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A Message from the
Macon County University of Missouri
Extension Council Chair

Dear Citizens of Macon County:

It is an honor and privilege to present this 2013 Annual Report of the University of Missouri Macon County Extension Council to the citizens of our County. We are grateful to the Extension staff, who have dedicated their profession to making this a successful year, along with the time and talents of many volunteers, community leaders, and Council members. We have a strong partnership with our County Commission.

It is the goal of the Extension Council, through the University of Missouri, to provide our citizens with the many facets of practical education that may be of lifelong benefit in their daily lives and their chosen endeavors to support their families and community. The knowledge is provided through major programs such as: Community Development which includes economic development and vitality; Business Development which includes small business startup, financial analysis, and workforce development; Missouri Families which includes health and nutrition, parenting, child care, and personal finance; Agriculture and Natural Resources which includes crop management, livestock production, and horticulture; and one of our signature programs which is 4-H Youth Development.

It is our sincere wish that you will find within this report an understanding of the ways in which your Extension is striving to provide essential services to our citizens. We are looking forward to another great year.

Stan Grant, extension council chair
COUNCIL LEADERSHIP
Roles and Duties of the Extension Council

The mission of University of Missouri Extension is to improve Missourian’s lives by addressing their highest priorities through the application of research–based knowledge and resources.

As an integral part of the land-grant mission, University of Missouri Extension is a joint venture of University of Missouri campuses; Lincoln University Cooperative Extension; the people of Missouri through county extension councils; Cooperative State Research Education and Extension Service of the U.S. Department of Agriculture; and other stakeholders and partners.

The county extension council plays a vital role in meeting these educational needs. County extension councils are statutorily created to work with the University of Missouri in carrying out the local extension program (Section 262:550 to 262:610, Revised Statues of Missouri).

Effective county extension councils are comprised of members who are committed to the extension mission. Their responsibilities can be categorized into three areas:

- Educational program development and implementation
  
  The council plans and carries out extension programs in their county by identifying concerns in their community; making recommendations to the University by working with local faculty; and ensuring access to local residents, groups and organizations.

- Governance
  
  The council administers the local extension budget and operations, including council-employed personnel and fiscal management. The council is responsible for office operations, annual council membership, elections, council operations and meetings, legal requirements, regional council relationship, marketing, and decision making.

- Membership
  
  Membership begins with recruiting candidates who represent the broad educational need and backgrounds of the people in the county.

2013 Extension Council members left to right. Carla Grant, Barbara Primm, Cheryl Fullerton, Greg Robertson, Jon Dwiggins, Danny Primm, Corey Blackford, Louise Gaughan, Beth James, Paula Thompson, Kathy Rowe, Ben Coleman, Stan Grant. Not pictured Jack Davison.
Dear County Commissioners and Associated Friends of MU Extension:

As we enter 2014, we at University of Missouri Extension celebrate our 100-year partnership with you, with the State of Missouri and with the federal government. Through the Smith-Lever Act of 1914, the Cooperative Extension Service was established to provide practical application of research knowledge “to persons not attending or resident in said colleges in the several communities.” Over the years, the mission to bring you relevant, reliable and responsive education to improve lives and local economies remains the same. Yet, we also have changed to help you meet emerging issues and to take advantage of emerging opportunities.

Every day, MU Extension helps create value for citizens. For example:

Throughout the state, MU Extension provides information to help address issues and opportunities related to Missouri’s economic infrastructure, public services, economic development, jobs and educational access. Counseling more than 3,000 business clients in FY12 resulted in 9,328 new jobs, sales increases of $188 million, $213 million in new business financing, and government contracts of more than $195 million.

Our state and nation are in need of workers who are highly proficient in science, technology, engineering and math (STEM). Research has shown that 4-H members develop an increased interest in science three times higher than their non-peers. Both non-traditional activities, such as robotics, and more traditional activities, such as livestock judging and food preparation, are doorways to science-related careers.

Livestock production accounts for about 53 percent of the state’s agricultural receipts. MU Extension’s Tier Two Show-Me-Select Replacement Heifer Program, which improves reproductive efficiency of beef herds, has garnered producers $237 to $357 per heifer, depending on breeding protocol followed. Statewide economic impact of the program has exceeded $65 million.

These are just three examples of MU Extension’s impact – made possible through your support of MU Extension in your community. I look forward to our continuing partnership, and as always, your ideas for improving our partnership are welcome.

Michael D. Ouart
Vice Provost and Director
Macon County MU Extension Faculty and Staff

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Additional Faculty/Staff Serving Macon County

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2013 Macon County University of Missouri
Extension Council Operating Budget

<table>
<thead>
<tr>
<th>Revenue</th>
<th></th>
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<tbody>
<tr>
<td>County Appropriation</td>
<td>38,000.00</td>
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<tr>
<td>Miscellaneous</td>
<td>169.95</td>
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<tr>
<td>Funds Reallocation—Moving Funds</td>
<td>-1,200.00</td>
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<tr>
<td>Total Revenue</td>
<td>36,969.95</td>
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</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary &amp; Wages</td>
<td>16,581.74</td>
</tr>
<tr>
<td>Payroll Expenses</td>
<td>5,732.22</td>
</tr>
<tr>
<td>Travel</td>
<td>2,600.00</td>
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<tr>
<td>Telephone Service</td>
<td>1,807.17</td>
</tr>
<tr>
<td>Rent /Water/Snow removal</td>
<td>9,360.00</td>
</tr>
<tr>
<td>Supplies/Services</td>
<td>69.05</td>
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<tr>
<td>Utilities</td>
<td>1,792.87</td>
</tr>
<tr>
<td>Insurance</td>
<td>518.94</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>38,461.99</td>
</tr>
</tbody>
</table>
2013
University of Missouri System
Columbia | Kansas City | Rolla | St. Louis

Impact on Macon County, Missouri

The County at a Glance
☐ UM Students: 75
☐ UM Alumni: 450
☐ UM Employees: 41
☐ Population: 15,500
☐ UM Salary & Retirement Income: $1,529,760
☐ UM State Tax Revenue: $51,121
☐ UM Federal Tax Revenue: $224,687

UM Students from the County in 2012
➢ 75 students
  ➢ 66 - MU
  ➢ 4 - UMKC
  ➢ 5 - Missouri S&T
  ➢ 60 - Undergraduates
  ➢ 15 - Graduates
  ➢ 61 - Full-time students
  ➢ 14 - Part-time students

UM Alumni Residing in the County in 2012
➢ 450 alumni
  ➢ 383 - MU
  ➢ 34 - UMKC
  ➢ 18 - Missouri S&T
  ➢ 15 - UMSL
  ➢ 213 Selected School Alumni
    ➢ 6 - Medicine
    ➢ 21 - Nursing
    ➢ 14 - Health Professions
    ➢ 3 - Dentistry
    ➢ 7 - Pharmacy
    ➢ 2 - Optometry
    ➢ 7 - Veterinary Medicine
    ➢ 93 - Agriculture
    ➢ 41 - Engineering
    ➢ 19 - Law

UM Employees and Retirees Residing in the County in 2012
➢ 41 people employed by UM
  ➢ 15 - MU
  ➢ 1 - Missouri S&T
  ➢ 25 - UM Health Care
➢ 14 UM Retirees and Beneficiaries

UM Services Received in the County in 2012
➢ 2,717 patients seen at UM Health Care, with $794,056 of uncompensated care.
➢ 12 patients seen at the UMKC School of Dentistry with an average of $36 per patient in uncompensated care.
➢ 7,903 contacts with MU Extension through MU Extension events held in district counties.

UM Alumni Teaching K-12 in the County in 2012
➢ 32 teachers
➢ 13% of all county teachers
➢ 3 principals and administrators
➢ 21% of all county principals and administrators

Select UM Properties in the County
Barths Brown Farm

Advancing Missouri
Office of Government Relations
309 University Hall • Columbia, MO 65211 • 573-882-2728
wwwumsystemedu/missouri
Impact on Macon County, Missouri

UM Research Expenditures Funded by Federal and Private Sources

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>$158.3</td>
<td>$162.7</td>
<td>$173.2</td>
<td>$185.6</td>
<td>$193.0</td>
<td>$194.7</td>
</tr>
</tbody>
</table>

Electronic Services to the State in 2012

- The Missouri Research & Education Network (MOREnet) provided internet connectivity and technical services to members that include:
  - 64 higher education institutions with more than 308,000 students.
  - 500 K-12 schools with 868,000 students and 76,000 faculty.
  - 134 public libraries connecting 343 library buildings that serve 5.4 million Missourians.
  - MOREnet returned $13 million in telecommunications expenditures to companies doing business in Missouri.

Economic Development Highlights

- With $3.2 billion in total revenues, UM would have been the 17th largest publicly held Missouri-headquartered company in the state in 2012.
- With more than 31,000 employees in the state, UM was Missouri's 2nd largest employer in 2011.
- In 2010, UM’s $169 million in federal science and engineering research expenditures represented 93% of these expenditures at Missouri public universities.
- In 2012, UM’s $223.3 million in National Science Foundation (NSF) awards represented 80% of all NSF awards made to Missouri public universities.
- UM earned $6.8 million in licensing income in 2012.
- UM received 163 new invention disclosures in 2012.
- 8 startups were created around UM technologies in 2012.
- UM was issued 34 U.S. patents and filed 69 new U.S. patent applications in 2012.

Financial Aid Provided to UM Students in 2012

- $871.2 million
  - $432.1 million - MU
  - $202.2 million - UMKC
  - $97.5 million - Missouri S&T
  - $139.4 million - UMSL

Impact on Education in 2011

- UM enrolled 50% of first-time undergraduates attending four-year public institutions in 2011.
- UM awarded 49% of the 1,130 doctoral degrees earned in Missouri.
- UM awarded 42% of the 1,937 first professional degrees earned in Missouri.
- UM awarded 54% of the 28,798 bachelor’s or higher degrees awarded by Missouri’s four-year public institutions.

Supporting the University of Missouri is an investment in the future of Missouri.

The university advances Missouri citizens and communities through its mission of teaching, research, public service, and economic development across our four campuses and University of Missouri Extension.
**Number of Macon County Learners**

4-H youth development in Macon County is a community of 216 youth building life skills, engaging in science and connecting to communities. One of every five Missourians between the ages of 5 and 18 participated in a Missouri 4-H program in 2013.

<table>
<thead>
<tr>
<th>Total Hours of Collective Workshop Participation in 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>216 members x 1hr per month x 12 monthly club meetings = 2,592 hours of community club work. 4-H offers over 100 different project areas for members to enroll in such as electricity, robotics, beef and cake decorating. To be recognized as a member in good standing each member must also complete at least one project in which they work with a registered volunteer for at least six hours per year. 216 members x 1 project each x 6 project meeting hours = 1,296 hours spent doing project work with an adult 4-H volunteer. Most members take around three different projects and spend more than the six required hours with a volunteer.</td>
</tr>
</tbody>
</table>

**What Did They Learn?**

The five Macon County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from aerospace and arts to veterinary science and sport fishing. Clubs also involve children and teens in community service, camping and educational trips.

**What Action Did They Take?**

4-H members continue to build on life skills that will benefit them throughout their lives.
<table>
<thead>
<tr>
<th>How Does this Work Make Macon County and Missouri Better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-H Connects Kids to College and a Higher Quality of Life. Missouri 4-H Members are twice more likely to have been on a college campus than their non 4-H peers. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). In 2011, MU Extension 4-H connected 8,500 young people ages 8 to 18 to University of Missouri campuses and faculty. Being on a campus is a predictor of youth going on to higher education (Hoover, 2006).</td>
</tr>
<tr>
<td>- Twenty-seven Macon County young people ages 8-18 participated in 4-H events on the MU Campus</td>
</tr>
<tr>
<td>- These students are more likely to go to college and enjoy</td>
</tr>
<tr>
<td>- Increased financial success for themselves and their offspring</td>
</tr>
<tr>
<td>- Being better consumers</td>
</tr>
<tr>
<td>- Improved quality of life through more opportunities for leisure and hobbies</td>
</tr>
<tr>
<td>- Improved health for themselves and their children (Porter, 2003)</td>
</tr>
<tr>
<td>- Being more likely to vote as adults</td>
</tr>
<tr>
<td>- Being more likely to contribute to their community (Lerner, 2009; Zaff et al, 2003)</td>
</tr>
<tr>
<td>- Youth who earn their bachelor’s degree increase annual earnings by $2.4 million over their lifetime (NACUBO, 2012). If 70% of the Macon County members participating in 4-H events on the MU campus go on to earning their bachelor’s degree, 4-H would help those local young people together earn $45.36 million more of lifetime earnings (27 youth X 0.70 X $2,400,000 = $45.36 million).</td>
</tr>
</tbody>
</table>
Title of program:  4-H Volunteer Support

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>Macon County 4-H members are supported by 110 registered adult volunteers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours of Collective Workshop Participation in 2013</td>
<td>Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at $19 per hour, based on average Missouri incomes, the contribution of Macon 4-H volunteers was worth more than $209,000 in 2013!</td>
</tr>
<tr>
<td>What Did They Learn?</td>
<td>Volunteers come away from their experience learning as much from the members as they taught. They learn how members interact and what motivates youth. Each volunteer must take a one-time Volunteer Orientation course. During the orientation they learn about the history of 4-H, youth development, the 4-H philosophy regarding competition and how 4-H teaches life skills and character to our youth.</td>
</tr>
<tr>
<td>What Action Did They Take?</td>
<td>Volunteers create, support and are part of the 4-H community. 4-H volunteers organize club meetings, project meetings, fundraisers and events. These dedicated people help our youth learn about project related skills such as using a sewing machine to make a dress while at the same time learning important lifelong skills such as responsibility.</td>
</tr>
<tr>
<td>How Does This Work Make Macon County and Missouri Better?</td>
<td>Volunteers create, support and are part of the 4-H community. More importantly, these adults serve as mentors for our youth helping them transition into caring and contributing adults throughout our communities.</td>
</tr>
</tbody>
</table>
Sixty-five 4-H members participated in the annual Achievement Day. Members competed in demonstration contests, public speaking contests, personal development interviews, 4-H royalty interviews, fashion revue, a table setting contest, collection displays, team skill-a-thon and judging contests for ages 5-18.

65 participants x 3 hours = 195 hours

Achievement Day assists 4-H youth in improving problem solving, communication and organizational skills as youth develop and present demonstrations, public speeches and judging class reasons. They also enhance teamwork skills as they work together to complete a task during a team contest called skill-a-thon.

4-H also helps youth prepare for future job interviews by offering different contests such as personal development, royalty, table setting and collections displays where each participant will be interviewed by a single judge or a panel of judges.

The 4-H Study of Positive Youth Development discovered that, when compared to other youth, young people involved in 4-H have higher educational achievement and higher motivation for future education. In addition, youth in 4-H make more civic contributions to their communities than youth in other out-of-school programs.
Some events the Macon County 4-H members attended include:
- State 4-H Teen Conference - 8 members attended
- State 4-H Congress - 6 members attended
- 4-H Summer Camp - 19 members attended
- State Public Speaking - 5 member attended
- State Shooting Sports Contest - 16 members attended
- State Livestock Judging Contest - 5 members attended
- State Demonstrations - 9 members attended
- State Fashion Revue - 3 members attended
- Missouri State Fair - 17 members attended
- State Poultry Day - 2 members attended

4-H members spend months working in their project areas preparing for county, regional, state and national contest or events.

4-H offers many opportunities for youth to learn life skills and grow into contributing adults.

Macon County was well represented at regional, state and national 4-H events. Members also demonstrated their skills learned through their 4-H projects at many contests.

Community service is integral to positive youth development programs. 4-H youth are three times more likely to actively contribute to their communities when compared with youth who do not participate in 4-H (Lerner, 2008).
## Title of program: Show-Me quality Assurance

<table>
<thead>
<tr>
<th><strong>Number of Macon County Learners</strong></th>
<th>Twenty-one youth attended the 2013 program.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Hours of Collective Workshop Participation in 2013</strong></td>
<td>Some 4-H members will own or manage an animal for a project. The Show-Me Quality Assurance program is a two-hour program geared toward 4-H youth enrolled in food animal projects such as beef, rabbits, poultry, sheep, swine, dairy and goats. Members enrolled in a food animal project will take the course twice between the ages of eight and thirteen and once again when they are fourteen. They will spend at least six hours in the Show-Me Quality Assurance program.</td>
</tr>
<tr>
<td><strong>What Did They Learn?</strong></td>
<td>Information covered during the course includes daily care and management, animal handling, animal identification, reading feed labels, biosecurity, proper injection locations, carcass quality and medication withdrawal times.</td>
</tr>
<tr>
<td><strong>What Action Did They Take?</strong></td>
<td>4-H members that are enrolled in animal projects take on a big role of responsibility. Members not only take care of their animal’s daily wellbeing but also keep breeding records, medical records and expense records.</td>
</tr>
<tr>
<td><strong>How Does This Work Make Macon County and Missouri Better?</strong></td>
<td>Active 4-H members report being engaged in 3 times more leadership experiences than their non 4-H peers.</td>
</tr>
</tbody>
</table>
**Title of program:** Macon County Fair

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>204 4-H and FFA members participated in the 2013 Macon County Town and Country Fair held in July.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours of Collective Workshop Participation in 2013</td>
<td>Each exhibitor may put in 100 hours preparing, practicing, helping others and exhibiting at the county fair.</td>
</tr>
<tr>
<td>What Did They Learn?</td>
<td>4-H can also offer a taste of entrepreneurship to many youth through projects such as electricity, cake decorating, beef, computers, home environment and welding. The Macon County Fair gives 4-H members the opportunity to promote their work by exhibiting in shows, contests, demonstrations, displays and the Junior Livestock Sale.</td>
</tr>
<tr>
<td>What Action Did They Take?</td>
<td>During the fair 1005 ribbons were awarded. The Danish system of judging is used at the fair where the exhibit is evaluated against a standard, and recognition is given to the exhibitor by how close they have come to meeting that standard. A blue ribbon indicates the youth has excellent knowledge in the project area that exceeds the standard. A red ribbon indicates the youth has some knowledge in the project area and meets the standard. A white ribbon indicates the youth has little or no knowledge in the project area. At the fair 83% of the entries received blue ribbons, 16% received red ribbons and 1% received white ribbons. There were 506 items exhibited in the Expo Building during the fair. Forty-three percent of the blue ribbon inside items were chosen to be exhibited in the 4-H Building at the Missouri State Fair indicating a high level of achievement. Youth will use the judge’s comments as valuable information to help them improve next year’s projects.</td>
</tr>
</tbody>
</table>
Members that exhibit at the fair use the judge's comments as valuable information to help them improve and grow for the future. Youth that exhibit an item inside the building at the fair participate in conference style judging. Conference judging allows the member and judge to evaluate the exhibits together. During the evaluation the judge and exhibitor talk directly with each other. Through the two-way conversation the judge can give suggestions to improve the exhibit and the exhibitor may explain problems encountered and solutions as well as goals reached and any knowledge gained. Conference style judging gives the exhibitor an opportunity to learn from the judge's experiences and knowledge and to start making future plans.

**How Does This Work Make Macon County and Missouri Better?**

<table>
<thead>
<tr>
<th><strong>Title of program:</strong></th>
<th>4-H Summer Camp</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Number of Macon County Learners</strong></th>
<th>Nineteen members from Macon County attended 4-H summer camp at Cuivre River State Park near Troy, MO.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Hours of Collective Workshop</strong></td>
<td>Summer camp is four days per session. 19 campers x 48 programing hours spent at camp = 912 hours.</td>
</tr>
<tr>
<td><strong>What did they learn?</strong></td>
<td>A pre-camp evaluation and post-camp evaluation developed from the Life Skills Evaluation System was given to campers that were entering grade six and up the first day and the last day of camp in 2012. The evaluation tool showed 4-H camp is helping youth develop skills related to decision making, wise use of resources, useful or marketable skills and self-responsibility. When campers were asked about the most important thing they had gained from attending 4-H camp, many responded with answers related to accepting responsibility, being more independent, interacting better with people, improved ability to make new friends, improved ability to get along with people, increased teamwork, decision making and self-confidence.</td>
</tr>
</tbody>
</table>
Parents noted that when their children returned home from camp they had better attitudes, flexibility, improved responsibility and a better tenacity to help out as a result of attending 4-H Camp (Klem, 2006).

4-H members regardless of their background, socio-economic status, race and gender thrive through the health/safety education and experiences they receive through 4-H programming. Young people in 4-H are:

- Less likely to have sexual intercourse by Grade 10
- 56% more likely to spend more hours exercising or being physically active
- Shown to have had significantly lower drug, alcohol and cigarette use than their peers (Lerner, 2008)

**What Action Did They Take**

**How Does This Work Make Macon county and Missouri Better**

<table>
<thead>
<tr>
<th><strong>Title of program:</strong></th>
<th>4-H School Programs</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Number of Macon County Learners</strong></th>
<th>One hundred twenty five students in Macon County participated in 4-H School enrichment programs in 2013.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Hours of Collective Workshop Participation in 2013</strong></td>
<td>Pre-incubated eggs are delivered to the classroom on a Monday where they turn the eggs twice daily until Friday. The eggs hatch the next Monday and stay in the classroom for the week.</td>
</tr>
<tr>
<td><strong>What Did They Learn</strong></td>
<td>Students in classrooms that participate in 4-H embryology learn about science, life, responsibility, decision-making and teamwork while working their way through activities and lesson plans provided to the teacher or volunteer by the Extension Office.</td>
</tr>
</tbody>
</table>
### What Action Did They Take?

4-H school enrichment programs are short-term educational experiences that supplement learning in the classroom. Most are led by teachers or 4-H volunteers. The most popular 4-H school program in Macon County is “Hatching Chicks in the Classroom”.

### How Does This Work Make Macon County and Missouri Better?

Missouri 4-H members are engaged with science activities. The advantages of 4-H participation include the development of positive attitudes about science and more participation in science-focused activities during out-of-school time.

The benefit for girls seems particularly important. In the national 4-H Study of Positive Youth Development Wave 6 sample, 4-H girls were significantly more positive on all the measures related to science. Missouri girls in Wave 7 were also more likely to report that they participated in programs that increased their interest in science-related topics. (Lerner, 2006).

*Duplicates not removed*
References:


There were 6 individuals that took individual trainings for themselves and or businesses. There were individual counseling sessions of 83 in total for various companies throughout Macon County.

Macon County program results are as follows:
- Sales increases $80,944.00
- Loans and Equity Infusion into County $1,052,450
- Jobs Created 14
- Jobs Retained 7
- Woman-owned contracting support $20,344
- Other government contracting awards totaling $451,697.25

The workshop was called Profit Mastery which was a two-day seminar on finance. Each individual learned ways to improve profitability in a business and were taught where to look for financial problems when sales are excellent and there is no money in the bank.

Out of the 83 counseling sessions, 2 of the businesses took direct action to improve management style of their business. There were 3 individuals that started a business in Macon County. Other existing businesses created 14 new jobs and retained 7 jobs.
The results for the business development program with Missouri Procurement Technical Assistance Centers (MO PTAC), Macon County during 2013, involved 83 people and their companies with business start-up, management counseling, training, and government contracting. Macon County had an increase in government contract awards.

Overall, the University of Missouri Business Development Programs (BDP) served 21,983 people and their businesses state-wide. The total impact for all businesses assisted by the BDP included:

- New jobs: 1981
- Sales increases: $194,194,820.31
- Government contracts: $218,500,000
- New businesses: 252
- Jobs retained: 3514
- Loans and investments in business: $217,050,115.01
- Acquired assets: $63,048,551
- Total Research Grant Proposals
  - $32,251,750
- Clients/companies receiving business counseling: 4,374
- Business training attendees and conference participants: 18,840

Export Awards 7
  Amount of Awards $1,571,662

The business development faculty are contributing to these business successes. These staff have regional and state-wide assignments and work with businesses in all counties across the state.
PROGRAM AREA        Affordable Care Act – State-wide Initiative  
Title of program: Affordable Care Act Education Program  
Extension Specialist(s): Chris Shoemaker, business development specialist

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</td>
<td>114</td>
</tr>
<tr>
<td>What Did They Learn?</td>
<td>Participants learned how the new law affects them, basic health insurance terms, and the different health insurance options available to them. The program also explained Missouri’s Health Insurance Marketplace and how to get enrolled in health insurance. The program further explained the impact on employer coverage, how to get help to pay for health insurance, the impact of this program on other types of health insurance and changes to Medicare.</td>
</tr>
<tr>
<td>What Action Did They Take?</td>
<td>Participants were better informed to make decisions and were provided resources of places to obtain assistance in the actual enrollment process.</td>
</tr>
<tr>
<td>How Does This Work Make Macon County and Missouri Better? (Public value statement)</td>
<td>University of Missouri Extension reaches out to families and individuals with relevant and timely education across the state on the Affordable Care Act. Unbiased, solid information was provided to the participants. When a program of this nature is supported, a law which impacts everyone directly or indirectly can be addressed with the public in a non-biased manner</td>
</tr>
</tbody>
</table>
Program Area: Community Development
Title of program: School bond
Extension Specialist(s): Larry Dickerson, community development specialist

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</td>
<td>10 hours of conference and consultation</td>
</tr>
<tr>
<td>What Did They Learn?</td>
<td>Information and resources were provided to the Macon R-1 School District on demographics and community information.</td>
</tr>
<tr>
<td>What Action Did They Take?</td>
<td>Dr. Chuck Stockton, School Superintendent, used this information to help develop a bond issue proposal to be put on the ballot.</td>
</tr>
<tr>
<td>How Does This Work Make Macon County and Missouri Better? (Public value statement)</td>
<td>When you support the community deliberation program, community members talk about difficult public issues in a different way, finding common ground and reducing the polarization around the issue. This benefits other community members because it moves the issue forward and reduces conflict in the community so that people can work towards a solution that they can implement and live with.</td>
</tr>
</tbody>
</table>
**PROGRAM AREA**  
Child Care Education

**Title of program:** Team Nutrition

**Extension Specialist(s):** Jim Meyer, nutrition and health education specialist and Jane Hunter, human development specialist

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</td>
<td>124</td>
</tr>
</tbody>
</table>

| What Did They Learn? | Food choices that can help meet nutrient needs  
Ways to improve meals and snacks for children  
Healthy food choices to improve the health of providers and children alike  
Employee wellness  
Best practices in the child care setting to encourage healthy eating and increased physical activity |
|---------------------|-------------------------------------------------------------|

| What Action Did They Take? | Child care providers reviewed their current menus and incorporated ideas learned from the workshop.  
Providers evaluated the current environment and incorporated family style serving ideas as well as increased physical activity. |
|---------------------------|------------------------------------------------------------------------------------------------------------------|

<table>
<thead>
<tr>
<th>How Does This Work Make Macon County and Missouri Better? (Public value statement)</th>
<th>When you support programs for early care and education child care providers learn better practices for nutrition and health education as well as the importance of increasing physical activity in the early years. These practices lead to reduced obesity and good health for adults and children alike.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Macon County Learners</strong></td>
<td>12</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----</td>
</tr>
<tr>
<td><strong>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</strong></td>
<td>96</td>
</tr>
<tr>
<td><strong>What Did They Learn?</strong></td>
<td>Principles of child growth and development Strategies for positive guidance and discipline Parenting behaviors to nurture self-esteem in their children Behavior management for both parents and children Stress management strategies and skills Familiarization with community resources for help and support</td>
</tr>
<tr>
<td><strong>What Action Did They Take?</strong></td>
<td>Skill building practiced in class and at home with their children. Goal setting for their behaviors and the behaviors of their children. Worked with the division of family services to regain custody of their children in some situations.</td>
</tr>
<tr>
<td><strong>How Does This Work Make Macon County and Missouri Better? (Public value statement)</strong></td>
<td>When you support basic parent education for parents and kinship situations including people of all ages and circumstance, families are strengthened and success is achieved.</td>
</tr>
</tbody>
</table>
Exercises to increase balance
Prevention measures to decrease the risk of falls
Evaluation of indoor and outdoor environments to reduce the risk of falls
Community and organizational resources that encourage physical activity and health and well-being.

Participants completed safety assessments to detect changes that need to be made in and out of the home for safety. Participants corrected several things in the home or made additions that would reduce the risks of falls. Exercises were learned and practiced to maintain strength.

When you support this program, individuals are educated to evaluate their living quarters and physically strengthened to increase the likelihood of maintaining their independence, stay physically healthy and reduce medical costs.
The food preservation program answers consumer questions and teaches safe food preservation techniques. Lessons are based on safe food handling research. The need is to protect food from contamination by pathogenic microorganism parasites, and naturally occurring toxins. Current data indicates a large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses per year resulting in hospitalizations and possible death. Participants include limited resource families, school children, minority families, youth adults, and child care providers.

| Number of Macon County Learners | 8 |
| Total hours of collective workshop participation in 2013 (#of participants x workshop hours) | 8 |
| What Did They Learn? | The food preservation program answers consumer questions and teaches safe food preservation techniques. Lessons are based on safe food handling research. The need is to protect food from contamination by pathogenic microorganism parasites, and naturally occurring toxins. Current data indicates a large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses per year resulting in hospitalizations and possible death. Participants include limited resource families, school children, minority families, youth adults, and child care providers. |
| What Action Did They Take? | Attendees replaced gauges that were inaccurate or faulty. Attendees engaged in conversations with the specialists to learn more about proper food safety and preservation. |
| How Does This Work Make Macon County and Missouri Better? | When you support MU Extension’s food safety and food preservation programs, there will be a reduction in the potential for food borne illnesses. |
### PROGRAM AREA
Family Nutrition Program

### Title of program:
School Program

### Extension Specialist(s):
Mary Smyser and Lisa May—FNP

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>580 children preschool through 8th grades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>What Did They Learn?</strong></td>
<td>Participants learned about nutrition, food safety, and physical activity for lifelong health and fitness.</td>
</tr>
<tr>
<td><strong>What Action Did They Take?</strong></td>
<td>Participants not only learn about best practices for themselves but also share this information with their families where changes may occur.</td>
</tr>
<tr>
<td><strong>How Does This Work Make Macon County and Missouri Better? (Public value statement)</strong></td>
<td>When you support FNP, children and youth become more aware of healthy food choices and stay physically active. These behaviors reduce the risk of childhood obesity and set the stage for healthy living as adults.</td>
</tr>
</tbody>
</table>
**Program Area**: Agri-Business

**Title of Program**: Farm Lease Program

**Extension Specialist(s)**: Joe Koenen, Darla Campbell, Karisha Devlin, Mary Sobba

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</strong></td>
<td>21</td>
</tr>
<tr>
<td><strong>What Did They Learn?</strong></td>
<td>Topics included current rental rates and trends, specific items to include in a farm lease, terminating a farm lease correctly, lease hunting issues, and crop and livestock share lease concerns</td>
</tr>
<tr>
<td><strong>What Action Did They Take?</strong></td>
<td>88% of the attendees understand that a lease is a legal, binding contract. 66% of the attendees know where to find lease forms and where to get further information.</td>
</tr>
<tr>
<td><strong>How Does This Work Make Macon County and Missouri Better? (Public value statement)</strong></td>
<td>When you support MU Extension’s farm lease program, you educate participants in lease issues and laws. This promotes better landlord-tenant communications and lessens conflict and costly litigation.</td>
</tr>
</tbody>
</table>
Agriculture lenders learned about crop and livestock outlook, land rental rates and values, Missouri Agriculture and Small Business Authority programs, legal issues in agriculture, macro-economics, cover crops and pasture varieties.

The lenders in attendance from the region handle loans of more than $470 million to agriculture operations totaling over 3,600 different loans in the tri-states of Missouri, Iowa and Illinois.

When you support agriculture lenders programming they have up-to-date information on the latest prices, budgets and resources to help clients manage risk and profitability.

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</td>
<td>24</td>
</tr>
<tr>
<td>What Did They Learn?</td>
<td>Agriculture lenders learned about crop and livestock outlook, land rental rates and values, Missouri Agriculture and Small Business Authority programs, legal issues in agriculture, macro-economics, cover crops and pasture varieties.</td>
</tr>
<tr>
<td>What Action Did They Take?</td>
<td>The lenders in attendance from the region handle loans of more than $470 million to agriculture operations totaling over 3,600 different loans in the tri-states of Missouri, Iowa and Illinois.</td>
</tr>
<tr>
<td>How Does This Work Make Macon County and Missouri Better? (Public value statement)</td>
<td>When you support agriculture lenders programming they have up-to-date information on the latest prices, budgets and resources to help clients manage risk and profitability.</td>
</tr>
</tbody>
</table>
Attendees learned about estate planning goals and objectives, how property is titled, the importance of communication, 1031 exchanges, estate planning tools availability, the role of power of attorney and durable power of attorney, the difference between gift and estate tax.

The program prepares individuals to discuss estate and business succession concerns with their families as well as making them more comfortable in discussing this matter with attorneys.

Behavior change resulting from attending program:

- ~95% identified goals and objectives (only 35% before class)
- ~ 82% have communicated estate planning issues with heirs (only 27% had before class)
- ~ 82% calculated an estimate of their estates value (48% had before class)
- ~ 83% have reviewed insurance policies (compared to 51% before class).

When you support farm and small business estate planning, you assist families to prepare better to understand and work with their attorney in planning their estate. This helps foster family communication and avoid costly litigation and aids in the continuation of the business. If families save 3 hours of legal time, the value of this class is over $5000.
Attendees learned the current trends in beef production, trade, domestic supplies, demand factors, and price and profitability prospects for the coming year. Cover crops for forage production were also addressed.

The information aided producers in making decisions regarding marketing and feeding their cattle.

When you support educational programs for livestock producers Missouri’s agricultural economy is strengthened through best practices.
### PROGRAM AREA
Horticulture

**Title of program:** Master Gardener Program  
**Extension Specialist(s):** Jennifer Schutter, horticulture specialist

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>15</th>
</tr>
</thead>
</table>

| Total hours of collective workshop participation in 2013 (#of participants x workshop hours) | 791 total hours:  
167 education hours and  
624 service hours, which has a value $13,815.36 using the 2012 value of $22.14 per hour from the Independent Sector. |

| What Did They Learn? | Master Gardeners continually learn about new plant varieties, landscaping methods, insects and diseases and their control, integrated pest management, lawn care, pruning, among many other areas of horticulture. |

| What Action Did They Take? | The Master Gardeners consulted, planted, bought supplies, mulched, watered, weeded, oversaw projects, and numerous other things related to the beautification project and healing garden at Samaritan Hospital in Macon. They also worked on beautification projects at the post office and local churches. Master Gardeners also served as a 4-H horticulture project leader and assisted youth with various horticulture projects. |

| How Does This Work Make Macon County and Missouri Better? (Public value statement) | When you support MU Extension's Master Gardener program public awareness of unbiased, research based gardening information is promoted and increased. The Macon County Master Gardeners assist in the community through beautification projects, by helping to disseminate research based information. |
Title of program: Contacts with home and commercial producers

Extension Specialist(s): Jennifer Schutter, horticulture specialist and Darla Campbell, agri-business specialist

<table>
<thead>
<tr>
<th>Number of Macon County Learners</th>
<th>Approximately 68</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours of collective workshop participation in 2013 (#of participants x workshop hours)</td>
<td>Approximately 50 hours</td>
</tr>
<tr>
<td>What Did They Learn?</td>
<td>Citizens received a positive identification of an insect, plant disease or disorder, or a weed in their yard. They received pest control options in most cases. Citizens also sought home horticulture assistance on various garden topics. Some citizens receive the Garden Talk newsletter. Growers learned insect and disease diagnostics; how to interpret soil test results, particularly those for micronutrients which are not tested for by home gardeners. They continually learn new ways to market their crops.</td>
</tr>
<tr>
<td>What Action Did They Take?</td>
<td>Correctly having a pest identified allows homeowners to make better choices about pest control. After taking a soil test, some homeowners properly amended their soil before planting vegetables, fruits or a new lawn. Before buying trees and shrubs for their landscape, some homeowners received information on landscape plants so they could make better choices and place the right plant in the right spot. Macon county vegetable producers sell thousands of pounds of produce through various marketing outlets such as farmers’ market, farm stands, grocery stores, restaurants, direct sales to consumers and wholesalers. Producers are better able to diagnose their plant diseases and disorders, identify insects, and know the best method of control to apply to the crop.</td>
</tr>
<tr>
<td>How Does This Work Make Macon County and Missouri Better? (Public value statement)</td>
<td>By supporting MU Extension’s Home Horticulture program, citizens receive high quality horticultural information that is unbiased and research-based. When you support University of Missouri Extension’s Missouri Grown program, growers are provided with unbiased and research-based information to make better decisions which will help them be successful with commercial production and marketing of their crops.</td>
</tr>
</tbody>
</table>
Visit these Web Sites to Learn More About University of Missouri Extension

University of Missouri /Lincoln University Extension
http://extension.missouri.edu

Publications
http://muextension.missouri.edu/xplor

Missouri Families
http://missourifamilies.org

Community Connection
www.communityconnection.org

The Missouri Career Information Hotline
http://missouribusiness.net/career

Missouri Watershed Information Network
http://www.mowin.org

Missouri Alternatives Center
http://agebb.missouri.edu/mac

Distance Education
http://cdis.missouri.edu

What is University of Missouri Extension?

University of Missouri Extension is the statewide educational outreach of the University of Missouri System, which has campuses in Columbia, Kansas City, Rolla, and St. Louis, and Lincoln University in Jefferson City. Through conferences, short courses, workshops, town meetings, and the mass media, University of Missouri Extension delivers the knowledge and resource base of Missouri’s land grant universities to citizens. Research-based information enhances Missouri’s economic viability, creates strong individuals, families and communities, and creates and sustains healthy environments. Extension specialists work in collaboration with personnel from state agencies and local organizations to draw together whatever resources may be needed to help citizens accomplish their goals. Macon County Extension is proud to extend these resources to the citizens of our county through the many programs described in the 2012 Annual Report.

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