Road

Alabama A&M University's facility on Moores Mill Road has become a vital asset to Madison County. Between October 2023 and September 2024, the Agribition Center hosted 52 events, ranging from community gatherings to university workshops, drawing an estimated total of 46,149 attendees. In 2024, the Center also served as the venue for the inaugural North Alabama Ag Expo.

On Saturday, November 2, around 800 visitors attended the Ag Expo, enjoying a variety of family-friendly activities, such as educational exhibits, local vendors, a petting zoo, bounce houses, and a tractor driving contest. The first 100 children received a free t-shirt, and additional giveaways included raffle prizes from exhibitors and a complimentary lunch.

The People's Patch

Madison County Community Farm

For four decades, Alabama A&M University (AAMU) and the Madison County Commission operated under a “gentleman’s agreement” to maintain a community garden on land near the AAMU campus. In February 2024, this informal arrangement became official with the signing of a five-year agreement to develop an urban farm to enhance research and outreach activities while addressing food insecurity in Madison County, Alabama.

As part of the agreement, AAMU donated 25 acres of land. Daily operations of the farm, known as The People’s Patch, are managed by District 6 Commissioner Violet Edwards and her team. Support is also provided by AAMU students and staff from Alabama Extension, who contribute expertise in areas such as communications and marketing, pest management, and crop selection. Alabama Extension has also provided funds for the farm’s infrastructure and other expertise.

The People’s Patch maintains an active Facebook page, sharing weekly harvest updates, volunteer opportunities, and other timely announcements. The page’s following continues to grow as more residents learn they can access fresh produce free of charge.

In 2024 alone, 111,060 pounds* of fresh produce were harvested and distributed to Madison County residents.

*2024 summer harvest estimates based on square footage planted and yield estimate charts.



&



ALABAMA
A&M
UNIVERSITY





The People's Patch Madison County Community Farm.



AAMU Extension Specialist Felix Samuel, Madison County Commissioner Violet Edwards, Madison County Commission (MCC) Harvest Manager Jason Andra, MCC District Office Administrator Sequin Martin, MCC Director of Outreach Bryan Primm, and AAMU Extension Specialist Clement Akotsen Mensah.



Fresh okra and squash from The People's Patch.



Two AAMU student volunteers smile for the camera during the 2024 Goat & Sheep Summit.



Urban Agriculture

Advancing Herd Health and Profitability

Animal Science and Forages

When small ruminant farmers do not keep abreast of new management practices, they could fall behind in productivity and lose revenue. They could also miss opportunities to improve animal health or to learn about untapped resources and marketing opportunities for their products or services. This can also lead to an inability to compete with other producers.

Alabama Extension's Alabama Goat and Sheep Summit allows professionals to address shared challenges among small ruminant producers and farmers. The Summit is held at AAMU's Winfred Thomas Agricultural Research Station, and it includes lectures, hands-on demonstrations, and tours to explore the latest agricultural research projects. Youths are also invited to participate in farm tours, hands-on experiments, and other activities designed to spark an interest in agricultural careers.

2024 Impacts

In 2024, approximately 120 participants attended the Alabama Goat and Sheep Summit. As a result of attending this event:

- 85 percent (102) of participants learned more about parasite control.
- 46 percent (55) learned more about diversifying small ruminant agribusinesses.
- 44 percent (53) increased their knowledge of silvopasture management.
- 34 percent (41) increased their knowledge of poisonous plants.
- 28 percent (34) increased their knowledge of breeding management.
- 13 percent (16) learned how to manage pests.

By learning and implementing best management practices, small farmers and animal producers can advance herd health and on-farm profits.

ROI: 436:1 – *Staying abreast of best practices can lower annual animal health costs.*



Extension Specialist Felix Samuel leads a breakout session during the 2024 Alabama Goat and Sheep Summit.



Extension Specialist Felix Samuel and Christopher Burns work to gather a herd of goats.

STATE OF ALABAMA
DEPARTMENT OF AGRICULTURE AND INDUSTRIES
THOMPSON - BISHOP - SPARKS
STATE DIAGNOSTIC LABORATORY
ANIMAL, POULTRY AND AQUACULTURE
890 SIMMS ROAD



Pictured from left to right: Sasa Boskovic, Jelena Pavic, Essence Bell, Goran Vuckovac, Felix Samuel, Daivon Allen, Faruk Mulabdic, Vladimir Bulatovic, and Radomir Medojevic.



Urban Agriculture

Cochran Fellowship Training

Success Story by Felix U. Samuel, Ph.D.

The Cochran Fellowship Program is a program of the United States Department of Agriculture (USDA). This program provides short-term training opportunities for professionals from middle-income countries. The initiative aims to enhance global trade and development by improving agricultural practices.

Alabama A&M University (AAMU) received a \$63K Cochran Fellowship Grant to train veterinarians and agricultural experts from Bosnia and Herzegovina. Six veterinarians from Bosnia and Herzegovina participated in the two-week training program led by Extension Animal Science Specialist Felix U. Samuel from November 2-16, 2024.

Bosnia and Herzegovina, like many nations with developing agricultural sectors, face significant challenges in maintaining livestock health and disease management. These issues stem from the following:

- Limited access to advanced training in veterinary or animal sciences
- Gaps in modern diagnostic tools
- Inconsistent implementation of best practices in animal health

As a result, the country's livestock industry has struggled with outbreaks of zoonotic and endemic diseases, reduced productivity, and trade restrictions due to health concerns. Addressing these challenges required targeted capacity building to equip local veterinarians with the knowledge and skills to implement advanced animal health strategies and improve disease management systems.

AAMU designed and delivered a specialized animal health and disease management program through the USDA Cochran Fellowship Program that addressed the specific needs of the participants and their local agricultural systems. Through this initiative, AAMU reaffirmed its commitment to advancing global agricultural and veterinary practices, benefiting both the US and its international partners.

Urban Agriculture

Greener Living through Home Horticulture

Home Horticulture: Urban Green

Homeowners often encounter a variety of challenges when maintaining their lawns and gardens, such as weeds, pests, nutrient deficiencies, plant diseases, and drainage issues. Home horticulture programs offer valuable support in addressing these problems. Beyond their practical benefits, these programs also promote physical and mental well-being by encouraging outdoor activity and fostering connections with family and community members. Additionally, well-kept gardens can help reduce food insecurity and lower monthly grocery expenses for individuals and families.

Urban Green is an education program that provides urban residents with sustainable practices to manage landscaping, urban gardening, and home pests. It includes the Back-2-Basics Online Gardening Series that focuses on basic gardening and landscaping training for individuals with limited space in urban settings.

2024 Impacts

A program survey among 2,637 participants indicated the following:

- 84 percent increase in knowing the importance of water irrigation systems and 68% increase in learning at least four ways to conserve water in a garden.
- 85 percent increase in knowing how to use cultivation practices to control weeds.
- 92 percent increase in the importance of identifying beneficial insects.
- 92 percent (2,426) of participants learned the importance of pollinators and pollinator gardens.

Delayed post-assessment surveys among 211 participants revealed the following:

- 82 percent (173) watered more efficiently using a timer and 89 percent (188) watered efficiently using drip irrigation.
- 83 percent (175) conducted a soil test more frequently.
- 73 percent (154) purchased or built a rain barrel for water conservation.
- 48 percent (101) purchased and planted a trap plant or crop.
- 77 percent (162) adopted plasticulture and irrigation.

Home horticulture programs can help reduce food insecurity and increase knowledge and skills that are beneficial to the environment.

ROI: 25:1 – *A well-maintained home garden allows people to save on home food costs.*



STEM in the Garden participants at Southlawn Elementary School in Montgomery County- Photo by Roosevelt Robinson.



Urban Regional Agent Allyson Shabel demonstrates how to harvest flower seeds.



Extension specialist turns over a leaf to reveal garden pests.



Extension IPM Specialist Clement Akotsen Mensah shows AAMU Child Development Center students a hissing cockroach during an Alabama Extension Week event on the Quad.



Monitoring pests in a community garden.

Urban Agriculture



Minimizing Risks for Growers

Integrated Pest Management

Each year pests cause a variety of damage to gardens and crops. For example, they chew on leaves, stems, fruit, and vegetables. The results are stunted plant growth, discoloration, and reduced crop yields. Some pests can also spread plant diseases. Integrated Pest Management (IPM) programs work to control pests and diseases that are harmful to plants and the environment.

Alabama Extension's IPM program at AAMU works with urban food producers, small-scale farmers, home gardeners, city planners, community leaders, and academic researchers to provide sustainable solutions to pest and plant disease problems. Although this program is still in development, staff are available to assist growers and homeowners across the state.

2024 Impacts

- 5,536 direct and indirect program contacts were made during 2024.
- 30+ individual growers and homeowners were educated on how to control pests like aphids, squash bugs, stink bugs, spotted wing drosophila (SWD), and peach pests.

The IPM specialist works closely with the harvest manager at The People's Patch Madison County Community Farm to control pests and plant diseases.

- In 2024, an estimated 111,060 pounds of produce was harvested and distributed to Madison County residents at no cost.
- The People's Patch is also used for research. It is among the first sites where the *Leptopilina japonica*, a beneficial parasitic wasp that attacks the SWD, was documented cc. The SWD poses serious threats to small fruit producers of blackberries, blueberries, cherries, elderberries, strawberries, and other fruit tree crops.

IPM minimizes pesticide risks for growers and the environment and protects beneficial insects.

ROI: 3:1 – IPM education can lower pesticide costs.



ALABAMA 4-H
Alabama A&M University



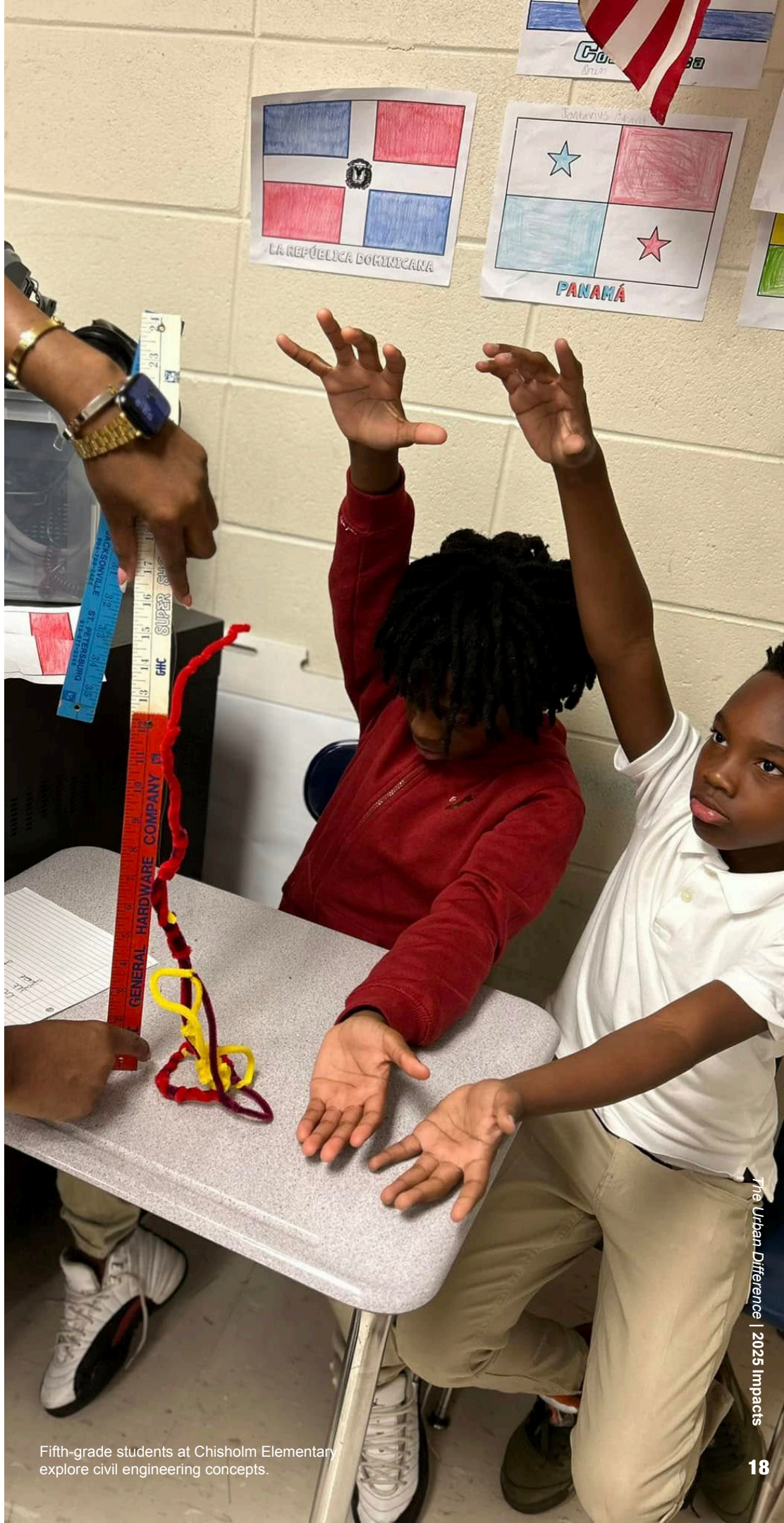
Students from Leighton Elementary learned about drones in agriculture and basic recreational drone safety tips from 4-H Urban Regional Agent Tyler Thompson.



Franklin County high school students conducted various experiments in the pyro-lab.



Urban 4-H students in Washington DC.



Fifth-grade students at Chisholm Elementary explore civil engineering concepts.

Alabama 4-H at AAMU

Substance Use Among Alabama Youth

Alabama 4-H Youth Development

Since COVID-19 hit the world stage, overall drug use among Alabama adolescents has continued to decline. Despite this progress, in 2023, 7.2 percent of youth aged 12–17 reported using illicit drugs, and 5.8 percent misused prescription medications. During 2021–2022, nearly 6 percent of youth in this age group reported using alcohol. Another 7 percent or approximately 26,000 teens used illicit drugs—85 percent (22,100) of these youth used marijuana.

Regarding tobacco, the Alabama Department of Public Health reported that 2.25 million middle and high school students used tobacco products in 2024—down from 2.8 million in 2023. However, nicotine vaping rates have returned to pre-pandemic levels.

The Alabama 4-H program at Alabama A&M University delivers Health Rocks!®, a resistance skills training program. Health Rocks!® uses the positive youth development model to empower young people with life and decision-making skills to avoid substances like drugs, alcohol, and tobacco.

2024 Impacts

Despite staffing shortages in 2024, 304 youth completed ten hours of Health Rocks!® training. Pre- and post-test surveys revealed these findings:

- 59 percent (179) of the youth developed critical thinking and refusal skills that enabled them to resist peer pressure and make healthier life choices.
- 84 percent (255) indicated they could discuss health-related topics to promote positive behavior, particularly among their peers and make safer choices when it comes to substance use.
- 11 percent increase among pre- and post-test surveys in the knowledge of the adverse effects of substances and the risks of using drugs, alcohol, and tobacco.

By engaging in resistance skills training, adolescents gain skills to recognize and resist high-risk situations involving substance use.

ROI: 7:1 – *Resistance skills training leads to lower cigarette use and costs.*



Sign up for Alabama 4-H at www.aces.edu/AAMU4H



Health Rocks

11/18/2021

you want to smoke with me:
 NO I'm good; have to go home
 NO, don't do that
 NO I'm good somebody calling
 NO I'm too young



Students at LE Wilson learned about vaping, simulated how it affects our bodies, and explored how we can make better decisions about our health.



4-H Health Rocks!® students at Tharptown learned about the importance of quality friendships and making decisions about our health based on facts.

Alabama 4-H at AAMU

Zyien's Transformation

Success Story by Angela Williams, Ed.D.

Zyien Thompson was a quiet and reserved student. Her peers often saw her as the girl who sat quietly and observed others, rarely raising her hand or speaking up. However, everything changed when she became an ambassador for the 4-H Tech Changemakers program.

Zyien initially joined Tech Changemakers out of a simple interest in technology. Her curiosity grew as she began learning about digital tools and resources. The turning point came when Alabama 4-H at Alabama A&M University held sessions to provide digital literacy skills to adults in her community. The Urban Extension 4-H specialist encouraged Zyien to take on a leadership role, something she had never done before. Despite her initial hesitation, Zyien accepted the challenge.

Zyien prepared diligently, learning how to teach others, and practicing public speaking. On the day of the first session, she surprised everyone, including herself. She confidently guided adults through the intricacies of using drones in the workplace. Zyien's confidence soared throughout several sessions. She soon became the face of the program, inspiring other youth to step out of their comfort zones. Her transformation was remarkable—the once shy girl became a capable leader and mentor.

Zyien Thompson





Birmingham Community Incubator (BCI) participants pose after the completion of the program.



Community Resource Development

Gearing Up for Success

Birmingham Community Incubator

The reasons behind business failures in Alabama mirror causes seen across the nation. Common factors include inadequate planning and financial management, ineffective marketing strategies, cash flow issues, and poor leadership for starters.

According to U.S. Bureau of Labor Statistics and Lendio, an online marketplace for business loans, the business failure rates in Alabama are as follows:

- 23.5 percent of businesses fail within the first year.
- 45.6 percent fail within the first five years.
- 63.9 percent fail within the first ten years.

Business startup training offered through the Birmingham Community Incubator (BCI) provides aspiring entrepreneurs the opportunity to lay a firm foundation for business ventures. Participants gain access to critical resources and networks, develop a solid business plan, and more importantly, increase their chances of success.

2024 Impacts

There were 34 graduates in 2024. Since 2022, 151 adults have participated in a 6-hour training course delivered in partnership with the Salvation Army, Operation Hope and ELI Thrive. In total, 74 aspiring entrepreneurs have graduated and 68 of those graduates have received a \$1,000 grant to launch their businesses.

Business startup training provided by community resource development programs (CRD) allows aspiring entrepreneurs the chance to build a firm foundation that can lead to greater business success.

ROI: 40:1 – *Extension CRD programs can help reduce business failure rates.*



Birmingham Community Incubator attendees during a workshop.



Extension Agent Jon Jacobson poses with BCI graduates.



Terence Norwood (top left), Juani Macias-Christian (top right),
Jon Jacobson (bottom left) and Marisa Hawkins (bottom right).

Community Resource Development

Extension CRD Team Becomes **Pioneers** in Entrepreneurship Education

Success Story by Terence Norwood, M.P.P.A.

In an era where economic self-sufficiency is paramount, the Alabama Cooperative Extension System's Community Resource Development (CRD) team at Alabama A&M University (AAMU) emerged as a trailblazer in entrepreneurship education. They are the first Cooperative Extension team in the nation to become certified entrepreneurship educators through the Council on Adult Basic Education (COABE), a national organization dedicated to advancing adult education and lifelong learning. This achievement not only sets a precedent for other Extension teams but also reinforces the importance of entrepreneurship in community development.

Terence Norwood, an Alabama Extension community and economic development specialist, and Urban Regional Extension Agent Juani Macias-Christian completed training in 2024, while team members Jon Jacobsen and Marisa Hawkins, completed the training in 2025.

This certification is through COABE's Online Entrepreneurship Institute. The institute aims to equip educators with the skills necessary to teach entrepreneurship effectively, ensuring learners are prepared to navigate the complexities of starting and running a business.

The CRD team sought the COABE certification because they recognized the pressing need for more effective entrepreneurship education. Attaining the certification signifies a commitment to high-quality educational practices and positions the team as leaders in the field. As certified entrepreneurship educators, the team is dedicated to delivering comprehensive and impactful training to diverse populations.

The collaboration between COABE and the CRD team is a model for other Extension teams nationwide. The team hopes to inspire others to pursue similar certifications and initiatives to create a nationwide network of informed and skilled entrepreneurship Extension educators by getting this certification.

Consumer Sciences and Personal Financial Management

Overcoming Economic Challenges

FLIP: Financial Literacy in Progress

Today, most Alabamians find themselves in debt due to the inflated cost of living, which includes higher mortgage rates. Other debt is the result of student loans, credit cards, and unexpected medical costs. According to Experian, one of the largest credit bureaus in the nation, the average mortgage debt for Alabamians was \$178,204, student loan debt was \$37,390, and the average credit card balance was \$6,730.

Money management classes offer numerous benefits, including setting financial goals, avoiding financial costly mistakes, and building a stronger financial future. These classes provide the skills to manage finances more effectively with increased confidence and less stress.

FLIP: Financial Literacy in Progress teaches people how to develop good money management skills. Participants learn how to sensibly approach buying, recognize unreasonable buying behavior, develop a spending plan or budget, establish and maintain good credit, apply strategies to reduce debt, and avoid financial fraud and predatory lenders.

2024 Impacts

In 2024, 211 participants engaged in five, one-hour FLIP sessions. Pre- and post-test surveys revealed the following:

- 177 percent increase in the percentage of participants who agree to review their credit reports regularly.
- 157 percent increase in the percentage of participants who plan to keep their credit balance under 30 percent of their credit limits.
- 49 percent increase in the percentage of participants, indicating they plan to pay their bills on time.
- 47 percent increase in the percentage of participants who knew how to identify predatory lenders.
- 335 percent increase in the percentage of participants who indicated they plan to avoid using payday and cash advance loans.
- 437 percent increase in the percentage of participants who planned to avoid using title loans.
- 472 percent increase in the percentage of participants who indicated they will avoid using rent-to-own services.

Overcoming economic challenges begins by managing personal finances, resulting in less debt and more household savings.

ROI: 296:1 – *Applying financial literacy tools can lower personal debt.*



Extension Specialist Dorothy Brandon leads a FLIP session.



FLIP participants pose to celebrate program completion.

Family and Child Development

Digital Literacy for Older Adults

Mastering the Digital Divide

In 2024, computer and internet use among older adults continued to rise; however, disparities persisted due to age, income, and educational levels. In addition, some older adults still face barriers due to physical and cognitive limitations and concerns about digital literacy and security while online.

Alabama Extension's Mastering the Digital Divide computer training program offered numerous benefits, including enhanced cognitive function, improved communication with friends and loved ones, and a greater sense of independence. Using digital technology can also reduce feelings of isolation among seniors as experienced during the COVID-19 pandemic.

In 2024, 216 adults participated in a series of three, two-hour sessions of their choice. The program introduced participants to a basic understanding of computers, mobile devices, and software applications that enabled them to perform specific tasks and interact with other people.

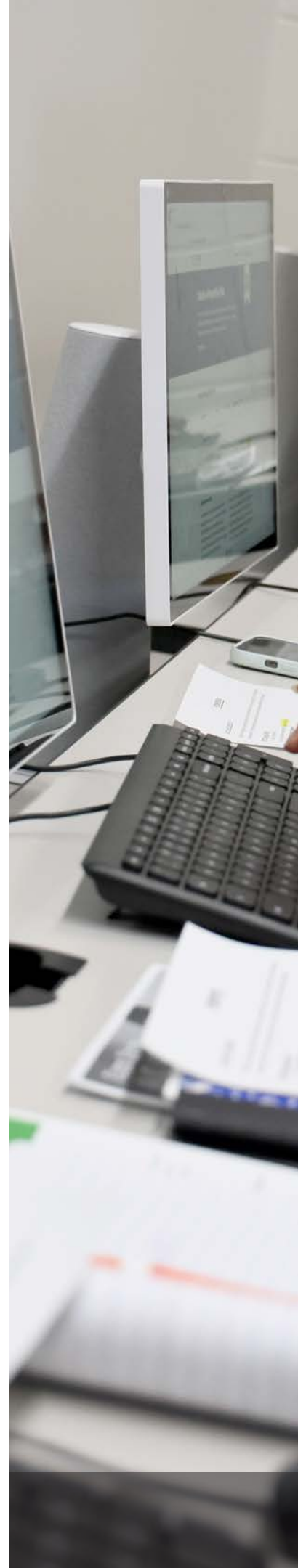
2024 Impacts

As a result of the Mastering the Digital Divide training:

- 216 older adults increased their knowledge of computers, including types and what to consider when purchasing a computer.
- 191 participants learned about a word processing program, enabling them to create, save, and open a document.
- 25 older adults increased their knowledge of online etiquette and mobile devices (smartphones and tablets) to perform daily tasks.

Computer literacy is important for older adults to stay connected, access essential financial and health services, and to maintain cognitive functions that improve their quality of life.

ROI: 33:1 – *Digital literacy training enables older adults to access services.*







Extension Specialist Karnita Garner collecting unwanted electronics, prescription drugs, and documents for shredding and recycling.



Forestry, Wildlife and Natural Resources

Living in Harmony with Nature

UESEP: Urban Environmental Science Education Program

The environment plays a vital role in the survival of humans, plants, and animals. Like other living beings, people rely on clean air, water, food, and natural resources. Beyond basic needs, the environment also supports our physical and mental well-being. Imagine the positive impact if more people took steps to reduce oil consumption. By using less fossil fuel for electricity, we could lower greenhouse gas emissions. In turn, reducing these gases in the atmosphere could possibly minimize the severity of climate-related changes.

Alabama Extension's environmental programs instructs people on how to live in harmony with nature. The UESEP: Urban Environmental Science Education Program provides youth and adults with conservation strategies to improve environmental awareness and stewardship. These initiatives also address new and emerging environmental issues.

2024 Impacts

- 38,000 pounds of paper were recycled, saving 101 trees, 961 gallons of oil, 714,968 hours of electricity, and 30,424 gallons of water, per the Montgomery County Environmental Calculator.
- 10 STEM books were shared with 2,288 youth focusing on disaster preparedness. Schools designated in the Alabama Turnaround Initiative were also among the targeted schools. As a result of the lessons, 76 percent (1,739) of youth wanted to read more because of the Lend an EAR virtual story time series; 77 percent (1,762) of youth felt the story time series increased their knowledge of natural resources; 86 percent (1,968) of youth felt reading the books aloud helped them understand them better; and 70 percent (1,602) of youth felt the story time series made them want to protect the environment.
- 107 of 304 participants completed a post-delayed survey, which indicated that 95 percent (102) had recycled glass, paper, plastic, or aluminum in their homes; 75 percent (80) created an emergency preparedness kit; 36 percent (39) tested drinking water in their homes; and 58 percent (62) tested the soil in their lawns.

Environmental education programs enable people to be eco-friendly by conserving natural resources and fostering greater harmony with nature.

ROI: 143:1 – Reducing energy consumption helps decrease greenhouse gas emissions.

Forestry, Wildlife and Natural Resources

Extension Student Wins More Top Poster Awards

Success Story by Karnita Garner, Ph.D.

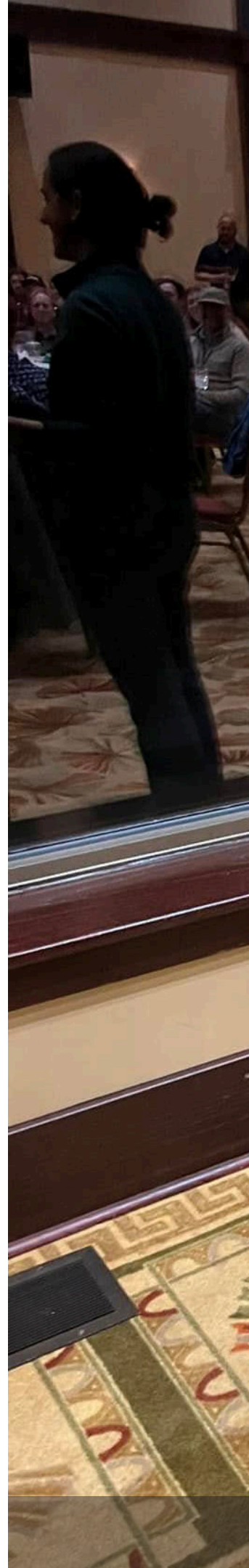
Every spring Alabama A&M University (AAMU) encourages students to showcase their science, technology, engineering, and mathematics (STEM) research projects during STEM Day. This year Destinee Simmons, a 2024 AAMU chemistry graduate, and a former Extension biweekly student and volunteer, won first place for a second time in the poster contest for her presentation on the Distribution of Mercury in Flint Creek Watershed: Implications for Mercury Bioaccumulation.

Simmons also garnered a “Best Poster” presentation award for this work at the 2024 Alabama Chapter of the American Fisheries Society Annual Meeting, February 21-22, 2024, in Guntersville, Alabama. Other poster co-authors included AAMU Professor and Advisor Paul Okweye, Environmental Extension Specialist Karnita Garner, and Elica Moss, AAMU research assistant professor.

About the Research

The research study examines the bioavailability and toxic effects of mercury and its compounds in water, soil, and fish found in the Flint Creek Watershed in Hartselle, Alabama. It also examines the distribution of mercury within the Flint Creek Watershed and the implications for mercury bioaccumulation. Research findings indicated that PPCP concentrations were detected in some of Alabama’s water sources. The study further underlined the need for improved pharmaceutical use and management and the development of evidence-based water quality guidelines.

Simmons volunteered with Alabama Extension’s SerPIE program that highlights the connection between pharmaceutical drugs, personal care products, and pollution by tackling tough topics like the opioid crisis and giving the public information to protect their home and the environment.





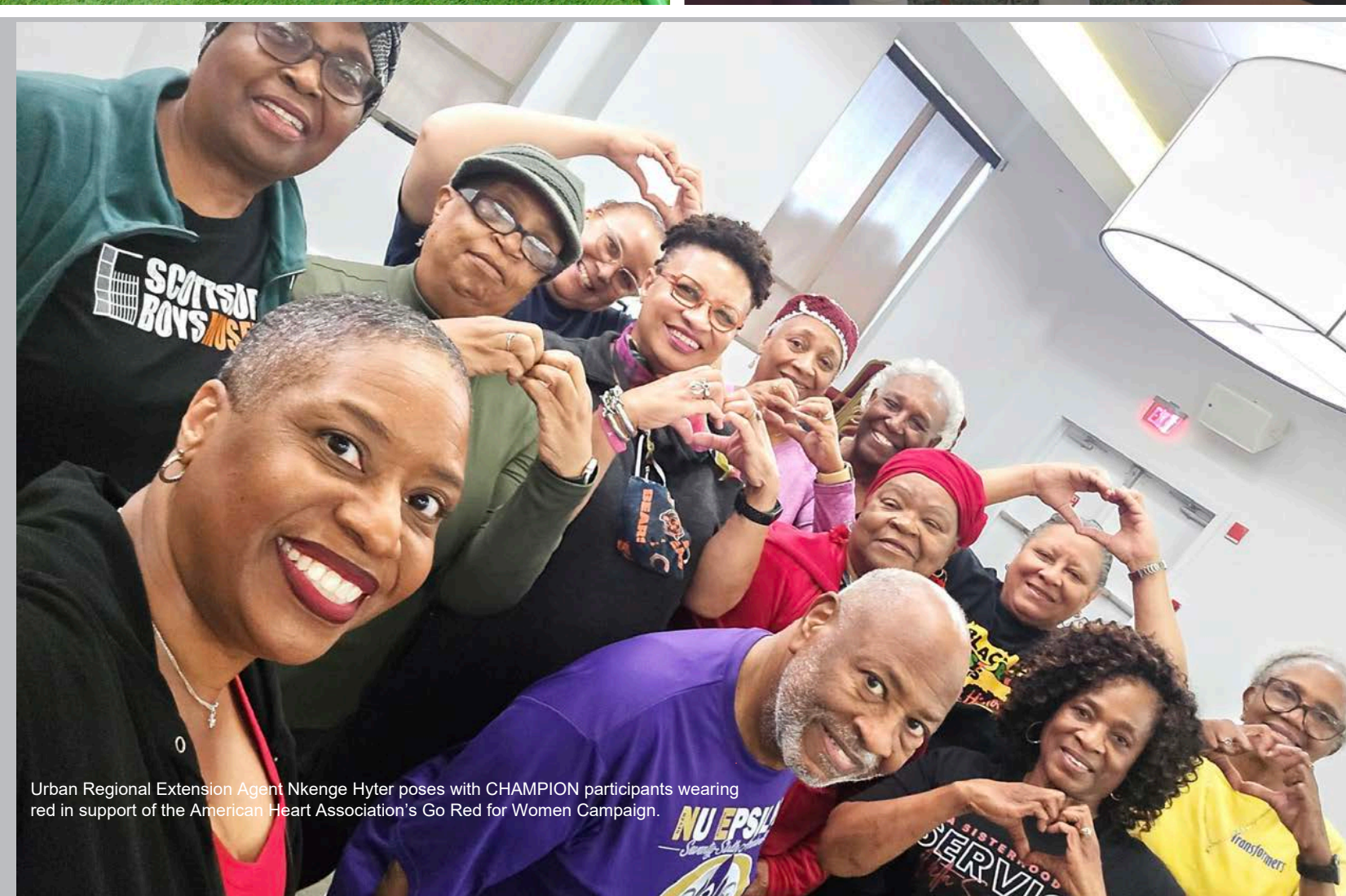
Destinee Simmons with Katelyn Lawson, President, Alabama Chapter of the American Fisheries Society.



Program Support Associate & Mobile Nutrition Lab Coordinator Shavita Wood helps a child blend a smoothie on the blender bike.



Extension Urban SNAP-Ed Digital Content Coordinator Jordan Allen poses outside the Mobile Nutrition lab with two AAMU students.



Urban Regional Extension Agent Nkenge Hyter poses with CHAMPION participants wearing red in support of the American Heart Association's Go Red for Women Campaign.



Troy University students make a smoothie on the Urban SNAP-Ed blender bike.



Morgan County 4-H youth attend a Champion Fitness Walk with Extension Agent Shanetria Orr.





Human Nutrition, Diet and Health

Healthy Choices, Healthy Lives

CHAMPION Youth

Alabama ranks 45th in the nation for youth overweight and obesity rates, according to America's Health Rankings by the United Health Foundation. Approximately 35.5 percent of Alabama children ages 10–17 are considered overweight or obese, based on reported height and weight. Health and nutrition programs play a key role in addressing these issues by promoting healthy habits, reducing obesity rates, and supporting overall well-being.

The Alabama Extension's CHAMPION Youth program helps combat these challenges by building health literacy among young people. CHAMPION Youth targets young people aged 12-17 and focuses on the importance of a healthier lifestyle to reduce chronic disease risk factors. Young people learn to make healthy food choices while at school, home or in their community. In addition, they learn the importance of staying physically active and what it takes to adopt a healthier lifestyle.

2024 Impacts

Among the 388 youth who completed evaluations:

- 39% (151) of youths reported consuming vegetables all the time.
- 68% (264) of youths reported consuming fruits all the time.
- 59% (229) reduced their intake of high-sugar foods.
- 41% (159) reduced their intake of high-sugar foods.
- 47% (182) reduced their intake of high-fat foods.

Health and nutrition education programs encourage youth to make healthier food choices.

ROI: 35:1 – *Utilizing healthy school meal programs can be more cost-effective.*

Human Nutrition, Diet and Health

Healthy Living Begins at Home

Urban EFNEP: Expanded Food and Nutrition Education Program

The Centers for Disease Control and Prevention, in its Youth Risk Behavior Survey Data Summary & Trends Report for Dietary, Physical Activity, and Sleep Behaviors: 2013–2023, reported that high school students are falling short of recommended standards for healthy eating, physical activity, and sleep. In fact, there has been a decline in the daily consumption of fruits, vegetables, and breakfast among students. Furthermore, Alabamians spend as much as \$39 a month eating out and the same amount with take out. Nutrition education programs play a crucial role in guiding youth and their families toward healthier lifestyles that begin at home.

The Urban EFNEP: Expanded Nutrition Education Program targets parents, as well as youth. The program teaches participants how to consume healthy foods on a limited budget at home, while encouraging daily physical activity. By involving the family, parents can reinforce healthy living behaviors at home.

2024 Impacts

Among 437 youth, there was improvement in one or more practices:

- 30% (131) improved diet quality.
- 18% (79) improved physical activity.
- 20% (87) improved in food safety.
- 30% (131) improved in food resource management.

Nutrition education programs enables youth to become active participants in promoting healthy habits at home and away from home that will follow them throughout life.

ROI: 1:1 – *Nutrition education enables youth to save on monthly food costs away from home.*



Healthy snack ingredients prepped and ready to assemble.



Youth stand outside the Extension Mobile Nutrition Lab sampling smoothies made with blender bike.



Two Extension health and nutrition educators, Gloria Maxie and Carolina Hurtado, prep ingredients for a nutrition lesson.

2025 References

In addition to specialist reports, the following references were used.

Alabama Department of Public Health. 2025. "Tobacco: Tobacco Prevention and Control." <https://www.alabamapublichealth.gov/tobacco>.

August Escoffier School of Culinary Arts. 2024. "Consumer Dining Trends: How Americans Are Spending on Restaurants and Takeout." <https://www.escoffier.edu/blog/world-food-drink/consumer-dining-trend-statistics/#>.

Certstaffix Training. 2025. "Huntsville Computer Skills Course Descriptions." <https://training.certstaffix.com/catalog/276/Computer-Skills/520/Huntsville-Alabama>.

Consolidated Credit. 2025. "Alabama Debt Relief Guide." <https://www.consolidatedcredit.org/debt-relief/alabama/>.

Dunlap, Sarah T. 2025 Update: The Burden of Tobacco in Alabama. <https://www.alabamapublichealth.gov/tobacco/assets/tobaccoburdenreport2025.pdf>.

Finaciti. 2023. "Benefits of Attending Best Personal Finance Courses and Trainings." <https://finaciti.com/benefits-of-attending-best-personal-finance-courses-and-trainings/>.

Find Energy, LLC. 2024-2025. "Electricity Rates in Alabama." <https://findenergy.com/al/>.

Helquist, Bryndee. 2024. "Understanding Small Business Survival and Failure Rates." <https://www.lendio.com/blog/small-business-survival-and-failure-rates>.

Horymski, Chris. 2025. "Average Credit Card Debt Increases 3.5% to \$6,730 in 2024." <https://www.experian.com/blogs/ask-experian/state-of-credit-cards/>.

Jinnette, Rebecca. 2024. "The Importance of Computer Literacy for Senior Citizens in 2024." NC Cooperative Extension. <https://bertie.ces.ncsu.edu/2024/05/bridging-the-digital-divide-the-importance-of-computer-literacy-for-senior-citizens-in-2024>.

Joint Economic Committee. 2024. "The Economic Benefits of Child Nutrition." <https://www.jec.senate.gov/public/index.cfm/democrats/2024/8/the-economic-benefits-of-child-nutrition>.

JourneyFoods. 2025. "Cooking at Home vs. Eating Out. What's Better?" <https://www.journeyfoods.io/blog/cooking-at-home-vs-eating-out-whats-better>.

Kakulla, Brittne. 2025. "Technology Adoption Continues as Older Adults Integrate Tech into Daily Life." <https://www.aarp.org/pri/topics/technology/internet-media-devices/2025-technology-trends-older-adults>.

Maggiolo, Nicolette Star. 2024. "The Cost of Eating Out Versus Eating in by State." <https://www.topnutritioncoaching.com/blog/cost-of-eating-out-vs-eating-in>.

Mickelson, Stephanie. 2024. "How Much Does Pest Control Cost in Alabama?" <https://www.yahoo.com/lifestyle/much-does-pest-control-cost-185452552.html>.

Sugue, Mara. 2025. "Updated Drug and Alcohol Statistics for Alabama." <https://www.addictiongroup.org/alabama/drug-statistics>.

Schwahn, Lauren. 2025. "How Much Should You Budget for Groceries Each Month?" <https://www.nerdwallet.com/article/finance/how-much-should-i-spend-on-groceries>.

Tobacco Insider. 2025. "USA: Cigarette Prices." <https://tobaccoinsider.com/usa-cigarette-prices>.

University of Alabama at Birmingham. 2025. "Certificate in Entrepreneurship." <https://catalog.mindedge.com/uab/suites/19771/certificate-in-entrepreneurship>.

University of Missouri. 2024. "The Goodness of Gardening." <https://ipm.missouri.edu/meg/2024/4/gardening-dt>.

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Special thanks to program partners, participants, Alabama Extension staff, and other valuable stakeholders who make our work possible.



Extension staff members Taris Martin & Daivon Allen with AAMU students.



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New September 2025 UNP-2209

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