



UNIVERSITY OF MISSOURI EXTENSION

Madison County

2024 Annual Report

**SERVE
MISSOURI.**

**DELIVER
MIZZOU.**

8 Court Square
Fredericktown, MO 63645
573-783-3303

 **Extension**
University of Missouri

an equal opportunity/ADA institution



December 2024

Dear county commissioners, elected leaders and friends of MU Extension and Engagement,

As we reflect on the past year, I want to express my deep gratitude for your support of MU Extension and for your partnership in enhancing the lives of Missourians.

Your support for MU Extension fuels Missouri's agriculture, strengthens families, prepares our youth and promotes the health, well-being and vitality of our communities. Over the past year, our programs have focused on addressing key needs throughout the state:

- **Expanding access to 4-H:** To make 4-H more accessible, we've introduced more in-school and after-school clubs, reducing barriers and creating opportunities for young Missourians to develop essential skills and leadership abilities.
- **Supporting agriculture and land stewardship:** We're addressing critical issues such as succession planning for family farms, rural mental health, agricultural business management and land stewardship. These initiatives are helping Missouri's farmers plan for the future and preserve the health of our land for future generations.
- **Advancing health initiatives:** Our team of community health field specialists, covering every region of the state, works directly with local leaders to assess health needs and bring UM System resources and expertise to these communities, supporting healthier lives and stronger communities.
- **Promoting economic development:** MU Extension is helping to create economic opportunities by working with individuals, supporting businesses in their growth and collaborating with communities to enhance local vibrancy. Through these efforts, we help bring new jobs, skills and possibilities to Missourians across the state.
- **Providing essential training:** Our continuing education programs prepare Missouri's firefighters and health care workers to meet the demands of their roles with the latest skills and knowledge, ensuring they are well-prepared to serve our communities.

As you read through this annual report, I hope you feel as proud as I do of the accomplishments we've achieved together. The dedication and professionalism of MU Extension's faculty and staff are inspiring, and I am grateful to work alongside them—and each of you—as we make Missouri a stronger, healthier and more vibrant place. Thank you for your continued support and partnership. Together, we are serving Missouri by delivering the University *for* Missouri.

Warm regards,

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

Who we are

Faculty and staff located in Madison County

Sarah Barks

Community Health Field Specialist

Emily Schoenbeck

Nutrition Program Associate

Sandy Tripp

Youth Program Associate

Stephanie Schindler

Extension and Engagement Specialist

Other Faculty Serving Madison County

Donna Aufdenberg

Horticulture Field Specialist

Brad Coleman

4-H Youth Field Specialist

John Fuller

Human Development and Family Science Field Specialist

Michael Graham

Livestock Field Specialist

Sarah Higgins

Natural Resources Field Specialist

Evan Holley

Nutrition and Health Field Specialist

Jason Morris

Agriculture Business Field Specialist

Anthony Ohmes

Agronomy Field Specialist

Jerry Richards

Feral Hog Educator

Clayton Skelton

4-H Educator

Sarah Denkler

Southeast Regional Director

Council members

Rick Polete, Chair

Beth Simmons, Vice Chair

Katie Baldwin, Secretary

John Wright, Treasurer

Rusty Allgier

Linda Aumann

Jason Green, County Commission

Appointee

Brandon Hale

Clay Lerche

Joalyn McKenney

Cathy Melby

Jason Sutton, Farm Bureau Appointee

Emily Wright

***The University of Missouri
Extension Council of Madison
County would like to thank the
Madison County Commissioners
for their continued support of
Extension programming in
Madison County.***

County commissioners

Jason Green – Presiding Commissioner

Tom Stephens – 1st District Commissioner

Larry Kemp – 2nd District Commissioner

Budget and more

Appropriations budget

County Appropriations	54,000
Total Income	54,000
Expenses	
Salaries/Benefits	32,700
Travel	2,028
Telephone	420
Office Supplies/Service	2,662
Rent and Utilities	12,490
Insurance	1,900
Equipment	1,800
Total Expenses	54,000

Return on investment

For every dollar invested by Madison County, MU invests \$6.48

MU Extension is a unique 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.



Key Outcomes

- Community Health Specialist, Sarah Barks, started in the Madison County Extension office in April of 2024. This position is new for Madison County Extension.
- 336 youth were involved in 4-H programming in Madison County in 2024.
- SNAP-Ed programs in Madison County saw 495 direct contacts and 7,414 indirect contacts in 2024.
- In February of 2024, the Madison County Extension office moved to their new location at 8 Court Square. The move could not have been made possible without the support of the Madison County Commission.
- Feral Hog eradication efforts in Southeast Missouri have been so successful that a decline in the feral hog population has been seen yearly for several years.
- 10 Madison County residents completed Stay Strong, Stay Healthy in 2024.
- 2 Century Farms were recognized in 2024 in Madison County.

Local Support

Did you know you can donate directly to Madison 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.

Madison County

Missouri 4-H

Brad Coleman, Regional 4-H Specialist & Sandy Tripp, Youth Program Associate



Youth Impact at a Glance

The Madison County 4-H Youth Development program had over 336 youth participants in 2024. Youth participated in Community 4-H Clubs, Youth Futures programs, school-based programs and day camps. The Fredericktown Farmers 4-H Club has 25 volunteers serving over 35 youth. There are three SNAC—Eating From the Garden programs, that were taught at Fredericktown, Marquard, and the Calvary Church for homeschool youth. A Youth Futures program was conducted with the Calvary Homeschool Group. At the Fredericktown Intermediate School, over 60 youth participated in the Archery program every Thursday in the after-school program. Madison County 4-H youth participated in the Madison County Fair, showing their projects and animals. Many of the youth also showed projects at the St. Francois County Fair.

4-H community clubs offer long term experiences in which members learn life skills such as leadership, citizenship, responsibility, and teamwork under the guidance of trained 4-H volunteers.



4-H Serving our Communities

Each year, Missouri 4-H collects details on the time dedicated to giving back to our communities. Madison County volunteers completed 8,000 hours of service for an estimated \$250,000 worth of volunteer time.

The Fredericktown Farmers 4-H Club received a grant to do landscaping at the Fredericktown Nutrition Center. The youth and volunteers replaced the mulch and planted azaleas. The members enjoyed learning teamwork and cooperation while landscaping the flower beds. The funds was provided by FCS Financial.

Summer Enrichment Grant

Our six-county region received over \$80,000 in summer enrichment grants to support programs such as Youth Futures, Kids in the Kitchen, Youth Gardening, Sensory Gardening, Clover Kid Camps, Emergency Preparedness Camp, 4-H Day at The Lake and overnight camps. Our 4-H program developed partnerships with organizations such as libraries, conservation groups, homeschool groups, public and private schools, and civic organizations that will serve us as we expand our 4-H program in 2025. In Madison County youth participated in summer programs including Clover Kids, Kids in the Kitchen and Youth Futures.

Surveys said-

“Do we have to leave now? I want to make another smoothie!”

“How do I join a 4-H Club now?”



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**

through credible statewide programs

Agriculture and Environment

Anthony Ohmes, Regional Agronomist

Forage Systems

Diversifying forage systems for greater resilience of the forage supply by implementing the use of warm and cool season forages, perennial and annual grasses, legumes, and forbs to meet the needs of Missouri's diverse livestock segment.

Grazing School teaches Management-intensive Grazing (MiG) methods that improve forage persistence and quality, increasing the number of days of grazing forages in pastures, reducing dependency on hay, while conserving Missouri's natural resources. Twenty-two attended from Southeast and East Central Regions resulting in 95% planned adoption.

Extending the Grazing Season event addressed need of alternative forage crops, sunn hemp for summer and milo for winter grazing. One-on-one direct consultation on forage species, soils tests, nutrients, weeds and insects was provided to 148 individuals across the region.



Picture: 2024 Grazing School

Extending the Grazing Season quote, "Been wanting to plant milo for some time but was not 100% of how it all worked. Feel more comfortable about planting milo now [for winter forage]."



Picture: One of 32 2024 PPAT events offered.

Pesticide Applicator Training

Integrating pest management methods, protecting the environment, and reducing exposure risk while meeting federal and state requirements for restricted use pesticides. Thirty-two private applicator trainings offered across the SE Region and one aerial commercial applicator training educated 287 private and commercial applicators.

Missouri Agriculture contributes \$93.7 billion annually to Missouri's economy.*

*Missouri Department of Agriculture 2024 Status Report

Field Crops and Soils

Increasing MO field crop production through education on integrated pest, nutrient, crop, and soil management accomplished through events, soil testing, and one-on-one consultations. Four regional meetings reached 214 individuals.

Invited to educate 83 producers on corn ear disease. Individual one-on-one consultation on field crop management reached 141 producers across the region. Soil management including soil tests reached 135 individuals in Madison County.



Picture: 2024 Rice Meeting. One of 3 commodity meetings offered in SE Missouri.

Madison County

Agriculture Business and Policy

Jason Morris, Regional Agriculture Business Specialist

Ag Lenders Seminar

The Ag Lenders Seminar is a multi county programming effort to educate those who work in the field of agriculture finance and those who desire knowledge. This program consists of marketing outlooks, weather forecasts as well as past and current trends related to farming.

Farm Lease Classes

Many questions related to farm leases from producers and landlords are addressed yearly by MU Extension agricultural business specialists. As a relatively new program, several throughout Southeast Missouri participated in this program on-line and in-person. The two primary topics covered were items in a lease and terminating a farm lease. Estimates have 33 percent of farm leases in Missouri are still oral and oral lease termination is complicated and somewhat unique to the state. This program continues to draw participants, and elderly landowners appreciate the in-person option greatly.

Beef Producers

One of the greatest impacts for 2024 was addressing issues and needs which faced Southeast Missouri beef producers. Extension and Ag Business hosted several meetings throughout the year to educate producers regarding weather conditions, marketing options, financial directives and more. MU Extension was involved in or participated in no less than eight cattle related meetings.

Farm Tax Workshops

MU Extension hosted and taught Farm Tax Workshops for farm businesses and farm and ranch families. The content included Corporate Transparency Act, TCJA, estate & gift tax sunset, conservation tax issues, managing high/low-income years, Section 179 and depreciation, sales & exchanges and retirement and social security planning.

The online participants planned to take some action before the end of the year. The planned actions included: reviewing farm records (70%), meeting with tax preparer before the end of the year (67%), communicate with family members (50%) and fifty percent plan to review resources before purchasing begins in 2025.

Annie's Project

A new program was delivered in the Southeast Region which involved women in agriculture. More than nine On My Own programs were scheduled throughout the 18 county Southeast Region.

2024 Program Highlight

Beef Producers at risk: For the second year in a row, I invited Dr. Tim Evans, Assoc. Prof. & State Ext. Specialist, Veterinary Medicine from MU, to help find solutions facing local beef producers. In addition, Dr. Evans presented at two cattlemen's association meetings. This year, we transversed five counties and met with numerous producers. We have secured future endeavors to host farm and field days. Originating from a one county visit, this small project has grown into a program encompassing many counties.

Some of the questions and comments were:

"How can I get Dr. Evans to my farm?"

"Will and can he come back next year?"

"Why have we not done this before?"

Madison County

Agriculture and Environment

Michael Graham, Regional Livestock Specialist

Shielded Metal Arc Welding (SMAW)

Although sometimes not typically thought of in the realm of livestock, it is never a bad idea to expand farmer's knowledge with welding metal. Any farm has numerous opportunities for fusing metal together and if a producer knows how to weld, that is one more thing they can do themselves instead of out-sourcing it.

- Eight producers signed up for a two-evening course.
- 100% of the attendees learned new welding skills or honed existing skills.
- The objectives included:
 - Safe operation of the shielded metal arc welder.
 - Setting the welder for the size metal needing to be fused
 - Understanding and utilizing the electrode numbering system
 - Learning by hands-on application



Show Me Select Replacement Heifer Program

Created in 1998 the three objectives for the Show-Me-Select Heifer program is: 1. Improved heifer development through a Total Quality Management strategy. 2. Increased marketing opportunities for and added value for Missouri-raised heifers. 3. Creating of reliable sources of quality replacement heifers based on management, reproduction, and genetics. This program utilizes a collaborative effort between the producer, the MU extension livestock specialists, and local veterinarians to create a reliable source of replacement heifers in terms of genetics and management.

- Two sales were held in St. Francois County in 2024 at the Farmington Regional Stockyards. 228 total heifers sold from 15 producers.
- Gross revenue from the Farmington Show-Me-Select sales were \$692,775.00 in 2024.



Madison County

Agriculture and Environment

Jerry Richards, Cooperative Feral Hog Outreach Coordinator

2024 Update

The Missouri Feral Hog Elimination Partnership (MFHEP) had a very productive year!

To start the year, I had the opportunity to be interviewed by television stations in Springfield and Cape Girardeau. The interviews wound up appearing on stations in those cities, as well as on sister stations in Jonesboro, Arkansas and Paducah, Kentucky. Those interviews gave us the opportunity to reach a huge and diverse audience with our message, and we had great feedback from individuals who saw the interviews and reached out to us with very positive feedback.

While final numbers are not yet available for 2024, it looks like we will have eliminated about 5000 feral hogs in the state in the past 12 months. This compares to 2023 when we removed a little less than 8000 swine. The fact that this number is down is a very positive sign. It indicates that there are fewer hogs on the landscape causing damage to our public and private lands....evidence of the success of our program. When there are fewer hogs to be eliminated, our efforts will yield results that reflect this decrease.

In December, aerial operations began with our USDA helicopter. We have been fortunate to have the full-time use of a more powerful helicopter this year, which allows for increased performance and safety when engaged in the process of getting as close to the hogs as possible during elimination efforts. The educators such as myself have the opportunity to participate as part of the "ground crew" during aerial ops, and it is a very rewarding experience. Snow on the ground greatly aids visibility when locating hogs, so winter conditions can substantially increase our success.

Washington, Iron and Reynolds counties were approved to receive new equipment, free of charge, to help remediate damage caused by feral hogs. The equipment includes such items as harrows and no-till drills, and is given to local Soil and Water Conservation Districts. Landowners with damage caused by the swine can use this equipment free of charge. The availability of this equipment represents incredible cost savings for individuals who otherwise would have to come up with it on their own. The fact that drills, harrows and other equipment is readily visible sitting outside of SWCD offices goes a long way towards showing the public that we are working diligently to help restore private lands to the condition they were in before the arrival of this invasive species.

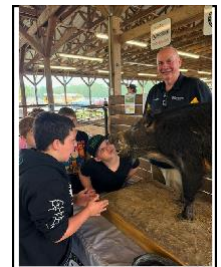
This past year I traveled extensively to bring our message to County Commissions, Farm Bureaus, SWCDs, MU Extension Offices, schools, community meetings, agricultural conferences, career days, feed stores, equipment dealers, powersports dealers, etc. I basically try to go anyplace that there are people who are affected, in one way or another, by feral hogs. One particularly gratifying thing I have experienced in the past few years is that students who have heard my presentation in one year are willing and eager to share our message and strategies with their classmates when we return to their schools. They are absorbing and sharing why we do things the way we do.



MFHEP Outreach Educator Jerry Richards delivers equipment to Bollinger County



Jerry Richards was a featured guest on KY3 News Springfield and Fox 23 News Cape Girardeau



Elementary students have fun with Jerry and the mounted feral hog



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through credible statewide programs

Business and Community

Estate Planning: What's the Worst That Can Happen???

Jennifer R. Williams, JD
University of Missouri Extension



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This class uses the fictional family pictured above to demonstrate the consequences of not having an estate plan.

Jennifer R. Williams taught an estate planning class in Madison County to **4 adults**, educating them on the importance of completing an estate plan.

“I was unaware of beneficiary deeds in Missouri and will certainly execute such when I update other documents.”

“‘What’s the worst thing that could happen’ is way worse than I ever imagined!”



Economic
Opportunity

Madison County

Community and Professional Health Education

Sarah Barks, Regional Community Health Specialist

Since starting with MU Extension in April I have been very busy! I completed the MO-RE course which assisted in creating a Strategic Plan for my regions. Part of this course included conducting a Community Voices survey in which all Missourians were given a chance to have their voices heard. Eighty-six respondents across my regions fully participated. The findings are insightful and helped identify and prioritize my focus areas. In East Central and Southeast Regions of Missouri, the three priority areas were identified as heart disease, poor mental health and lung cancer. Much of my time is spent doing work in these counties with the focus of these priority areas.

Top 3 priority areas:
Heart Disease
Poor Mental Health
Lung Cancer



CHEO team at Strategic Planning

I attended coalition meetings in each county, participated in Sequential Intercept Mapping and helped develop a Community Health Improvement plan. I achieved certification in WeCanProsper Resiliency Training and have since offered this course five times. I have presented my regional needs assessment findings to MU Extension councils and community partners including coalitions. I recently presented about the Recovery Friendly Workplace Initiative. In August, I was trained in Strengthening Families Program 10-14 and assisted facilitating the training to a local coalition.

SNAP Education

The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$11,145,237 in federal funds to Missouri. The funds support engagement with 74,864 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 1,164,143 indirect educational contacts through newsletters, health fairs, food pantries, and the Show Me Nutrition helpline.

Four hundred and ninety-five direct and 7414 indirect contacts were made in Madison 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.



Success Story

When I arrived to teach *Healthy Change* to some of the residents at New Morning Apartments, I noticed several participants that had previously attended the *Eating Smart Being Active* series I taught at the same location over a year ago. As we were catching up, two of the participants told me they had been eating more fruits and vegetables since taking the class last year! One of the participants also told me she is now only drinking one can of soda a day which is a big deal considering how many sodas she was drinking a day before taking the classes! I am very excited to see what other positive steps they will take because of participating in *Healthy Change* this year.

Emalie Schoenbeck (NPA) with a participant from St. Michael's Village in Fredericktown during a Healthy Change session.



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs **Health and Human Sciences**



Healthy aging is one of the key focus areas for MU Extension. Falls and chronic diseases are among the two leading age-related causes of death. The **Stay Strong Stay Healthy** program addresses this issue by teaching older adults strength training, balance and flexibility exercises proven to reduce risk of fall and increase mobility and independence.

10 Madison County residents registered for a Stay Strong Stay Healthy class offered by Nutrition and Health Specialist Evan Holley in 2024, with 100% of participants who completed the class demonstrating improved strength, balance, and flexibility. Participants reported feeling better, both mentally and physically, and expressed a feeling of empowerment to continue exercising on their own going forward.

The economic impact of Stay Strong Stay Healthy in Iron County in 2024 is an estimated **\$5,120** in savings on healthcare expenses.

Participants in Stay Strong Stay Healthy expressed their love for the class and are on the calendar for a follow up class in early 2025, demonstrating the value participants find in the program.

Participant quotes:

- “Evan was very informative and helpful. I enjoyed the group that was in the class.”
- “I love the exercise, and the coach and his patience.”
- “This class has helped me with my balance and strength.”

In addition to named programming, MU Extension in Madison County contributed to the MU Extension website and Health & Human Sciences podcast (Truth or Trend), with a combined reach of over **2,000** visits and downloads.

Nutrition and Health specialist Evan Holley also worked in cooperation with Human Development specialist John Fuller to offer a 1-hour workshop on eating healthy on a budget and digital coupon tools for 2 participants who reported increased knowledge and confidence on the presented subject.

Contribution to broad-reaching platforms like web and podcast help to increase the visibility of Extension in Madison County and build awareness of Extension as a trusted resource.

- **\$5,120 in healthcare savings**
- **100% demonstrated improvement in key health indicators**
- **17 class sessions**
- **2,000+ website visits and podcast downloads**
- **858 direct contacts**



Madison County

Health and Human Sciences

John Fuller, Regional Human Development and Family Science Specialist

for Older Adults

1 Session a week for
10 weeks
Starting June 17th at
1:00 pm

Mondays

Madison County Senior Center
107 Spruce St
Fredericktown, MO 63645

No Charge

This program is
designed for those
60 years and older

For more information
and requirements
call 573-783-3303

Chromebook will be
provided

Computer and Technology Classes

This has been a response to a great need in the Southeast Region. From learning how a Chromebook works to understanding their phones better. Thanks to a grant that Aging Matters received. We were able to provide these classes at no charge. In our lectures and workshops, 74.6% reported to have learned a new skill. In our courses, of those surveyed, 18 people before the class either agreed or strongly agreed to be comfortable with a computer. After the class, 32 people agreed or strongly agreed to feeling comfortable with a computer.

Digital Coupons

With inflation at the level it is, people are looking for ways to save. Coupons are not always readily available. Many coupons or website extensions are online available online. Partnering with Nutrition and Health, attendees learned to eat healthy on a diet followed up by ways to get coupons through technology.



County Highlights

Madison County State Fair Farm Family – The Parson Family

The Parson Family members were among those honored during the 66th annual Missouri Farm Family Day, Aug. 14 at the Missouri State Fair. The Parson family was selected as the Missouri County Farm Family by University of Missouri Extension and the local Farm Bureau. Each year, the fair sets aside a day to recognize farm families from across the state that are active in their communities, involved in agriculture, and/or participate in local outreach and extension programs such as 4-H or FFA.



Madison County Leaders Honor Roll

The Leaders Honor Roll recognizes outstanding leaders and volunteers who have supported and helped to advance MU Extension in their communities. Congratulations to Rachelle Parson and Riley Bumgardner. Rachelle and Riley are leaders with the shooting sports program through the Fredericktown School District afterschool program.



Missouri Century Farm

Four Missouri County farms have been recognized as a Missouri Century Farm in 2024.

The Mouser Family

The Ronald and Janet Ward Family

Families were presented their certificates during the Annual Dinner. In 1976, Missouri's Centennial Farm project awarded certificates to persons owning farms that had been in the same family for 100 years or more. The MU College of Agriculture, Food and Natural Resources and MU Extension planned a 10-year update in 1986 called the Century Farm program. Since then, the program has been an annual event, recognizing more than 100 farms each year.



A ribbon cutting and open house was held in 2024 to introduce the community to the new Madison County Extension office. The office moved to 8 Court Square in February and has seen a substantial increase in the number of people in the office at our new location!



Madison County



University of Missouri System

COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

UM System Footprint in the county in 2024



FY24 county students

27 students

- 21 Undergraduates
- 6 Graduate and professional students
- 23 Full-time students
- 4 Part-time students
- 11 Pell grant recipients (aid year 2024)



County employees and retirees

5 people employed by UM

- 5 Campuses



County alumni

Selected school alumni

- 4 Medicine
- 7 Nursing
- 5 Health Professions
- 4 Veterinary Medicine
- 22 Agriculture
- 28 Engineering
- 3 Law

Alumni teaching K-12

- 10 teachers
- 6.0% of all district teachers



County breakdown

MU

- 15 students
- 71 alumni
- 4 employees

UMKC

- 0 students
- 5 alumni
- 0 employees

Missouri S&T

- 5 students
- 31 alumni
- 0 employees

UMSL

- 7 students
- 54 alumni
- 1 employee



Construction projects

- \$2,250 remitted to 1 county vendor, for 1 project



County properties and offices

MU Extension in: Madison County



County population: 12,665



County services provided

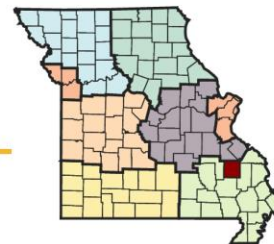
Health care (FY24)

- 11 in-state patients seen at MU Health Care, with \$1,595 of uncompensated care
- MU Health Care's Missouri Telehealth Network recorded 56 visits to 30 patients having ZIP codes associated with the county

Extension (2023)

- 2,998 Total educational contacts from MU Extension to residents of the county, including:
 - 68 contacts related to productive farming, better gardening, and managing natural resources
 - 2,895 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
 - 11 contacts related to starting businesses, developing community leaders, or renewing the local economy

Missouri Grand Challenges: Local Solutions



MADISON 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

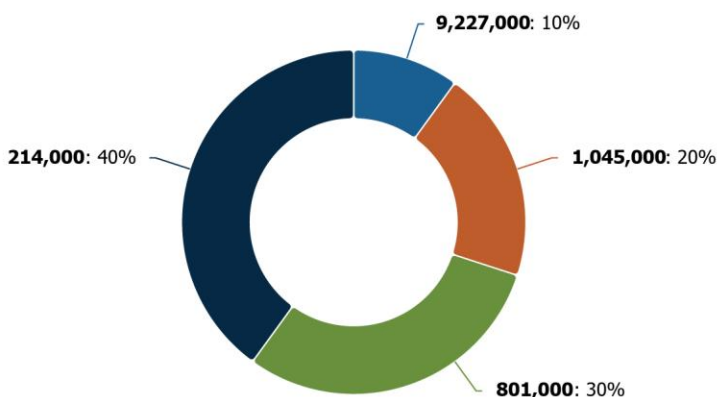
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: Agricultural Economics

Leading Agricultural Products

Total Rank (Sales): \$10



Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](https://www.nass.usda.gov/). 2022.

Net Farm Income

Net farm income (total sales, government payments, and other farm-related income minus total farm expenses) reflects the strength of the local agricultural community and can be an important measure for lenders and policy makers. The report area had a combined net farm income of \$2,156,000 in 2017, an average of \$6,514 per farm. This is below the statewide average farm income of \$56,606.

Report Area	Total Farms	Average Farm Income
Madison	331	\$6,514
Missouri	87,887	\$56,606

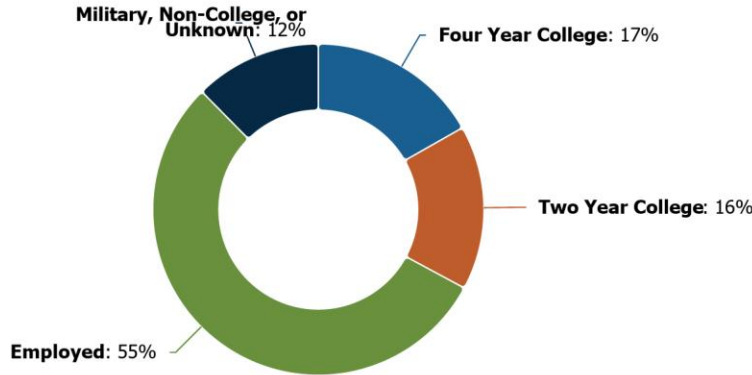
Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](https://www.nass.usda.gov/). 2022.



CHALLENGE 2: Educational Access and Excellence: *College and Career Readiness*

Post High School Report

The 12-month post-graduation activity of recent high school graduates can inform communities about postsecondary education, career readiness, and characteristics of the future workforce. In 2022, of 137 graduates surveyed in the report area, 23 went to a four-year college, 22 to a two-year college, 75 directly entered the job market. The remaining 17 are reported as in the military, not in college, or unknown.



Data Source: [Missouri Department of Elementary & Secondary Education](#). 2022.



CHALLENGE 3: Healthy Futures: *Healthy Weight*

Obesity (Adult)

This indicator reports the number and percentage of adults aged 20 and older self-report having a Body Mass Index (BMI) greater than 30.0 (obese). Respondents were considered obese if their Body Mass Index (BMI) was 30 or greater. Body mass index (weight [kg]/height [m]²) was derived from self-report of height and weight. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Note: In 2021, the CDC updated the methodology used to produce estimates for this indicator. Estimated values for prior years (2004 - 2017) have been updated in this platform to allow comparison across years. Use caution when comparing with saved assessments generated prior to November 10, 2021.

Percentage of Adults Obese, 2016



Data Source: Centers for Disease Control and Prevention, [National Center for Chronic Disease Prevention and Health Promotion](#). 2021.

Physical Inactivity

Within the report area, 2,467 or 24.1% of adults aged 20 and older self-report no active leisure time, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?" This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

Note: In 2021, the CDC updated the methodology used to produce estimates for this indicator. Estimated values for prior years (2004 - 2017) have been updated in this platform to allow comparison across years. Use caution when comparing with saved assessments generated prior to November 10, 2021.

Adults Age 20+ with No Leisure Time Physical Activity, Percent

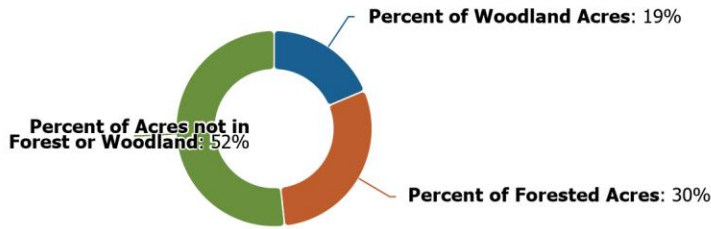


Data Source: Centers for Disease Control and Prevention, [National Center for Chronic Disease Prevention and Health Promotion](#). 2021.



Forested, Woodland & Non-forested Acres

Sustainable management of forests and woodlands and harvesting of mature trees support the state’s \$10.3 billion forest products industries. Forests have a closed canopy (>80% cover) permitting little light to penetrate to the ground below. They consist of several overlapping layers of trees, with a mid-story and understory comprising a variety of shade-tolerant shrubs and a sparse layer of soft-stemmed plants. Woodlands have a more open canopy (30-80% cover), and their sparse, woody mid-story allows more sunlight to reach the ground. This light permits the growth of a dense ground cover containing a variety of wildflowers, grasses and sedges. Fire plays a large role in maintaining woodland habitats.



Data Source: Multi-Resolution Land Characteristics Consortium, [National Land Cover Database](#).

Rotational Grazing

A planned rotational grazing system allows time for vegetation to rest and recover before being grazed again. In 2017, nearly 16,000 Missouri farms reported practicing rotational or management-intensive grazing. With 11 million acres of row crops and nearly 2 million grazing livestock animals (mainly cattle), Missouri is well suited to capitalize on the grazing potential of cover crops. In addition to generating more income, grazing cover crops can have a positive impact on soil health. Manure, hoof action and the root responses that grazing elicits stimulate soil biological activity and lead to healthier soil and healthier crops.

Percent of Operations Utilizing Rotational Grazing



Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#), 2022.