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UNIVERSITY OF MISSOURI EXTENSION

Gasconade County



2025 Annual Report

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**SERVE MISSOURI.
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Extension
University of Missouri
an equal opportunity/ADA institution



Office of Extension
and Engagement
University of Missouri

VICE CHANCELLOR'S OFFICE

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Columbia, MO 65211

PHONE 573-882-2394

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Dear County Commissioners, Elected Leaders, and Friends of MU Extension and Engagement,

As I reflect on the past year, I am struck by the remarkable progress we have made together. MU Extension continues to deliver on its mission of linking the University of Missouri with every community across our state, ensuring that Missourians have access to the knowledge, resources, and partnerships they need to thrive.

Through the dedication of our faculty, staff, councils, partners, and advocates, MU Extension continues to make a measurable difference across Missouri. Last year, we had more than 1.5 million educational contacts and generated more than \$1 billion in economic impact. Building on that momentum, your support also helped secure a \$5 million recurring increase in state funding. This important milestone is already being invested in people, programs, and facilities to strengthen agriculture, improve health and well-being, support local economic development, and prepare youth for leadership through 4-H.

We have also adapted to new realities. Even as the sunset of federal SNAP-Ed funding forced hard choices, our commitment to delivering nutrition and health programs to families in need has not wavered. We are expanding investments in rural health, civic leadership and community development to address the priorities Missourians tell us matter most. We are also aligning our work with university, state, and federal priorities to maximize impact, whether in rural healthcare, agricultural innovation or workforce development.

Our strengths remain clear: people, programs, and partnerships. From nearly 6,000 4-H volunteers to county council members, master gardeners, and master naturalists, Extension thrives because of the dedication of those who serve. Our trusted, research-based content was accessed nearly 2 million times and downloaded more than 76,000 times last year, and innovative programs, from soil testing to urban revitalization initiatives, continue to meet Missouri's evolving needs.

Thank you for your continued partnership. MU Extension belongs to all Missourians, and together we will keep building resilient communities, fostering innovation, and preparing our state for the future.

With appreciation,

Chad Higgins, PhD
Vice Chancellor, MU Extension and Engagement
Chief Engagement Officer, UM System

WHO WE ARE

Gasconade County Extension



Brandi Richardson, Extension and Engagement Specialist

Rebecca Fuchs, Nutrition Program, Administrative Support

Nancy Stephan, 4-H Youth Program Associate

Caren Vogt, County Support Staff

Rachel O'Halloran, Field Specialist, Nutrition and Health

Tanner Adkins, Field Specialist, 4-H

County Specialists:

Chrisee Brandl, Field Specialist, Livestock

Charles Ellis, Field Specialist, Agriculture Engineering

Maria Calvert, Field Specialist, Human Development and Family Sciences

Rudra Baral, Field Specialist, Agronomy

Kate Kammler, Field Specialist, Horticulture

Rachel Hopkins, Field Specialist, Ag Business

Faculty and Staff



County Executives

County Commissioners

Tim Schulte, Presiding Commissioner

Jim Holland, Northern District

Ron Hardecke, Southern District



Council Members

Jackie Gray, Chairman

Jeanne Dorner, Vice-chairman

Amanda Greunke, Secretary

Sarah Powers, Treasurer

Allison Grzeskowiak

Melissa Scego

Darin Fuchs

Gary Hacker

Charles Rademacher

Marilyn Rademacher

Katie Scheer

Ron Hardecke, Commissioner

BUDGET AND MORE

Appropriations budget

Income

County Appropriations 69,931.00

Expenses

Salaries/Benefits	51,593.52
Travel	3,663.10
Telephone	756.43
Office Supplies/Service	2,148.40
Utilities	5,550.00
Insurance	1,965.44
Capital Repairs	1,814.20
Total Expenses	70,575.57

Gasconade County partners

Gasconade County Farm Bureau
Gasconade County R-2 Schools
Gasconade County R-1 Schools
Gerald Elementary
Owensville Senior Center
Gasconade County Fair Association
Heartland Independent Living Center
Gasconade County Health Alliance
Owensville Regional Library
Hermann Regional Library
Hermann Area District Hospital
GCR2 Excel Before & After School Program
Three Rivers Electric Cooperative
Crawford Electric Cooperative
Missouri AgriAbility
Show-Me Strong Farm Families
Owensville Lions Hall
White Mule Winery
USDA/SWCD
Pioneer Truss Company
Helping Hands Food Pantry
Messmer and Eitmann Senior Center, Hermann
Owensville/Hermann FFA
Owensville MFA
Tractor Supply

Return on investment

The University of Missouri provides funding for staff salaries, benefits, and professional development. They contribute nearly \$350,000 to Extension programming efforts in Gasconade County.

MU Extension is a unique funding partnership.

Extension funding is a three-way partnership of federal, state and county government. Federal and state money, through the University of Missouri system, pay professional staff salaries, training costs, computers and communication equipment. County funds support the local office, secretarial and youth assistant salaries, staff mileage and council expenses.

The Gasconade County Extension Council, faculty and staff would like to express our appreciation to the Gasconade County Commissioners for their continued support of extension programs.



Local support

Did you know you can donate directly to Gasconade County Extension with a gift to be used immediately or as an endowment contribution for long term efforts. Monies put into the endowment are left forever to earn interest with the county office benefiting each year. You can also direct your donation to a specific program such as 4-H or Master Gardeners.

UM SYSTEM COUNTY IMPACTS

MU Extension in Gasconade Community Impact Report

This report offers a detailed overview of how MU Extension positively impacts Gasconade County, showcasing the meaningful ways local engagement supports residents. It includes data on the number of students, employees, retirees and alumni affiliated with the University of Missouri System, along with the healthcare and extension services provided over the past year.

In addition, the report highlights the broader contributions of the UM System across Missouri in key areas such as education, research, healthcare, economic development and public service. It features metrics like job creation, financial aid distribution, research investment, healthcare access and broadband expansion.

This report is a valuable resource for understanding the measurable benefits the UM System brings to Missouri communities. It supports informed decision-making, advocacy efforts and strategic planning by illustrating the tangible impact of university-driven initiatives at both the local and statewide levels.

[Access your county's Impact Report.](#)



GRAND CHALLENGES

Grand Challenges

The Grand Challenges — Economic Opportunity, Educational Access, Health and Well-being, and Agricultural Stewardship — represent the most pressing issues facing Missouri communities. They are important because:

By focusing on these challenges, MU Extension in Gasconade can better leverage university resources, data and partnerships to empower people to improve their lives, businesses and communities.

This report presents localized data and insights in how MU Extension in Gasconade is addressing these challenges. Each section breaks down county-specific statistics compared to state averages.



Missouri Grand Challenges: Local Solutions



GASCONADE COUNTY

Knowing Missouri's Needs

MU Extension asked Missourians to share the greatest challenges they and their communities face.

We heard that feedback and made big changes in the way we work with council and local partners to improve lives. Locally, a network of county engagement and subject matter specialists now share MU's knowledge, research and engagement, targeting programs, information and assistance in:

- agriculture and environment
- youth and family
- business and community
- health and safety

For each grand challenge, MU Extension and Engagement targets a specific gain by 2023:



Economic opportunity

Increase MU Extension and Engagement's economic impact to the State of Missouri from \$1 billion to \$1.5 billion overall, and from \$88 billion to \$100 billion in agriculture, the top economic sector



Educational access and excellence

Increase participation in postsecondary education from 66% to 70%



Health and well-being

Improve Missouri's health ranking from 40th to 35th in the nation

Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: *Business Dynamics*

Business Growth/Change

The rate of business change reflects the net gain or loss in total establishments. The report area saw a net loss of 12 businesses between 2021 and 2022. There were 128 establishment "births" and 140 "deaths" contributing to the change. The rate of change was -0.93% over the ten year period, which is lower than the state average of 0.45%.

Establishment Net Change Rate

-0.93%

Gasconade

Missouri 0.45%

Data Source: US Census Bureau, [US Census Business Dynamics Statistics](https://www.census.gov/business/dynamics/). 2023.

Largest Job Sectors

Understanding the local economy is vital to describing a community. In this region, the largest sector by employment size is Manufacturing, which employs 1,659 people. The average wage for the industry is \$54,689. Government and government enterprises and Retail trade are the next largest sectors, and they employ 1,050 and 912 workers, respectively.

Job Sector	Total Employment	Average Wage
Manufacturing	1,659	\$54,689
Government and government enterprises	1,050	\$55,195
Retail trade	912	\$24,355

Data Source: US Department of Commerce, [US Bureau of Economic Analysis](https://www.bea.gov/). 2022.

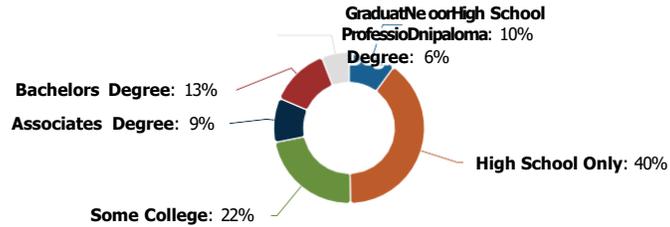


CHALLENGE 2: Educational Access and Excellence: *Educational Attainment*

Adult Educational Attainment

Educational attainment shows the distribution of the highest level of education achieved in the report area, and helps schools and businesses understand the needs of adults, whether it be workforce training or the ability to develop science, technology, engineering, and mathematics opportunities. Educational attainment is calculated for persons over 25 and is an estimated average for the period from 2017 to 2021.

In the report area, 22.2% of adults have at least some college education and 22.2% of adults have an associate's level degree or higher. However, 39.6% stopped their formal educational attainment after completing high school, and 10.1% of adults did not complete high school.



No High School Diploma

10.12%

Missouri 8.41%

Gasconade

Data Source: US Census Bureau, [American Community Survey, 2019-23](#).

Data Source: [US Census Bureau, American Community Survey, 2019-23](#).



CHALLENGE 3: Healthy Futures: *Mental Health*

Deaths of Despair

Untreated mental health conditions, substance abuse, and stress have caused an epidemic of "deaths of despair" across the United States. Research shows that deaths due to suicide, alcohol-related disease, and drug overdose have caused the first decreases in U.S. life expectancy in the 21st century. Within the report area there were an estimated 77 deaths of despair, or 77.49 deaths per 100,000 population between 2011 and 2017. This rate is higher than the state rate of 52.01 per 100,000, and represents an increase of 22.46% since the 2001-2007 report period.

Poor Mental Health Days

This indicator reports the average number of self-reported mentally unhealthy days in past 30 days among adults (age-adjusted to the 2000 standard). Data were from the 2022 Behavioral Risk Factor Surveillance System (BRFSS) annual survey and are used for the 2025 County Health Rankings.

Average Poor Mental Health Days per Month, 2018

5.6

Missouri 5.6 😊

Gasconade



Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via County Health Rankings, 2022](#).

Mortality Rate, 2014-2020

77.49

Missouri 52.01 😞

Gasconade



Data Source: [Centers for Disease Control and Prevention, CDC - National Vital Statistics System. Accessed via CDC WONDER, 2014-20](#).



CHALLENGE 4: Agricultural Growth & Stewardship: *Agricultural Economy*

Jobs Derived

Missouri has a diverse agriculture industry, strong in crops and livestock, as well as food and forestry processing industries. These industries remain a significant part of Missouri's economy, supporting more than 1 in every 10 jobs, on average. In 2021, agriculture, forestry, and related industries in Missouri were estimated to contribute: 456,618 jobs, \$93.7 billion in output and [\\$31.8 billion in household income](#). [Learn more about Missouri Agriculture's Economic Impact](#).

Percent of Jobs Derived from Agriculture

21.5%

Gasconade

Missouri

23.55%

Data Source: Missouri [Department of Agriculture, Missouri Agricultural and Small Business Development Authority. 2021](#).

Value Added

Value-added agriculture refers to production, manufacturing, marketing or other services that increase the value of primary agricultural commodities. In 2021, the total value-added derived from agriculture, forestry and related economic activity was an estimated \$34.9 billion. Meat processing, food processing, animal and pet food manufacturing, and crop production and related industries are Missouri's top value-added products: \$9.5 billion and 155,425 jobs from livestock production and related industries alone. [Learn more about Missouri Agriculture's Economic Impact](#).

Percent of Total Value Added from Agriculture

14.5%

Gasconade

Missouri

21.98%

Data Source: Missouri [Department of Agriculture, Missouri Agricultural and Small Business Development Authority. 2021](#).

Gasconade County Office Community Engagement

Government Day 2025
at the Courthouse



2025 Fair Parade

Community Garden



Missouri Day 2025 at
Gerald Elementary

2025 Fair Booth



4th Grade Field Day
at the White Mule



Annual Dinner 2025



Santa's Parade
of Lights

Spring Into Action: Farm and Home Workshop Series

- Workshops include:
- 10:00 am Understanding Your Soil Needs
 - 11:30 am Backyard Poultry
 - 1:00 pm Vegetable Gardening Basics
 - 2:30 pm Managing Your Woodland Acres



Date: Saturday, April 26, 2025
Time: 10:00-4:00 pm
Venue: Owensville Lions Club (1816 Krausetown Rd, Owensville, MO)
Cost: Free

Lunch will be provided, sponsored by Gasconade County Farm Bureau.
Register for one workshop or come all day!
Register here! <https://extension.missouri.edu/events/spring-into-action-farm-and-home-workshop-series>

Community Farm and
Home Workshop



4-H is Beyond Ready

What is 4-H?

4-H is where Missouri's young people find their spark and learn by doing. Whether raising animals, coding robots, growing gardens, or giving back to their neighbors, 4-H members gain real-world skills with the help of caring mentors.

Rooted in University of Missouri Extension, 4-H connects classrooms, communities, and families to create learning that sticks—building confident, capable leaders who are Beyond Ready for life. In 4-H, youth discover their strengths, practice resilience, and learn to lead with heart—preparing them not just for what's next, but for anything that comes their way.



Community clubs are at the heart of 4-H. Led by trained volunteers, members come together regularly to learn, lead, and serve. Youth elect officers, enroll in projects, and plan hands-on activities that build leadership, teamwork, and responsibility. Clubs explore a variety of topics throughout the year.

Gasconade County continues to have a strong community club program with 273 active youth members. When including school enrichment and afterschool programs, Gasconade County 4-H reached 726 youth in 2025.



4-H brings hands-on learning directly into schools through in-school and afterschool programs that extend classroom lessons. **Teachers and 4-H professionals**, guide students through 4-H projects in areas such as science, agriculture, health, and leadership, helping youth connect learning to the real world.

Gasconade County's most popular school enrichment program continues to be the embryology. In 2025, 334 youth from Gasconade County R-1 and R-2 schools learned through hands on experiences, the life-cycle of chick hatching. This program is an important educational intersection between Science, Technology, Engineering, and Math (STEM), with Agriculture Education. STEM and Agriculture Education are high demand economic opportunities in Gasconade County. County youth are being trained early in these areas through 4-H School enrichment.





Learn by Doing

Gasconade County 4-H



Missouri 4-H Agriculture programs give youth hands-on experiences in areas such as animal science, veterinary science, plant science, and agronomy. Members explore the biology, care, and management of animals and crops while developing problem-solving, critical thinking, and leadership skills.

Gasconade County 4-H has a long tradition of animal science learning and exhibition. In 2025, 261 animal projects were enrolled in from beef, to chickens, to dogs, and many more. The most popular animal project in the county was swine with 106 youth enrolled.

4-H's Leadership and Civic Engagement

programs foster understanding, confidence, and decision-making skills to empower young people to become informed and active citizens. These initiatives prepare youth to become future leaders by engaging them in programs where they have voice and influence.

A highlight each summer in Gasconade County is 4-H Camp Counselors. These 4-H teen members lead camp sessions throughout the summer where they care and lead younger 4-H members in life skill development and independence. These experiences help teens grow as confident communicators and thoughtful problem solvers, ready to lead wherever life takes them.



Missouri 4-H Natural Resources programs engage youth in hands-on learning across climate science, environmental sustainability, renewable energy, sportfishing, and wildlife conservation. Programs like the **4-H Sportfishing Contest** and **Sportfishing SLAM** give young people practical experience while building teamwork, problem-solving skills, and a love of the outdoors.

The **4-H Shooting Sports** program teaches marksmanship, safe firearm use, hunting, and archery principles, demonstrating how 4-H encourages holistic youth development and responsible citizenship. Supported by caring adult leaders, these programs help youth cultivate life skills, self-worth, and conservation ethics while exploring the natural world around them.

Gasconade County

Missouri 4-H

Local Impact

Volunteers: 4-H members are supported by 67 youth and adult volunteers. Volunteers are the core of the 4-H program. They help to create, support and deliver educational programs and experiences. Missouri 4-H volunteers report contributing on average 100 hours per year to the program. These individuals serve as role models and mentors for youth.



Civic Engagement: Gasconade County took two 4-H youth to visit the Missouri State Capitol for Missouri 4-H Day. These teens spoke with local elected officials about their life skills developed in 4-H and learned more about government operations for the state. More than a trip, 4-H teens are working toward becoming our next generation of elected officials.



Project Learning 4-H offers over 100 different focus areas members can be involved in. From traditional livestock production to advanced fields in aerospace, 4-H has something for everyone! The variety of projects members participate in can be seen at the local and state fairs and even serving the local community. This year 4-H members Korbyn Kottwitz, Garth Gerlemann, Eben Kottwitz, and Leland Ulhorn made produce stands for a community garden outside of the Extension Office for community members to pick-up free fresh produce through their woodworking project. 4-H projects develop skills and allow opportunities to support the community.

Gasconade County

Missouri 4-H

Success Stories

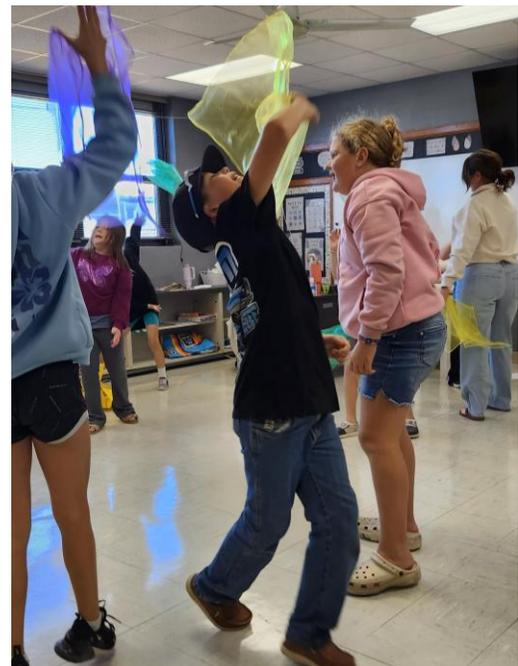


Schools & Partnerships: Gasconade County 4-H partnered with Crawford Electric Cooperative and Three Rivers Electric Cooperative to deliver a hands-on learning experience through the EXCEL Afterschool Program. This project focused on basic electrical skills and safety while introducing youth to careers in the energy and utilities field. Students participated in a practical assembly project, learning how extension cords are constructed and safely used.

Missouri Day: Gasconade County 4-H participated in Gerald Elementary School's annual Missouri Day, an event that celebrates Missouri products, history, and state pride through interactive learning. 4-H emphasized student engagement by leading a Missouri-facts scavenger hunt that encouraged exploration, teamwork, and critical thinking. Students also participated in an interactive scarf activity, following directions to catch scarves in motion, which reinforced listening skills and showed that physical activity can be fun, active, and engaging.



Government Day: Gasconade County Government day was a huge success in 2025 with 80 students from the county participating to learn more about the operations of local government. Students toured county offices to ask questions of officials and were able to attend an active court session.

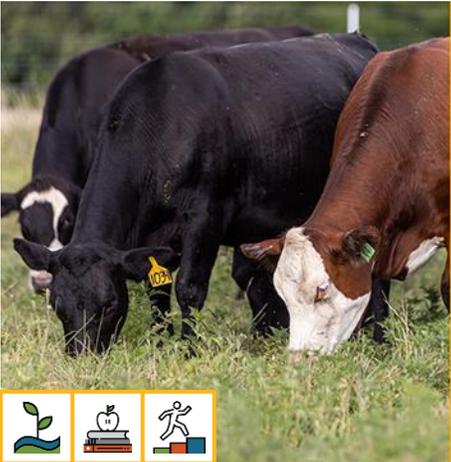




MU Extension **Serves MISSOURI and Delivers MIZZOU**

through credible statewide programs

Agriculture and Environment



Missouri Grazing Schools teach management-intensive grazing by dividing large fields into smaller paddocks and systematically rotating livestock among them. Producers who attend the grazing schools learn how to reduce costs through Improved livestock grazing and pasture management while getting insights into fencing, watering systems and grazing system design.



The annual impact of management-intensive grazing is estimated to be \$125 MILLION per year in Missouri



The Missouri AgrAbility Project provides practical education, on-the-farm assistance and agency referrals to farmers and ranchers with disabilities and their families to promote agricultural and rural independence. National Institute of Food and Agriculture (NIFA) an agency of the U.S. Department of Agriculture (USDA), administers the AgrAbility project.



“A lot of veterans come right out of the service and may feel disconnected and may be struggling with finding job opportunities. The Heroes to Hives program offers a diversion as well as opportunities.”

Eric Work, Heroes to Hives participant

Heroes to Hives offers free professional training in beekeeping to veterans, promoting financial and personal wellness through community development. Missouri’s Heroes to Hives group has trained more than 1,200 veterans since 2021. It is the nation’s largest agriculture training program for U.S. military service members.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Livestock - Gasconade County

Agriculture and Environment

Chrisee Brandl – Field Specialist in Livestock

Local Impact - Livestock

Gasconade County Program Activities totaled approximately **111** contacts. Programs included grazing school, farm and home workshop, and SMQA.

Virtual programs totaled approximately **381** contacts.

Gasconade County Direct Contacts totaled approximately **12**. The methods of contact included phone calls, texts, emails, office visits, and farm visits with topics directly related to livestock.

Gasconade County Program Highlights

Show-Me-Quality Assurance

This was a 4-H event where youth learned livestock management practices in handling and use of animal health practices. The goal of the training is for youth to leave with a good understanding of producing a safe and wholesome product. There were a total of 80 youth who participated hands-on.

Gasconade County Grazing School

Chrisee presented on topics including *matching forages to livestock* and *animal requirements and yield distribution* at the Gasconade County Grazing School offered in collaboration with NRCS. There were approximately 19 participants. Participants gained knowledge in the classroom and hand-on learning on farms.

Gasconade County Farm and Home Workshop

A total of 12 individuals attended the program, which featured educational sessions in agronomy, horticulture, livestock, and forestry. Participants received practical information on soil health and crop productivity, vegetable garden establishment and management, backyard poultry care, and woodland management strategies, including invasive species control. The program provided research-based education for landowners, producers, gardeners, and community members, supporting improved natural resource management and production practices. Chrisee presented on *Backyard Poultry* including housing, nutrition, health, and basic management.

Livestock - Gasconade County

Agriculture and Environment

Chrisee Brandl – Field Specialist in Livestock

Show-Me-Select (SMS) Heifer Replacement Program

The Show-Me-Select Replacement Heifer Program uses the latest research on health, nutrition, genetics and reproductive science to ensure Missouri counties continue to be national leaders in providing quality beef.

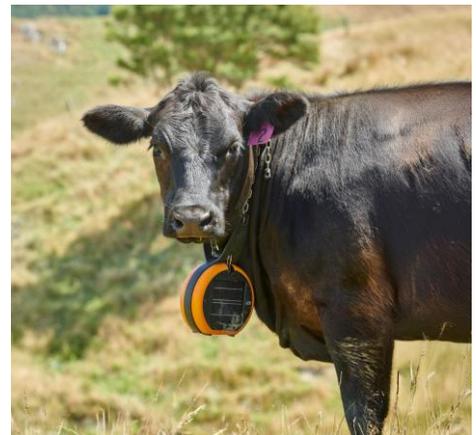
The 2025 SMS sale for the Central Region was held in Vienna, MO at South Central Regional Stockyards in May. Chrisee Brandl is the Regional Coordinator for the Central Region. Chrisee completed 19 farm visits to gather pre-breeding, breeding, and pregnancy data along with tagging heifers before the sale. There were 9 consignors that sold 58 heifers to 15 buyers. The sale average was \$3,917. Chrisee completed 7 farm visits to gather pre-breeding data for the upcoming 2026 spring sale.

Social media engagement totaled 27,109 views - 1,534 people engaged with 288 reactions, 85 shares, and 982 followers.



Virtual Fence Foundations

The Center for Regenerative Agriculture, MU Extension, and the Missouri Fertilizer Control Board put together a 5-part webinar series about all things virtual fencing. There were approximately 1,026 participants statewide on webinars with YouTube videos published. Chrisee assisted with the organization, implementation, and advertisement of this webinar series.



Missouri Grazing School

Grazing school is a cooperative venture between NRCS and MU Extension. The agenda covers all aspects of managed intensive grazing for both plants and livestock. Chrisee presented on topics including *matching forages to livestock* and *animal requirements and yield distribution* at two grazing schools offered in Warren and Gasconade counties. There were approximately 46 participants. It is the intention of grazing school to provide research-based education to participants who are considering intensive grazing and the importance of a comprehensive approach to managed intensive grazing. Long term outcome is improved daily gain of the livestock and further improving overall on farm income.

Livestock Newsletters

Chrisee authored and distributed approximately 2,693 newsletters with topics focused on livestock and upcoming events for producers. A total of seven editions were sent out via email and AgConnect. Topics included Grazing Management, Secure Beef Supply Plan and Biosecurity, Beef Quality Assurance, Theileria Orientalis, Summer Annual Forages, Extending the Grazing Season, Drones and Livestock, Fall Calving Nutrition, Pearls of Production, and Livestock Specialist Introduction.

Livestock - Gasconade County

Agriculture and Environment

Chrisee Brandl – Field Specialist in Livestock

Livestock Programs - Gasconade County

Beef Quality Assurance Trainer

Beef Quality Assurance (BQA) is a program that provides systematic information to U.S. beef producers of how good husbandry techniques can be coupled with accepted scientific knowledge to raise cattle under optimum management conditions.

Pork Quality Assurance Trainer

Pork Quality Assurance Plus® (PQA Plus®) is an education and certification program designed to help pig farmers and their employees continually improve production practices. It addresses food safety, animal well-being, environmental stewardship, worker safety, public health and community.

Show-Me-Select Replacement Heifer Program

The SMS replacement heifer program uses the latest research on health, nutrition, genetics, and reproductive science to ensure Missouri counties continue to be national leaders in providing high quality beef. The program focuses on Missouri's farmers and is dependent upon active participation from livestock specialist and local veterinarians, each of which are critical components of the agriculture sector of this state.

Pearls of Production

Pearls of Production is a hands-on educational program for livestock production. The program consists of a classroom setting and focused on key animal production topics presented by female industry leaders addressing women safety issues working with livestock, livestock health concerns, current topics in the livestock industry, policy and regulatory issues, taking care of yourself, and how to be a positive influence in livestock production.

Management Intensive Grazing School Instructor

Missouri Grazing Schools is a major program effort by the University of Missouri Extension and Natural Resources Conservation Service (NRCS) to educate livestock farmers and ranchers across Missouri on how to increase profitability with no negative environmental impact on the land. The focus is to enhance soil, water, and forage resources in Missouri operations by teaching the concepts of Management-intensive Grazing (MiG).

Secure Beef Supply – Biosecurity

The Secure Beef Supply (SBS) plan provides guidance to help beef producers maintain business continuity during a foot-and-mouth disease (FMD) outbreak. The program supports producers, veterinarians, and animal health officials in preparing for a coordinated response that protects herd health and the beef industry.

Innovated Livestock Technology - Drones

The agricultural drone program provides hands-on training in using unmanned aircraft to improve scouting, mapping, and decision-making on farms. Participants learn how drones can enhance efficiency by capturing real-time data on crop health, livestock monitoring, and field conditions.

Gasconade County

Agriculture and Environment

Horticulture Highlights—Katie Kammler, Horticulture Specialist

Client Contacts:

28 calls and emails providing research-based horticulture information.

Topics included:

- Soil test results
- Growing apples
- Ficus tree issues
- Moss control
- Vole problems
- Growing onions
- Raised bed soil mixes
- Earthworm mounds
- Pumpkin pesticide information
- Armyworms
- Growing blackberries
- And many more horticulture-related inquiries

Programs Delivered:

- **Vegetable Garden Basics** — Owensville (22 participants)
- **Garden Clean-up** — Gasconade County Master Gardeners (10 participants)

Impact:

- Reached **32 participants** through educational programs
- Supported local gardeners with practical solutions for fruit and vegetable production
- Strengthened community engagement through hands-on learning



Provided blackberry growing advice.

"Reliable, Responsive, and Relevant Information for the Missouri Gardener"

October 2025

The Garden Spade



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Subscribe Now!

Receive a monthly email link to "The Garden Spade".

[SUBSCRIBE HERE!](#)



Extension
University of Missouri

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION/AGE/SEX/RELIGION/ETHNICITY/SEXUAL ORIENTATION/SEXUAL IDENTITY/VETERAN EMPLOYER

Be Vigilant for Spotted Lanternfly

Emily Althoff
MU Extension Entomology
emilialthoff@missouri.edu



Missouri residents are urged to be on the lookout for spotted lanternfly (SLF), an insect that could have devastating effects on the state's \$4.2 billion wine and grape industry. SLF can damage fruits including grapes, as well as ornamentals and urban landscapes.

Since its first detection in Pennsylvania in 2014, SLF has been found in 19 states, including states that neighbor Missouri, says University of Missouri Extension and Lincoln University Urban Entomologist Emily Althoff. SLF has been intercepted three times in Missouri since 2022.



Althoff says SLF could be spotted on shipping materials from now until December.

Those in agriculture and transportation should inspect equipment for this insect, which hitchhikes across country on metal objects such as trains and other vehicles.

Althoff said it important to know what SLF looks like in various stages. She noted that it may appear as egg masses, nymphs or adults on vehicles and equipment. Live SLF are easiest to spot at dusk or night when they move up and down the trunks of plants. SLF's preferred host is Tree of Heaven (*Ailanthus altissima*). Learn more about SLF in the "Keeping an Eye Out for

continued on page 2 >>

Success Story: Growing Garden Knowledge in Missouri

In 2025, the **Garden Spade e-newsletter** continued to be a trusted resource for horticulture enthusiasts across Missouri. With **2,556+ subscribers** and a **9.6% increase in subscriptions**, the newsletter reached more people than ever before.

Each monthly issue delivered practical, research-based tips on topics such as **insects, weeds, landscape plants, trees, fruits, and vegetables**, helping readers make informed decisions in their gardens and landscapes.

This growth reflects the strong interest in reliable horticulture information and the value of Extension resources in supporting healthy, productive gardens. By expanding its reach, the Garden Spade is empowering more residents to succeed in their gardening efforts year-round.



Gasconade County

Agriculture and Environment

Local Impact

2025 Annual Report – Agronomy Program

Rudra Baral, Agronomy Specialist, University of Missouri Extension

Serving Cole, Miller, Pulaski, Osage, Maries, Gasconade, and Laclede Counties

Executive Summary

2025 was a year of impact and growth for MU Extension's agronomy program in the East Central Region. Through research-based education, innovative tools, and strong partnerships, we advanced MU Extension's core principles: **Educate, Create, Connect**.

- **226** participants engaged in direct educational programs
- **2.2 million** reached indirectly via media and outreach
- **1,830** soil samples analyzed with tailored recommendations
- **71** producers received technical assistance
- **21** forage producers benefited from free nitrate testing
- **15+** farm visited to solve field related problems
- **12** educational materials created (2 articles for MU Extension Publication, 4 newspaper articles, 1 peer-reviewed article, 1 graphic motion video and 4 workshops materials)
- **1** producer received Grassland Partnership Program and
- **6** producers received grant writing assistance

EDUCATE: Learning & Access

Workshops & Training (16 programs, 226 participants):

- **Private Pesticide Applicator Training:** 4 sessions, 40 producers certified
- **Soil Health Workshops:** 4 sessions + virtual program (134 participants)
- **Hay Quality Management:** 3 workshops, 28 producers
- **Warm Season Grass Management:** Miller County workshop (5 participants)
- **Grazing School:** Gasconade County (12 participants)
- **Master Gardener Program:** 7 active members trained

Soil Testing Services:

- **1,830 samples reviewed** across 7 counties

Nitrate Poisoning Testing Service:

- **21 forage producers** received free qualitative nitrate testing service

Media Reach:

- **2,186,736 readers** via newspaper articles
- **1,039** reached through Extension publications
- Educational video on nitrate poisoning reached **292 viewers**



Gasconade County

Agriculture and Environment

Local Impact

2025 Annual Report Page 2 – Agronomy

CREATE: Innovation & Opportunity

- **Research Publication:** “Cropping Potential of Forage Soybean” in *Frontiers in Agronomy*
- **Extension Publications:** **2 articles** at MU Extension publication and **4 newspaper** articles at local newspaper
- **Manual Development:** Developed evidence-based new workshop manuals and training resources for Hay Quality Management Workshop, Soil Health Workshop, Warm & Cool-Season Grass Management
- **Grant Writing Assistance:** Assisted **7 producers** with successful grant applications
- **Forage Quality Testing:** Launched quantitative hay quality testing service in partnership with Ward Lab Nebraska

CONNECT: Engagement & Partnership

- Attended **13 County Extension Council meetings** and **12 SWCD board meetings**
- Conducted **15+ farm visits**
- Engaged **100+ community members** through events like Farm & Fest and Taste of Osage
- Strengthened partnerships for conservation and producer support
- Displayed MU Extension Information Desk at Eldon Farmers Market (3 times)

Impact Summary

- **Direct Reach:** 269 participants, 71 producers assisted
- **Indirect Reach:** Over 2 million through media
- **Community Engagement:** Farmers markets, open houses, and local events

Looking Ahead: 2026 Priorities

- Private Pesticide Applicators Training
- Utilizing Drones in Missouri Agriculture Workshop
- Pasture Fertility Management Workshop
- Forage Options for Winter Grazing Workshop
- Hay Quality Management and Forage Testing
- Understanding Your Soil Needs Workshops
- Grazing School Program
- Lake Area Master Gardening Program Coordination
- Ongoing services: soil testing, nitrate testing, farm visits

Conclusion:

MU Extension’s agronomy program continues to deliver evidence-based education, foster innovation, and build partnerships that strengthen Missouri agriculture.

Ag Business

Covering Franklin, Gasconade, Osage, Maries, Miller, Pulaski, Phelps, Dent, Crawford, Washington, St. Francois and Ste. Genevieve Counties

Rachel Hopkins
Ag Business Specialist
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2025 AT A GLANCE

- **38** Lenders attended 'What Lenders Need to Know in 2026' in Jefferson City. Lenders heard from presenters discussing Market Outlooks, Policy Updates, Beef Feeding Calculator, Farmland Values and Rental Rates.
- **60** attendees at the Farm Tax Workshops held in December, both in-person and online. Rachel hosted 2 locations (Ste. Genevieve & Vienna) and presented on drought & farm lease.
- **89** mid-Missouri farmers and ranchers attended the Central Missouri Forage & Beef Conference in Maries County.
- **35** local producers attended the Wurdack Producer Field Day in October to hear about local applicable topics.
- **120** producers attended three Grazing Schools where Financial Aspects of Grazing were taught.

\$47,753 in lease's consulted on in 2025.



The cannulated bovine is always a memorable time with the FFA students.

1924 DIRECT CONTACTS 7140 INDIRECT CONTACTS



Rachel spoke to the East Central Cattlemen's Association in March 2025 on tips for succession planning.

KEY SUCCESSES

- ✓ **Monthly emails** out to subscribers letting them know of upcoming Extension programs in the region.
- ✓ Connect & Educated **50 STL City youth** about agriculture at **Wurdack Extension Center**.
- ✓ **Rural Safety Day** educated **177 3rd graders** in Washington County of hazards they might encounter and thus preventing traumatic injuries.
- ✓ **Annie's Project** brought together **13 women in Maries County** for the 6 weeklong event. It included field trips, guest speakers and activities.
- ✓ **Wurdack FFA Day** provided a learning opportunity for **528 9th graders** on different fields in agriculture and exposes them to new ideas and concepts.

Gasconade County

Agriculture Business

Extension Tax Schools



University of Missouri Extension coordinated and offered tax education through one summer and three fall tax schools. The summer school was in person and live online. Fall schools were in Columbia and Springfield and an online school. The schools were designed for those who prepare taxes including enrolled agents, tax preparers, CPAs, individuals, and attorneys.

The training included updates on legislation, rulings and cases, individual taxpayer issues, agricultural and natural resources topics, ethics, trusts and estates, agriculture and natural resource tax issues, business tax issues, business entity tax issues, IRS issues, installment sales, tax benefits of home ownership, retirement tax issues, and individual tax issues. The schools were approved for up to 16 hours of continuing education credit by the IRS, Missouri Bar and for CFP continuing education. Total continuing education hours reported to IRS for the schools was 4,024 hours.

The teaching teams included CPAs, a former IRS stakeholder liaison, an IRS certified retired ag economics professor, an attorney, a certified financial planner, Missouri Department of Revenue, MU faculty and extension ag business specialists.

The evaluations had many positive comments and helpful suggestions. One comment from an online participant was “The video was outstanding – best I’ve seen on any CPE I’ve done live.”. Planning is underway to offer trainings in 2026. Local county residents benefit when local tax preparers have the opportunity to gain knowledge, which benefits their clients and communities. The tax schools are a program of the ag business and policy program of MU Extension, coordinated by Mary Sobba with help from a team of ag business specialists throughout the state.

The resources for the schools included the IRS, 2025 National Income Tax Workbook from the Land Grant University Tax Education Foundation, and materials written by the instructors.

The 2025 school attendance totaled three hundred eighty-nine people, which was an 11% increase from 2024. The participants were from throughout Missouri and two from out of state.



Gasconade County

Agriculture Business

Agriculture Lender Seminar

Mary Sobba

Sixty-five lenders from 20 Missouri counties and Illinois attended an ag lender seminar in Mexico. Lenders learned about crop and livestock outlook, agriculture & tax policy, rental rates & land values, input costs and enterprise budgets and regulatory updates. The average tenure of agricultural lender was 12 years with a range of 1 to 38 years. On average, lenders had 207 agricultural loans in their portfolio with an average loan size of \$33,526. Given this information, it is estimated the Mexico Agricultural Lenders Seminar reached 13,455 loans valued at 4,487.6 million dollars. Attendees drove an average of 49 miles to attend the program with a range of 5 to 95 miles.

By attending University of Missouri's Agricultural Lenders' seminars, lenders gain knowledge to help their clients make better decisions based on objective education and resources. More information and better decisions benefit their portfolio of producers, landowners, and agribusinesses through enhanced understanding of enterprise budgets, market expectations, and other decision-influencing factors affecting families' and businesses' financial health.

Participants described the seminar as informative, well-organized, and enjoyable. Several complimented the quality of the presentations and expressed appreciation for the event overall. In addition to the ag lender seminar in Mexico, there were seminars in Chillicothe, Jefferson City, Springfield and Warsaw. The total statewide attendance was 198 ag lenders.





Health and Human Science Programs Gasconade County

Rachel O'Halloran 

Field Specialist in Nutrition and Health



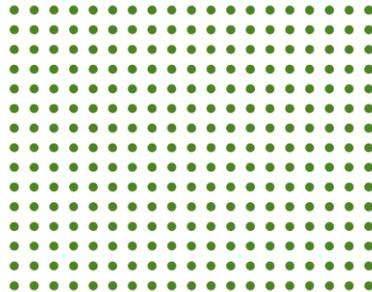
Many Gasconade residents were reached with health education in 2025.

-Dots represent count-

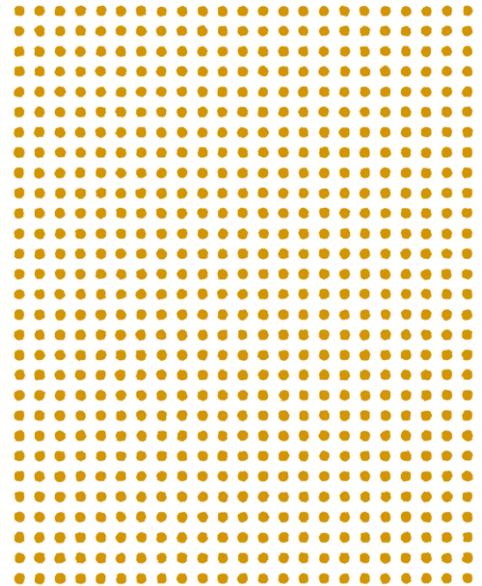
13 health programs were performed.



258 individuals were taught through the health programs



526 health education



Total Programs	Total Individuals	Total Health Education Experiences
13	258	526

Programs: 2025

- Stay Strong Stay Healthy
- Chronic Disease Self-Management
- Dining with Diabetes
- Home Food Preservation
- Tai Chi for Arthritis
- Community Gardens
- Alpha-Gal Awareness

Success Story

"I just wanted to let you know that our patron, *****, walked in the library today after her doctor's appointment and said, "You have saved my life!" Her blood work is all showing improvement and she has lost 8 lbs. She credits your Dining with Diabetes class."

Jamie Breig
Adult Programmer
Owensville Branch
Scenic Regional Library

13 health programs were performed in Gasconade in 2025. Those programs included the programs described here.



Home Food Preservation

Preserve the season's bounty in a safe and delicious way.

Learn safe techniques for pressure canning, boiling water bath canning, steam canning, dehydration, and freezing.

Understand the importance of using safe food preservation and storage methods to avoid cross-contamination and food-borne illnesses.

“This course made me more self-sufficient and improved my family’s access to quality food.”



Policy, systems, and environmental (PSE) changes encourage residents to improve community health by making healthy choices easier and more accessible. Residents design strategies around local needs, assets, and interests.

Two community garden beds were founded in Gasconade County. One serves the Owensville Senior Center, providing seasonal produce to their salad bar. A recorded 65 residents made use of the garden beds produce in 2025.



Stay Strong, Stay Healthy supports older adults in maintaining strength, balance, and mobility to fully engage in the activities that matter most to them. The program combines safe, effective exercises with practical information on nutrition and wellness, helping participants build confidence, connection, and **well-being** for lifelong health.

After eight weeks, participants in the Stay Strong, Stay Healthy program showed significant improvement in their STRENGTH, BALANCE and SLEEP QUALITY.

A participant of the *Stay Strong Stay Healthy* program in Gasconade County shared how much stronger she feels after completing the course. She now finds it easier to retrieve things from the floor and can mow her grass with less effort. *“I can reach my toes so much easier,”* she said, celebrating her improved flexibility and strength. The exercises helped her rebuild everyday function and confidence in her movement. She shared that this is the strongest she’s felt in years, and she plans to continue staying active.



Chronic Disease Self-Management programs offer evidence-based information for individuals and their caregivers to boost self-confidence in managing symptoms, enhancing quality of life and even reducing health care expenses.

These programs have undergone rigorous evaluation and are proven to be effective tools for individuals dealing with chronic conditions like arthritis, fibromyalgia, depression and diabetes.

A participant in the *Living a Healthy Life with Chronic Conditions* program in Owensville, MO, was motivated to improve his health literacy. He learned how something as simple as chair selection could help him stand more independently and used class resources to update his chair, adjust his stance, and build a strength routine. At his six-month follow-up, he plans to exercise five days a week and has already made healthier food swaps. “Being able to position my feet under the chair changes the power I have to rise up without using additional aids,” he shared.



Dining with Diabetes builds food skills through cooking while learning strategies to manage, prevent, or delay diabetes-related complications. Each session offers detailed instruction, group activities, and hands-on cooking of a diabetes-friendly meal.

After four weeks participants significantly increased **exercise, fruits and vegetable consumption** and use of the **Diabetes Plate Method**.



Tai Chi for Arthritis guide residents through the practice of 16 tai chi forms. Exercising in this way corrects painful postures, builds balance, and reclaims control of the mind. Each participant learns at their own pace and comes together to celebrate each other. Tai chi is supported by the CDC and the military to reduce pain and improve longevity.

A participant of the *Tai Chi for Arthritis and Health* sample program, offered to staff and parents at Owensville Middle School, found unexpected value in the class for her role as a youth dance club coach. She appreciated how the exercises focused on balance, weight shifting, and body control—skills that directly support her dancers' development. She shared, “*Moving this way will help them develop muscle isolation for some of the other dance moves we are learning.*” Inspired by the program, she plans to incorporate Tai Chi-inspired movements into her dance practices.



MU Extension **Serves MISSOURI and Delivers MIZZOU**
through credible statewide programs

Health and Human Sciences



Changing Our Mental and Emotional Trajectory (COMET) is a 2-hour training for older youth and adults to support friends, family, acquaintances, colleagues and neighbors' wellbeing.



Brain and the Disease of Addiction provides a foundational understanding of how the brain is affected from substances such as drugs and alcohol and how the disease of addiction develops. The Brain and the Disease of Addiction Program is for individuals, parents, students, healthcare professionals, and groups and organizations who will benefit from an understanding and knowledge of the science of the disease of addiction.



Resilience is the capacity to adapt when faced with adversity. **WeCanPROSPER Resilience Training** is a 2.5 hour training for participants to evaluate their personal resilience, tap into resources and create an action plan to enhance their resilience. Upon completing the training, participants can attend a facilitator session, enabling them to deliver the content within their communities and strengthen resilience within their networks.

100% of participants indicate that the skills and techniques they learned will help them become MORE RESILIENT.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Gasconade County

Health and Human Sciences

Local Impact

Emily Poncher, MPA — Community Health Specialist

emilyponcher@missouri.edu

Serving Crawford, Dent, Franklin, Gasconade, Maries, Montgomery, and Phelps Counties

2025 at a Glance

Hello all! 2025 was a year of connection and collaboration across the counties I serve. My work focused on connecting with communities through local events, professional meetings, and community spaces to share practical health information and strengthen partnerships.

Throughout the year, I supported county and regional efforts related to physical activity, mental and emotional well-being, and emerging health concerns, including Alpha-gal Syndrome. This included facilitating Extension programs, collaborating with Health and Human Sciences colleagues, and sharing community health work through conferences, local media, and public events. In Gasconade County, efforts centered on sharing timely and practical health information directly with residents through trusted community events like the Owensville Fall Health Fair.

Key Successes

- Contributed to and promoted 100 Miles 100 Days regional collaboration, which engaged over 700 participants across East Central Missouri
- Shared Alpha-gal education and other Extension resources with residents at the Owensville Fall Health Fair
- Strengthened visibility of Extension's role in community health through direct outreach and engagement
- Supported regional programming efforts that benefited residents across East Central Missouri



Sharing Extension resources and educational materials at the Owensville Fall Health Fair

Gasconade County

Health and Human Sciences

Local Impact

In 2025, total of 19 participants across 6 classes completed the Focus on Kids in Gasconade County. Across our region, 80% of participants reported increased knowledge about the cooperative coparenting benefits to children, 78% increased their knowledge about best strategies for child-focused communication, 76% increased their confidence in parenting skills during this transition, 74% report increased confidence in their ability to handle the transition, 77% feel they are better able to help their child adjust, and over 30% shared they have reduced intention for re-litigation services. Based on the metrics from similar programs at other major universities, we use the following equation to determine impact. (# of completers) x \$520 = estimated societal cost savings per year. As of the end of 2025, the estimated societal cost savings is \$9,880.





MU Extension **Serves MISSOURI and Delivers MIZZOU**

through credible statewide programs

Health and Human Sciences

SNAP-Ed Public Value Statement 2025

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$11,419,598 in federal funds to Missouri. The funds support engagement with 70,722 Supplemental Nutrition Assistance Program (SNAP) recipients and eligible citizens of Missouri who learned about being active and healthy eating on a budget. This year we had 970,939 indirect educational contacts through newsletters, health fairs, and food pantries.

3,929 direct and indirect contacts were made in **Gasconade** County.

Participants in SNAP-Ed learn the importance of making healthier meals and snack choices, eating breakfast more often, are more willing to try new foods, increase their physical activity, and make healthier food choices. Those who practice healthy eating and are physically active are more likely to contribute to a healthy labor force and enjoy a high quality of life throughout the lifespan.

This vital programming effort also reduces healthcare costs over the participant's lifetime, saving taxpayer money in reduced public healthcare benefits and insurance premiums.

EFNEP Public Value Statement 2025

The Expanded Food and Nutrition Education Program (EFNEP) brought \$1,624,777 federal funds to Missouri. These funds were used to enroll 424 limited-resource families in nutrition education and meal preparation classes, representing 1,550 family members. Additionally, 2,942 youth were enrolled in EFNEP classes.

38 of these youth and adult participants reside in **Gasconade** County.

Participants in EFNEP learn the importance of making healthier meals and snack choices, eating breakfast more often, trying new foods, increasing their physical activity, and making healthier food choices. Those who practice healthy eating and are physically active are more likely to contribute to a healthy labor force and enjoy a high quality of life throughout the lifespan.

This vital programming effort also reduces healthcare costs over the participant's lifetime, saving taxpayer money in reduced public healthcare benefits and insurance premiums.

Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being



MU Extension **Serves MISSOURI and Delivers MIZZOU**

through credible statewide programs

Business and Community



DEMOGRAPHIC, ECONOMIC AND WORKFORCE DATA TRAINING

MU Exceed offers customized data training. Participants learn how to use public data through hands-on exercises and demonstrations.

In 2022, Exceed provided data training to MORE THAN 200 MISSOURIANS. 95% of the attendees said that the information they learned was useful to their work.



Missourians from all walks of life celebrated the **2023 Missouri Good Neighbor Week** Sept. 28 to Oct. 4 by completing and reporting neighboring acts and nominating others as the most engaged neighbors in their counties.

In 2023, the goal was to document 15,000 acts of neighboring. That goal was surpassed with 19,752 Missourians being positively affected during MISSOURI GOOD NEIGHBOR WEEK.

“TAAF funds enhanced our ability to rival our competitors. Now we are proficiently showcasing our American products and feeling stronger in the marketplace.”

**Nancy Montgomery,
Tacony Manufacturing
St. James, MO**



The **Mid-America Trade Adjustment Assistance Center (TAAC)** administers TAAF, a program funded of the U.S. Department of Commerce’s Economic Development Administration. TAAF’s mission is to boost American manufacturer’s ability to compete in a global market, strengthen operations and improve profitability, thereby increasing U.S. jobs. Mid-America TAAC assists manufacturing firms in Iowa, Kansas, Missouri and Nebraska.

Mid-America TAAC reported that client sales revenues were more than \$2 BILLION IN 2022.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being



MU Extension **Serves MISSOURI and Delivers MIZZOU**

through credible statewide programs

Continuing Education



Established in 2002, the **Fire Officer Certificate Program** is designed for those who wish to further their professional development without the time and expense of traditional college classes. This program has been developed and evaluated to ensure it provides structured curriculum delivery and academic rigor. The program requires completion of 288 of instruction within three years.



The Law Enforcement Training Institute (LETI) has provided basic and advanced training for law enforcement since 1948. LETI's **Basic Peace Officer Academy** exceeds the 600 hours of training required for licensure in Missouri. From 2019 through 2025, the basic academy has licensed almost 400 peace officers, more than any other academy in the state. During that time, all but one graduate became employed by a law enforcement agency. LETI graduates come from around the state and return to their communities to serve and protect.



The **Missouri Extension Disaster Education Network** provides education and technical assistance to individuals and families, local governments, schools and organizations so they can prepare for and respond to natural and man-made disasters. Because of the unique relationship it maintains with each community, MU Extension is a key resource for the public, emergency services and public officials.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being