Missouri continues to be a diverse state both in terms of its rich history of urban and rural traditions as well as its agricultural and other products. In the last four years, Missouri has seen a net increase to its population of about 3 percent with more substantial growth in the counties around the urban corridors and a decline in the more rural settings. Missouri, like most states in the country, is also seeing an aging of its population and a growth in its Hispanic population. The poverty level in Missouri stands at approximately 12 percent overall with that number increasing to 15 percent for children under the age of 18. Particularly alarming, among the statistics we see, is the increase in obesity among adults and youth.

Agriculture continues to play a key role in Missouri’s economy. In 2004, the state’s 106,000 farms produced and sold crops, livestock and other agricultural commodities worth $5.82 billion. Nationally, Missouri ranks second in the number of farms and 15th in total cash receipts.

Input from more than 10,000 stakeholders was gathered and analyzed along with demographic changes, emerging trends and new research. From this information, several important themes emerged. The most powerful of these themes is the desire for access to additional educational opportunities and the need for communities to retain their young adults in order to survive as a viable economic entity. Economic development, entrepreneurial education and workforce development have also been given priority. New program initiatives within this plan address these and many of the other issues resulting from the statistics above.

Much has changed since our last plan of work in 2000. State funding has been reduced resulting in fewer personnel to create and deliver programs. Technology has made great strides and the utilization of websites and distance education has become an increasingly effective way to educate and do business. But Missouri stakeholders have made it clear they still want Extension’s local presence in their communities. So our challenge will be to utilize both in the most efficient and effective manner. The technology will allow us to reach audiences never reached by us before but will also allow us to have the resources to provide the human connection when and where it makes sense.

The need to leverage our resources has also become an important factor to our future success. Our involvement in eXtension and many multistate programming activities allows us to take advantage of other state’s expertise and them of ours. Of course, we would not exist without our federal, state and county partners and the over 19,000 volunteers who are the heart and soul of our success.

Our strategic plan continues to drive our programs, stressing three emphasis areas: economic viability; strong individuals, families and communities; and healthy environments. The presence of these themes is evident in our priority programs that follow as is our desire to be more inclusive in those we serve.

As fiduciaries to our stakeholders, we continue to strive to provide access to a diverse audience, be good stewards of the resources given to us and work toward more accountability in what we do. Our stakeholders have told us they need access to our research-based educational opportunities now more than ever and we will do our best to meet their needs.

### Estimated Number of Professional FTEs/SYs total in the State.

<table>
<thead>
<tr>
<th>Year</th>
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<th></th>
<th>Research</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>1862</td>
<td>1890</td>
<td>1862</td>
</tr>
<tr>
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<td>0.0</td>
</tr>
<tr>
<td>2010</td>
<td>239.6</td>
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<td>0.0</td>
</tr>
<tr>
<td>2011</td>
<td>239.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2012</td>
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<td>0.0</td>
<td>0.0</td>
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<tr>
<td>2013</td>
<td>239.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

### II. Merit Review Process

1. The Merit Review Process that will be Employed during the 5-Year POW Cycle.
In addition to reviewing the stakeholder input from all 114 counties, regional and state faculty surveyed current literature to identify state-wide demographics, national and state trends, and discipline specific research related to program effectiveness. Based on this review, state-wide priority needs were identified and programs in response to those priorities were developed by faculty. The program priorities along with their program logic models were then reviewed by the appropriate state program leader to assure the programs are both relevant and of high quality. State-wide program priorities will be utilized by regional faculty as they develop a local programming response to their county’s identified needs. The resulting proposed county program plan will then be taken to the county council for their acceptance. Once approved, the programming will be delivered and the impact evaluated.

By establishing this ongoing merit review process of: stakeholder needs identification; program response by faculty; stakeholder feedback; and outcome assessment, the quality and relevance of programs will be maintained.

2. Brief Explanation

III. Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

Planned programs will address the critical issues of strategic importance, including those identified by more than 10,000 stakeholders, through a process of a continuous cycle of: stakeholder input; programming response; evaluation; and stakeholder feedback. Based on the input of our stakeholders we have identified priority programs. This programming response will be presented to our stakeholders for their acceptance. If accepted the programs will be delivered and their outcomes evaluated. This evaluation information in turn will be shared back with our stakeholders for their feedback. Based on that input, a programming response will be made and the cycle will begin again. To make sure we have identified national and state-wide trends we gathered input from our regional and state faculty to identify critical issues of strategic importance. Our involvement in multi-state initiatives, particularly the North Central region, also informs us as to critical issues of strategic importance.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

During the stakeholder input process, a series of 12 targeted sessions were held with diverse groups and audiences to seek input for the plan. In addition, program planning sessions in 114 counties addressed the question of how to meet the needs of unserved audiences. A random telephone survey of 1,000 Missourians as part of our stakeholder input was also used to identify unserved audiences and unmet needs. In addition, each Extension faculty member included goals in their individual performance expectations that address the needs of underserved or under-served audiences. As a result, planned programs at all levels will address the needs of under-represented populations of the state by responding to identified needs. Faculty will provide the programming, evaluate programs, and then return to these populations to gather their feedback. Based on that input, a programming response will be made and the cycle will begin again. Extension has also created a strategic plan for diversity and one component of that plan is related to programs and services. Action steps and performance indicators have been established to evaluate our progress. In addition, we have developed and implemented a statewide awareness campaign to heighten the awareness of Extension programs to those individuals who are not familiar with our services. We have also diversified our delivery methods with such tools as web and two-way interactive video to reach under-served audiences.

3. How will the planned programs describe the expected outcomes and impacts?

Each planned program is developed using a program logic model that describes the expected outcomes and impacts. Extension faculty will report against these logic models to measure outcomes and impacts. This information is being shared with our stakeholders at county council meetings and by posting our Plan of Work which includes the program logic models on our Extension website.

4. How will the planned programs result in improved program effectiveness and/or efficiency?

The planned programs will result in improved program effectiveness by refining and expanding our use of the program logic model emphasizing the use of a variety of evaluation tools designed to measure both output and outcomes. We also expanded our stakeholder input methodology to include a more diverse audience in order to gather a more diverse perspective on the effectiveness of our programs. This input will continue to be gathered over the course of the plan of work cycle in order to determine
program effectiveness from the perspective of a variety of stakeholders. The planned programs will result in more efficiency by the use of technology particularly distance education, web sites, use of web-based software designed for both audio and web, and the use of interactive two-way video. The design of our organizational structure, in using regional faculty to serve multiple counties, also allows us to be more efficient in our program delivery particularly when utilizing technology such as web sites, web-based audio, or interactive video. We will also continue to maximize our use of volunteers in many of our programs and expand our use of multi-state programming when appropriate.

IV. Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation

- Survey specifically with non-traditional individuals
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Survey of traditional stakeholder groups
- Survey of the general public
- Survey specifically with non-traditional groups
- Survey of traditional stakeholder individuals

Brief explanation.

University of Missouri Extension has gathered opinions of Missouri residents in a variety of ways to assist us in determining the critical issues of strategic importance. Our goals in developing the methodologies for the stakeholder input process were to: diversify the audiences in order to gain a better perspective on the reach and effectiveness of our programs; to diversify the gathering process so that we could utilize the feedback for both program prioritization and also to gain knowledge as to preferred delivery methods as well as general awareness of our programs; and finally to gather some program specific information and diversity needs information in a more substantive way in order to gain a better understanding of the issues underlying the needs in order for us to be more effective in our programming response.

The methods used in our stakeholder input gathering were as follows: statewide telephone survey, 1,005 urban and rural residents participated in a random-sample telephone survey; community conversations on economic development, 200 people were engaged in 16 regional community conversations on economic development; diversity discussions, 130 African Americans, Latinos and other under-served individuals provided input at 12 diversity discussions; web-based survey, 6,839 people completed a satisfaction survey on our website content; county and regional needs assessments, 1,133 county extension council members identified issues of concern at local and regional needs assessment sessions; meetings with state agencies, meetings with directors of state agencies to receive feedback on their priority issues and where we might partner in the future.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups

Brief explanation.

(NO DATA ENTERED)

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input
Meeting with traditional Stakeholder individuals
Survey specifically with non-traditional individuals
Survey of the general public
Survey specifically with non-traditional groups
Meeting specifically with non-traditional groups
Meeting specifically with non-traditional individuals
Meeting with traditional Stakeholder groups

Brief explanation

(NO DATA ENTERED)

3. A statement of how the input will be considered

To Identify Emerging Issues
To Set Priorities
Redirect Extension Programs
In the Staff Hiring Process
In the Action Plans
In the Budget Process

Brief explanation.

(NO DATA ENTERED)
<table>
<thead>
<tr>
<th>S. NO.</th>
<th>PROGRAM NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aging</td>
</tr>
<tr>
<td>2</td>
<td>Applying Science and Technology</td>
</tr>
<tr>
<td>3</td>
<td>Building Better Childcare for Missouri</td>
</tr>
<tr>
<td>4</td>
<td>Building Character</td>
</tr>
<tr>
<td>5</td>
<td>Building Environments</td>
</tr>
<tr>
<td>6</td>
<td>Building Inclusive Communities</td>
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<tr>
<td>7</td>
<td>Business Development</td>
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<td>8</td>
<td>Choosing Healthy Lifestyles</td>
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<tr>
<td>9</td>
<td>Community Leadership Development for Youth and Adults</td>
</tr>
<tr>
<td>10</td>
<td>Creating Community Economic Viability</td>
</tr>
<tr>
<td>11</td>
<td>Creating Economic Preparedness</td>
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<tr>
<td>12</td>
<td>Enhancing Community Viability Through Youth Leadership</td>
</tr>
<tr>
<td>13</td>
<td>Ensuring Safe Communities</td>
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<tr>
<td>14</td>
<td>Facilitating Community Decision Making for Youth and Adults</td>
</tr>
<tr>
<td>15</td>
<td>Food Safety</td>
</tr>
<tr>
<td>16</td>
<td>Forage Production and Management</td>
</tr>
<tr>
<td>17</td>
<td>Home Horticulture and Environment</td>
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<td>18</td>
<td>Improving Communications</td>
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<td>Individual Wastewater Systems-Implications for a New Rural Generation</td>
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<td>Missouri Crop Management Systems</td>
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<td>Missouri Master Wildlifer</td>
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<td>22</td>
<td>Missouri Woodland Steward</td>
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<td>23</td>
<td>MO-PORK: Increasing Pork Production in Missouri</td>
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<td>24</td>
<td>Nutrition, Health and Physical Activity</td>
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<td>25</td>
<td>Parenting</td>
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<td>Pasture Based Dairy Systems</td>
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<td>Personal Financial Management</td>
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<td>Plant Protection for the 21st Century</td>
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<td>Profit Focused Agriculture</td>
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<td>Show-Me-Select Replacement Heifer Program</td>
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<td>31</td>
<td>Strengthening Families</td>
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<td>32</td>
<td>Volunteer Development</td>
</tr>
<tr>
<td>33</td>
<td>Watershed Management and Planning</td>
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</tbody>
</table>
V(A). Planned Program (Summary)

1. Name of the Planned Program

Aging

2. Brief summary about Planned Program

To continue to provide educational resources to support successful aging and to strengthen the aging family. Helping older adults to live safely and independently in their homes as long as possible. Help their caregivers to have adequate information and support. Resources and guidelines are developed for educators to teach a variety of subjects: Housing, Universal Design and aging in place; Parenting the Second time Around, Grandparents raising grandchildren; Aging Well, help realize full potential; Stay Strong-Stay Healthy, strength training program; Mental Health and Aging, identify mental health problems, refer and assist; Who Gets Grandma’s Yellow Pie Plate, passing on personal possessions; Finances, estate planning and retirement.

3. Program existence: Mature (More than five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tr>
<td>802</td>
<td>Human Development and Family Well-Being</td>
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<tr>
<td>803</td>
<td>Sociological and Technological Change Affecting Individuals, Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>804</td>
<td>Human Environmental Issues Concerning Apparel, Textiles, and Res</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: 100%

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

These topics have consistently been brought forward in many counties as areas of need for further resources. It is estimated the number of Missouri residents ages 55 to 74 will increase by 15 percent in the next five years. Many older adults want to “age in place,” staying in their homes as long as possible. Many of their homes are not designed for persons with declining physical abilities and mobility. The majority of support provided for elders in their homes is provided by family caregivers. Supporting elders in making the changes necessary in their homes, in taking preventative steps to maintain their physical and mental health, and provide support to caregivers is essential to maintaining families and communities. Programs in this area provide a great deal of collaboration with other agencies and organizations and link the older generation with younger.

2. Scope of the Program
V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The basic premise of these programs is that each community is as strong as the individuals within that community. The strength in some of these programs is focused on physical health while others are on support networks. Elders are living much longer and research has indicated many new strategies and resources to maintain their well-being. This assists the older adults, their family and the community as most older adults are giving a great deal to their communities and sharing their life of experience. The programs provided are based on best practice models developed specifically for Missourians and/or best practice models identified nationally.

2. Ultimate goal(s) of this Program

Improved quality of life. Increase awareness of the benefits of incorporating Universal design features for individuals of various ages and abilities. Educate soon-to-be retirees, care providers, and individuals with disabilities about strategies for creating safe and accessible home environments. Increased knowledge of strategies to maintain physical, cognitive and mental functioning. Increase skills in assessing frail elder or adult and the family caregiver.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | | Research |
|------|------------|----------------|----------------|
|      | 1862  | 1890 | | 1862 | 1890 |
| 2009 | 7.1  | 0.0 | | 0.0 | 0.0 |
| 2010 | 7.1  | 0.0 | | 0.0 | 0.0 |
| 2011 | 7.1  | 0.0 | | 0.0 | 0.0 |
| 2012 | 7.1  | 0.0 | | 0.0 | 0.0 |
| 2013 | 7.1  | 0.0 | | 0.0 | 0.0 |

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and multi-session programs, meetings; Develop products, curriculum and resources; Develop curriculum for advocacy groups; Provide training; Work with media; Partner with AARP, Missouri Department of Health and Senior Services, Area Agencies on Aging and national organizations; Assemble and maintain relevant website on how-to strategies.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Other 1 (Web Based Class)</td>
<td>Web sites</td>
</tr>
<tr>
<td>Education Class</td>
<td>TV Media Programs</td>
</tr>
<tr>
<td>Workshop</td>
<td>Public Service Announcement</td>
</tr>
<tr>
<td>One-on-One Intervention</td>
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</tbody>
</table>
3. Description of targeted audience
Older adults and their families, persons who work with older adults, persons in mid-life who are preparing for aging, persons over 60, grandparents, baby boomers, homecare providers, disability and aging advocacy groups, home builders/contractors of elderly housing, real estate agents, aging service providers (health and mental health).

V(G). Planned Program (Outputs)
1. Standard output measures
Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
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<td>3250</td>
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<tr>
<td>2013</td>
<td>4000</td>
<td>10000</td>
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</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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3. Expected Peer Review Publications

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<th>Extension Target</th>
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<tr>
<td>2013</td>
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</table>

V(H). State Defined Outputs
1. Output Target

- Number of workshops.
  
<table>
<thead>
<tr>
<th>Year</th>
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<th>2011</th>
<th>2012</th>
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<td>50</td>
<td>50</td>
<td>50</td>
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<td>50</td>
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</table>

- Number of newsletter articles.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>0</td>
</tr>
</tbody>
</table>

- Number of radio spots.
Number of one-on-one counseling sessions.

2009: 50  
2010: 50  
2011: 50  
2012: 50  
2013: 50

Number of unique website visits.

2009: 50000  
2010: 50000  
2011: 50000  
2012: 50000  
2013: 50000

Number of participant contacts.

2009: 10000  
2010: 11000  
2011: 12000  
2012: 13000  
2013: 14000

Number of guide sheets distributed.

2009: 0  
2010: 0  
2011: 0  
2012: 0  
2013: 0

V(I). State Defined Outcome

1. Outcome Target

# of participants who help manage caregiving roles and responsibilities.

2. Outcome Type: Change in Action Outcome Measure

2009: 0  
2010: 0  
2011: 0  
2012: 0  
2013: 0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 802 - Human Development and Family Well-Being
• 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target

Percent of participants who report making changes in family elder care as a result of participation.

2. Outcome Type: Change in Action Outcome Measure

2009: 35  
2010: 40  
2011: 50  
2012: 55  
2013: 60

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 802 - Human Development and Family Well-Being
• 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target

# of families who use decision making skills to improve quality of life for both caregivers and receivers.

2. Outcome Type: Change in Action Outcome Measure

2009: 0  
2010: 0  
2011: 0  
2012: 0  
2013: 0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)
1. Outcome Target

# of participants who feel they are more self-sufficient adults.

2. Outcome Type: Change in Condition Outcome Measure

   2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 802 - Human Development and Family Well-Being
   • 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target

Self sufficient older adults.

2. Outcome Type: Change in Condition Outcome Measure

   2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 802 - Human Development and Family Well-Being
   • 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target

# of participants who volunteer more or who seek volunteer opportunities.

2. Outcome Type: Change in Condition Outcome Measure

   2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 802 - Human Development and Family Well-Being
   • 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target

Increased knowledge of how to manage caregiving roles and responsibilities.

2. Outcome Type: Change in Knowledge Outcome Measure

   2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 802 - Human Development and Family Well-Being
1. Outcome Target
Increased knowledge of the availability of family elder care.

2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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<th>2011</th>
<th>2012</th>
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</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 802 - Human Development and Family Well-Being
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target
Increased knowledge of decision-making skills necessary to make quality of life decisions for caregivers and receivers.

2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
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</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 802 - Human Development and Family Well-Being
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Public Policy changes
- Economy
- Appropriations changes
- Natural Disasters (drought, weather extremes, etc.)
- Government Regulations
- Populations changes (immigration, new cultural groupings, etc.)

Description
(NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- During (during program)
- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Case Study

Description
(NO DATA ENTERED)
2. Data Collection Methods

- Observation
- Structured
- Unstructured
- Telephone
- Case Study
- On-Site
- Mail
- Tests

**Description**

Programs used are evidenced based and utilize pre/post test as well as follow-up surveys to establish effectiveness and usefulness of program.
V(A). Planned Program (Summary)

1. Name of the Planned Program
Applying Science and Technology

2. Brief summary about Planned Program
Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of food science. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of animal science. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of plant science. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of environmental and natural sciences. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of information sciences. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of physical sciences. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and knowledge, skills and application of food science. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and knowledge, skills and application of animal science. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and knowledge, skills and application of plant science. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and knowledge, skills and application of environmental and natural sciences. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and knowledge, skills and application of information sciences. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and knowledge, skills and application of physical sciences.

3. Program existence : Mature (More then five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes
6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Youth Development</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Although the concept of scientific literacy was developed in the 1950’s, it remains a universal and timeless goal of education. Ideally, an individual’s progress toward scientific literacy continues throughout life; beginning with discovery and hands-on experiences as a youth. For over 100 years, 4-H has provided non-formal research-based education in science and technology emanating from the land-grant university through the guidance of caring adults. From the beginning, faculty attracted members and adults to science, engineering and technology by appealing to their avocation and vocation interests such as animals, foods,
gardening, woodworking, computers, fishing, etc. Sound education methodology of demonstration, judging and exhibition builds upon the land-grant science foundation to provide opportunities and incentives for youth to apply critical thinking and scientific inquiry to everyday aspects of their lives. 4-H Youth Development programs create the context (belonging, independence, mastery, generosity) for youth to learn content (science, engineering and technology). Command of science, engineering and technology by youth is essential for their contribution to the economic leadership of communities. Missouri citizens expressed their concerns through the University of Missouri Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

2. Scope of the Program

- Multistate Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision-making and act responsibly; and positively influence their communities and beyond. On-going caring relationships are essential to positive youth development.

2. Ultimate goal(s) of this Program

Anchoring learning opportunities in content of science, engineering and technology that promote positive youth development.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
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<td>2010</td>
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<td>7.7</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Food Science: Show Me Quality Assurance, Pork Quality Assurance, Camp Food and Fitness, Meats Contest & Cured Ham, Growth & Quality of Live Animal Evaluation, Livestock Judging and Grading. Animal Science Food Animal: Beef Project, Judging, Demonstration, Exhibition; Sheep Project, Judging, Demonstration, Exhibition; Swine Project, Judging, Demonstration, Exhibition; Goat Project, Judging, Demonstration, Exhibition; Dairy Project, Judging, Demonstration, Exhibition; Poultry Judging, Demonstration, Exhibition. Animal Science Companion Animal: Horse Project, Bowl, Hippology, Judging, Demonstration, Exhibition; Dog Project, Judging, Demonstration, Exhibition; Cat Project, Judging, Demonstration, Exhibition. Vet Science: Project, Judging, Demonstration, Exhibition. Embryology. Plant Science: Horticulture Project, Judging, Demonstration, Exhibition; Soybean Project, Judging, Demonstration, Exhibition; Corn Project, Judging, Demonstration, Exhibition; Gardening Judging, Demonstration, Exhibition; Bee Keeping. Environmental/Natural Sciences: Project, Judging, Demonstrations, Exhibition. Community Mapping: Water Quality/Aquatic Education; Sports Fishing; Project WET; Wildlife Habitat and Management; Project WILD; Leopold Education Project; Geology; Forestry Project, Demonstration and Exhibition; Project Learning Tree; Solid Waste Management. Information Sciences: Project, Judging, Demonstration, Exhibition; Community Mapping; Computers; Software-based projects; Geo-Spatial; Internet; Digital Media. Physical Sciences Project, Judging, Demonstration, Exhibition, Community Mapping: Robotics; Design; Bicycle; Built Environments; Home Environment; Design/Manufacturing – Textiles; Aero
Space; Woodworking; Welding; Electricity; Small Engines; Energy Use and Conservation.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrations</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Workshop</td>
<td>Web sites</td>
</tr>
<tr>
<td>Other 2 (Camps, Educational Events)</td>
<td></td>
</tr>
<tr>
<td>Other 1 (Exhibition, Judging, Field Trips)</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders) Youth aged 5 - 19.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
<td>600</td>
<td>3000</td>
<td>27000</td>
<td>8000</td>
</tr>
<tr>
<td>2010</td>
<td>650</td>
<td>3500</td>
<td>28000</td>
<td>8500</td>
</tr>
<tr>
<td>2011</td>
<td>700</td>
<td>4000</td>
<td>29000</td>
<td>9000</td>
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<td>2012</td>
<td>750</td>
<td>4500</td>
<td>30000</td>
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</tr>
<tr>
<td>2013</td>
<td>1500</td>
<td>10000</td>
<td>40000</td>
<td>45000</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
<tr>
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<td>2010</td>
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<td>2011</td>
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<td>0</td>
</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
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</tr>
<tr>
<td>2013</td>
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<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Attendance of project leaders at workshops for food science, animal science, plant science, environmental science, informational sciences and physical sciences.
2009 University of Missouri Extension Plan of Work

Number of youth enrolled in food science, animal science, plant science, environmental science, informational sciences and physical sciences.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>600</td>
<td>650</td>
<td>700</td>
<td>1000</td>
<td>0</td>
</tr>
</tbody>
</table>

Number of youth enrolled in embryology.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10000</td>
<td>10000</td>
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<td>10000</td>
<td>15000</td>
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</table>

Number of hits on website.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tr>
<td></td>
<td>21000</td>
<td>22000</td>
<td>23000</td>
<td>24000</td>
<td>24000</td>
</tr>
</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target
Youth will competently demonstrate knowledge and skills gained through demonstrations and project exhibition.

2. Outcome Type:
Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13000</td>
<td>13500</td>
<td>14000</td>
<td>14500</td>
<td>15000</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

   • Appropriations changes
   • Public Policy changes
   • Populations changes (immigration, new cultural groupings, etc.)
   • Natural Disasters (drought, weather extremes, etc.)
   • Economy
   • Government Regulations
   • Competing Programatic Challenges
   • Competing Public priorities

Description
The ability to provide volunteer training and educational experiences for youth is dependent on having a well educated, motivated local and state faculty.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

   • During (during program)
   • After Only (post program)
   • Other (Demonstration, Judging and Exhib)

Description
(NO DATA ENTERED)
2. Data Collection Methods

- Observation
- Sampling
- Mail
- Portfolio Reviews
- On-Site

Description
At the county and state level, youth will demonstrate knowledge and be evaluated against established criteria. Youth will create projects as a result of their project participation and the products will be evaluated against established criteria.
(A). Planned Program (Summary)

1. Name of the Planned Program
Building Better Childcare for Missouri

2. Brief summary about Planned Program
Missouri's "Build Better Childcare" program improves childcare quality via research-based educational workshops that focus on developmentally appropriate strategies for getting along with children and arranging learning environments.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>802</td>
<td>Human Development and Family Well-Being</td>
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<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(C). Planned Program (Situation and Scope)

1. Situation and priorities
The quality of childcare nationwide is suffering. Because so many families with young children rely on childcare so they can work, every effort to improve the situation benefits young children and their families. Moreover, a high quality system of childcare supports the economic development of Missouri.

2. Scope of the Program
   - Integrated Research and Extension
   - Multistate Extension

(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
Childcare provider education and specialized training are the strongest predictors of childcare quality and in turn, children's experiences. Moreover, the state of Missouri requires providers working in licensed facilities obtain 12 clock hours of training per year. Thus, because childcare is a widely-recognized source of family and society support, Missouri's "Building Better Childcare" program meets the needs of many Missouri citizens.

2. Ultimate goal(s) of this Program
Missouri's families have access to high quality childcare and Missouri's children attend safe and stimulating childcare programs that help them get ready for school.

(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program
\[VF\] \text{Planned Program (Activity)}

1. Activity for the Program
Conduct workshops and multi-session programs; Develop products, curriculum, and resources; Provide training for other professionals; Partner with other state agencies and organizations.

2. Type(s) of methods to be used to reach direct and indirect contacts

\begin{center}
\begin{tabular}{|c|c|c|c|c|}
\hline
& \textbf{Extension} & & \textbf{Research} & \\
& 1862 & 1890 & 1862 & 1890 \\
\hline
\textbf{2009} & 7.2 & 0.0 & 0.0 & 0.0 \\
\textbf{2010} & 7.2 & 0.0 & 0.0 & 0.0 \\
\textbf{2011} & 7.2 & 0.0 & 0.0 & 0.0 \\
\textbf{2012} & 7.2 & 0.0 & 0.0 & 0.0 \\
\textbf{2013} & 7.2 & 0.0 & 0.0 & 0.0 \\
\hline
\end{tabular}
\end{center}

\text{(F). Planned Program (Activity)}

2. Type(s) of methods to be used to reach direct and indirect contacts

\begin{center}
\begin{tabular}{|c|c|}
\hline
\textbf{Direct Methods} & \textbf{Indirect Methods} \\
\hline
\textbullet Workshop & \textbullet Newsletters \\
\textbullet Education Class & \textbullet Web sites \\
\hline
\end{tabular}
\end{center}

3. Description of targeted audience
Individuals who provide non-parental care to children ages birth through school entry such as center- and home-based childcare providers, Head Start and Early Head Start teachers, public-school preschool educators, and parent educators.

\[VG\] \text{Planned Program (Outputs)}

1. Standard output measures
Target for the number of persons (contacts) to be reached through direct and indirect contact methods

\begin{center}
\begin{tabular}{|c|c|c|c|c|}
\hline
\textbf{Year} & \textbf{Direct Contacts Adults} & \textbf{Indirect Contacts Adults} & \textbf{Direct Contacts Youth} & \textbf{Indirect Contacts Youth} \\
\hline
\textbf{2009} & 200 & 1000 & 0 & 0 \\
\textbf{2010} & 200 & 1000 & 0 & 0 \\
\textbf{2011} & 200 & 1000 & 0 & 0 \\
\textbf{2012} & 200 & 1000 & 0 & 0 \\
\textbf{2013} & 200 & 1000 & 0 & 0 \\
\hline
\end{tabular}
\end{center}

2. (Standard Research Target) Number of Patent Applications Submitted
3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>0</td>
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</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Number of classes and workshops offered.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2010</td>
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<tr>
<td>2011</td>
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<tr>
<td>2012</td>
<td>100</td>
</tr>
<tr>
<td>2013</td>
<td>100</td>
</tr>
</tbody>
</table>

- Number of participants attending classes and workshops.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2010</td>
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<td>2011</td>
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<tr>
<td>2012</td>
<td>200</td>
</tr>
<tr>
<td>2013</td>
<td>200</td>
</tr>
</tbody>
</table>

- Number of guide sheets distributed.
  
<table>
<thead>
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<th>Year</th>
<th>Target</th>
</tr>
</thead>
<tbody>
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<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
</tbody>
</table>

- Number of visits to childcare website.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<tr>
<td>2012</td>
<td>25000</td>
</tr>
<tr>
<td>2013</td>
<td>25000</td>
</tr>
</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target

Percent increase in awareness of developmentally appropriate learning environments and activities.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2013</td>
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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Age appropriate learning environments and activities will be implemented.
2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tr>
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<tbody>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 802 - Human Development and Family Well-Being

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Public Policy changes
- Competing Programatic Challenges
- Government Regulations
- Competing Public priorities

   Description
   (NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- Before-After (before and after program)

   Description
   (NO DATA ENTERED)

2. Data Collection Methods
- Other (paper/pencil questionnaires)

   Description
   (NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
   Building Character

2. Brief summary about Planned Program
   Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects curricula, camps and educational events about the six pillars (trustworthiness, respect, responsibility, fairness, caring and citizenship) to guide their life-long decision-making and life choices. (www.mo4h.missouri.edu/go/programs/character) Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s character development.

3. Program existence: Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tbody>
<tr>
<td>806</td>
<td>Youth Development</td>
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<tr>
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<tr>
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</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
   Young people are bombarded daily with decisions that challenge their character. Often they are encouraged to do what is expedient or to satisfy the crowd rather than being encouraged to do what is right. There is little question character education should begin at home, yet, young people spend so many hours of the day away from home it becomes the task of other caring adults and organizations to encourage and teach the basic principles of character. The six pillars of character provide a framework to guide decisions that impact life-long social and economic conditions. Missouri citizens expressed their concerns through the University of Missouri Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

2. Scope of the Program
   - In-State Extension
   - Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
   When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision making and act responsibly; and positively influence their communities and beyond. On-going caring relationships are essential to positive youth development.

2. Ultimate goal(s) of this Program
   By providing education, programs and experiences that provide opportunities to learn and demonstrate trustworthiness, respect,
responsibility, fairness, caring and citizenship, 4-H can help youth, adults and families integrate principles of character into their everyday lives.

**V(E). Planned Program (Inputs)**

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
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</tbody>
</table>

**V(F). Planned Program (Activity)**

1. Activity for the Program

Integrate Show Me Character resources into 4-H Clubs, 4-H Camps, 4-H Council and other meetings and 4-H educational events. Integrate Show Me Character modules into adult and teen volunteer training, workshops; Module 1-Why Character Development; Module 2-Character Development Theory; Module 3-The Six Pillars of Character; Module 4-Making Good Decisions; and Module 5-Competing with Honor.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other 2 (Camps, Educational Events)</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>Web sites</td>
</tr>
<tr>
<td>Other 1 (Exhibition, Judging, Field Trips)</td>
<td></td>
</tr>
<tr>
<td>Workshop</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Youth aged 5 to 19. Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders).

**V(G). Planned Program (Outputs)**

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods
2009 University of Missouri Extension Plan of Work

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
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<td>10100</td>
<td>15400</td>
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2. (Standard Research Target) Number of Patent Applications Submitted

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<th>Year</th>
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<tr>
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<tr>
<td>2013</td>
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</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
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<tr>
<td>2013</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target
   - Number of youth and adults reached by 4-H field and state faculty with the Show Me Character Program.
   - 2009: 11000
   - 2010: 12000
   - 2011: 13000
   - 2012: 14000
   - 2013: 15000

V(I). State Defined Outcome

1. Outcome Target
   - 10,000 youth will report an awareness of the six pillars of character.

2. Outcome Type: Change in Knowledge Outcome Measure
   - 2009: 10000
   - 2010: 10000
   - 2011: 10000
   - 2012: 10000
   - 2013: 10000

3. Associated Institute Type(s)
   - 1862 Extension

4. Associated Knowledge Area(s)
   - 806 - Youth Development

1. Outcome Target
   - 10,000 youth will report an awareness of how character affects their daily decisions.
2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>Value</td>
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</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 806 - Youth Development

1. Outcome Target

20 4-H field faculty will integrate Show Me Character into their 4-H program.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tbody>
<tr>
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<td>20</td>
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</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 806 - Youth Development

1. Outcome Target

50 to 60 youth will report annually through the Y2200, State 4-H Recognition Form on how 4-H has influenced their lives through their 4-H Story.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Populations changes (immigration, new cultural groupings, etc.)
- Competing Public priorities
- Government Regulations
- Natural Disasters (drought, weather extremes, etc.)
- Competing Programmatic Challenges
- Appropriations changes
- Economy
- Public Policy changes

Description
The ability to provide volunteer training and educational experiences for youth is dependent on having a well educated, motivated local and state faculty.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
2. Data Collection Methods

- Portfolio Reviews
- On-Site
- Other (Demos, Exhibs & Behav @ Ed event)
- Sampling

**Description**

At the county and state level, youth will demonstrate knowledge and be evaluated against established criteria. Youth will create projects as a result of their project participation and the products will be evaluated against established criteria. Applicants for State 4-H Awards will report how 4-H has influenced their lives through their 4-H Story of Y2200.
1. Name of the Planned Program
Building Environments

2. Brief summary about Planned Program
Building Environments is a consumer and professional education program concerned with educating Missouri citizens and government agencies about available and affordable housing options (including programs geared toward first-time homebuyers), housing quality, landlord-tenant relations, long-term home maintenance, healthy indoor air quality, healthy homes, home safety, home disaster preparedness (fire, weather, security), and promoting environmentally-sensitive and energy-efficient homes and buildings in Missouri.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>1862 Extension</th>
<th>1890 Extension</th>
<th>1862 Research</th>
<th>1890 Research</th>
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</thead>
<tbody>
<tr>
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<td>Human Environmental Issues Concerning Apparel, Textiles, and Res</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td></td>
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</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Quality affordable, energy efficient, and healthy housing continues to be an expressed need in various communities in rural and urban areas of Missouri. Post-purchase home-ownership education is an important part of any home-ownership program to facilitate home maintenance and retention. Homeowners may not provide necessary maintenance which could result in serious deterioration, they could fall behind on mortgage payments, save inadequately for repairs and renovation and they could over extend themselves through home equity payments due to lack of financial management. The program is based on the assumption it is critical to provide support in homecare and financial management to new homeowners, particularly households with no previous experience homeowner. Rental property managers are often faced with a dilemma. On one hand they want to keep units full, meet fair housing obligations and as good citizens provide housing to people who need it. On the other hand, in order to stay in business they need to rent to people who are likely to pay their rent and maintain the property. One way to address this dilemma is with a community program that provides high-risk tenants with practical training to help them succeed as tenants while making them aware of their legal rights in landlord-tenant relationships. The built environment has a profound impact on the natural...
environment, economy, health and productivity of Missouri. Green Buildings are sited, designed, constructed, renovated, and operated in order to enhance the well-being of occupants, and to minimize negative impacts on the community and natural environment. National and state programs encouraging green building are growing and reporting successes, while hundreds of demonstration projects and private buildings across the country provide tangible examples of what green building can accomplish in terms of comfort, aesthetics, energy and resource efficiency. Breakthroughs in building science, technology and operations are available to consumers who want to build or renovate green and maximize both economic and environmental performance. However, most consumers are not knowledgeable about the appropriate technologies and design strategies affordable and easy to integrate into homes and workplaces. Because most individuals spend much time inside, homes typically account for a major share of exposure to toxins, irritants, allergens, and gases that can cause disease and unhealthy living conditions. Families need to realize the importance of pollutant-free housing for good health. A growing body of scientific research has demonstrated families who live in homes that are well ventilated, dry, and free of pests, poisons, and dangerous gases will be healthier and lead fuller lives. Many homes fall short of the basic requirements of a healthy home and contain one or more hazards that adversely affect human health. Many Missourians each year are severely affected by fire and weather disasters. Missourians might also be affected by man-made (terror) and/or seismic disasters. Emergency preparedness education teaches families a 5-step process for preparing and coping with these possible disasters.

2. Scope of the Program

- In-State Extension
- Multistate Integrated Research and Extension
- In-State Research
- Multistate Research
- Integrated Research and Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The program uses extension specialists, government entities, and housing agencies, to serve as educators and facilitators to enable community residents and agencies to successfully develop, maintain, and monitor quality, affordable, healthy and sustainable housing in their area. This program covers these key curricula: HomeWorks: A first-time homebuyer and other homeowners program about basic home repairs, maintenance and financial management; HOME: Homebuyer education class explains the home-buying process. Topics include: financial preparedness, renting vs. owning, how much house you can afford, working with professionals to find an ideal house, home maintenance, energy management, buyer-assistance programs, mortgages, closing costs and homeowners insurance; Rent Smart: A teaching guide designed to be the core of a community tenant education program. It stresses information to help participants succeed as tenants and avoid confrontations and legal hassles. Includes guidelines and worksheets and uses role-playing exercises in conflict resolution as part of responsible renting; Home Maintenance and Repair: Designed to help new and existing homeowners protect their investment by learning basic home repairs, financial management, life-cycle costs, and routine inspections necessary to successfully keep a home long-term; 4-H/FACS Designing a Space of Your Own: Students learn to use home design software, house design, and explore career, community, and other resources related to housing; Healthy Homes/Healthy Indoor Air for America's Homes: Information on inspecting the home for pollutants and air-borne hazards. The program goal is to educate about sources, health risks, and control measures related to common residential pollutants, toxins, and indoor air problems. Housing-related hazards are addressed in a coordinated fashion, rather than a single hazard at a time. Topics include moisture and biologicals (molds, mildew, dust mites, etc.) and combustion products (carbon monoxide, formaldehyde, radon, household products and furnishings, asbestos, lead, particulates, secondhand smoke, and remodeling byproducts); Home Safety/Disaster Preparedness: Addresses home electrical protection, fire safety, home preparation planning for seismic and weather related disasters, and homeland security recommendations. Focuses on developing emergency plans, stocking supplies, recognizing hazards and warnings, and post-disaster relief information; Green Building: Integrated approach to green buildings and homes. Topics include energy systems, conservation and efficiency, alternative and renewable energy systems, weatherization, residential water recycling and conservation, energy-efficient appliances, insulation, residential waste recycling, renewable and natural building materials, daylighting, natural ventilation, and other similar material.

2. Ultimate goal(s) of this Program

Homeowners will gain information necessary to successfully maintain homeownership through knowledge and skill gained in home maintenance and basic care, home inspection, energy and financial management. Homeowners will take steps to protect and enhance their homes through basic maintenance, inspection, and repair skills. Cities and counties will benefit from the economic
impact of an increase in quality of housing. Renters and landlords will create better partnerships with each accepting and fulfilling
their respective responsibilities. Programs will promote interagency cooperation addressing housing problems. The communities
where these programs are implemented will develop coalitions and skills to foster quality affordable housing development in their
area through the facilitation by extension specialists. Cities and towns will develop an understanding that stereotypical notions
about affordable housing are incorrect and will be exposed to various forms of housing development along with the type of public
and private financial support available to generate these types of development. Communities will be able to identify important
stakeholders within and outside their communities who would help them to achieve their housing goals. Communities will be able
to monitor housing conditions and develop action plans for affordable housing development and maintenance. Families will know
how to control and mitigate pollutants at their sources, know how to take preventive measures against these hazards, and learn
how to solve problems when they are identified, in order to maintain healthy home environments. Families will reduce risks of home
accidents by learning basic home safety guidelines. Families will minimize loss during fire and disasters through careful
preparation and planning. Junior and Senior High Students will learn basic skills about homeownership, housing design, and
renting as part of a 4-H or FACS curriculum. Educate consumers on strategies to reduce energy consumption in homes and
buildings. Promote and educate consumers on weatherization in homes and buildings. Increase consumer awareness of the
benefits of alternative, renewable energy systems in homes and buildings. Increase consumer awareness of the benefits of green
building techniques and strategies in homes and buildings. Encourage consumer conservation of natural resources in homes and
buildings. Promote and educate homebuilders and designers about ecological strategies for building site development. Encourage
consumer use of recycled and/or reused materials in homes and buildings. Promote the USGBC’s LEED rating system and EPA’s
Energy Star programs for homes and buildings in Missouri. Educate consumers about ecological waste management and water
conservation/recycling systems in homes and buildings.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>2013</td>
<td>5.6</td>
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</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct hands-on workshops for builders and consumers. Assemble and maintain relevant website and guidesheet information.
Create a comprehensive Missouri Guide to Green Buildings. Encourage and support involvement in state, county, and local
governments and agencies supporting energy-efficient, green buildings and homes. Assemble and maintain relevant website and
guidesheet information on indoor air quality, home pollutants, home safety, and disaster preparedness. Maintain curriculum for
K-12 schools and at-risk families. Encourage and support involvement in state, county, and local governments and agencies
supporting healthy homes and disaster preparedness. Assemble and maintain relevant website and guidesheet information on
housing types, maintenance, renting, home financial management and development. Develop curriculum for advocacy groups,
housing agencies and nonprofit organizations. Encourage and support involvement in housing coalitions and agencies.
2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>• One-on-One Intervention</td>
<td>• Public Service Announcement</td>
</tr>
<tr>
<td>• Other 1 (Trade Show Displays)</td>
<td>• Newsletters</td>
</tr>
<tr>
<td>• Other 2 (Software/CAD)</td>
<td>• TV Media Programs</td>
</tr>
<tr>
<td>• Education Class</td>
<td>• Web sites</td>
</tr>
<tr>
<td>• Group Discussion</td>
<td></td>
</tr>
<tr>
<td>• Demonstrations</td>
<td></td>
</tr>
<tr>
<td>• Workshop</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Government Emergency management departments; Health Agencies; Medical groups and agencies; Day care providers; 4-H programs and Family and consumer science educators; Landlords and tenants; Builders and contractors; Real estate agents and brokers; K-12 educators, students, school districts; Consumers of home appliances; Do-it-yourself consumers; Business owners; Non-profit Energy and Ecological Organizations; Energy Cooperatives and Utilities; First Time Homebuyers; Existing and Long-term Homeowners; Non-profit Housing Agencies; Government and State Housing Directors.

\( V(G) \). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
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<td>Target</td>
<td>Target</td>
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</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>Expected Patent Applications</th>
</tr>
</thead>
<tbody>
<tr>
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3. Expected Peer Review Publications

<table>
<thead>
<tr>
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<th>Total</th>
</tr>
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<tbody>
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<td>2013</td>
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</table>
V(H). State Defined Outputs

1. Output Target

- Number of workshops.
  
  2009: 50  
  2010: 50  
  2011: 50  
  2012: 50  
  2013: 50

- Number of newsletter articles.
  
  2009: 0  
  2010: 0  
  2011: 0  
  2012: 0  
  2013: 0

- Number of radio spots.
  
  2009: 0  
  2010: 0  
  2011: 0  
  2012: 0  
  2013: 0

- Number of one-on-one counseling sessions.
  
  2009: 0  
  2010: 0  
  2011: 0  
  2012: 0  
  2013: 0

- Number of unique website visits.
  
  2009: 50000  
  2010: 50000  
  2011: 50000  
  2012: 50000  
  2013: 50000

- Number of participant contacts.
  
  2009: 2500  
  2010: 2500  
  2011: 2500  
  2012: 2500  
  2013: 2500

- Number of guide sheets distributed.
  
  2009: 0  
  2010: 0  
  2011: 0  
  2012: 0  
  2013: 0

V(I). State Defined Outcome

1. Outcome Target

Percent of participants who have a home disaster preparedness plan.

2. Outcome Type:  

   Change in Knowledge Outcome Measure

   2009: 35  
   2010: 40  
   2011: 50  
   2012: 55  
   2013: 60

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 605 - Natural Resource and Environmental Economics
   • 608 - Community Resource Planning and Development
   • 723 - Hazards to Human Health and Safety
   • 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target

Percent of participants who secure funding to purchase a home.
2. Outcome Type: Change in Knowledge Outcome Measure

2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   ● 605 - Natural Resource and Environmental Economics
   ● 608 - Community Resource Planning and Development
   ● 723 - Hazards to Human Health and Safety
   ● 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target
Percent of participants who indicate they feel able to maintain their home.

2. Outcome Type: Change in Knowledge Outcome Measure


3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   ● 605 - Natural Resource and Environmental Economics
   ● 608 - Community Resource Planning and Development
   ● 723 - Hazards to Human Health and Safety
   ● 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target
Percent of participants who have implemented energy conservation technologies.

2. Outcome Type: Change in Knowledge Outcome Measure


3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   ● 605 - Natural Resource and Environmental Economics
   ● 608 - Community Resource Planning and Development
   ● 723 - Hazards to Human Health and Safety
   ● 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
Government Regulations
Economy
Populations changes (immigration, new cultural groupings, etc.)
Appropriations changes
Competing Public priorities
Public Policy changes
Natural Disasters (drought, weather extremes, etc.)

Description
(NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - Before-After (before and after program)
   - Case Study
   - During (during program)

Description
(NO DATA ENTERED)

2. Data Collection Methods
   - On-Site
   - Mail
   - Case Study
   - Observation

Description
(NO DATA ENTERED)
VA. Planned Program (Summary)

1. Name of the Planned Program
Building Inclusive Communities

2. Brief summary about Planned Program
Building Inclusive communities is about helping people, organizations, and communities deal with the challenges presented by the dramatic changes occurring in society in productive ways that respect differences and embrace the diversity that makes communities vibrant places to live, work and play. The program seeks to help community leaders engage everyone with an interest in their community in addressing the issues that affect their development and develop the intercultural capacity of communities to deal with a changing population. Included in this program are the following: the Community Development Academy provides high quality relevant community development education through a series of three courses. Each five-day course is intensive, experiential, available for noncredit (continuing education units) or for three hours undergraduate or graduate credit. The courses explore ideas and develop practical skills for effectively involving and empowering local citizens and leaders in community-based efforts; Alianzas is an extensive partnership designed to assist immigrants and communities in accommodating and learning from each other. The ultimate goal of Alianzas is to enhance the ability of communities to collaborate with the growing immigrant Hispanic populations through a Hispanic, university and community partnership, using a community-based, co-learner approach. The means to reach this goal include: accessing established University faculty and community resources to address issues that arise from cultural differences within the community, fostering effective communication and cultural diversity skills that are shared between the community and University of Missouri Extension, and using the community-based, co-learner model to mutually define the needs and assets of the community, as well as to develop and implement a culturally sensitive strategic plan; the organizational development and nonprofit development program is designed to support the development of small, community-based groups and nonprofits and develop their capacity to address important community issues. The primary goal is to assist community-based organizations in more effectively achieving their goals and meeting their purpose and mission. The program includes research on the issues affecting organizational development and educational programs, projects and consulting activities with groups on a range of development topics including incorporation, planning, collaboration, financial management, marketing, and others; Global Leadership Education, or GLE, is a program devoted to building the leadership capacity of community members, community leaders and professionals across sectors. Since 1990, the University of Missouri has collaborated with the Community Development Department (CDD) of the Royal Thai Government to carry out an exchange program that builds mutual understanding and contributes to collaborative learning between the people of Missouri and Thailand. Ongoing collaboration with a variety of community organizations and sponsors will be used to help promote the programs.

3. Program existence: Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

VB. Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage
Communities are undergoing tremendous changes and these changes are impacting their ability to fully participate in what is increasingly a more global society. Many new immigrants are moving into our communities that bring resources with them that can make the community stronger but the integration of these newcomers also presents challenges most communities don’t know how to address. Between 1990 and 2000 the Latino population in Missouri increased by nearly 92 percent. Challenges facing these new immigrants include language, cultural differences and low-pay employment. Communities with increases in Latino populations also have challenges. Schools must refocus their resources to students that do not speak English; social services must find shelter and healthcare for families; communities receiving immigrants need help in learning about cultures new to them. Existing groups of people in communities also are not able to fully participate in community life. Consequently many people especially those with fewer resources, less education, and from a different culture are often left at a disadvantage in accessing public resources and are less able to participate in public decision-making. At many levels, and particularly the community level, the need for interconnectedness is gaining more attention and importance. Communities around the world are embracing localization, participation and exploring ways to elude the divisiveness that plagues many nations. Economic globalization, devolved responsibility, and the information technology revolution have also contributed to the rising need for democratic participation, multicultural tolerance, civic engagement and partnerships between religious and secular society. As Barbara Crosby (1999) noted in her book Leadership for the Global Commons, “…the opportunities to be leaders in the global commons will only increase. Indeed, the nurturing of world citizenship, as an urgently needed complement to national citizenship must surely be amongst the highest callings in years to come.” The Association for Healthy Cities and Communities has said, “The seven pillars of a healthy community include practicing ongoing dialogue; generating leadership; shaping its future; embracing diversity; knowing itself; connecting people and resources, and creating a sense of community.” Communities across the state of Missouri are facing a wide variety of issues and challenges that affect whether or not they will be able to develop themselves in a sustainable manner. In order to address many of these challenges a coordinated response between the government, private business, and other public institutions is required. An understanding of the building blocks of community development is necessary in order to effectively facilitate development in communities and community organizations. A safe educational environment where participants can practice, interact, and learn from each other and the faculty is critical to learning and testing new development concepts and facilitates a better understanding of the complexity of the issues communities face.

2. Scope of the Program

- In-State Extension
- Multistate Extension
V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
Including the interests of all members of the community in public decision-making serves the best interest of communities. Conditions that affect those least able to succeed affect everyone in the community. Building Inclusive communities is an ongoing process of engagement, education, and community action aimed at getting the widest representation of the community involved in the planning and development of the community. Existing leadership is capable and interested in creating space for others to participate in community affairs. Resources exist to develop necessary support systems.

2. Ultimate goal(s) of this Program
Increased capacity of youth and adults, businesses, organizations and communities to address community issues effectively that affect their development and develop the intercultural capacity of communities to deal with a changing population by mobilizing the community human and social capital for common purposes.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
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<th>Extension</th>
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<tr>
<td>2013</td>
<td>4.3</td>
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V(F). Planned Program (Activity)

1. Activity for the Program
Provide facilitation, training, workshops. Conduct intensive courses and conferences to share state of the art knowledge and research and to integrate research with community needs. Assist with organizational development, fund development, and tailoring content to local community need, and gaining non-profit status. Work with media and facilitate partnerships to assist in working to meet needs of Spanish-Speaking and other minority populations.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
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<tbody>
<tr>
<td>Direct</td>
<td>Indirect</td>
</tr>
<tr>
<td>Methods</td>
<td>Methods</td>
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<tr>
<td>● Other 1 (Field Trip)</td>
<td>● TV Media Programs</td>
</tr>
<tr>
<td>● One-on-One Intervention</td>
<td>● Web sites</td>
</tr>
<tr>
<td>● Education Class</td>
<td>● Public Service Announcement</td>
</tr>
<tr>
<td>● Other 2 (Conferences)</td>
<td>● Newsletters</td>
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<tr>
<td>● Group Discussion</td>
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<td>● Workshop</td>
<td></td>
</tr>
<tr>
<td>● Demonstrations</td>
<td></td>
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</table>

3. Description of targeted audience
Targeted audience is all social groups in the community, including low-income and minority, youth and adults. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc. Also targeted are those who are currently serving in a leadership role in an agency, organization, neighborhood, club, community, business or aspire to serve; local and state government officials and...
professionals working in community development.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults Target</th>
<th>Indirect Contacts Adults Target</th>
<th>Direct Contacts Youth Target</th>
<th>Indirect Contacts Youth Target</th>
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<tr>
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<td>25000</td>
<td>450</td>
<td>2700</td>
</tr>
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<td>2012</td>
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<td>2013</td>
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<td>32000</td>
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2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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3. Expected Peer Review Publications

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<tr>
<td>2013</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Number of partners engaged.

|--------|----------|----------|----------|----------|----------|

- Number of conferences, courses or workshops held.

|--------|----------|----------|----------|----------|----------|

- Number of organizations with which we worked.

|--------|----------|----------|----------|----------|----------|

- Percent of non-White Caucasian participants in programs.

|--------|----------|----------|----------|----------|----------|
Percent of Hispanic participants in programs.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>28</td>
<td>30</td>
<td>32</td>
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V(I). State Defined Outcome

1. Outcome Target

Percent of participants in the Community Development Academy reporting an understanding of the diverse relationships that exist within communities.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
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</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 - Community Institutions, Health, and Social Services

1. Outcome Target

Number of new community networks formed that bridge between diverse cultural/ethnic groups.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 - Community Institutions, Health, and Social Services

1. Outcome Target

Number of multicultural, ethnic, and racially diverse events organized that bridged and celebrated community differences.

2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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<td>6</td>
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<td>9</td>
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</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

1. Outcome Target

% of participants in the Community Development Academy that report successfully initiating, mobilizing, or coordinating new community projects.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
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</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)
1. **Outcome Target**

% of participants in the Community Development Academy that indicate use of acquired skills and knowledge after one year.

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
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<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
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<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**

   • 1862 Extension

4. **Associated Knowledge Area(s)**

   - 608 - Community Resource Planning and Development
   - 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   - 805 - Community Institutions, Health, and Social Services
   - 806 - Youth Development

---

1. **Outcome Target**

Number of jobs created by new businesses and business expansion/growth or organizational development/growth.

2. **Outcome Type:** Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
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</table>

3. **Associated Institute Type(s)**

   • 1862 Extension

4. **Associated Knowledge Area(s)**

   - 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   - 806 - Youth Development

---

1. **Outcome Target**

Number of jobs retained.

2. **Outcome Type:** Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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3. **Associated Institute Type(s)**

   • 1862 Extension

4. **Associated Knowledge Area(s)**

   - 608 - Community Resource Planning and Development
   - 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   - 806 - Youth Development

---

1. **Outcome Target**

Number of volunteer hours generated by community organizations.
2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<td>1200</td>
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<td>1250</td>
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<td>1300</td>
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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 - Community Institutions, Health, and Social Services

1. Outcome Target

Number of people reporting taking on increased, different, or new leadership roles in community.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tr>
<td></td>
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<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

1. Outcome Target

% of participants in cultural competency programs reporting increased knowledge and skills for dealing with cultural differences.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td></td>
<td>60</td>
<td>60</td>
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</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

1. Outcome Target

Dollar value of resources leveraged.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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<td></td>
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</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 - Community Institutions, Health, and Social Services

1. Outcome Target

Number of community organizations engaged in collaborative relationships to address complex community issues.
2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
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<td>8</td>
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</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 805 - Community Institutions, Health, and Social Services

1. Outcome Target
Number of communities/organizations using inclusive planning and decision-making processes that address societal changes.

2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
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</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 608 - Community Resource Planning and Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Populations changes (immigration, new cultural groupings, etc.)
- Competing Programatic Challenges
- Appropriations changes
- Government Regulations
- Economy
- Public Policy changes
- Competing Public priorities

Description
For example, we have observed fluctuations in participation in the Community Development Academy, Cambio de Colores and other workshops/conferences as a result of the change in the economy. With the downturn, enrollment dropped although need increased. With improving economy, the enrollments are rising.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- During (during program)
- After Only (post program)
- Retrospective (post program)
- Case Study

Description
Conduct end of course, workshop or conference evaluations. Web-based follow-up survey after 1 year and 3 years for participants in Community Development Academy. Monitoring changes in communities.

2. Data Collection Methods
● Sampling
● Whole population
● Case Study
● On-Site
● Other (on-line survey)
● Tests

Description
(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Business Development

2. Brief summary about Planned Program
To grow the Missouri economy and Missouri communities and improve the lives of Missouri citizens by adding to the employment base, generating tax revenues, and growing and establishing businesses.

3. Program existence: Mature (More than five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tr>
<td>603</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>604</td>
<td>Marketing and Distribution Practices</td>
<td></td>
<td>5%</td>
<td></td>
<td></td>
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<tr>
<td>607</td>
<td>Consumer Economics</td>
<td></td>
<td>5%</td>
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<tr>
<td>608</td>
<td>Community Resource Planning and Development</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td></td>
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</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Business Development Program (BDP): Community business support networks are needed throughout Missouri. This is supported through every needs assessment conducted (listed in the assumptions section) by the MU Extension BDP. Success for a new business is dependent on supportive business networks and environments; In 1995, only 8 percent of the nation’s employment came from Fortune 500 industrial firms. In the past 10 years, that number has declined. Additionally, while the numbers of adults starting a business each year has remained fairly stable since 1996, there has been a slight increase in recent years as a result of shifts in the economy. For instance, in Missouri, there were about 20,000 more small businesses in 2004 than there were in 2003; According to data from the Kauffman Foundation, one year after pre-business activity begins, only about 20 percent of businesses have successfully started, 47 percent are still in the process of starting and 20 percent have either already gone out of business or have suspended start-up activities. Clearly there is a need for technical assistance to help prospective business owners and owners of existing firms. Our studies of current customers and clients and existing businesses that are not currently customers and clients indicate the highest priority needs as financial (pricing, obtaining capital [seed, venture, equity),
long-term, receivables/customer accounts, financial statements/cash flow, calculating overhead), management (time management), human resources (finding [employment applications], retaining, motivating, evaluating, interviewing employees), business planning (strategic and annual), and marketing (advertising, market research [identifying new market opportunities and developing marketing plans]); While substantial evidence exists the items listed immediately above constitute high priority subject matter area for startup and existing business owners and managers, evidence also exists there are new opportunities that need to be explored for adoption within the University of Missouri Extension (BDP). These topics are identified through academic research and best practices reports of economic and business development programs in higher education and nonprofit organizations such as family owned businesses, technology commercialization, transfer of technological innovation, intellectual property protection, product development, offering youth programs with the goal of creating a culture of entrepreneurship among youth, and developing infrastructure that enables the BDP service personnel to provide a comprehensive set of services in one location; Effective diagnosis of client needs is important for both counseling and training programs of University of Missouri Extension BDPs. This diagnosis, conducted through multiple methodologies, is essential for the program success. The perspectives of business owners and managers (current clients/customers and individuals not currently customers), extension councils, faculty, service providers, and best practices research and academic research contribute to this understanding and diagnosis of client needs.

2. Scope of the Program

- Integrated Research and Extension
- In-State Extension
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The business development program needs and priorities in Missouri are based on a needs assessment process that includes:
Studies of extensive data from current counseling and training clients and customers of the business development program. This data includes demographic data, customer satisfaction data, impact/outcome data and learning experiences and preferences data; A study of learning experiences and preferences data from existing business owners and managers not currently clients or customers of the business development program. This data comes from a survey of 10,000 existing businesses and includes demographic data, business needs and learning experiences and preferences; A study of Missouri technology company needs that was conducted via 101 interviews from 1,152 technology companies across Missouri; A review of literature from 130 articles on entrepreneurship in peer-reviewed, scholarly journals in 2004-2005; A review of best practices from higher education and nonprofit organizations engaged in economic or business development programs; Input from Missouri county extension councils in 114 counties. County extension council members identified priority programs that should be addressed in their county by University of Missouri Extension program in the next 3-5 years. They also addressed the actions that should be taken to address the needs, priority audiences, and expected outcomes; A study of business development program faculty and staff designed to determine their priorities among the needs identified in the above studies and identify other priorities and needs they identified through the course of their work; Review and analysis of search results from the business development program website. The search results highlight major areas of interests from individuals that visit the website.

The business development program in Missouri makes the following assumptions related to business owners’ needs and practices and effectiveness of University of Missouri Extension business development programs: Business owners are willing and able to implement recommendations of business counselors; A business owner will use the knowledge he or she possesses; Resources exist within the business development program to implement programs; Improving Missouri’s economy is an ongoing process of engagement, education, and action by business owners and public policy makers; Economic conditions will positively and adversely effect business success regardless of the actions of the business owner or business faculty; Business owners and prospective business owners are able to obtain capital; The network of support businesses need is available to them; Business owners benefit by using information and analyzing alternatives; Using the resources available through business support services has positive economic benefits for the business; Outcomes are not discreetly short/medium/long term but build upon each other.

2. Ultimate goal(s) of this Program

Increased sales for client firms. Create and retain jobs. Obtain business investments through loans and equity injected into businesses. Start new businesses.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program
V(F). Planned Program (Activity)

1. Activity for the Program
Business counseling and training.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Workshop</td>
<td>Other 1 (Community/state partnerships/net)</td>
</tr>
<tr>
<td></td>
<td>One-on-One Intervention</td>
<td>Public Service Announcement</td>
</tr>
<tr>
<td></td>
<td>Group Discussion</td>
<td>Web sites</td>
</tr>
<tr>
<td></td>
<td>Education Class</td>
<td>Newsletters</td>
</tr>
</tbody>
</table>

3. Description of targeted audience
Small business owners, managers and their employees. Individuals who want to start a business. Partners, stakeholders and funding agencies, including elected officials.

V(G). Planned Program (Outputs)

1. Standard output measures
Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
<td>1562</td>
<td>57656</td>
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<td>2011</td>
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<td>2012</td>
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</tr>
<tr>
<td>2013</td>
<td>1562</td>
<td>57656</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2009 : 0  2010 : 0  2011 : 0  2012 : 0  2013 : 0
3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
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<tbody>
<tr>
<td>2009</td>
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<tr>
<td>2013</td>
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</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Number of counseling clients.
  
  2009: 150  
  2010: 150  
  2011: 150  
  2012: 150  
  2013: 150

- Training customer satisfaction (scale 1-7 high).
  
  2009: 6  
  2010: 6  
  2011: 6  
  2012: 6  
  2013: 6

- Number of applied research projects.
  
  2009: 1  
  2010: 1  
  2011: 1  
  2012: 1  
  2013: 1

- Website statistics (in millions).
  
  2009: 0  
  2010: 0  
  2011: 0  
  2012: 0  
  2013: 1

- Counseling hours.
  
  2009: 750  
  2010: 750  
  2011: 750  
  2012: 750  
  2013: 750

- Counseling customer satisfaction (scale 1-7 high).
  
  2009: 6  
  2010: 6  
  2011: 6  
  2012: 6  
  2013: 6

- Training attendees.
  
  2009: 975  
  2010: 975  
  2011: 975  
  2012: 975  
  2013: 975

- Training events.
  
  2009: 95  
  2010: 95  
  2011: 95  
  2012: 95  
  2013: 95

- Training hours x attendees.
  
  2009: 92000  
  2010: 92000  
  2011: 92000  
  2012: 92000  
  2013: 92000

- Number of counseling sessions.
  
  2009: 300  
  2010: 300  
  2011: 300  
  2012: 300  
  2013: 300
V(I). State Defined Outcome

1. Outcome Target
Increase in knowledge.

2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development

1. Outcome Target
Business owners will start or expand a business as appropriate to their business goals.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 608 - Community Resource Planning and Development

1. Outcome Target
Business owners will make or revise decisions about the type of business or business structure as appropriate to their business goals.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices

1. Outcome Target
Business owners will prepare a business plan as appropriate to their business goals.
1. Outcome Target
Business owners will develop financial projections as appropriate to their business goals.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development

1. Outcome Target
Business owners will seek start-up funding as appropriate to their business goals.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development

1. Outcome Target
Business owners will develop management systems as appropriate to their business goals.
2. Outcome Type : Change in Action Outcome Measure

2009 : 0  2010 : 0  2011 : 0  2012 :0  2013 : 0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development

1. Outcome Target

Business owners will investigate legal and compliance issues for their business as appropriate to their business goals.

2. Outcome Type : Change in Action Outcome Measure

2009 : 0  2010 : 0  2011 : 0  2012 :0  2013 : 0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development

1. Outcome Target

Business owners will develop a marketing plan as appropriate to their business goals.

2. Outcome Type : Change in Action Outcome Measure

2009 : 0  2010 : 0  2011 : 0  2012 :0  2013 : 0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development

1. Outcome Target

Business owners will commercialize products as appropriate to their business goals.
2. Outcome Type: Change in Action Outcome Measure

2009: 0  
2010: 0  
2011: 0  
2012: 0  
2013: 0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

● 602 - Business Management, Finance, and Taxation
● 603 - Market Economics
● 604 - Marketing and Distribution Practices
● 608 - Community Resource Planning and Development

1. Outcome Target

Business owners will inform stakeholders of the outcome of their work with the University of Missouri Extension Business Development as appropriate to their business goals.

2. Outcome Type: Change in Action Outcome Measure

2009: 15  
2010: 15  
2011: 15  
2012: 15  
2013: 15

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

● 602 - Business Management, Finance, and Taxation
● 603 - Market Economics
● 608 - Community Resource Planning and Development

1. Outcome Target

Number of jobs created.

2. Outcome Type: Change in Condition Outcome Measure

2009: 165  
2010: 165  
2011: 165  
2012: 165  
2013: 165

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

● 602 - Business Management, Finance, and Taxation
● 603 - Market Economics
● 604 - Marketing and Distribution Practices
● 607 - Consumer Economics
● 608 - Community Resource Planning and Development

1. Outcome Target

Dollar amount of sales and contracts (in millions).

2. Outcome Type: Change in Condition Outcome Measure

2009: 21  
2010: 21  
2011: 21  
2012: 21  
2013: 21

3. Associated Institute Type(s)

• 1862 Extension
4. Associated Knowledge Area(s)
   - 602 - Business Management, Finance, and Taxation
   - 603 - Market Economics
   - 604 - Marketing and Distribution Practices
   - 607 - Consumer Economics
   - 608 - Community Resource Planning and Development

1. Outcome Target
Dollar amount of business investments, including loans and equity approved loans (in millions).

2. Outcome Type : Change in Condition Outcome Measure
   - 2009 : 6
   - 2010 : 6
   - 2011 : 6
   - 2012 : 6
   - 2013 : 6

3. Associated Institute Type(s)
   - •1862 Extension

4. Associated Knowledge Area(s)
   - 602 - Business Management, Finance, and Taxation
   - 603 - Market Economics
   - 604 - Marketing and Distribution Practices
   - 607 - Consumer Economics
   - 608 - Community Resource Planning and Development

1. Outcome Target
Number of new businesses started.

2. Outcome Type : Change in Condition Outcome Measure
   - 2009 : 20
   - 2010 : 20
   - 2011 : 20
   - 2012 : 20
   - 2013 : 20

3. Associated Institute Type(s)
   - •1862 Extension

4. Associated Knowledge Area(s)
   - 602 - Business Management, Finance, and Taxation
   - 603 - Market Economics
   - 604 - Marketing and Distribution Practices
   - 607 - Consumer Economics
   - 608 - Community Resource Planning and Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
● Appropriations changes
● Government Regulations
● Economy
● Natural Disasters (drought, weather extremes, etc.)
● Public Policy changes
● Competing Programatic Challenges
● Competing Public priorities
● Populations changes (immigration, new cultural groupings, etc.)

Description
(NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   ● After Only (post program)
   ● Time series (multiple points before and after program)
   ● Other (Customer satisfaction)
   ● Case Study
   ● Comparisons between program participants (individuals, group, organizations) and non-participants
   ● Retrospective (post program)

Description
(NO DATA ENTERED)

2. Data Collection Methods
   ● Sampling
   ● Mail
   ● On-Site
   ● Whole population
   ● Structured
   ● Unstructured
   ● Case Study

Description
Not necessary - standard research methods.
V(A). Planned Program (Summary)

1. Name of the Planned Program
Choosing Healthy Lifestyles

2. Brief summary about Planned Program
Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects curricula, camps and educational events about choices for a healthy lifestyle, nutrition, food preparation, food safety and related careers. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects, camps and educational events about the importance and benefits of physical activity for a healthy lifestyle. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events about the importance and benefits of recreation and leisure for a healthy lifestyle. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events information and skills to manage stress and to promote their emotional well-being. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events to increase knowledge and skills on enhancing levels of safety. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events to prevent high risk behaviors.

Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth-serving organizations to gain skills to promote children’s and youth’s mental and emotional health both in normal and difficult situations (e.g., incarceration, grandparents raising grandchildren). Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to decrease the likelihood youth engage in high risk-taking behaviors.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Youth Development</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td></td>
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</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Healthy lifestyles include eating a healthy diet, maintaining a healthy weight, exercising regularly, quitting (or not starting) smoking, and minimizing stress. Fifty percent of deaths and illnesses in the United States relate directly to unhealthy lifestyles—primarily poor nutrition, tobacco use, lack of physical activity, and unmanaged stress. By providing education, programs and experiences that promote healthy behaviors, 4-H can help youth, adults and families integrate healthy behaviors, which include physical, mental and emotional well-being, into their everyday lives. Missouri citizens expressed through the University of Missouri Extension Plan of Work process concerns over the high incidence of obesity in children and youth and the need for wholesome choices for physical and leisure activity. Communities want youth to learn more and have opportunities for healthy food and other lifestyle choices.

2. Scope of the Program
   - In-State Extension
   - Multistate Extension
V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision-making and act responsibly; and positively influence their communities and beyond. On-going caring relationships are essential to positive youth development.

2. Ultimate goal(s) of this Program
By providing education, programs and experiences that promote healthy behaviors, 4-H can help youth, adults and families integrate healthy behaviors, which include physical, mental and emotional well-being, into their everyday lives.

V(E). Planned Program (Inputs)
1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
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<td>2013</td>
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</tr>
</tbody>
</table>

V(F). Planned Program (Activity)
1. Activity for the Program
4-H Food and Nutrition Projects; Physical Activity 4-H Projects; Camp Food and Fitness; Steppin’ Out Fitness Guide; FNEP and 4-H; Couch Potato Challenge Guide; Fight BAC Food Safety; 4-H Shooting Sports; 4-H Child Development Project; 4-H Sportsfishing; Stress Connection Project; 4-H Outdoor Adventures; Develop curricula for teen depression and suicide; Gardening; 4-H Safety Projects; Farm/Rural Safety Days.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Web sites</td>
</tr>
<tr>
<td>● Other 2 (Camps, Educational Events)</td>
<td>● Other 1 (Exhibition, Judging, Field Trips)</td>
</tr>
<tr>
<td>● Workshop</td>
<td>● Newsletters</td>
</tr>
</tbody>
</table>

3. Description of targeted audience
Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 5 - 19.

V(G). Planned Program (Outputs)
1. Standard output measures
Target for the number of persons(contacts) to be reached through direct and indirect contact methods
### 2. (Standard Research Target) Number of Patent Applications Submitted

**Expected Patent Applications**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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### 3. Expected Peer Review Publications

<table>
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<tbody>
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<tr>
<td>2013</td>
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</tbody>
</table>

**V(H). State Defined Outputs**

1. **Output Target**

- Attendance of project leaders at workshops for foods/nutrition, physical activity, shooting sports, healthy relationships and/or safety.

  - **2009:** 220
  - **2010:** 230
  - **2011:** 240
  - **2012:** 250
  - **2013:** 250

- Number of youth enrolled in foods projects, physical activity projects, leisure projects, safety projects, camps, educational events and afterschool.

  - **2009:** 5100
  - **2010:** 5200
  - **2011:** 5300
  - **2012:** 5400
  - **2013:** 5500

**V(I). State Defined Outcome**

1. **Outcome Target**

4500 youth will competently demonstrate knowledge and skills gained through demonstrations and project exhibition.

2. **Outcome Type:** Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000</td>
<td>5000</td>
<td>5000</td>
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<td>5000</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**

   - 1862 Extension

4. **Associated Knowledge Area(s)**

   - 806 - Youth Development
1. Outcome Target
75% of the participants of Camp Food and Fitness will indicate they are continuing to make healthy food choices 6 months after the camp experience.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome</th>
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<tbody>
<tr>
<td>2009</td>
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<td>2010</td>
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<td>2011</td>
<td>20</td>
</tr>
<tr>
<td>2012</td>
<td>20</td>
</tr>
<tr>
<td>2013</td>
<td>20</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Populations changes (immigration, new cultural groupings, etc.)
- Economy
- Public Policy changes
- Competing Public priorities
- Natural Disasters (drought, weather extremes, etc.)
- Government Regulations
- Appropriations changes
- Competing Programatic Challenges

Description
The ability to provide volunteer training and educational experiences for youth is dependent on having a well educated, motivated, local and state faculty.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- During (during program)
- Other (Demos, Judging, Exhibs of Knowle)
- After Only (post program)

Description
At the county and state level, youth will demonstrate knowledge and be evaluated against established criteria. Youth will create projects as a result of their project participation and the products will be evaluated against established criteria.

2. Data Collection Methods
- Structured
- Whole population
- On-Site
- Other (Demos, Judging, & Exhibits)
- Mail
- Portfolio Reviews
- Sampling

Description
(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Community Leadership Development for Youth and Adults

2. Brief summary about Planned Program
Community leadership programs increase the capacity of adults and youth (ages 14-18), organizations, and communities to address community problems effectively by mobilizing the range of community capital for common purposes of addressing community issues and needs. Current programming includes EXCEL (EXperience in Community Enterprise and Leadership), Step Up to Leadership!, Community Voices, the Neighborhood Leadership Academy, Youth EXCEL, and Leadership RAP-Juvenile Justice Centers. These programs develop community leaders and fit the needs and character of the locale. They engage the breadth of community leaders in planning and conducting programs and rely on past participants to provide leadership for future programming. These programs focus on building and applying community and leadership knowledge and skills for the development of the community. Leadership RAP also targets juveniles in rehabilitation. Ongoing collaboration with a variety of community organizations and sponsors will be used to help promote the programs.

3. Program existence: Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tbody>
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<td>803</td>
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<tr>
<td>806</td>
<td>Youth Development</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
The future of a community is closely tied to building a critical mass of community leaders for the future. The seven pillars of a healthy community include practicing ongoing dialogue; generating leadership; shaping its future; embracing diversity; knowing itself; connecting people and resources, and creating a sense of community (Source: Association for Healthy Cities and Communities). New leadership voices that are committed to making a difference in communities are emerging from very different contexts and bring vastly different perspectives and experiences. New leadership voices include: those who are socially and economically marginalized and who may, in the past, have been overlooked as potential leaders; those who have emerged as leaders in their communities, but may not yet be present at leadership tables where decisions are made, resources distributed and policies set that impact people in communities; and those leaders who may be visible in professional and policymaking arenas, but whose commitment to working with leaders in community is just emerging (Source: Engaging New Leadership Voices for Catalyzing and Sustaining Community Change, Kellogg Foundation). New strategies for development are emerging. Community economic development strategies require a new way of thinking that: focuses on the people and their skills in the area as the source for economic stability and growth (as opposed to recruitment of industry); measures success on the basis of the quality of community, quality jobs created and ability to provide decent living; focuses on working with the whole community and building systems of support for community enterprise and entrepreneurship; and focuses on working as a region for place-based...
development rooted in the local culture, heritage, nature tourism, and multi-community, multi-organizational, and public-private collaboration. A number of concerns facing communities demand leadership in a contemporary arena of increasing complexity. Community organizations and political subdivisions such as cities, school districts, library boards and counties continually struggle to find qualified residents to serve as council, board and commission members. Understanding external forces that affect the community and its future are critical for leaders. These include the devolution of authority for action and service delivery to the community; the double bind created by trying to maintain quality with fewer resources; expectations for sharing power and responsibility; interdependence, diversity, collaboration, and communication; and displacement of the developmental paradigm with the globalization paradigm.

2. Scope of the Program

- Multistate Extension
- Multistate Integrated Research and Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Everyone is a leader, and citizens from all walks of life need to accept responsibility for problem solving. Leadership is not innate, it can be learned. A flexible dispersed leadership pattern is an element of community entrepreneurship (Flora and Green). Healthy Communities generate leadership everywhere (Coalition for Healthier Cities and Communities). Successful and sustainable communities enhance human and social capital by increased use of the skills, knowledge and ability of local people (NCRCRD). Community leadership is one component of an effective community (National Civic League). Effective communities have a unique way of understanding how the community educates itself in the community’s business (Kettering Foundation). Involving and working with people is important to accomplishing work that needs to be done. An influence relationship is important among leaders and collaborators who intend real changes that reflect their mutual purposes (Rost). Leadership development is a process, not a quality. Results come from combined efforts and commitment of all in the community and/or organization.

2. Ultimate goal(s) of this Program

Increased capacity of youth and adults, organizations, and communities to address community problems effectively by mobilizing the community human and social capital for common purposes.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 162</th>
<th>Extension 1890</th>
<th>Research 162</th>
<th>Research 1890</th>
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</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Form planning committee; assist with organizational development, fund development, and tailoring content to local community need. Provide facilitation, training, workshops, retreat, field trips and exchanges with other communities, conduct planning with education class for use of learning.
2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
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<tbody>
<tr>
<td>Direct Methods</td>
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<td></td>
</tr>
<tr>
<td>● Education Class</td>
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<td>● Newsletters</td>
</tr>
<tr>
<td>● Other 2 (Retreat/Field Trip)</td>
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<td>● Web sites</td>
</tr>
<tr>
<td>● Group Discussion</td>
<td></td>
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<tr>
<td>● Workshop</td>
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<tr>
<td>● Demonstrations</td>
<td></td>
<td></td>
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<td>● Workshop</td>
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<tr>
<td>● Other 1 (Role Playing and Leading)</td>
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<tr>
<td>Indirect Methods</td>
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<tr>
<td>● Newsletters</td>
<td></td>
<td></td>
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<tr>
<td>● Web sites</td>
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</tbody>
</table>

3. Description of targeted audience

Targeted audience is all social groups in the community, including low-income and minority, youth (age 14-18), adults. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc. Also targeted among adults will be those who are currently serving in a leadership role in an agency, organization, neighborhood, club, community, business or aspire to serve.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults Target</th>
<th>Indirect Contacts Adults Target</th>
<th>Direct Contacts Youth Target</th>
<th>Indirect Contacts Youth Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5000</td>
<td>500</td>
<td>300</td>
<td>25</td>
</tr>
<tr>
<td>2010</td>
<td>5000</td>
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<td>25</td>
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<td>2011</td>
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<tr>
<td>2012</td>
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<td>25</td>
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<tr>
<td>2013</td>
<td>5000</td>
<td>500</td>
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</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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3. Expected Peer Review Publications

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<th>Year</th>
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<tbody>
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<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>
\( V(H). \) State Defined Outputs

1. Output Target

- Number of program participants (gender and ethnicity).

\[
\begin{array}{cccccc}
2009 & : & 350 & & & \\
2010 & : & 360 & & & \\
2011 & : & 365 & & & \\
2012 & : & 370 & & & \\
2013 & : & 375 & & & \\
\end{array}
\]

- Number of programs held.

\[
\begin{array}{cccccc}
2009 & : & 30 & & & \\
2010 & : & 32 & & & \\
2011 & : & 35 & & & \\
2012 & : & 35 & & & \\
2013 & : & 35 & & & \\
\end{array}
\]

- Number of volunteers who assisted.

\[
\begin{array}{cccccc}
2009 & : & 100 & & & \\
2010 & : & 125 & & & \\
2011 & : & 130 & & & \\
2012 & : & 130 & & & \\
2013 & : & 130 & & & \\
\end{array}
\]

\( V(I). \) State Defined Outcome

1. Outcome Target

% of participants reporting changes in changes in personal growth and self efficacy; community commitment; shared future and purpose, community knowledge and civic engagement.

2. Outcome Type: Change in Knowledge Outcome Measure

\[
\begin{array}{cccccc}
2009 & : & 60 & & & \\
2010 & : & 62 & & & \\
2011 & : & 64 & & & \\
2012 & : & 64 & & & \\
2013 & : & 64 & & & \\
\end{array}
\]

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

1. Outcome Target

Percent increase in number of participants reporting new roles and opportunities undertaken.

2. Outcome Type: Change in Action Outcome Measure

\[
\begin{array}{cccccc}
2009 & : & 10 & & & \\
2010 & : & 12 & & & \\
2011 & : & 12 & & & \\
2012 & : & 13 & & & \\
2013 & : & 13 & & & \\
\end{array}
\]

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

1. Outcome Target

Number of community projects/plans developed.

2. Outcome Type: Change in Action Outcome Measure

\[
\begin{array}{cccccc}
2009 & : & 5 & & & \\
2010 & : & 5 & & & \\
2011 & : & 6 & & & \\
2012 & : & 7 & & & \\
2013 & : & 8 & & & \\
\end{array}
\]

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
1. **Outcome Target**
   Number of community projects/plans implemented.

2. **Outcome Type:** Change in Action Outcome Measure
   - 2009: 1
   - 2010: 2
   - 2011: 3
   - 2012: 4
   - 2013: 5

3. **Associated Institute Type(s)**
   - 1862 Extension

4. **Associated Knowledge Area(s)**
   - 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   - 806 - Youth Development

1. **Outcome Target**
   Sustained capacity for community leadership development: the number of programs which continue after at least 5 years.

2. **Outcome Type:** Change in Condition Outcome Measure
   - 2009: 17
   - 2010: 18
   - 2011: 19
   - 2012: 20
   - 2013: 0

3. **Associated Institute Type(s)**
   - 1862 Extension

4. **Associated Knowledge Area(s)**
   - 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   - 806 - Youth Development

1. **Outcome Target**
   Dollar value of grants and resources leveraged/generated from community projects/programs.

2. **Outcome Type:** Change in Condition Outcome Measure
   - 2009: $5000
   - 2010: $5000
   - 2011: $5000
   - 2012: $5000
   - 2013: $5000

3. **Associated Institute Type(s)**
   - 1862 Extension

4. **Associated Knowledge Area(s)**
   - 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   - 806 - Youth Development

**V(J). Planned Program (External Factors)**

1. **External Factors which may affect Outcomes**
   - Appropriations changes
   - Competing Public priorities
   - Competing Programmatic Challenges
   - Natural Disasters (drought, weather extremes, etc.)
   - Economy
   - Government Regulations
   - Public Policy changes
   - Populations changes (immigration, new cultural groupings, etc.)
V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - After Only (post program)
   - During (during program)
   - Retrospective (post program)

Description
Short-term: session evaluations conducted on-site. Mid-term: Pre- and post-course assessment of individuals in Adult EXCEL Program to determine changes in personal growth and self-efficacy; community commitment; shared future and purpose, community knowledge, civic engagement and social cohesion. Long-term: Conduct assessment of community impacts. Working on methodologies for this through NRI grant. It will require 2 reporting cycles before completed.

2. Data Collection Methods
   - Tests
   - Whole population
   - Sampling
   - On-Site
   - Other (on-line survey)

Description
(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Creating Community Economic Viability

2. Brief summary about Planned Program
Addressing the long-term viability of the community embraces a holistic focus toward improving the community economy. This entails working with communities through planning, economic analysis, leadership development and fostering a climate for innovation. CEED (Community Enterprise and Entrepreneurial Development) has been developed out of a renewed interest in economic development and entrepreneurship on the part of the University and Extension and comprises a fresh approach in particular to rural community revitalization through a special partnership between the University of Missouri Extension, the Truman School of Public Affairs, and the Rural Policy Research Institute (RUPRI). Ongoing collaboration with a variety of community organizations and sponsors will be used to help promote the programs.

3. Program existence: New (One year or less)
4. Program duration: Long-Term (More than five years)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>608</td>
<td>Community Resource Planning and Development</td>
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<tr>
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<td>Sociological and Technological Change Affecting Individuals, Family</td>
<td></td>
<td></td>
<td>20%</td>
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</tr>
<tr>
<td>806</td>
<td>Youth Development</td>
<td></td>
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<td>20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
In 2004 the NADO Research Foundation found 50 percent of local development and election officials believe their region should pursue the development of a diversified local economy. Community economic development strategies require a new way of thinking that: focuses on the people and their skills in the area as the source for economic stability and growth (as opposed to focusing entirely on recruitment of industry); measures success on the basis of the quality of community, quality jobs created and their ability to provide a decent living; focuses on working with the whole community and building systems of support for community enterprise and entrepreneurship; and focuses on working as a region for place-based development rooted in the local culture, heritage, ecology, and multi-community, multi-organizational, and public-private collaboration. It is well documented economic development efforts rooted in recruitment and attraction are not working in rural America (RUPRI Center for Rural Entrepreneurship, 2005). Rural communities continue to witness an out-migration of their best and brightest as employment opportunities dwindle or disappear. As population and local wealth transfers out, communities’ financial bases are eroded and infrastructure and public services suffer. Communities who are less entrepreneurial are less vital from an economic standpoint (GEM, 2003). In Missouri hundreds of small towns find themselves in this predicament. There will be no help for them from the outside, and they are unable to afford a professional economic developer. Yet these same small communities have a broad array of assets from beautiful natural
settings to affordable housing to hard-working people. Current trends for such communities are to help them build from within their own solutions to economic woes based on these assets. The CEED program will focus on creating conditions within communities that assist entrepreneurs and their businesses to emerge, thrive and grow. A priority will be to arm communities with the tools to foster leadership, engage youth, embrace entrepreneurship, and coordinate available services and educational opportunities to result in a seamless entrepreneurship development system.

2. Scope of the Program

- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Entrepreneurship is a critical factor in local economies. Growth and serial entrepreneurs are not easily discerned; so all entrepreneurs need nurturing. All forms of entrepreneurship contribute to the quality and economy of the community. A community culture that nurtures entrepreneurship is as critical as actual skill and knowledge development for entrepreneurs themselves. Development of an entrepreneurial support system and partnerships that support community entrepreneurship and appropriate policies is essential to creating viable community economies. Fostering entrepreneurship includes entrepreneurial practices among social and non-profits and within educational and governmental organizations and agencies.

2. Ultimate goal(s) of this Program

Help create, study and disseminate best models of entrepreneurial community practice. Influence and expand economic development on a community-driven basis. Establish process by which communities can readily access university resources in growing their local economies. Continue to provide entrepreneurial education, research and assessment service. Create a statewide community of interest in entrepreneurship and entrepreneurial communities as the seed to community-based economic development. Forge stronger connections with metropolitan centers and markets.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
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<td>2011</td>
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<tr>
<td>2012</td>
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<tr>
<td>2013</td>
<td>5.7</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

To facilitate entrepreneurship as an economic development strategy, we will: work in selected settings (communities and regions in the state) to develop models of excellent entrepreneurial community practice and community economic development; enhance capacity and effectiveness of community members to support entrepreneurship through workshops, training, counseling, developing partnerships, providing referrals, organizational development, participatory visioning and planning; help communities respond to the needs and plans of their entrepreneurs through planning, leadership development, working with the media and building partnerships; develop advanced entrepreneurship skills among Extension specialists through development and delivery of new curricula; and share knowledge and learning that encourages the enhancement of local economies and quality of life through entrepreneurial efforts through web, media, partners, conferences, workshops, seminars, and public policy briefings.
2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Indirect Methods</td>
</tr>
<tr>
<td>- One-on-One Intervention</td>
<td>- Web sites</td>
</tr>
<tr>
<td>- Workshop</td>
<td>- TV Media Programs</td>
</tr>
<tr>
<td>- Education Class</td>
<td>- Newsletters</td>
</tr>
<tr>
<td>- Group Discussion</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Targeted audience is all social groups in the community, including low-income and minority, youth and adults. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc. Primary Audiences: predominantly rural towns, communities, counties and/or multi-county regions and their residents in Missouri that have experienced economic downturn, and have few other opportunities; of these communities, work with ones that have demonstrated a reasonable amount of motivation to work on their situations. Secondary Audiences: communities that would like to learn more about entrepreneurial communities; Extension staff, state and non-profit staff that could benefit from advanced entrepreneurship training.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults Target</th>
<th>Indirect Contacts Adults Target</th>
<th>Direct Contacts Youth Target</th>
<th>Indirect Contacts Youth Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2000</td>
<td>1000</td>
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<tr>
<td>2013</td>
<td>2500</td>
<td>1600</td>
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<td>150</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<td>2013</td>
<td></td>
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</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
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<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>1</td>
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</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
**V(H). State Defined Outputs**

1. Output Target

- Number of communities/regions.
  
  2009: 10  
  2010: 15  
  2011: 15  
  2012: 15  
  2013: 15

- Number of workshops on community entrepreneurship and economic development.
  
  2009: 20  
  2010: 30  
  2011: 30  
  2012: 30  
  2013: 30

**V(I). State Defined Outcome**

1. Outcome Target

% workshop participants reporting increased knowledge and understanding of local/regional economy and community economic development strategies and their applicability to the situation.

2. Outcome Type: Change in Knowledge Outcome Measure

  2009: 0  
  2010: 0  
  2011: 0  
  2012: 0  
  2013: 0

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 608 - Community Resource Planning and Development

1. Outcome Target

Dollar value of new resources leveraged to address community economic change.

2. Outcome Type: Change in Action Outcome Measure

  2009: 200000  
  2010: 200000  
  2011: 200000  
  2012: 200000  
  2013: 200000

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 608 - Community Resource Planning and Development

1. Outcome Target

Number of community foundations, revolving loan funds, community development corporations formed.

2. Outcome Type: Change in Action Outcome Measure

  2009: 1  
  2010: 1  
  2011: 1  
  2012: 1  
  2013: 1

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 608 - Community Resource Planning and Development

1. Outcome Target

Number of schools using entrepreneurship curricula (still using and newly using).
2. Outcome Type: Change in Action Outcome Measure

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 806 - Youth Development

1. Outcome Target
Number of people reporting taking on increased, different, or new leadership roles in community.

2. Outcome Type: Change in Action Outcome Measure
   2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   • 806 - Youth Development

1. Outcome Target
Number of jobs created by new businesses or business expansion/growth.

2. Outcome Type: Change in Condition Outcome Measure
   2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 608 - Community Resource Planning and Development

1. Outcome Target
Increased cooperation across community services/Increase in networks and partnerships.

2. Outcome Type: Change in Action Outcome Measure
   2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

1. Outcome Target
Total number of businesses created.

2. Outcome Type: Change in Condition Outcome Measure

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
608 - Community Resource Planning and Development

1. Outcome Target
Number of jobs retained.

2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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</tr>
<tr>
<td>2010</td>
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<td>2011</td>
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<tr>
<td>2012</td>
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</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 608 - Community Resource Planning and Development

1. Outcome Target
% of new businesses created by youth.

2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>50</td>
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<tr>
<td>2010</td>
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<td>2011</td>
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<tr>
<td>2012</td>
<td>50</td>
</tr>
<tr>
<td>2013</td>
<td>50</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 608 - Community Resource Planning and Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Competing Programatic Challenges
- Economy
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Public Policy changes
- Appropriations changes
- Natural Disasters (drought,weather extremes,etc.)
- Government Regulations

Description
(NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- Case Study
- Retrospective (post program)
- Time series (multiple points before and after program)
- After Only (post program)
- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

Description
Surveys at conclusion and follow up with those participating in community entrepreneurship workshops. Case studies of
regions/communities where resources and indepth assistance have been invested. Eventual changes in community climate survey over time.

2. Data Collection Methods

- Case Study
- Whole population
- On-Site
- Other (on-line survey)
- Observation
- Sampling

Description

(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Creating Economic Preparedness

2. Brief summary about Planned Program
Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects curricula, camps and educational events about knowledge and skills to prepare them for the world of work. Adult staff and volunteers will facilitate youth ages 8 to 19 to learn through projects, camps and educational events entrepreneurial knowledge and skills. Adult staff and volunteers will facilitate youth ages 8 to 19 to learn through projects curricula, camps and educational events about personal finances. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events to increase consumer knowledge and skills. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and youth’s workforce and career preparation. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and youth’s entrepreneurial knowledge and skills. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and youth’s personal finances.

3. Program existence: Intermediate (One to five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Youth Development</td>
<td>100%</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Providing opportunities to economically prepare youth, addresses several societal concerns. First of all, being a success economically provides a foundation for being successful in life in general. Our world is rapidly changing and growing more global and complex. Knowledge and skills for personal finances, preparing for the changing work place and thinking entrepreneurial are essential for youth to thrive today. In addition, the labor force is getting older. The fastest growing part of the labor force today is women, minorities and immigrants. It is important to provide opportunities for these audiences to be fully prepared and ready to engage in the changing, complex and global society we live in today. Missouri citizens expressed their concerns through the University of Missouri Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

2. Scope of the Program
   ● In-State Extension
V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision-making and act responsibly; and positively influence their communities and beyond. On-going caring relationships are essential to positive youth development.

2. Ultimate goal(s) of this Program

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<tr>
<td>2011</td>
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<tr>
<td>2012</td>
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<tr>
<td>2013</td>
<td>2.8</td>
<td>0.0</td>
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</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Learning about personal finances through Financial Champions 4-H Project Literature, demonstrations, exhibits, camps and educational events. Learning about consumerism through Consumer Savvy 4-H Project Literature, demonstrations, exhibits, camps and educational events. Learning about youth entrepreneurship through curricula, demonstrations, exhibits, camps and educational events.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>● One-on-One Intervention</td>
<td>● Web sites</td>
</tr>
<tr>
<td>● Group Discussion</td>
<td>● Newsletters</td>
</tr>
<tr>
<td>● Demonstrations</td>
<td></td>
</tr>
<tr>
<td>● Other 2 (Camps, Educational Events)</td>
<td></td>
</tr>
<tr>
<td>● Workshop</td>
<td></td>
</tr>
<tr>
<td>● Other 1 (Exhibition, Judging, Field Trips)</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 8 - 19.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods.
### 2. (Standard Research Target) Number of Patent Applications Submitted

<table>
<thead>
<tr>
<th>Year</th>
<th>Expected Patent Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<tr>
<td>2010</td>
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</tr>
<tr>
<td>2011</td>
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<td>2012</td>
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<tr>
<td>2013</td>
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</tbody>
</table>

### 3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
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</tr>
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<tbody>
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</tr>
<tr>
<td>2013</td>
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</tr>
</tbody>
</table>

### V(H). State Defined Outputs

#### 1. Output Target
- 4-H Club, Council Treasurer Roles; 4-H Club fundraisers; 4-H Financial Champions Project Literature; 4-H Consumer Savvy Project Literature; Entrepreneurship; Workforce/Career Readiness.

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1100</td>
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</tr>
<tr>
<td>2013</td>
<td>1400</td>
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</tbody>
</table>

### V(I). State Defined Outcome

#### 1. Outcome Target
Number of youth and adults in treasurer roles for 4-H Clubs, Councils and Committees.

#### 2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

#### 3. Associated Institute Type(s)
- 1862 Extension

#### 4. Associated Knowledge Area(s)
- 806 - Youth Development

#### 1. Outcome Target
Attendance of project leaders at workshops for personal finance, consumer and/or entrepreneurship.
### Outcome Type

- **Change in Knowledge Outcome Measure**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td></td>
<td>25</td>
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<td>40</td>
<td>45</td>
</tr>
</tbody>
</table>

#### Associated Institute Type(s)
- 1862 Extension

#### Associated Knowledge Area(s)
- 806 - Youth Development

#### Outcome Target

Number of youth enrolled in personal finance, consumer and/or entrepreneurship.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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<td>145</td>
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</table>

#### Outcome Type

- **Change in Knowledge Outcome Measure**

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<tr>
<th>Year</th>
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<th>2010</th>
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<th>2012</th>
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<tbody>
<tr>
<td></td>
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<td>45</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

#### Associated Institute Type(s)
- 1862 Extension

#### Associated Knowledge Area(s)
- 806 - Youth Development

#### Outcome Target

Number of youth participating in camps, educational events and afterschool.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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#### Outcome Type

- **Change in Knowledge Outcome Measure**

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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>450</td>
<td>475</td>
<td>500</td>
</tr>
</tbody>
</table>

#### Associated Institute Type(s)
- 1862 Extension

#### Associated Knowledge Area(s)
- 806 - Youth Development

#### Outcome Target

350 youth will competently demonstrate knowledge and skills gained through treasurer roles, demonstrations and project exhibition.
● 806 - Youth Development

1. **Outcome Target**

70 volunteers will competently lead youth through project experiences, promoting demonstrations, judging and other educational events.

2. **Outcome Type** : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>85</td>
<td>90</td>
<td>95</td>
<td>100</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**

• 1862 Extension

4. **Associated Knowledge Area(s)**

● 806 - Youth Development

---

1. **Outcome Target**

100 youth will go onto post-secondary education.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**

• 1862 Extension

4. **Associated Knowledge Area(s)**

● 806 - Youth Development

---

1. **Outcome Target**

75 youth will demonstrate career planning by listing their goal(s) and the institution of higher education they choose to achieve their goal(s) on their 4-H state scholarship and/or award applications.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**

• 1862 Extension

4. **Associated Knowledge Area(s)**

● 806 - Youth Development

---

**V(J). Planned Program (External Factors)**

1. **External Factors which may affect Outcomes**

● Populations changes (immigration, new cultural groupings, etc.)
● Competing Public priorities
● Appropriations changes
● Competing Programatic Challenges
● Natural Disasters (drought, weather extremes, etc.)
● Economy
● Public Policy changes
● Government Regulations

**Description**

The ability to provide volunteer training and educational experiences for youth is dependent on having a well educated, motivated, local and state faculty.
V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - After Only (post program)
   - Time series (multiple points before and after program)
   - During (during program)

Description
At the county and state level, youth will demonstrate knowledge and be evaluated against established criteria. Youth will create projects as a result of their project participation and the products will be evaluated against established criteria. Applicants for State 4-H Awards will report how 4-H has influenced their lives through their 4-H Story of Y2200. The State 4-H Scholarship Application will be reviewed for stated career goals and post-secondary education.

2. Data Collection Methods
   - Other (Demos, judging, exhibits)
   - Whole population
   - Portfolio Reviews

Description
(NO DATA ENTERED)
\(\text{V(A). Planned Program (Summary)}\)

1. **Name of the Planned Program**
   Enhancing Community Viability Through Youth Leadership

2. **Brief summary about Planned Program**
   Adult staff and volunteers will facilitate youth ages 11 to 19 to learn through projects curricula, camps, educational events and meaningful leadership roles about the power of youth/adult partnerships. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects, camps, educational events and meaningful leadership roles about the importance and benefits of serving the community. Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects, camps, educational events and meaningful leadership roles about the importance of being an engaged citizen. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote youth and adult partnerships. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and youth’s contribution through community service. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children’s and meaningful civic engagement.

3. **Program existence:** Mature (More then five years)
4. **Program duration:** Long-Term (More than five years)

5. **Expending formula funds or state-matching funds:** Yes
6. **Expending other than formula funds or state-matching funds:** Yes

\(\text{V(B). Program Knowledge Area(s)}\)

1. **Program Knowledge Areas and Percentage**

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Youth Development</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total   | 100%                   |                  |                 |                |                |

\(\text{V(C). Planned Program (Situation and Scope)}\)

1. **Situation and priorities**
   Missouri citizens expressed their concerns through the University of Missouri Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership. It is important to equip and engage young people into meaningful leadership roles in their communities so they feel compelled to return to improve the social, environmental and economic conditions in their communities.

2. **Scope of the Program**
   - Multistate Extension
   - In-State Extension
   - Multistate Integrated Research and Extension

\(\text{V(D). Planned Program (Assumptions and Goals)}\)

1. **Assumptions made for the Program**
   When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision-making and act responsibly;
and positively influence their communities and beyond. On-going caring relationships are essential to positive youth development.

2. Ultimate goal(s) of this Program

Developing the leadership skills of youth builds their capacity as individuals to resolve issues. As individual youth use leadership skills in groups and organizations, the capacity to resolve community issues increases. Building skills and engaging youth to use these skills builds viable communities. Thus, the goal of this program is to enhance the social, environmental and economic conditions of communities through youth leadership.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
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</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

4-H Leadership Roles – club, county council/committees, state council, collegiate; Leadership project; Youth Civic Leaders Summit; Extension Council Youth Leaders; Army Service Learning Toolkit; Public Adventures; CECH-UP; Global Education.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td></td>
</tr>
<tr>
<td>Other 2 (Camps, Educational Events)</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Other 1 (Exhibition, Judging, Field Trips)</td>
<td>Web sites</td>
</tr>
<tr>
<td>Workshop</td>
<td></td>
</tr>
<tr>
<td>One-on-One Intervention</td>
<td></td>
</tr>
<tr>
<td>Demonstrations</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 8 - 19.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods
<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1400</td>
<td>3500</td>
<td>17000</td>
<td>34000</td>
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<tr>
<td>2010</td>
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<td>4000</td>
<td>18000</td>
<td>36000</td>
</tr>
<tr>
<td>2011</td>
<td>1600</td>
<td>4500</td>
<td>19000</td>
<td>38000</td>
</tr>
<tr>
<td>2012</td>
<td>1700</td>
<td>5000</td>
<td>20000</td>
<td>40000</td>
</tr>
<tr>
<td>2013</td>
<td>1800</td>
<td>5500</td>
<td>21000</td>
<td>42000</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
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<td>2012</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Number of youth and adults in leadership roles for 4-H Clubs, Councils and Committees.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2250</td>
<td>2500</td>
<td>2750</td>
<td>3000</td>
<td>3500</td>
</tr>
</tbody>
</table>

- Number of youth and adult partnership teams trained at workshops, conferences, summits.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>300</td>
<td>350</td>
<td>400</td>
<td>450</td>
<td>500</td>
</tr>
</tbody>
</table>

- Number of community service grants awarded through the Missouri 4-H Foundation.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55</td>
<td>.60</td>
<td>.65</td>
<td>.70</td>
<td>.75</td>
</tr>
</tbody>
</table>

- Number of youth in civic leadership roles.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td></td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>45</td>
</tr>
</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target

12,000 youth will engage and complete 4-H leadership roles.
2. Outcome Type: Change in Knowledge Outcome Measure

2009: 12000  
2010: 12000  
2011: 12000  
2012: 12000  
2013: 12000  

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 806 - Youth Development

1. Outcome Target

70% of the sample of 400 youth who have participated in state 4-H educational events or fulfilled leadership roles will report incorporating skills in other educational and/or leadership situations.

2. Outcome Type: Change in Action Outcome Measure

2009: 300  
2010: 300  
2011: 300  
2012: 300  
2013: 300

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

• Natural Disasters (drought, weather extremes, etc.)
• Appropriations changes
• Public Policy changes
• Competing Programatic Challenges
• Competing Public priorities
• Economy
• Government Regulations
• Populations changes (immigration, new cultural groupings, etc.)

Description
The ability to provide volunteer training and educational experiences for youth is dependent on having a well educated, motivated, local and state faculty.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

• During (during program)
• After Only (post program)
• Case Study

Description
At the county and state level, youth will demonstrate knowledge, skills and competencies through leadership roles. Applicants for State 4-H Awards will report what they have learned about leadership and citizenship in the Missouri Recognition Form, Level III, Y2200. Plans of Work created by Youth and Adult Partnership teams will become benchmarks for determining team impact on their communities.

2. Data Collection Methods
- Sampling
- Structured
- Case Study
- Mail
- Whole population
- Other (see below)
- Portfolio Reviews
- Observation

**Description**
Other: Educational events, State 4-H Award & Scholarship Applications, Community Service Grants, Youth/Adult Partnership Plan of Actions.
V(A). Planned Program (Summary)

1. Name of the Planned Program
Ensuring Safe Communities

2. Brief summary about Planned Program
Ensuring Safe Communities includes primarily the Community Emergency Management Program that provides a program of resources, personnel and educational programs and materials to support the mission of the Governor’s Disaster Recovery Partnership (established 1993) and develop the capability to assist communities and citizens in all areas of emergency management. The program, in partnership with the Fire Rescue Training Institute, provides educational programming and technical assistance to federal, state and local entities, professional and non-profit organizations, businesses, and educational institutions. The program provides assistance in establishing COAD (Community Organizations Active in Disasters), disaster educational materials and presentations to communities and organizations, consulting with local emergency planning committees and/or citizen councils, representing Extension in meetings of federal, state and local emergency management organizations after disasters, assisting local entities in identification of funding sources for emergency management and homeland security (e.g., USDA-RD, fire grants), and coordinating Extension disaster activities. The program also actively participates in the Extension Disaster Education Network (EDEN).

3. Program existence: Mature (More then five years)
4. Program duration: Long-Term (More than five years)
5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>805</td>
<td>Community Institutions, Health, and Social Services</td>
<td>95%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>806</td>
<td>Youth Development</td>
<td></td>
<td>5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 100%

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Community emergency preparedness is critical. Missouri experiences at least 10 significant emergencies such as floods, ice storms, and tornadoes each year. During the last three years, between 40 and 70 counties have experienced federally declared disasters. However, numerous local natural disasters occur frequently throughout the year and without warning. After disasters, Extension is called on regularly by SEMA to facilitate unmet-needs committees and Community Organizations Assisting in Disaster (Source: Missouri Fire Rescue and Training Institute, 2005). All aspects of community and personal life can be impacted by natural or man-made disasters. Regardless of size or impact, all disasters are local events, and approximately 1 percent of all disasters meet the requirements for the President to declare a disaster. Thus it falls upon local organizations and other organizations that can provide assistance from the outside to manage the majority of events that occur in communities. Nurturing community linkages before, during and after disasters has been shown by research to be critical to community viability. The focus is to build the knowledge and skills needed to develop and implement policies, plans, and procedures to protect life, property, business survivability, community sustainability and the environment through applications of sound emergency management principles in all phases of emergency management.
2. Scope of the Program

- Multistate Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Disasters will occur with relative frequency and impact local communities. Communities are better prepared to handle homeland security risks by being prepared to handle natural disasters and environmental disasters (which have much higher probability of occurring). Extension can become a key disaster resource for communities to rely upon. Faculty and staff should learn general emergency management principles. All Extension offices and components should engage in mitigation and preparedness measures to ensure survivability from a disaster event. This program will improve the efficacy of Extension in disasters. Communities using Community Development models can become more disaster resilient. Extension is a key player in bringing together and facilitating diverse community groups.

2. Ultimate goal(s) of this Program

Increased capacity of individuals and families, businesses, farms, organizations, and communities to prepare for and respond to and recover from disaster effectively by mobilizing the community human and social capital for common purposes.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
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<td>1862</td>
<td>1890</td>
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<tr>
<td>2010</td>
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<tr>
<td>2011</td>
<td>1.9</td>
<td>0.0</td>
</tr>
<tr>
<td>2012</td>
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</tr>
<tr>
<td>2013</td>
<td>1.9</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Establish COAD (Community Organizations Active in Disasters). Provide disaster educational materials & presentations to communities and organizations. Build partnerships with local, state, federal agencies and organizations. Consult with local emergency planning committees and/or citizen councils. Represent Extension at meetings of federal, state and local emergency management organizations after disasters. Assist local entities in identification of funding sources for community emergency management and homeland security, eg., USDA-RD, fire grants, etc. Provide disaster preparedness and mitigation leadership for Extension itself. Coordinate and participate in Extension disaster activities.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Web sites</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>TV Media Programs</td>
</tr>
<tr>
<td>Other 1 (Simulations)</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Education Class</td>
<td>Public Service Announcement</td>
</tr>
<tr>
<td>Workshop</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
</tbody>
</table>
3. Description of targeted audience

Targeted audience is all social groups in the community, including low-income and minority, Spanish-speaking, community organizations, local government, home builders, agencies that assist in disaster, businesses and farmers. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc.

\( \text{V(G). Planned Program (Outputs)} \)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
<td>3000</td>
<td>2400</td>
<td>60</td>
<td>450</td>
</tr>
<tr>
<td>2010</td>
<td>3200</td>
<td>2600</td>
<td>65</td>
<td>450</td>
</tr>
<tr>
<td>2011</td>
<td>3200</td>
<td>2800</td>
<td>70</td>
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<td>500</td>
</tr>
<tr>
<td>2013</td>
<td>3400</td>
<td>2800</td>
<td>70</td>
<td>500</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

\[ \begin{array}{|c|c|c|c|c|}
\hline
\text{Year} & \text{Expected Patent Applications} \\
\hline
2009 & 0 \\
2010 & 0 \\
2011 & 0 \\
2012 & 0 \\
2013 & 0 \\
\hline
\end{array} \]

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
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<th>Total</th>
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<td>2013</td>
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<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

\( \text{V(H). State Defined Outputs} \)

1. Output Target

- Number of communities assisted with training and facilitation for disaster preparedness.

\[ \begin{array}{|c|c|c|c|c|}
\hline
\text{Year} & \text{Number of Communities} \\
\hline
2009 & 45 \\
2010 & 45 \\
2011 & 45 \\
2012 & 45 \\
2013 & 45 \\
\hline
\end{array} \]

- Number of partners.

\[ \begin{array}{|c|c|c|c|c|}
\hline
\text{Year} & \text{Number of Partners} \\
\hline
2009 & 100 \\
2010 & 100 \\
2011 & 100 \\
2012 & 100 \\
2013 & 100 \\
\hline
\end{array} \]

- Number of workshops and trainings conducted by Extension faculty.

\[ \begin{array}{|c|c|c|c|c|}
\hline
\text{Year} & \text{Number of Workshops} \\
\hline
2009 & 15 \\
2010 & 15 \\
2011 & 20 \\
2012 & 20 \\
2013 & 25 \\
\hline
\end{array} \]
V(I). State Defined Outcome

1. Outcome Target
% of participants in workshops/training reporting learning about preparedness, hazards, mitigation.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 805 - Community Institutions, Health, and Social Services

1. Outcome Target
Community Organizations Active in Disaster (COADs) created and function to meet citizen needs.

2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
<tr>
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<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 805 - Community Institutions, Health, and Social Services

1. Outcome Target
Practices adopted such as disaster plans and kits developed.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 805 - Community Institutions, Health, and Social Services
• 806 - Youth Development

1. Outcome Target
% of communities that make changes after conduct of emergency management exercise in the community.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension
4. Associated Knowledge Area(s)
   ● 805 - Community Institutions, Health, and Social Services

1. Outcome Target
Communities, businesses, schools and residents recover quickly and with less cost after a disaster because they were prepared.

2. Outcome Type : Change in Condition Outcome Measure

   Year 2009 2010 2011 2012 2013
   Outcome 0 0 0 0 0

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   ● 805 - Community Institutions, Health, and Social Services

1. Outcome Target
Number of county Extension offices that adopted or reviewed disaster plans and preparedness measures during the past year.

2. Outcome Type : Change in Action Outcome Measure

   Year 2009 2010 2011 2012 2013
   Outcome 25 25 25 25 25

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   ● 805 - Community Institutions, Health, and Social Services

1. Outcome Target
Dollar value of resources leveraged (volunteer hours, grants for warning systems, etc.) for emergency management.

2. Outcome Type : Change in Action Outcome Measure

   Year 2009 2010 2011 2012 2013
   Outcome 0 0 0 0 0

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   ● 805 - Community Institutions, Health, and Social Services

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
   ● Economy
   ● Appropriations changes
   ● Populations changes (immigration, new cultural groupings, etc.)
   ● Natural Disasters (drought, weather extremes, etc.)
   ● Public Policy changes
   ● Government Regulations
   ● Competing Programatic Challenges
   ● Competing Public priorities

Description
The degree to which disaster strikes and the extent of its coverage (including terrorist acts and threats) will greatly impact the work accomplished.
V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - Case Study
   - During (during program)
   - Before-After (before and after program)
   - Comparisons between program participants (individuals, group, organizations) and non-participants
   - Retrospective (post program)
   - After Only (post program)
   - Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
   - Time series (multiple points before and after program)

Description
Session evaluations conducted on-site when training is conducted. Documentation of COAD work and community response as a result.

2. Data Collection Methods
   - Case Study
   - Sampling
   - On-Site
   - Whole population

Description
(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Facilitating Community Decision Making for Youth and Adults

2. Brief summary about Planned Program
Rapid changes in technology, economic and social patterns require a greater depth of analysis and understanding and participatory planning processes that engage the breadth of the community in decision making and implementation. This program provides an array of community decision support tools and processes to support analysis, ways for people to dialogue and explore options, policy development, development of a vision and planning processes, implementation of plans, conflict resolution tools, and support and training for local government.

Community Decision Support provides tools such as economic models, demographic analysis, GIS mapping, fiscal impact, and local government support. The Community Policy Analysis Center conducts community economic baseline analyses, scenario analyses, and supports training on a range of policy issues including land use, transportation, environment, entrepreneurship and health. The Center uses a participatory research approach through which communities are equal partners in all projects. The Office of Social and Economic Data Analysis serves as partner with the state census center and conducts research and educational projects with state agency and community partners that focus on public policy issues such as transportation, health and community services, and public education. OSEDA provides web-based demographic analysis. The Community Planning program is designed to enable groups, organizations, and communities to develop a vision, identify priorities, develop an action agenda, and successfully develop and implement programs and projects. The CECH-Up program also engages middle school students with local government officials in learning and project development. Missouri Communities Deliberative works with communities to build their knowledge about, and ability to engage difficult public issues. The process helps to mitigate conflict, polarization and stalemates which commonly result over issues where there are no optimal solutions and which require public input. This program increases the capacity of communities to address public policy issues/problems through deliberative processes such as public forums and results in: 1) communities using deliberation as an habitual practice; 2) people convening, moderating, recording and reporting public forums; and 3) issues being framed for deliberative process.

3. Program existence: Mature (More then five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage
### 1. Situation and priorities

Globalization, changing age structures, devolution of authority for critical services and other forces are combining to make state and local policy decisions more demanding and budgets tighter. The issues are more complex and diverse, lacking well-defined technical solutions and clear-cut criteria to judge their resolution. Local officials and community leaders/residents are acknowledging the need for data and processes to analyze those data in order to make informed decisions. Rural communities and counties, in particular, have limited tools to help them understand and analyze issues before making policy decisions. In addition they have limited financial resources for accessing tools to assist in understanding and analyzing issues. Land use trends indicate the state’s open country population is increasing. The non-English speaking and the numbers of retirees are increasing. Economic trends indicate many rural economies are becoming less dependent on production agriculture and seeking ways to add value, diversify and build viable communities. Communities increasingly desire to have a clear sense of purpose and direction for the future, being able to make important decisions about community and economic development, and to take proactive measures toward their envisioned future. Funders require a community to have developed a plan as a prerequisite for application for funding. The basis of democracy is for citizens to play an active role. Yet people are not active and it extends beyond apathy towards voting and even running for office. Less people participate in rallies, work in civic groups, and write letters to the newspaper or to public officials. People are less willing to learn how the system works, more inclined to throw up their hands in disgust. Thus when public input is essential for more sustainable solutions to increasingly complex and divisive public issues, the public is not engaged. Much public engagement on public policy issues falls into “announce and defend” where discussions over difficult issues break down into polarized stances, escalating conflict, arguments and “blame.” Frustration mounts as people do not know how to come together, dialogue and deliberate.

### 2. Scope of the Program

- In-State Extension
- Multistate Extension

### Table: Planned Program (Situation and Scope)

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>608</td>
<td>Community Resource Planning and Development</td>
<td>25%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>609</td>
<td>Economic Theory and Methods</td>
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<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>610</td>
<td>Domestic Policy Analysis</td>
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<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>803</td>
<td>Sociological and Technological Change Affecting Individuals, Families</td>
<td></td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>805</td>
<td>Community Institutions, Health, and Social Services</td>
<td></td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>806</td>
<td>Youth Development</td>
<td></td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</tr>
</tbody>
</table>
V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

People have an interest in improving their local community and situation. Community decision-making is best when it involves a broad spectrum of community members in community deliberation. Community decision-making is improved by use of information and analysis of alternatives. An informed citizenry will be more involved in their community. Perspectives of citizens from varying backgrounds add innovative ideas to decision-making. Effective communities have a unique way of understanding how the community educates itself in the community’s business (Kettering Foundation). Involving and working with people is important to accomplishing work that needs to be done.

2. Ultimate goal(s) of this Program

Citizens and decision-makers have the skills, information and tools necessary to engage in public deliberation and problem solving on a wide variety of issues and challenges to create their desired future. This leads to increased capacity of youth and adults, organizations, and communities to address community problems effectively by mobilizing the community resources and assets for common purposes and efficacious local decision making and governance.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<tr>
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<tr>
<td>2013</td>
<td>6.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Form planning committees/advisory panels, facilitate participatory visioning and planning workshops, moderate local issues forums, train moderators and conveners for forums and issue framing, hold community meetings and conduct presentations, gather data and use decision-support tools to analyze alternatives for the community with citizens and decision makers, work with communities to address a specific need or issue. Also work with media; provide analysis, training and consultation for local and state government; work with local officials to provide classroom training for middle school students; facilitate project planning and local government field trips with middle schoolers; and conduct project fairs and other events to highlight middle school learning and civic engagement projects.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-on-One Intervention</td>
<td>Web sites</td>
</tr>
<tr>
<td>Workshop</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>Other 1 (Project Fairs)</td>
</tr>
<tr>
<td>Education Class</td>
<td></td>
</tr>
<tr>
<td>Other 1 (Role Playing and Leading)</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
</tbody>
</table>
3. Description of targeted audience
Targeted audience would be all social groups in the community, including low-income and minority, youth (age 12-14), adults, community leaders, local government and policy making groups, and state and local agencies. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc.

V(G). Planned Program (Outputs)

1. Standard output measures
Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5000</td>
<td>15000</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>2010</td>
<td>5000</td>
<td>15000</td>
<td>300</td>
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<td>2011</td>
<td>5000</td>
<td>15000</td>
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<td>2012</td>
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</tr>
<tr>
<td>2013</td>
<td>5000</td>
<td>15000</td>
<td>350</td>
<td>400</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>0</td>
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</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2010</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
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<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2013</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target
- Number of partners.
  2009 : 150  
  2010 : 150  
  2011 : 150  
  2012 : 150  
  2013 : 150  

- Number of volunteers who assisted.
  2009 : 250  
  2010 : 250  
  2011 : 250  
  2012 : 275  
  2013 : 275  

- Number of communities/organizations using deliberative processes to dialogue or frame public issues.
  2009 : 15  
  2010 : 15  
  2011 : 15  
  2012 : 15  
  2013 : 15  

Report Date 07/23/2008
• Percent of non-White Caucasian participants in programs.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td>%</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target

% of participants reporting they feel they have an increased voice and opportunity to participate in the community.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

1. Outcome Target

Number of communities/organizations developing or updating a plan.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td>%</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

1. Outcome Target

Number of communities reporting engagement in plan/project implementation.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
<tr>
<td>%</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

1. Outcome Target

Number of people reporting taking on increased, different, or new leadership roles in community.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tr>
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</table>

3. Associated Institute Type(s)

• 1862 Extension
4. Associated Knowledge Area(s)
   ● 608 - Community Resource Planning and Development
   ● 805 - Community Institutions, Health, and Social Services
   ● 806 - Youth Development

1. Outcome Target
Number of jobs created by new businesses or business expansion/growth.

2. Outcome Type : Change in Condition Outcome Measure
   2009 : 0 2010 : 0 2011 : 0 2012 : 0 2013 : 0

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
   ● 608 - Community Resource Planning and Development
   ● 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

1. Outcome Target
Number of jobs retained.

2. Outcome Type : Change in Condition Outcome Measure
   2009 : 0 2010 : 0 2011 : 0 2012 : 0 2013 : 0

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
   ● 608 - Community Resource Planning and Development
   ● 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

1. Outcome Target
Number of businesses created.

2. Outcome Type : Change in Condition Outcome Measure
   2009 : 0 2010 : 0 2011 : 0 2012 : 0 2013 : 0

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
   ● 610 - Domestic Policy Analysis
   ● 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
   ● 805 - Community Institutions, Health, and Social Services

1. Outcome Target
Dollar value of savings from more efficient government and organizational performance.
2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
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<th>2009</th>
<th>2010</th>
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</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 610 - Domestic Policy Analysis

1. Outcome Target

Dollar value of new resources leveraged by communities.

2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 - Community Institutions, Health, and Social Services

1. Outcome Target

Number of volunteer hours generated by communities/organizations.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Competing Public priorities
- Government Regulations
- Public Policy changes
- Populations changes (immigration, new cultural groupings, etc.)
- Natural Disasters (drought, weather extremes, etc.)
- Competing Programatic Challenges
- Economy

Description

(NO DATA ENTERED)
V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - After Only (post program)
   - Retrospective (post program)
   - Before-After (before and after program)
   - Case Study
   - During (during program)

Description
(No data entered)

2. Data Collection Methods
   - Case Study
   - Whole population
   - Other (on-line survey)
   - Sampling
   - Observation
   - Tests
   - On-Site

Description
(No data entered)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Food Safety

2. Brief summary about Planned Program
The approach to food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts within the Family Nutrition Education Program curriculum. Opportunities for programming regarding food safety happen sporadically throughout the state. Extension will deliver food safety lessons developed on safe food handling research. Programs include but are not limited to occasional quantity cooks, FNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

3. Program existence: Mature (More than five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>712</td>
<td>Protect Food from Contamination by Pathogenic Microorganisms, Parasites, Toxins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
The need is to protect food from contamination by pathogenic microorganisms 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 with 325,000 cases resulting in hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

2. Scope of the Program
- In-State Extension
- Multistate Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
The majority of successful self-changers unconsciously follow a similar sequence of activities and attitudes. Furthermore, these stages of change remain fairly constant no matter what area of behavior change is being considered. The six stages defined by James Prochaska, Ph.D. and his colleagues are pre-contemplation, contemplation, preparation, action, maintenance and termination. At any point in time, only about 20 percent of the population is ready to make a behavior change i.e., is in the action stage or above. For these individuals, the role of the instructor is to create an environment where active learning can occur so individuals have access to the knowledge, skills and support needed to move from preparing to change to maintaining desired behavior changes. From a programmatic standpoint, educating people who are at the pre-contemplation, contemplation or preparation stage (about 80 percent of the population) involves using educational strategies that increase general awareness and knowledge, raise individual consciousness and knowledge, and change attitudes regarding safe food practices.
2. Ultimate goal(s) of this Program
Decrease the incidence of disease associated with contamination of food resulting from household food handling practices.

V(E). Planned Program (Inputs)
1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
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</tr>
</tbody>
</table>

V(F). Planned Program (Activity)
1. Activity for the Program
Number of Curriculum developed; Number of individual inquiries responded to; Number of trainings for large groups; Number of smaller workshops; Number of guide sheets written; Number of newsletter articles written; Number of media interviews held.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td></td>
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<td>Workshop</td>
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<td>TV Media Programs</td>
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<tr>
<td>Education Class</td>
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<td>Newsletters</td>
</tr>
<tr>
<td>Demonstrations</td>
<td></td>
<td>Web sites</td>
</tr>
<tr>
<td>One-on-One Intervention</td>
<td></td>
<td>Public Service Announcement</td>
</tr>
</tbody>
</table>

3. Description of targeted audience
Pre K–12th grade students, food stamp individuals and households, general adults, older adults, nursing home assistants, daycare providers.

V(G). Planned Program (Outputs)
1. Standard output measures
Target for the number of persons(contacts) to be reached through direct and indirect contact methods
### Direct Contacts Adults

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Indirect Contacts Adults Target</th>
<th>Direct Contacts Youth Target</th>
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<tr>
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<tr>
<td>2013</td>
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</table>

### 2. (Standard Research Target) Number of Patent Applications Submitted

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<thead>
<tr>
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<tbody>
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</table>

### 3. Expected Peer Review Publications

<table>
<thead>
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<th>Extension Target</th>
<th>Total</th>
</tr>
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<tr>
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### V(H). State Defined Outputs

1. Output Target

- **Curriculum.**
  
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<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>0</td>
<td>0</td>
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</tbody>
</table>

- **Individual inquiries.**
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- **Trainings for large groups.**
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>0</td>
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</tr>
</tbody>
</table>

- **Smaller workshops.**
  
<table>
<thead>
<tr>
<th>Year</th>
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<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

- **Guide sheets.**
  
<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tbody>
</table>

- **Newsletter articles.**
Media interviews.

Increased knowledge of proper hand washing.

Outcome Target:
Increased knowledge of proper hand washing.

Outcome Type:
Change in Knowledge Outcome Measure

2009: 0 2010: 0 2011: 0 2012: 0 2013: 0

Associated Institute Type(s):
- 1862 Extension

Associated Knowledge Area(s):
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Increased knowledge of cooking foods adequately.

Outcome Target:
Increased knowledge of cooking foods adequately.

Outcome Type:
Change in Knowledge Outcome Measure

2009: 0 2010: 0 2011: 0 2012: 0 2013: 0

Associated Institute Type(s):
- 1862 Extension

Associated Knowledge Area(s):
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Increased knowledge of avoiding cross-contamination.

Outcome Target:
Increased knowledge of avoiding cross-contamination.

Outcome Type:
Change in Knowledge Outcome Measure

2009: 0 2010: 0 2011: 0 2012: 0 2013: 0

Associated Institute Type(s):
- 1862 Extension

 Associated Knowledge Area(s):
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Increased knowledge of keeping food at a safe temperature.

Outcome Target:
Increased knowledge of keeping food at a safe temperature.

Outcome Type:
Change in Knowledge Outcome Measure

2009: 0 2010: 0 2011: 0 2012: 0 2013: 0

Associated Institute Type(s):
- 1862 Extension

Associated Knowledge Area(s):
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
1. Outcome Target
Increased knowledge of storing foods properly.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

1. Outcome Target
% or # of individuals who indicate an intent to adopt one or more safe food handling practices.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
• Populations changes (immigration, new cultural groupings, etc.)
• Economy
• Natural Disasters (drought, weather extremes, etc.)

Description
Increased immigrant population. Natural disasters especially flooding, tornadoes and severe storms that result in power outages. A lower income audience may tend to hold onto food longer than appropriate.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
• After Only (post program)
• Before-After (before and after program)
• Retrospective (post program)

Description
{NO DATA ENTERED}

2. Data Collection Methods
• Observation
• On-Site
• Unstructured
• Sampling
• Structured
• Whole population

Description
{NO DATA ENTERED}
V(A). Planned Program (Summary)

1. Name of the Planned Program
Forage Production and Management

2. Brief summary about Planned Program
The Forage Production and Management program covers the largest agricultural industry in Missouri. This program endeavors to teach Missouri’s 90,000 forage producers to better manage their forage resources for improved economic return while protecting the environment. The Forage Production and Management program will reach the target audience primarily through the following curricula: management-intensive grazing; pasture-based dairying; year-round grazing management, including winter feeding systems and making use of summer pasture; and fescue toxicosis. The expected outcomes from this program include increased economic development and social viability of rural Missouri. The direct economic impact of this program can be expected to exceed $200,000,000 on an annual basis.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tr>
<td>205</td>
<td>Plant Management Systems</td>
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</tr>
<tr>
<td>307</td>
<td>Animal Management Systems</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>402</td>
<td>Engineering Systems and Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Missouri’s forage-livestock industry is the state’s largest agricultural endeavor. Forage producers use 18 million acres of private lands for grazing, hay production and conservation, and forages are the major land cover for protecting the environment. Forage-livestock enterprises contribute more than $5 billion annually to Missouri’s economy and provide direct income for more than 200,000 citizens. Nationally, Missouri has the second largest cow-calf herd (more than 4 million cows and calves), the second largest number of beef producers and the seventh largest number of dairy farms and is the second largest producer of grass hay. 80% of all feed units for these livestock come from forages. Additionally cattle feeding states including Kansas, Iowa, Nebraska and Oklahoma rely on the genetic base of calves from Missouri. No other agricultural enterprise covers more acres, generates more real income or engages as many citizens. Missouri’s dairy farms are struggling. Since 1991, almost 30% of Missouri’s family dairies have gone bankrupt because of high feed costs, expensive capital investments and low profit margins. According to economic analyses, small dairies could adopt grazing to lower feed costs, minimize capital investments, increase profit margins and protect the environment. A team of agronomists, dairy scientists, veterinarians, economists and rural sociologists will show dairy producers how to use grazing to save their farms. Cow-calf producers in Missouri are among the least cost efficient, which makes them unprofitable when calf prices are low. Nearly half of their potential income is spent for livestock.
feed during January, February and March. Hay represents about 90% of the cost for winter feed. This program emphasizes strategies to lower winter feed costs. Missouri's livestock enterprises often benefit from "management-intensive grazing," a practice that subdivides large pastures into smaller paddocks. These paddocks can be stocked heavily for three to four days, then rested for 30 to 40 days. Research shows small paddocks, when heavily stocked and rested, can greatly improve economic returns and environmental quality. University of Missouri Extension has been a leader in developing a management-intensive grazing curriculum, a curriculum often copied by other states. Missouri's major pasture is tall fescue, most of which is infected with a toxic fungus. The fungus causes fescue toxicosis, the most severe livestock disorder in Missouri and the US; fescue toxicosis costs US livestock producers $900 million annually. MU has the first curriculum-based educational program to address fescue toxicosis through hands-on workshops, new testing technologies and integrated management solutions. Missouri has some of the most erodible soils in the US, leading to sediment contamination of surface waters and loss of valuable topsoil. While many conventional cropping systems are known to have substantial pesticide and nutrient runoff problems, forage systems help mitigate these problems. Well-managed forage systems reduce surface runoff and act as filters which have a positive impact on the environment, especially on water quality.

2. Scope of the Program

- Multistate Extension
- Integrated Research and Extension
- In-State Extension
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The nature of the industry is a highly competitive one. Competition from other domestic and foreign markets plays a significant role in determining product pricing. For this enormous industry to remain competitive, University of Missouri’s Extension programs should focus largely on improved management practices that help Missouri producers reduce their cost of production while preventing environmental damage. Only in this way can the industry survive in the long term.

2. Ultimate goal(s) of this Program

The goal of the Forage Production and Management Program is to teach Missouri’s 90,000 forage producers to better manage their forage resources for improved economic return and to protect the environment. This will ultimately enhance the economic and social viability of rural Missouri.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th></th>
<th></th>
<th>Research</th>
</tr>
</thead>
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</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Forage Production and Management will use multiple delivery methods to reach the target audience: regional three-day schools on management-intensive grazing; pasture-based dairying core group meeting and “pasture walks”; winter feeding systems and summer pasture program using demos, clinics, and tours. Fescue toxicosis and management workshops; Missouri Forage and Grassland Council Forage Conference; field days at outlying research centers; MU forage websites and multistate websites.
(cooperating with Oregon State University), electronic guides; CDs with prepared presentations; in-service training (ISEs) for regional staff; news releases for the general public; and popular press articles.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Other 2 (Tours)</td>
<td>● Web sites</td>
</tr>
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<td></td>
<td>● One-on-One Intervention</td>
<td>● Other 1 (Press Releases)</td>
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<tr>
<td></td>
<td>● Other 1 (Conferences)</td>
<td>● Newsletters</td>
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<td></td>
<td>● Workshop</td>
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<td>● Demonstrations</td>
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<td>● Education Class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Group Discussion</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of target audience

The primary target audience includes Missouri forage and livestock producers. These are mainly producers of beef and dairy cattle, although the program does address forages for other livestock, such as sheep, goats and horses, and nonlivestock forage producers, such as hay producers and wildlife conservationists. The program also targets industry and government, as it presents current science, technology and training to agricultural business and policymakers.

V (G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
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<tr>
<td>2013</td>
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</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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<th>Year</th>
<th>Target</th>
</tr>
</thead>
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</tr>
<tr>
<td>2013</td>
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</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<tr>
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</tbody>
</table>
V(H). State Defined Outputs

1. Output Target

- Provide in-service training session(s) for regional Extension specialists on an annual basis.
  
<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

- Develop or revise guide sheets on an annual basis for regional Extension specialists to use in producer meetings.
  
<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
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<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

- Revise Missouri publication M168, Missouri Dairy Grazing Manual.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target

Nine hundred (900) producers will annually attend a management-intensive grazing (MiG) school.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 307 - Animal Management Systems

1. Outcome Target

Five thousand (5,000) Missouri producers will increase their awareness of stockpiling and summer pasture management for beef cattle.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 307 - Animal Management Systems
- 402 - Engineering Systems and Equipment

1. Outcome Target

Two hundred (200) Missouri farmers will increase their knowledge of fescue toxicosis.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)
1. Outcome Target

Five thousand (5,000) producers will stockpile forage and develop specific pastures for summer grazing.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Action Outcome Measure</th>
</tr>
</thead>
<tbody>
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<td>2011</td>
<td>5000</td>
</tr>
<tr>
<td>2012</td>
<td>5000</td>
</tr>
<tr>
<td>2013</td>
<td>5000</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 307 - Animal Management Systems

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Government Regulations
- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes

Description
External factors that play a significant role include BSE, domestic and foreign competition, weather events (drought, cold, heat, etc.), governmental regulations, and other technological developments.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Case Study
- Before-After (before and after program)
- After Only (post program)
- During (during program)

Description
The pasture-based dairy program is planning a structured survey that will measure forage management, cow management, economic milestones and quality of life.

2. Data Collection Methods

- Mail
- On-Site
- Observation
- Sampling

Description
We are conducting surveys for the pasture-based dairy producers and for the winter feeding and summer pasture programs. We are also acquiring data from the Missouri Department of Natural Resources. Finally, we are collecting seed sales data from MFA and other major suppliers.
V(A). Planned Program (Summary)

1. Name of the Planned Program
Home Horticulture and Environment

2. Brief summary about Planned Program
There is increasing awareness of the physical and psychological benefits people receive from gardening. However, success with gardening requires some basic knowledge about selection, planting and care of plants. Gardening with insufficient information may result in failure, wasted money, physical injury and environmental degradation from soil erosion or misuse of pesticides. This program is designed to provide home gardeners with research-based horticultural information. Through Master Gardener training, youth education (Garden ‘N Grow), workshops, demonstration plantings, newsletters, press releases and other methods, gardeners will gain information that will allow them to reap the benefits of maintaining healthy turf, ornamental, fruit and vegetable plantings while being good stewards of the environment.

3. Program existence: Mature (More than five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Appraisal of Soil Resources</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>205</td>
<td>Plant Management Systems</td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>211</td>
<td>Insects, Mites, and Other Arthropods Affecting Plants</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>212</td>
<td>Pathogens and Nematodes Affecting Plants</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>213</td>
<td>Weeds Affecting Plants</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>216</td>
<td>Integrated Pest Management Systems</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Gardening is the most popular hobby in the U.S. There is a growing awareness both among the general public and health professionals of the importance of plants to physical and psychological well-being. In addition to aesthetic improvements in the...
home environment, planting of turf, trees, shrubs, perennials and flowers provides exercise and a sense of accomplishment, reduces energy costs and adds value to the home. Fresh fruits and vegetables produced in home gardens are a healthy supplement to the diets of many Missourians. Gardening also fulfills a need on the part of people several generations removed from the farm to work with the soil. The benefits of gardening to quality of life can be realized by people of all ages and income levels. Young people can learn a great deal about agriculture and gain a sense of responsibility and accomplishment from participating in gardening, either as a family or in project-oriented activities. Older people get exercise, enjoyment and a sense of purpose from working with plants. Working people benefit greatly from the relaxation and stress relief they derive from gardening activities. The growth of the Master Gardener program is indicative of the great demand for horticultural information. There are more than 2,000 active Master Gardeners in Missouri working in 110 counties. Access to high-quality horticultural information is crucial for a broad spectrum of Missourians to take advantage of the many benefits of gardening. Unbiased research-based information on selecting, planting, and maintaining fruit, vegetable and ornamental species around the home is a key element in gardening success. Additionally, information on effective and environmentally responsible pest management strategies around the home is extremely important, not only to ensure gardening success, but also to prevent damage to human health and the environment.

2. Scope of the Program
- Multistate Extension
- In-State Research
- Integrated Research and Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

There are multiple sources of horticultural information. Too many of Missouri’s citizens must rely on their neighbors, garden centers, home improvement stores, magazines and broadcast media for most of their information on gardening. In many instances, employees in garden centers are not well trained in horticulture and get much of their information from suppliers of the plants and pest control products they sell. University of Missouri Extension is one of only a few Missouri sources of unbiased information on gardening. But for Extension to remain a reliable source of information, it must be able to react quickly and be able to reach many highly dispersed consumers. Dissemination of high-quality, unbiased, research-based horticultural information to a broad spectrum of Missourians would allow tens of thousands more of the state’s citizens to reap the benefits of improved gardening success. This effort would also significantly reduce the risk of environmental degradation due to improper use of pesticides by homeowners.

2. Ultimate goal(s) of this Program

Individuals with an interest in gardening will become more aware of the importance of plants in people’s lives and will be able to select varieties of fruits, vegetables and ornamentals best adapted to Missouri conditions. They will increase their understanding of the basics of plant health care, including soils, pruning, fertilization, and management of disease problems and common insect pests in and around the home. Nursing home managers will become more aware of the potential for horticultural plants to improve the quality of life for residents and will adopt Horticultural Therapy programs. The University of Missouri Extension Home Horticulture and Environment program will contribute to the beautification of Missouri communities to an increased sense of community pride. More Missourians of all ages and income levels will lead more active, fulfilled lives and will enjoy improved mental and physical health. More Missourians will have a sense of connection with nature.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program
### 1. Activity for the Program

Some of the major activities under this program are Master Gardener training (core course), advanced Master Gardener training, Garden 'N Grow training and workshops for garden center employees. Other activities include the Plants of Merit and HortLine programs in cooperation with Missouri Botanical Gardens, homeowner workshops, Lifespan Learners Series, Responsible Home Horticulture Series, booths at home shows and fairs, Plant a Row for the Hungry, Horticulture Therapy in Nursing Homes and the Home*A*Syst Program.

### 2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Workshop</td>
<td>Other 2 (Exhibits)</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>Other 1 (News Releases)</td>
</tr>
<tr>
<td>Education Class</td>
<td>Web sites</td>
</tr>
<tr>
<td></td>
<td>TV Media Programs</td>
</tr>
</tbody>
</table>

### 3. Description of targeted audience

The ultimate target audience of this program is individuals with an interest in gardening. However, to reach this diverse and highly dispersed audience, MU Extension will need to use several community multipliers of information. One highly important audience will be the Master Gardener volunteers. After receiving training, Master Gardeners contribute volunteer hours to assist with dissemination of horticultural information through speaking engagements, workshops, information booths, youth programs, Extension Center hot lines, demonstration plantings and other activities. Youth groups including 4-H are another important target audience. Many young people will enroll in the Garden 'N Grow program.

### V(G). Planned Program (Outputs)

#### 1. Standard output measures

**Target for the number of persons (contacts) to be reached through direct and indirect contact methods**
2009 University of Missouri Extension Plan of Work

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>6000</td>
<td>10000</td>
<td>500</td>
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</tr>
<tr>
<td>2010</td>
<td>6000</td>
<td>10000</td>
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<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>6000</td>
<td>10000</td>
<td>500</td>
<td>0</td>
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<tr>
<td>2012</td>
<td>6000</td>
<td>10000</td>
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<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>10000</td>
<td>15000</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2012</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Provide in-service training session(s) for regional Extension specialists on an annual basis.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

- Develop or revise guide sheets a year for regional extension specialists to use in producer meetings.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

- Print and electronic newsletters devoted to pest and horticulture crop management will be developed and distributed to regional specialists and other clientele.
  
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td></td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target

Master Gardeners, garden center employees, retired persons and home gardeners will increase their knowledge of basic plant growth, fertility, plant care, varieties, diseases.
2. Outcome Type : Change in Knowledge Outcome Measure


3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 101 - Appraisal of Soil Resources
• 205 - Plant Management Systems
• 211 - Insects, Mites, and Other Arthropods Affecting Plants
• 212 - Pathogens and Nematodes Affecting Plants
• 213 - Weeds Affecting Plants
• 216 - Integrated Pest Management Systems

1. Outcome Target
Nursing home managers will become more aware of the potential for horticultural therapy to improve the quality of life for residents.

2. Outcome Type : Change in Knowledge Outcome Measure

2009 : 0 2010 : 0 2011 : 0 2012 :0 2013 : 0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 101 - Appraisal of Soil Resources
• 205 - Plant Management Systems
• 211 - Insects, Mites, and Other Arthropods Affecting Plants
• 212 - Pathogens and Nematodes Affecting Plants
• 213 - Weeds Affecting Plants
• 216 - Integrated Pest Management Systems

1. Outcome Target
4-H members & youth will improve their gardening skills and awareness of where food comes from through the Garden & Grow program.

2. Outcome Type : Change in Knowledge Outcome Measure


3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 101 - Appraisal of Soil Resources
• 205 - Plant Management Systems
• 211 - Insects, Mites, and Other Arthropods Affecting Plants
• 212 - Pathogens and Nematodes Affecting Plants
• 213 - Weeds Affecting Plants
1. **Outcome Target**
Increase the number of Missourians participating in gardening activities.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tr>
<td></td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
<td>3300</td>
<td>3500</td>
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</table>

3. **Associated Institute Type(s)**
• 1862 Extension

4. **Associated Knowledge Area(s)**
- 101 - Appraisal of Soil Resources
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems

1. **Outcome Target**
Increase the number of new Master Gardeners completing the core training.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
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<th>2012</th>
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<td>250</td>
<td>250</td>
<td>250</td>
<td>500</td>
<td>350</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**
• 1862 Extension

4. **Associated Knowledge Area(s)**
- 101 - Appraisal of Soil Resources
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems

1. **Outcome Target**
Increase use of soil sampling and plant diagnostic services by home gardeners.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td></td>
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<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**
• 1862 Extension

4. **Associated Knowledge Area(s)**
- 101 - Appraisal of Soil Resources
- 205 - Plant Management Systems
1. **Outcome Target**

Increase the number of Master Gardener volunteer hours and contacts.

2. **Outcome Type**

   **Change in Action Outcome Measure**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
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<th>2012</th>
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<tr>
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<td>2500</td>
<td>2500</td>
<td>3000</td>
<td>3000</td>
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</table>

3. **Associated Institute Type(s)**

   • 1862 Extension

4. **Associated Knowledge Area(s)**

   - 101 - Appraisal of Soil Resources
   - 205 - Plant Management Systems
   - 211 - Insects, Mites, and Other Arthropods Affecting Plants
   - 212 - Pathogens and Nematodes Affecting Plants
   - 213 - Weeds Affecting Plants
   - 216 - Integrated Pest Management Systems

**V(J). Planned Program (External Factors)**

1. **External Factors which may affect Outcomes**

   - Competing Programatic Challenges
   - Competing Public priorities
   - Natural Disasters (drought, weather extremes, etc.)

   **Description**
   
   (NO DATA ENTERED)

**V(K). Planned Program (Evaluation Studies and Data Collection)**

1. **Evaluation Studies Planned**

   - During (during program)
   - Retrospective (post program)
   - Before-After (before and after program)

   **Description**
   
   (NO DATA ENTERED)

2. **Data Collection Methods**

   - Sampling
   - Mail
   - On-Site
   - Tests

   **Description**
   
   (NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
   Improving Communications

2. Brief summary about Planned Program
   Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of communications. Program staff will facilitate learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth-serving organizations to gain skills to promote children’s communication skills.

3. Program existence: New (One year or less)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Youth Development</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
   4-H Youth Development is the largest non-formal U.S. youth development program that ties public and private resources to the single purpose of supporting the positive and successful development of youth. In a recent study of Missouri 4-H camp participants and their parents, youth report and parents concur youth gained skills to communicate and to work with others in a group. In addition, youth learned to make friends, respect each other and resolve differences. All 4-H youth development programs provide opportunities for youth to learn and/or improve communication skills. Learning communication skills enhances learning, fosters interpersonal skills and facilitates leading groups. Command of communication skills by youth is essential for their contribution to the civic and economic leadership of communities. Missouri citizens expressed their concerns through the University of Missouri Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

2. Scope of the Program
   - In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
   When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision-making and act responsibly; and positively influence their communities and beyond. On-going caring relationships are essential to positive youth development.

2. Ultimate goal(s) of this Program
   Through opportunities afforded by the 4-H Youth Development program, youth will learn or enhance communications skills to foster
learning, healthy interpersonal skills and facilitate leading groups.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th></th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>1890</td>
<td>1862</td>
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<tr>
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<td>3.7</td>
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</tr>
<tr>
<td>2012</td>
<td>3.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2013</td>
<td>3.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Communication Toolkit: Fun Skill-Building Activities to do with Kids; Clowning project, judging, demonstration, exhibition; Public Speaking; Theatre Arts project, judging, demonstration, exhibition; Demonstration learning methodology; Oral reasons for project judging.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other 1 (Exhibition, Judging, Field Trips)</td>
<td>TV Media Programs</td>
</tr>
<tr>
<td>Other 2 (Camps, Educational Events)</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Workshop</td>
<td></td>
</tr>
<tr>
<td>Demonstrations</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
<tr>
<td>One-on-One Intervention</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 5 - 19.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods
### 2009 University of Missouri Extension Plan of Work

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1200</td>
<td>2500</td>
<td>8000</td>
<td>15000</td>
</tr>
<tr>
<td>2010</td>
<td>1300</td>
<td>2600</td>
<td>8500</td>
<td>15000</td>
</tr>
<tr>
<td>2011</td>
<td>1400</td>
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<td>18000</td>
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<td>2012</td>
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<td>3000</td>
<td>9500</td>
<td>18000</td>
</tr>
<tr>
<td>2013</td>
<td>1600</td>
<td>3000</td>
<td>10000</td>
<td>18000</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

<table>
<thead>
<tr>
<th>Year</th>
<th>Expected Patent Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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</tr>
<tr>
<td>2010</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
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<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0</td>
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<td>2011</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Number of youth enrolled in communication projects and educational events.
  
  2009: 7000  
  2010: 7500  
  2011: 7500  
  2012: 8000  
  2013: 0

- Attendance of project leaders at workshops for educational methods and communication projects.
  
  2009: 125  
  2010: 150  
  2011: 175  
  2012: 200  
  2013: 250

- Number of youth participating in camps, educational events and afterschool.
  
  2009: 7500  
  2010: 7500  
  2011: 7500  
  2012: 7500  
  2013: 7500

- Number of hits on website.
  
  2009: 20000  
  2010: 20000  
  2011: 20000  
  2012: 20000  
  2013: 20000

V(I). State Defined Outcome

1. Outcome Target

4,000 youth will competently demonstrate knowledge and skills gained through demonstrations, oral reasons and/or public speaking.
2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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</tr>
<tr>
<td>2010</td>
<td>4000</td>
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<tr>
<td>2011</td>
<td>4000</td>
</tr>
<tr>
<td>2012</td>
<td>4000</td>
</tr>
<tr>
<td>2013</td>
<td>4000</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 806 - Youth Development

1. Outcome Target
A sample of 400 youth who have participated in state 4-H educational events incorporating communications (oral reasons, demonstrations, public speaking, etc.) will report incorporating skills in other educational and/or leadership situations.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>400</td>
</tr>
<tr>
<td>2010</td>
<td>400</td>
</tr>
<tr>
<td>2011</td>
<td>400</td>
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<tr>
<td>2012</td>
<td>400</td>
</tr>
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<td>2013</td>
<td>400</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Public Policy changes
- Appropriations changes
- Populations changes (immigration, new cultural groupings, etc.)
- Competing Programatic Challenges
- Economy
- Competing Public priorities
- Government Regulations
- Natural Disasters (drought, weather extremes, etc.)

Description
The ability to provide volunteer training and educational experiences for youth is dependent on having a well educated, motivated local and state faculty.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- During (during program)
- Other (Educational Events)
- Retrospective (post program)
- After Only (post program)

Description
At the county and state level, youth will demonstrate communication skills and be evaluated against established criteria.

2. Data Collection Methods
● On-Site
● Mail
● Structured
● Portfolio Reviews
● Whole population
● Observation
● Sampling

Description
At the county and state level, youth will demonstrate knowledge and be evaluated against established criteria.
1. Name of the Planned Program

Individual Wastewater Systems-Implications for a New Rural Generation

2. Brief summary about Planned Program

University of Missouri Extension is working with other agencies to provide installers, real estate professionals, and home-loan inspectors with research-based information on the function of on-site septic systems, use of alternative systems, and how soils play an important role in site selection. More than 1,200 on-site sewage installers have received certification through the Missouri Department of Health for attending on-site classes. Over 500 real estate professionals and home-loan inspectors have attended classes to improve their skills at identifying and evaluating on-site sewage systems before land transfers take place. On-site sewage installers, lending institutions, real estate professionals and home-loan inspectors are in need of research-based information about on-site sewage systems. The training allows them to perform their inspections and installation of on-site sewage systems more effectively. University of Missouri Extension has developed a program directly aimed at teaching the basics of on-site sewage systems and how these issues affect each of their professions. Real estate professionals and appraisers can receive six hours of professional education credits (PECs) for attending the class, and home inspectors and wastewater professionals can receive 4.5 hours of PECs toward their continued education needs.

3. Program existence: Intermediate (One to five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

7. Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Soil, Plant, Water, Nutrient Relationships</td>
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<td></td>
<td>15%</td>
<td>1862 Extension</td>
</tr>
<tr>
<td>111</td>
<td>Conservation and Efficient Use of Water</td>
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<td></td>
<td>5%</td>
<td>1890 Extension</td>
</tr>
<tr>
<td>112</td>
<td>Watershed Protection and Management</td>
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<td></td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>133</td>
<td>Pollution Prevention and Mitigation</td>
<td></td>
<td></td>
<td>20%</td>
<td>1862 Research</td>
</tr>
<tr>
<td>723</td>
<td>Hazards to Human Health and Safety</td>
<td></td>
<td></td>
<td>30%</td>
<td>1890 Research</td>
</tr>
<tr>
<td>803</td>
<td>Sociological and Technological Change Affecting Individuals, Familial</td>
<td></td>
<td></td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(C). Planned Program (Situation and Scope)

1. Situation and priorities
As public awareness of environmental issues increases, more emphasis is being placed on water quality and human health. County deliberative assessments, facilitated by University of Missouri Extension, show increased interest in having access to reliable, current information about wastewater management and on-site sewage systems. This increase in public awareness for human and environmental health has led to increased regulations for protecting Missouri’s water resources through both the Missouri Department of Natural Resources and the Missouri Department of Health. These new regulations require on-site sewage system installers and inspectors to obtain continuing education units so they are current with the latest information and technologies relating to the installation and operation of on-site sewage systems. As new technologies for on-site systems are developed, installers and home inspectors must have access to an up-to-date, reliable source of information. New technologies have been created to target nonpoint pollution sources. DNA source tracking is now being used to determine the source and amount of pollution in water bodies in an affected area. To decrease liability issues, lending institutions rely on a closer working relationship between home inspectors and local Health Departments in evaluating on-site sewage systems on older homes that are being sold or refinanced. This trend has extended to the new home market where new homes are being built in environmentally sensitive areas. Homeowners wanting to be closely associated with natural beauty may need to select their home-site based on proper on-site sewage disposal or be willing to spend larger sums of money to install alternative systems that will effectively treat wastewater.

2. Scope of the Program
   - In-State Extension

(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
The Individual Wastewater Systems program has several driving forces that affect programming. New state regulations for on-site sewage systems must be met by all new systems being installed. Increased awareness of environmental and human health issues associated with improper on-site sewage system operation is driving the need for more information and knowledge. Many lending institutions are requiring an inspection and evaluation of on-site sewage systems before lending money on a property transfer. All these issues are helping drive the need for educational programs concerning on-site sewage systems, how to determine appropriate systems based on soil type, location and new regulations.

2. Ultimate goal(s) of this Program
The long-term goal of this program is to reduce the risk to human and environmental health by having properly functioning on-site sewage systems for every household. These systems would be designed in accordance with state regulations to reduce the risk to human health and to prevent degrading of water quality.

(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>0.0</td>
</tr>
<tr>
<td>2010</td>
<td>2.1</td>
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</tr>
<tr>
<td>2011</td>
<td>2.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>2012</td>
<td>2.1</td>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2013</td>
<td>2.1</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
</tbody>
</table>
V(F). Planned Program (Activity)

1. Activity for the Program
Field days will be offered to show how to properly install and maintain on-site sewage systems. A core curriculum is developed for training in on-site sewage system basics and site selection. Workshops will be offered to increase awareness and skills for selection of on-site systems and site location. Professional education credit classes will be offered to keep real estate professions, home inspectors and installers updated and trained on the latest technologies and alternative systems available. Media (printed, radio, television coverage) are used to increase awareness of programs and classes.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Discussion</td>
<td></td>
<td>● Newsletters</td>
</tr>
<tr>
<td>Education Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience
The primary audience for this program is on-site sewage system installers, inspectors, home-loan inspectors, lenders, real estate appraisers and real estate professionals. This course is being offered to agency personnel to assist them in understanding site selection limitations and alternative on-site systems that can be used in environmentally sensitive areas.

V(G). Planned Program (Outputs)

1. Standard output measures
Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
<td>500</td>
<td>1500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>500</td>
<td>1500</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2011</td>
<td>500</td>
<td>1500</td>
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<td>0</td>
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<tr>
<td>2012</td>
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<td>2000</td>
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<td>0</td>
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<tr>
<td>2013</td>
<td>600</td>
<td>2000</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2009 : 0
2010 : 0
2011 : 0
2012 : 0
2013 : 0

3. Expected Peer Review Publications
## State Defined Outputs

### 1. Output Target

- A core curriculum will be produced and used for the PEC courses.
  - \[2009 : 6 \quad 2010 : 6 \quad 2011 : 6 \quad 2012 : 8 \quad 2013 : 4\]

- University of Missouri Extension will offer classes totaling between 4.5 and 6 hours of professional education credit each year for real estate professionals, home building inspectors, and others.
  - \[2009 : 6 \quad 2010 : 6 \quad 2011 : 6 \quad 2012 : 6 \quad 2013 : 3\]

- Evaluations will be given at each training session to determine the effectiveness of the course.
  - \[2009 : 6 \quad 2010 : 6 \quad 2011 : 6 \quad 2012 : 6 \quad 2013 : 3\]

### State Defined Outcome

1. Outcome Target

Five hundred (500) on-site sewage installers, real estate professionals, home inspectors and agency personnel will increase their awareness and knowledge related to on-site sewage technologies.

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation

1. Outcome Target

Five hundred (500) class participants will incorporate information about human health risk and environmental quality when evaluating site selection and on-site system design during inspections and land transfers.

2. Outcome Type: Change in Action Outcome Measure

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
1. Outcome Target

In areas of class participation, on-site systems will be installed under latest guidelines that protect environmental quality through reduced wastewater nutrients in surface and groundwater supplies.

2. Outcome Type: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1200</td>
</tr>
<tr>
<td>2010</td>
<td>1100</td>
</tr>
<tr>
<td>2011</td>
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</tr>
<tr>
<td>2012</td>
<td>1400</td>
</tr>
<tr>
<td>2013</td>
<td>1500</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Government Regulations
- Populations changes (immigration, new cultural groupings, etc.)
- Competing Public priorities

Description

Citizens respond to the need for installation and operation of on-site systems based on the economic viability of their community and on their awareness of environmental quality and health concerns. Many times environment and health take a back seat to other needs driven by economic issues. As new homes are constructed and older homes are sold, regulations are forcing older systems to be brought into compliance to reduce risks associated with human pathogens in wastewater. Historically, older systems that may not be functioning properly have been grandfathered in without re-inspection or testing. Changes in regulations and public priorities can accelerate the adoption of properly functioning on-site systems and prevent continued use of older systems not in compliance with new regulations. Population shifts have caused a dramatic increase in new housing in many rural areas. New homes are required to meet minimum compliance standards set by the state and will force all on-site sewage systems being installed to meet human health and environmental protection standards.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)

Description

Class evaluations will be used to determine how people will use the information and to learn whether the course met their goals and expectations. Evaluations will also be used to determine if changes are needed in the course. As regulations change for on-site sewage issues – for both the human health area and the water quality area, the course will be re-evaluated to determine the need for updates and more technical information.

2. Data Collection Methods

- On-Site

Description

Except for evaluations completed by participants, no data collection is anticipated at this time. Water quality monitoring will be conducted by either the Missouri Department of Natural Resources or the Department of Health and Senior Services. In those
areas where the course has been offered, information will be collected for the number of on-site systems installed or improved to meet regulatory requirements.
V(A). Planned Program (Summary)

1. Name of the Planned Program
Missouri Crop Management Systems

2. Brief summary about Planned Program
The Missouri Crop Management Systems program of University of Missouri Extension will use multiple delivery methods to target a broad range of learners on various aspects of 21st century sustainable crop production. The major overriding goal for the program is to change the behavior of Missouri producers and improve their management systems to remain economically competitive. Additionally, the program is intended to motivate producers to implement practices that will minimize their impact on the environment. These research-based educational programs will assist these learners to improve all aspects of their crop management over a diverse range of crops, soils, farm sizes, and crop management options. Some major learning needs addressed through this program include: Knowledge of available information sources and how to use them in selecting the best crop genetics; Knowledge of the complex interactions between management choices, including crop choice, planting date, seeding rate, tillage, nutrient management, soil management, pest management and harvest management; Knowledge of how areas covered by other Integrated Crop Management programs (plant protection, genetically improved crops, identity-preserved crops, precision agriculture) fit together and fit into the overall crop production picture; Knowledge of the limitations of different sources of information used in crop management decisions.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Soil, Plant, Water, Nutrient Relationships</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>Protect Soil from Harmful Effects of Natural Elements</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>205</td>
<td>Plant Management Systems</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>405</td>
<td>Drainage and Irrigation Systems and Facilities</td>
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<td></td>
<td></td>
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<tr>
<td>512</td>
<td>Quality Maintenance in Storing and Marketing Non-Food Products</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 100%

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Nearly 80 percent of Missouri’s 29 million acres are devoted to crop and rangeland. Agricultural cash receipts total about $4 billion.
annually, making agriculture one of the top two industries in Missouri. Nearly half of agricultural cash receipts come from crop sales, and receipts from animal sales depend heavily on the production of feed crops not counted in cash receipts. Studies have repeatedly documented that crop management practices affecting production costs and production levels are the main determinants of profitability. Improvements in crop management systems will enhance economic viability for most Missourians and not just those directly involved in agriculture. Because land use in Missouri is dominated by agriculture, crop management systems have a significant impact on the environment, especially on water quality. Missouri has some of the most erodible soils in the U.S., leading to sediment contamination of surface waters and loss of valuable topsoil. Improved crop management systems have led to reduced erosion rates over the past 20 years, but erosion rates are still higher than the rate of topsoil formation, and sediment is still one of the most serious sources of water quality impairment. Nutrients and pesticides originating from agriculture also can adversely affect water quality. Thus, improvements in crop management practices and systems are essential to sustaining a healthy environment. With a wide range of crops (Missouri ranks in the top twelve states for seven different crops), soils, farm sizes, and production practices available, cropping systems in Missouri are diverse and complex. University of Missouri Extension expertise is well suited for educational programming spanning this diversity. Crop producers choose from an enormous range of management options. The goal of this program is to help producers make choices that will improve their crop management systems and keep Missouri’s agricultural economy strong while protecting natural resources. Disseminating results of Missouri-based crop research is a fundamental mechanism that will enable the program to meet this goal. Crop producers and crop service providers are often highly motivated to change their behaviors and improve their management systems to remain economically competitive. They are also increasingly motivated by a desire to minimize their impact on the environment. Educational programming is needed to help translate these motives into improved management that meets individual goals and contributes to the economic viability of Missouri. Improvements need to be made in all aspects of crop management over a diverse range of crops, soils, farm sizes and crop management options. Current crop production systems are sophisticated and have been honed through global competition, so only up-to-date information based on appropriate (usually local) research is useful for guiding behavior changes.

2. Scope of the Program
   - Integrated Research and Extension
   - In-State Research
   - In-State Extension
   - Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
Missouri’s crops are produced in a highly competitive industry. This competition occurs at local, state, regional and global levels. Successful entities are economically viable even when profit margins are small. Competition is beneficial to consumers because it sharpens production efficiency, but it means that crop producers must be constantly upgrading their production systems. University of Missouri Extension is one of only a few Missouri sources of unbiased information on crop production and management. But for Extension to continue to be an effective source of information, it must be able to respond quickly to rapidly changing influences. New crop management systems, including agroforestry and production of alternative crops or crops for niche markets, will become more accepted as knowledge increases. Sound science from carefully designed experiments, knowledgeable personnel, and efficient means of disseminating information are essential if Extension is to meet its responsibility to enhance economic development in all segments and regions of Missouri.

2. Ultimate goal(s) of this Program
Crop producers and their advisers would not only be aware of the latest research related to crop, water, and soil management, but also would learn appropriate techniques of using that information to build efficient crop management systems. Examples of cropping systems components include, but are not limited to, cultivar selection, appropriate crop rotations, harvesting techniques, optimal nutrient management, reduced soil erosion and pest management practices based on scouting. The ultimate goal is to sustain an economically viable crop production industry in Missouri while reducing potential negative impacts of crop production systems on the environment. This will enhance the economic and social viability of rural and urban Missouri.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE SYs to be budgeted for this Program
1. Activity for the Program

Campus-based and region-based faculty members will conduct several regional workshops and short courses in partnership with commodity groups and private industry. Venues include commodity district meetings, soil and crop conferences, Ag Science Week, regional short courses, field days, and demonstration projects. University of Missouri variety performance evaluations will be conducted in more than 40 locations.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>• One-on-One Intervention</td>
<td>• Newsletters</td>
</tr>
<tr>
<td>• Demonstrations</td>
<td>• Web sites</td>
</tr>
<tr>
<td>• Other 2 (Clinics)</td>
<td></td>
</tr>
<tr>
<td>• Education Class</td>
<td></td>
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<tr>
<td>• Other 1 (Conferences)</td>
<td></td>
</tr>
<tr>
<td>• Group Discussion</td>
<td></td>
</tr>
<tr>
<td>• Workshop</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

The primary target audiences are crop producers and their advisers. Programs will be developed for crop producers with a diversity of farm sizes, crops produced and land resource bases. Crop advisers and service providers are important targets because of their extensive contact with crop and livestock producers, which makes them ideal intermediates in passing on University of Missouri Extension programming to a wider range of producers than could be reached by Extension personnel alone. Because the future of Missouri agriculture depends on young professionals replacing retiring farmers and personnel, youth organizations such as FFA, 4-H, Young Farmers, and their teachers will receive specially designed programs.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods
### Target Direct Contacts Adults

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Year</th>
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### Target Indirect Contacts Adults

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### Target Direct Contacts Youth

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<th>Target</th>
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<th>Target</th>
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### Target Indirect Contacts Youth

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</table>

#### 2. (Standard Research Target) Number of Patent Applications Submitted

**Expected Patent Applications**

- **2009**: 0
- **2010**: 0
- **2011**: 0
- **2012**: 0
- **2013**: 0

#### 3. Expected Peer Review Publications

<table>
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<tr>
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<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<tr>
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</tr>
</tbody>
</table>

#### V(H). State Defined Outputs

1. **Output Target**

- Provide in-service training session(s) for regional Extension specialists on an annual basis.
  
  - **2009**: 2
  - **2010**: 2
  - **2011**: 2
  - **2012**: 2
  - **2013**: 2

- Develop or revise guide sheets annually for regional Extension specialists to use in producer meetings.
  
  - **2009**: 10
  - **2010**: 10
  - **2011**: 5
  - **2012**: 10
  - **2013**: 10

- Develop or revise manuals on an annual basis for regional Extension specialists to use in producer meetings.
  
  - **2009**: 2
  - **2010**: 2
  - **2011**: 2
  - **2012**: 2
  - **2013**: 2

- Print and electronic newsletters devoted to pest and crop management will be developed and distributed to regional specialists and other clientele.
  
  - **2009**: 24
  - **2010**: 24
  - **2011**: 24
  - **2012**: 24
  - **2013**: 24

#### V(I). State Defined Outcome

1. **Outcome Target**

Producers and crop advisors improve their knowledge related to crop management practices and systems such as new cultivars, pest control, IPM, and new practices.
Crop producers will improve their knowledge and implementation related to the various soil.  

Crop producers will learn proper irrigation management.  

Average yields and production efficiencies will increase. (Source: Missouri Agricultural Statistics Service and USDA/ERS)
4. Associated Knowledge Area(s)
   - 102 - Soil, Plant, Water, Nutrient Relationships
   - 104 - Protect Soil from Harmful Effects of Natural Elements
   - 205 - Plant Management Systems
   - 405 - Drainage and Irrigation Systems and Facilities
   - 512 - Quality Maintenance in Storing and Marketing Non-Food Products

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
   - Competing Programmatic Challenges
   - Economy
   - Natural Disasters (drought, weather extremes, etc.)
   - Appropriations changes
   - Government Regulations
   - Public Policy changes

Description
{NO DATA ENTERED}

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - Case Study
   - Before-After (before and after program)
   - Time series (multiple points before and after program)
   - During (during program)

Description
{NO DATA ENTERED}

2. Data Collection Methods
   - Mail
   - On-Site
   - Case Study
   - Sampling
   - Structured

Description
{NO DATA ENTERED}
V(A). Planned Program (Summary)

1. Name of the Planned Program
Missouri Master Wildlifer

2. Brief summary about Planned Program
The Missouri Master Wildlifer Program was developed to meet the need for educational programs that enable private landowners and managers to make informed decisions regarding the wise stewardship and conservation of wildlife and the habitats on which it depends. The program will provide an educational framework for disseminating research-based information on managing Missouri's wildlife resource on private lands. Learners will find the program invaluable in highlighting alternative management approaches for wildlife in a variety of habitats, including forests, farms and urban settings. The first phase of the Missouri Master Wildlifer Program will consist of eight sessions delivered live on the University of Missouri interactive television (ITV) network to eight sites throughout the state. All sessions will be offered on a tape-delayed basis for those sites that do not have ITV capability. The second phase of the program will build on the first series of topics. A regional Extension specialist can facilitate a "Conservation Education Advisory Council" with identified "conservation partners" at the local or regional level to plan a series of six or seven locally led educational events.

3. Program existence: Intermediate (One to five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

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<tr>
<th>KA Code</th>
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<th>%1890 Extension</th>
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<th>%1890 Research</th>
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<td>5%</td>
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</tr>
<tr>
<td>135</td>
<td>Aquatic and Terrestrial Wildlife</td>
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<tr>
<td>605</td>
<td>Natural Resource and Environmental Economics</td>
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<td>Total</td>
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</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Citizens own about 95 percent of the land in Missouri and therefore are responsible for managing most of the state's natural resource base, including forests, agricultural lands, prairies and grasslands, wetlands, streams and other natural habitats. Abundant natural resources, renewable and nonrenewable alike, provide for agricultural and forestry production and recreational opportunities which are directly or indirectly responsible for the majority of the economic activity within Missouri. Biological resources have important economic, aesthetic, ecological, recreational and scientific values. Populations of fish and wildlife and their habitats are essential for maintaining biological diversity. They contribute significantly to local economies, are fundamental elements of urban and rural communities, and are integral to the quality of life for all Missourians. The habitats upon which Missouri's biological resources depend are influenced by land use changes and the management decisions made by private landowners. Although targeted state and federal conservation programs have met with some success, these "conservation partners" have determined that a need exists for the development of educational programs that enable private landowners and
managers to make informed decisions regarding the wise stewardship and conservation of the wildlife resource and the habitats upon which they depend.

2. Scope of the Program
   - Integrated Research and Extension
   - Multistate Extension
   - In-State Extension
   - In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
The Missouri Master Wildlifer Program has documented a continuously rising demand among private landowners for research-based information on the management of the fish and wildlife resource and for information on wildlife economics and associated wildlife recreation opportunities. Over 80 percent of the 400 participants involved in the Missouri Master Tree Farmer Program indicated that wildlife considerations were a primary incentive for land ownership and expressed the need for additional training in managing their property for wildlife. Through a statewide deliberative process, Extension councils and invited community leaders across the state helped verify that environmental concerns and the stewardship of the state’s natural resources were important to Missourians. Over 75 percent of the state’s 6 million residents have participated in outdoor activities involving fish and wildlife. The sales tax supporting conservation programs demonstrates the state’s citizens continue to expect improved management of these natural resources. Missouri Master Wildlifer will work because of the strong partnership already in place between University of Missouri Extension and various divisions within the Missouri Department of Conservation (MDC). With no regional natural resource Extension specialists in the county Extension centers, the state forestry and fisheries and wildlife Extension specialists have, in the past, relied heavily on MDC field personnel to help deliver distance learning programs such as Master Tree Farmer and Master Wildlifer. The state Extension specialists facilitated teams across the state where MDC provided the on-site technical expertise and MU Extension specialists contributed their expertise in conducting adult learning sessions. This partnership has met with great success, particularly as Missouri has ranked among the top states in number of participants and course evaluations for these programs.

2. Ultimate goal(s) of this Program
Participants will gain the knowledge and necessary skills to enhance habitat for a variety of wildlife species to meet their particular land management objectives. In addition, an increasing number of landowners will gain an appreciation and an improved understanding of wildlife management concepts and implement practices that benefit the wildlife resource within agricultural and forested landscapes and in both rural and urban settings.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
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</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program
Develop curriculum-based Missouri Master Wildlifer Program Reference Manual, presentations and support materials, including assessment and evaluation tools, marketing strategies and promotional materials. Provide in-service training (ISE) for regional
natural resource program coordinators. Collaborate with various "conservation partners" in the delivery of the short course. These partners might include natural resource professionals with the MDC, NRCS, Soil and Water Conservation Districts and volunteers selected from various nonprofit conservation organizations (such as Conservation Federation of Missouri, Quail Unlimited, Wild Turkey Federation, Ducks Unlimited, Isaac Walton League).

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-on-One Intervention</td>
<td>●</td>
<td>● Web sites</td>
</tr>
<tr>
<td>Education Class</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Demonstrations</td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

The short course is designed for citizens and private landowners interested in integrating wildlife considerations into their current land use and management activities.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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<th>2010 :0</th>
<th>2011 :0</th>
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<th>2013 :0</th>
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3. Expected Peer Review Publications

<table>
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</tbody>
</table>
V(H). State Defined Outputs

1. Output Target

- Provide training session for Extension specialists at the annual statewide Extension meeting. This will include Missouri Woodland Steward and Missouri Master Naturalist.
  

- Provide annual in-service training (ISE) session for regional natural resource program coordinators. This will include Missouri Woodland Steward.
  

- Coordinate delivery of a growing number of short courses to private landowners at selected locations across Missouri.
  

V(I). State Defined Outcome

1. Outcome Target

50 percent of participants will increase their knowledge of wildlife ecological principles.

2. Outcome Type: Change in Knowledge Outcome Measure

  2009:0  2010:0  2011:0  2012:0  2013:0

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 131 - Alternative Uses of Land
- 135 - Aquatic and Terrestrial Wildlife

1. Outcome Target

50 percent of participants will increase their knowledge of habitat assessment techniques.

2. Outcome Type: Change in Knowledge Outcome Measure

  2009:0  2010:0  2011:0  2012:0  2013:0

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 131 - Alternative Uses of Land
- 135 - Aquatic and Terrestrial Wildlife

1. Outcome Target

50 percent of participants will increase their knowledge of benefits of improved wildlife habitat.

2. Outcome Type: Change in Knowledge Outcome Measure

  2009:0  2010:0  2011:0  2012:0  2013:0

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)
1. Outcome Target
50 percent of participants will increase their knowledge of wildlife habitat improvement practices.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Change in Knowledge</th>
</tr>
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<tbody>
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</table>

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 131 - Alternative Uses of Land
   • 605 - Natural Resource and Environmental Economics

1. Outcome Target
50% of participants will increase their knowledge of various technical assistance, professional services and resources available to achieve their wildlife management objectives through the MDC, NRCS, and private wildlife and land management consultants.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Change in Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2013</td>
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</table>

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 131 - Alternative Uses of Land
   • 605 - Natural Resource and Environmental Economics

1. Outcome Target
30 percent of participants will engage in at least one wildlife habitat improvement practice after six months.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Change in Action</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 131 - Alternative Uses of Land
   • 135 - Aquatic and Terrestrial Wildlife

1. Outcome Target
30 percent of participants will improve their capability to manage the wildlife resource on their property and, as a result, their potential for achieving ecological, economic and social benefits.
2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
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</table>

3. **Associated Institute Type(s)**
   - 1862 Extension

4. **Associated Knowledge Area(s)**
   - 131 - Alternative Uses of Land
   - 605 - Natural Resource and Environmental Economics

1. **Outcome Target**

   50 percent of participants will increase the economic value of their property by integrating management practices that enhance wildlife habitat with ongoing agricultural, forestry, recreational or related natural resource enterprises.

2. **Outcome Type**: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
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</tbody>
</table>

3. **Associated Institute Type(s)**
   - 1862 Extension

4. **Associated Knowledge Area(s)**
   - 131 - Alternative Uses of Land
   - 135 - Aquatic and Terrestrial Wildlife
   - 605 - Natural Resource and Environmental Economics

1. **Outcome Target**

   50% of MU Extension and "conservation partner" teams collaborate in the development of additional Missouri Master Wildlife or wildlife-related programming to meet the educational needs of private landowners and other audiences within the community.

2. **Outcome Type**: Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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3. **Associated Institute Type(s)**
   - 1862 Extension

4. **Associated Knowledge Area(s)**
   - 131 - Alternative Uses of Land
   - 135 - Aquatic and Terrestrial Wildlife

1. **Outcome Target**

   50 percent of participants completing wildlife habitat improvement practices will see a corresponding increase in the population of target species.

2. **Outcome Type**: Change in Condition Outcome Measure

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3. **Associated Institute Type(s)**
   - 1862 Extension

4. **Associated Knowledge Area(s)**
   - 131 - Alternative Uses of Land
   - 135 - Aquatic and Terrestrial Wildlife
   - 605 - Natural Resource and Environmental Economics
V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes

Description

Natural disasters (e.g., drought, floods, early or late freezes) could result in a population decline of the targeted wildlife species or a setback in creating suitable wildlife habitat. This could possibly discourage participants from sticking with their plans and lead to no improvement in their natural resources. However, more important than natural disasters are the man-made disasters of a poor economy or reduced federal or state appropriations. Natural resource improvement practices are often viewed as luxuries that disappear in a weak economy. The other man-made disaster of authorizing, yet underfunding (and in some cases zero funding) various incentive programs has the potential of leaving private landowners confused and distrustful of any government assistance program. This is why it is imperative the Missouri Master Wildlifer Program impress upon landowners the need to do something now and not depend upon others for help.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Description

The evaluation studies planned are straightforward in that they will measure immediate knowledge gain through pre- and post-testing. The time series will seek voluntary feedback from participants through a mail-in survey about what (if any) wildlife management practices they have implemented on their property and an assessment of improved wildlife habitat.

2. Data Collection Methods

- On-Site
- Mail

Description

No explanation is necessary.
1. Name of the Planned Program
Missouri Woodland Steward

2. Brief summary about Planned Program
Missouri Woodland Steward is an interactive short course designed to help private landowners identify the woodland habitats they want, describe what they have and introduce them to basic forest and wildlife management concepts and practices. The short course helps them begin to develop a plan over a collaborative process with other landowners attending the short course and introduces them to their local natural resource professional, who will serve as a coach in preparing and implementing their plan. The short course will be a series of four, two-hour sessions provided to University of Missouri regional Extension specialists in a DVD format. Each session will be a mix of studio presentations and field video clips. Interaction among participants and the local coordinators will be strongly encouraged. The short course will conclude with a Saturday field trip at each local site. This field exercise will serve as a capstone to reinforce the concepts and techniques presented in the classroom.

3. Program existence: New (One year or less)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
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V(C). Planned Program (Situation and Scope)

1. Situation and priorities
According to the 2004 U.S. Forest Service’s National Woodland Owner Survey, there are more than 350,000 family-owned forests in Missouri. Collectively, these private citizens own about 85 percent of the state’s 14 million acres of forestland. While on an area basis the number of family forests smaller than 100 acres equals the number of forested parcels larger than 100 acres, the number of landowners (329,000) disproportionately lies in the former group. One-third of these family-owned forests are part of the family farm. Of the two-thirds not part of a farm, 70 percent are part of the primary residence. The top five reasons given by survey participants for owning forest land were, in order of importance: aesthetics, part of a home or farm, family legacy, wildlife, and land investment. While wood products were not listed as a reason to own their land, nearly 40 percent of these landowners have conducted harvesting operations on some scale at some time. Further, less than 10 percent of these landowners have a
management plan or have sought professional help in managing their natural resources. The timber resources and associated products from Missouri forests contribute over $3 billion to the state's economy. Also, an estimated 94 percent of the wood used by the state's forest products industry comes from Missouri forests and, conservatively, represents $133 million per year paid to landowners statewide in the form of stumpage prices (Missouri Department of Conservation). At the same time, most of the forests in Missouri contain about 35 percent what is known as cull material that is unusable by industry for wood products. This high percentage is due to overcrowded, unhealthy forests that are the culmination of yesterday's abusive land use practices and today's lack of proper management. Statewide, landowners can expect to receive an average of 17 cents per board-foot for white oak sawlogs but about $1.70 per board-foot for white oak veneer logs (Missouri Timber Pricing Trends, Oct-Dec 2001). Under proper management, forest and individual tree quality can be improved creating increased value and income potential to landowners. If landowners could be persuaded to put their forest stands under management, increased prices would result and marketing of wood products could become a factor in the revitalization of rural communities in the forested regions of the state. Proper management of these family-owned forests is vital to sustaining Missouri's natural resources and high quality of life. These forest resources provide for viable ecosystems that support biological diversity and wildlife habitat. Woodland ecosystems contribute significantly to local economies and are fundamental elements of urban and rural communities. They are integral to the quality of life for all the citizens of the state. Missourians expect a safe and healthy environment and agricultural and forestry industries that serve as stewards of the natural resource base. Expanded educational programs are needed to help these family-owned forest landowners make informed decisions about the wise stewardship and conservation of their woodlands.

2. Scope of the Program

- In-State Extension
- Multistate Extension

\(V(D).\) Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The foundation of Edward L. Deci and Richard M. Ryan's self-determination theory (1985) is that adult learners need to feel competent, autonomous and connected. This short course supports each premise. Scripted presentations coordinated with demonstrations by landowners from across Missouri enabled participants in a pilot short course to feel they could perform the practices themselves. This competency building leads to a level of autonomy that empowers the participants to begin the long journey of improving the natural resources on their property. This short course connects landowners not only with other landowners, but also with their local natural resource professionals. Through the collaborative learning process among landowners and the coached planning that a professional can provide to a group at one time in a single location leverages the state’s resources for landowner education. Missouri Woodland Steward can be effective because of the strong partnership already in place between University of Missouri Extension and various divisions of the Missouri Department of Conservation (MDC). Because there are no regional natural resource Extension specialists in the county Extension centers, the state forestry and fisheries and wildlife Extension specialists have, in the past, relied heavily on MDC field personnel to help deliver distance learning programs such as Master Tree Farmer and Master Wildlifer. State Extension specialists facilitated teams across the state where MDC provided the on-site technical expertise and University of Missouri Extension specialists contributed their expertise in conducting adult learning sessions. This partnership has been highly successful in the 13 states participating in the aforementioned programs, and Missouri ranks among the top states in number of participants and course evaluations.

2. Ultimate goal(s) of this Program

The ultimate goal of the Missouri Woodland Steward Program is improvement of the area's natural resource base as measured by 1) an increase in the sustainable flow of value-added forest products, 2) an improvement in targeted wildlife habitat and species, and 3) an improvement in the water quality of those watersheds in the managed landscape.

\(V(E).\) Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program
V(F). Planned Program (Activity)

1. Activity for the Program

Develop a curriculum-based DVD product containing indoor session presentations and support materials, including assessment and evaluation tools, marketing strategies and promotional materials. Provide in-service training (ISE) for regional natural resource program coordinators. Partner with Missouri Department of Conservation resource foresters and private land conservationists in the delivery of the short course.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
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<tbody>
<tr>
<td>Other 1 (Collaborative Learning)</td>
<td>Newsletters</td>
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<tr>
<td>Demonstrations</td>
<td>Web sites</td>
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<td>Group Discussion</td>
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<tr>
<td>Education Class</td>
<td></td>
</tr>
<tr>
<td>One-on-One Intervention</td>
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</tbody>
</table>

3. Description of targeted audience

The target audience is resident and absentee landowners who own 10 acres or more and are interested in improving the natural resource base of their property.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods
2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
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3. Expected Peer Review Publications

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V(H). State Defined Outputs

1. Output Target

- Provide training session for Extension specialists at the annual statewide Extension meeting. This will include Missouri Master Wildlifer and Missouri Master Naturalist.
  
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<tr>
<th>Year</th>
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<tr>
<td>2013</td>
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</table>

- Provide in-service training (ISE) session for regional natural resource program coordinators. This will include Missouri Master Wildlifer and Missouri Master Naturalist.
  
<table>
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<th>Research Target</th>
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<tr>
<td>2013</td>
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</table>

- Coordinate delivery of short courses to private landowners at selected locations across Missouri.
  
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<th>Extension Target</th>
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V(I). State Defined Outcome

1. Outcome Target

50 percent of participants will increase their knowledge of forest ecology.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
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<tbody>
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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 135 - Aquatic and Terrestrial Wildlife
- 605 - Natural Resource and Environmental Economics

1. Outcome Target

50 percent of participants will increase their knowledge of forest management.
2. Outcome Type: Change in Knowledge Outcome Measure

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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 605 - Natural Resource and Environmental Economics

1. Outcome Target

50 percent of participants will increase their knowledge of wildlife ecological principles.

2. Outcome Type: Change in Knowledge Outcome Measure

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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 135 - Aquatic and Terrestrial Wildlife
- 605 - Natural Resource and Environmental Economics

1. Outcome Target

50 percent of participants will increase their knowledge of wildlife habitat improvement practices.

2. Outcome Type: Change in Knowledge Outcome Measure

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<th>2012</th>
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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources
- 135 - Aquatic and Terrestrial Wildlife
- 605 - Natural Resource and Environmental Economics

1. Outcome Target

30 percent of participants will have a management plan in place after six months.

2. Outcome Type: Change in Action Outcome Measure

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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources
- 135 - Aquatic and Terrestrial Wildlife
1. Outcome Target
30 percent of participants will have engaged in at least one forest and/or wildlife improvement practice after six months.

2. Outcome Type: Change in Action Outcome Measure

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   - 123 - Management and Sustainability of Forest Resources
   - 605 - Natural Resource and Environmental Economics

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
   - Economy
   - Appropriations changes
   - Natural Disasters (drought, weather extremes, etc.)

Description
Natural disasters (e.g., drought, floods, early or late freezes) could result in tree planting failures or unsuccessful conversion of abandoned fields to warm-season grasses. This could possibly discourage participants from sticking with their management plans and lead to no improvement in their natural resources. Limited funding of government programs such as Forest Land Enhancement Program (FLEP) has resulted in limiting the number of private landowners/areas receiving incentive payment to implement approved program practices. The Missouri Woodland Steward Program will educate landowners how not only to develop and implement their forest and wildlife management plan but reasoning and value of implementing the plan with or without incentive payments.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - Time series (multiple points before and after program)
   - Before-After (before and after program)

Description
The evaluation studies planned are straightforward in that they will measure immediate knowledge gain through pre- and post-testing. The time series will seek voluntary feedback from participants through a mail-in survey about what (if any) natural resource management practices they have implemented on their property.

2. Data Collection Methods
   - Mail
   - On-Site

Description
(NO DATA ENTERED)
(A). Planned Program (Summary)

1. Name of the Planned Program
MO-PORK: Increasing Pork Production in Missouri

2. Brief summary about Planned Program
The MO-PORK program will continue to work with Missouri Pork Producers in applied research and education practices resulting in application of management protocols and strategies to improve nutrient utilization, reproductive efficiency and management of swine. This includes diet formulation, feeding management, nutrient utilization, gilt development, management of the lactating and early weaned sow, boars in artificial insemination systems, alternative feed ingredients, evaluation of new feed ingredients, grain quality, antibiotic alternatives, animal welfare, evaluations of feeders and livestock waterers. Work will be aimed at impacts of early pig performance on future production efficiencies (pigs per sow per year, cost of production, whole herd feed efficiencies) as well as the more immediate measures such as piglet weaning weights, death loss, pigs weaned per sow, and growth performance. Additionally, work will move toward understanding and abatement of seasonally impaired reproduction in females and males and establishing diet formulations aimed at optimizing nutrient requirements for pigs during all phases of the life cycle. The MO-PORK program will evaluate feeds and ration management practices as well as provide detailed recommendations for producers to implement in their specific pork operations. Adopting more efficient feed management practices will assist Missouri pork producers to enhance the profitability and viability of their operations. The ability of pork producers to adopt feed management recommendations and implement the associated technologies depends on the genetic background of the pigs, facility design, labor required, financial constraints and the management goals of the pork operation. The MO-PORK program works closely with regional Extension livestock specialists and progressive swine producers in Missouri who request Extension programs to help improve production performance, such as optimizing nutrient requirements with particular emphasis on phase feeding practices and increasing pregnancy rates.

3. Program existence: Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage
<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
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<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tbody>
<tr>
<td>301</td>
<td>Reproductive Performance of Animals</td>
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<td>302</td>
<td>Nutrient Utilization in Animals</td>
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<td>40%</td>
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<td>303</td>
<td>Genetic Improvement of Animals</td>
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<td>Environmental Stress in Animals</td>
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V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Over 100 million pigs are produced for slaughter in the U.S. annually. Hog inventories in Missouri have experienced a downward trend since the 1940s. The decline in the number of swine operations is even more dramatic, as Missouri has gone from a peak of 63,000 operations in 1967 to 3,100 operations in 2001. 71 percent of the operations (45,000) left the industry between 1967 and 1987, before entry of any of the large-scale integrated producers. Currently, 260 swine enterprises are responsible for 84 percent of Missouri’s production. In addition Missouri currently exports 3 million feeder pigs for finishing in surrounding states. If only half of these pigs were finished in Missouri, more than $80 million of annual economic activity would occur within the state during the first five years, excluding the economic activity and benefits associated with any processing that might also be attracted to the state. Traditional pork producers with 100 to 600 sows in a farrow-finish enterprise are often overwhelmed with the growth statistics of swine operations in the top 10 percent. For many producers, the prospect of competing with a system that includes 2,500-sow farrowing sites, associated nursery sites and numerous finishing locations is too much to contemplate. These traditional swine producers know their costs of production are competitive, but they remain confused as to their abilities to make appropriate strategic decisions regarding the direction of their swine enterprise. In addition the use of artificial insemination has increased from less than 25 percent to more than 85 percent in the past 10 years. This coupled with tighter profit margins, has led producers to provide much higher levels of management to the farms. In most cases boars are housed in separate facilities where they can be provided optimal management, but there is little data to identify optimal management. This is because traditionally boars were only used for natural mating and sperm production was more than adequate. Artificial insemination allows a single boar to be used in mating 10 to 20 times as many sows as can be mated naturally. This allows the use of superior boars but also means inadequate identification of merit will result in the more widespread use of inferior boars. Another measure of production efficiency is feed efficiency because feed cost represents about 70 percent of the total cost of pork production. Any feed management practice that
will improve growth performance and feed efficiency enhances pork producers’ profit margins. Other pork production issues of
importance to producers are ensuring a quality food product; product safety from terrorism; prevention of disease outbreaks;
antibiotic feeding restrictions; neighborhood acceptance of swine operations; health of employees, owners, pigs and the public;
labor shortages; and lack of quality and skills in labor. Therefore, producers need to be continually educated and challenged to
adopt new technologies. Otherwise, they may opt to leave the pork production industry due to the increasing costs of
environmental regulations, limited market access and the smaller profit margins.

2. Scope of the Program
   - In-State Research
   - In-State Extension
   - Integrated Research and Extension
   - Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
   Pork producers are interested in improving efficiency through improved management. They are rapidly incorporating proven
   production technologies. There is little public funding for applied research, and much of that work is done by individual farms. Some
   producers will share their data if asked but are not motivated to do so on their own. If producers receive guidance in design of
   "on-farm trials" it is possible one producer’s applied research can provide valuable information for other producers. The MO-Pork
   program will be focused in regions of Missouri where swine production is a priority. Thirty-seven counties in Missouri (37/114, 32%)
   listed swine production as a priority program for their county in the FY00-03 Plan of Work, which suggests the potential for these
counties to benefit from participation in the MO-Pork program. In addition, 79 counties (69%) in Missouri during 2000 had more
than 5,000 head marketed annually (Missouri Farm Facts, 2001). These additional 42 counties in Missouri will also be targeted
areas for the MO-Pork program as there is opportunity for improvement and increased pork production due to community
acceptance.

2. Ultimate goal(s) of this Program
   The MO-Pork program will benefit Missouri citizens through knowledge, skills, practices and policies that enhance the economic
viability and profitability of participating Missouri producers. The overall program goal of MO-Pork is to improve the competitiveness
and diversity of Missouri swine production enterprises, which will increase the number and types of swine enterprises in operation
and the net value of those swine enterprises. Benefits of MO-Pork participants and the state of Missouri generally include
educational and technical materials that promote prosperity amid the rapid structural changes in the U.S. swine industry.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
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<tr>
<td>2010</td>
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<tr>
<td>2011</td>
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<td>0.0</td>
</tr>
<tr>
<td>2012</td>
<td>4.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2013</td>
<td>4.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program
   The MO-Pork program will include the following activities: Promotion of efficient production and management practices (Pork
Industry Handbook, MU guide sheets and Midwest Plan Service Handbooks); Use of Manual 144/202 “The Missouri System of
Swine Production”; On-farm data collection used to evaluate production and economic endpoints; Focused Management Schools
for MO-Pork participants, artificial insemination course, Back to the Basics: Farrowing School, Sow Manager’s Conference, Pigs to Plate: Adventures in Meat Quality Seminar, Health Summit, finishing short course, nursery management course, ventilation short course; Delivery of Pork Quality Assurance Program for MO-Pork participants; Delivery of new technologies in the swine industry to MO-Pork participants; Computer models/PDA record keeping programs; World Pork Expo and other conferences; Education about niche production markets and specialization opportunities; Media coverage of the MO-Pork program; Farm visits; On-farm research trials; Workshops; Meetings; and Consultation.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Workshop</td>
</tr>
<tr>
<td></td>
<td>Education Class</td>
</tr>
<tr>
<td></td>
<td>Demonstrations</td>
</tr>
<tr>
<td></td>
<td>One-on-One Intervention</td>
</tr>
<tr>
<td></td>
<td>Group Discussion</td>
</tr>
<tr>
<td>Indirect Methods</td>
<td>Newsletters</td>
</tr>
<tr>
<td></td>
<td>Web sites</td>
</tr>
<tr>
<td></td>
<td>Other 1 (News Releases)</td>
</tr>
<tr>
<td></td>
<td>Other 2 (Guides)</td>
</tr>
</tbody>
</table>

3. Description of targeted audience

The target audience will include people who own swine operations, work on swine farms, or provide technical support to people who own or work on swine farms (e.g., veterinarians, feed dealers). In addition, MO-Pork will target beginning Missouri pork producers, expanding Missouri pork producers, and industry personnel such as Missouri grain producers (interested in adding value to their crops).

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
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<td>750</td>
<td>400</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
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<td>750</td>
<td>400</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>750</td>
<td>750</td>
<td>400</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>500</td>
<td>1000</td>
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<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>500</td>
<td>1000</td>
<td>500</td>
<td>0</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Expected Peer Review Publications
V(H). State Defined Outputs

1. Output Target

- Provide in-service training session(s) for regional Extension specialists on an annual basis.
  
  2009: 1  
  2010: 2  
  2011: 1  
  2012: 2  
  2013: 1

- Develop or revise guide sheets on an annual basis for regional Extension specialists to use in producer meetings.
  
  2009: 1  
  2010: 1  
  2011: 2  
  2012: 2  
  2013: 4

- Develop or revise manual(s) on an annual basis for regional Extension specialists to use in producer meetings.
  
  2009: 1  
  2010: 1  
  2011: 1  
  2012: 1  
  2013: 0

V(I). State Defined Outcome

1. Outcome Target

Participants will maintain or increase pork production efficiencies, enhance marketing opportunities resulting in improved economic viability and profitability for their operation.

2. Outcome Type: Change in Action Outcome Measure

  2009: 0  
  2010: 0  
  2011: 800  
  2012: 0  
  2013: 0

3. Associated Institute Type(s)

  • 1862 Extension

4. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 305 - Animal Physiological Processes
- 306 - Environmental Stress in Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 315 - Animal Welfare/Well-Being and Protection

1. Outcome Target

Participants will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices or emerging technology to improve pork production efficiency and productivity.
2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 305 - Animal Physiological Processes
- 306 - Environmental Stress in Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 315 - Animal Welfare/Well-Being and Protection

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Public Policy changes
- Appropriations changes
- Economy
- Government Regulations
- Competing Programatic Challenges

Description

(NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Case Study
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)

Description

(NO DATA ENTERED)

2. Data Collection Methods

- Observation
- Sampling
- Structured
- On-Site
- Whole population
- Mail
- Case Study
- Unstructured
Description

(NO DATA ENTERED)
1. Name of the Planned Program
Nutrition, Health and Physical Activity

2. Brief summary about Planned Program
Provide nutrition and health education for adults and youth ages 3 through 18. Current programming includes: Dining with Diabetes, Health for Every Body, Stay Strong Stay Healthy, Fitness and Wellness of a Lifetime, Show-Me Shape-Up, Missouri on the Move, Jump Into Action, Food Power, Food Stamp Nutrition Education, Expanded Nutrition Education and local programs related to chronic disease prevention and management. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management. Additional programming needs include expanding programs related to physical activity, food purchasing/preparation, disordered eating, and a healthful approach to weight management. Ongoing collaboration with community agencies and organizations, such as the Department of Elementary and Secondary Education and Department of Health and Senior Services, will be used to help promote educational programs.

3. Program existence: Mature (More than five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

7. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>703</td>
<td>Nutrition Education and Behavior</td>
<td></td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>724</td>
<td>Healthy Lifestyle</td>
<td></td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>806</td>
<td>Youth Development</td>
<td></td>
<td>25%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 100%

8. Planned Program (Situation and Scope)

1. Situation and priorities
Available research data from CDC supports increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains in adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Obesity can place a person at an increased risk for chronic health problems including heart disease, stroke, diabetes, and some forms of cancer. In Missouri, 62 percent of adults are overweight or obese, and 32 percent of youth grades 6-8 are overweight or at risk for becoming overweight. In addition poor eating habits and physical inactivity also contribute to chronic health problems. Research data shows that 80 percent of Missouri adults and 85 percent of Missouri youth consume less than 5 fruits and vegetables per day; and 84 percent of youth drank less than 3 glasses of milk a day. Furthermore, 55 percent of Missouri adults report they do not engage in the recommended 30 minutes of physical activity five or more days of the week; 24 percent of adults reported that they did not participate in any physical activity in the last month. As for Missouri youth, 72 percent participated in insufficient moderate physical activity and 67 percent did not attend physical education class daily. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease. Based on available data, program priorities must be
on providing adults and youth with the knowledge and skills needed to promote healthful eating and develop a life-long interest in physical activity.

2. Scope of the Program
   - Multistate Extension
   - In-State Extension
   - Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
   The majority of successful self-changers unconsciously follow a similar sequence of activities and attitudes. Furthermore, these stages of change remain fairly constant no matter what area of behavior change is being considered. The six stages defined by James Prochaska, Ph.D. and his colleagues are pre-contemplation, contemplation, preparation, action, maintenance, and termination. At any point in time, only about 20 percent of the population is ready to make a behavior change, i.e., is in the action stage or above. For these individuals, the role of the instructor is to create an environment where active learning can occur so individuals have access to the knowledge, skills and support needed to move from preparing to change to maintaining desired behavior changes. From a programmatic standpoint, educating people who are at the pre-contemplation, contemplation or preparation stage (about 80 percent of the population) involves using educational strategies that increase general awareness and knowledge, raise individual consciousness and knowledge, and change attitudes. From a system’s perspective, improving health status, not only involves promoting individual behavior change, but building the capacity of communities to support individual behavior change efforts. Our educational programs are built on best practices of adult and youth education, focusing on the stages of change theory and emphasize experiential learning in such areas as food tasting and preparation, physical activity, hand washing and positive body image. Past evaluation data supports positive behavior changes have occurred as a result of our current programs.

2. Ultimate goal(s) of this Program
   Fewer risk factors for nutrition-related health problems and chronic diseases affected by diet and physical activity. Fewer complications of chronic diseases affected by diet, physical activity and selfcare management. Decreased community barriers to adoption of healthy lifestyle practices.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2010</td>
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<td>2012</td>
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<tr>
<td>2013</td>
<td>19.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program
   Use direct and indirect methods to provide education and targeted messages on nutrition, physical activity, and selfcare management. Some specific methods used will include group education, workshops, train-the-trainer strategies, newsletters, web-based education, and media efforts. In addition there will be community level interventions through partnerships that will be developed. This will include working with local coalitions to develop awareness campaigns.
2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-on-One Intervention</td>
<td></td>
<td>Web sites</td>
</tr>
<tr>
<td>Education Class</td>
<td></td>
<td>Newsletters</td>
</tr>
<tr>
<td>Demonstrations</td>
<td></td>
<td>Public Service Announcement</td>
</tr>
<tr>
<td>Workshop</td>
<td></td>
<td>TV Media Programs</td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Contacts Adults</td>
<td>Direct Contacts Youth</td>
<td>Indirect Contacts Youth</td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Adults, youth ages 3 through 18, low-income Missourians, pregnant women, adults 55 and older, volunteers, teachers and community members, school teachers and nurses, other adults interested in improving their quality of life.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
<td>15000</td>
<td>25000</td>
<td>200000</td>
<td>10000</td>
</tr>
<tr>
<td>2010</td>
<td>15000</td>
<td>25000</td>
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</tr>
<tr>
<td>2013</td>
<td>15000</td>
<td>25000</td>
<td>200000</td>
<td>10000</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2009 : 0  2010 : 0  2011 : 0  2012 : 0  2013 : 0

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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</tr>
<tr>
<td>2010</td>
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<td>2012</td>
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<td>0</td>
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</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Number of program participants (gender and ethnicity).
2009:0 2010:0 2011:0 2012:0 2013:0

- **Number of programs held.**
  

- **Number of newsletters distributed.**
  

- **Number of partnerships formed.**
  
2009:100 2010:100 2011:100 2012:100 2013:100

- **Number of community campaigns conducted.**
  

- **Number of PSAs developed.**
  
2009:0 2010:0 2011:0 2012:0 2013:0

- **Number of PSAs used.**
  
2009:0 2010:0 2011:0 2012:0 2013:0

- **Web usage.**
  

- **Number of volunteers trained.**
  

- **Number of guide sheets distributed.**
  

V(I). State Defined Outcome

1. **Outcome Target**
   Improved attitudes about health eating and physical activity (percent).

2. **Outcome Type :** Change in Knowledge Outcome Measure
   

3. **Associated Institute Type(s)**
   • 1862 Extension

4. **Associated Knowledge Area(s)**
   • 703 - Nutrition Education and Behavior
   • 724 - Healthy Lifestyle
   • 806 - Youth Development
1. **Outcome Target**

Percent of participants who exhibit increased awareness/knowledge of physical activity recommendations for health.

2. **Outcome Type**: Change in Knowledge Outcome Measure

   - **2009**: 35
   - **2010**: 40
   - **2011**: 50
   - **2012**: 55
   - **2013**: 60

3. **Associated Institute Type(s)**

   - 1862 Extension

4. **Associated Knowledge Area(s)**

   - 703 - Nutrition Education and Behavior
   - 724 - Healthy Lifestyle
   - 806 - Youth Development

1. **Outcome Target**

Percent of participants who exhibit increased awareness/knowledge of healthy food choices.

2. **Outcome Type**: Change in Knowledge Outcome Measure

   - **2009**: 35
   - **2010**: 40
   - **2011**: 50
   - **2012**: 55
   - **2013**: 60

3. **Associated Institute Type(s)**

   - 1862 Extension

4. **Associated Knowledge Area(s)**

   - 703 - Nutrition Education and Behavior
   - 724 - Healthy Lifestyle
   - 806 - Youth Development

1. **Outcome Target**

Percent of participants who exhibit improved skill in selecting healthy foods.

2. **Outcome Type**: Change in Knowledge Outcome Measure

   - **2009**: 35
   - **2010**: 40
   - **2011**: 50
   - **2012**: 55
   - **2013**: 60

3. **Associated Institute Type(s)**

   - 1862 Extension

4. **Associated Knowledge Area(s)**

   - 703 - Nutrition Education and Behavior
   - 724 - Healthy Lifestyle
   - 806 - Youth Development

1. **Outcome Target**

Increased self efficacy about managing chronic conditions.

2. **Outcome Type**: Change in Knowledge Outcome Measure

   - **2009**: 0
   - **2010**: 0
   - **2011**: 0
   - **2012**: 0
   - **2013**: 0

3. **Associated Institute Type(s)**

   - 1862 Extension

4. **Associated Knowledge Area(s)**
1. Outcome Target

Percent of participants who report improved skills in preparation of healthy foods.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of participants who report improved skills in preparation of healthy foods.</td>
<td>35</td>
<td>40</td>
<td>50</td>
<td>55</td>
<td>60</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 806 - Youth Development

1. Outcome Target

Awareness among private and public sector leaders about nutrition related challenges of individuals and families.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness among private and public sector leaders about nutrition related challenges of individuals and families.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 806 - Youth Development

1. Outcome Target

Involvement of community groups to address nutrition challenges/issues of individuals and families.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement of community groups to address nutrition challenges/issues of individuals and families.</td>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 806 - Youth Development

1. Outcome Target

Adopt one or more healthy food/nutrition practices.
2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
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</table>

3. **Associated Institute Type(s)**

   • 1862 Extension

4. **Associated Knowledge Area(s)**

   - 703 - Nutrition Education and Behavior
   - 724 - Healthy Lifestyle
   - 806 - Youth Development

1. **Outcome Target**

Begin or increase physical activity.

2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
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</table>

3. **Associated Institute Type(s)**

   • 1862 Extension

4. **Associated Knowledge Area(s)**

   - 703 - Nutrition Education and Behavior
   - 724 - Healthy Lifestyle
   - 806 - Youth Development

1. **Outcome Target**

Learner tries and accepts new foods.

2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
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<th>2012</th>
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<tr>
<td><strong>Change</strong></td>
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</table>

3. **Associated Institute Type(s)**

   • 1862 Extension

4. **Associated Knowledge Area(s)**

   - 703 - Nutrition Education and Behavior
   - 724 - Healthy Lifestyle
   - 806 - Youth Development

1. **Outcome Target**

Coalitions formed to address dietary quality and physical activity issues for individuals and families.
1. **Outcome Target**
Increase participation in regular physical activity.

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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<td>0</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**
   • 1862 Extension

4. **Associated Knowledge Area(s)**
   • 703 - Nutrition Education and Behavior
   • 724 - Healthy Lifestyle
   • 806 - Youth Development

1. **Outcome Target**
Family/individual participation in community events that increase physical activity.

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. **Associated Institute Type(s)**
   • 1862 Extension

4. **Associated Knowledge Area(s)**
   • 703 - Nutrition Education and Behavior
   • 724 - Healthy Lifestyle
   • 806 - Youth Development

1. **Outcome Target**
Improved behavior changes based on MyPyramid and the Dietary Guidelines.

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

3. **Associated Institute Type(s)**
   • 1862 Extension

4. **Associated Knowledge Area(s)**
   • 703 - Nutrition Education and Behavior
   • 724 - Healthy Lifestyle
   • 806 - Youth Development

V(J). **Planned Program (External Factors)**

1. **External Factors which may affect Outcomes**
Economy
- Public Policy changes
- Appropriations changes
- Government Regulations
- Natural Disasters (drought, weather extremes, etc.)
- Other (Participant self responsibility)
- Competing Programatic Challenges
- Competing Public priorities

**Description**
(NO DATA ENTERED)

**V(K). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**
- During (during program)
- After Only (post program)
- Time series (multiple points before and after program)
- Retrospective (post program)
- Before-After (before and after program)
- Case Study
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Other (Anecdotal success stories)

**Description**
(NO DATA ENTERED)

**2. Data Collection Methods**
- On-Site
- Observation
- Sampling
- Tests

**Description**
(NO DATA ENTERED)


(A). Planned Program (Summary)

1. Name of the Planned Program
Parenting

2. Brief summary about Planned Program
The Parenting program includes multiple curricula and delivery methods designed to increase parents' knowledge and adoption of appropriate parenting practices, as defined by the National Extension Parent Education Model (NEPEM), with a long-term goal of reduced child abuse and neglect.

3. Program existence: Mature (More then five years)
4. Program duration: Long-Term (More than five years)
5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tbody>
<tr>
<td>802</td>
<td>Human Development and Family Well-Being</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(C). Planned Program (Situation and Scope)

1. Situation and priorities
During the Missouri Plan of Work process, 78 counties identified a need for parenting programs. The counties identified a wide range of parents and others acting in a parenting role (e.g., divorced parents, grandparents who are parenting, young parents, low-income parents, etc) who need support and resources to develop better parenting skills.

2. Scope of the Program
   - Multistate Integrated Research and Extension
   - Integrated Research and Extension

(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
Parenting education will increase parents' knowledge and use of appropriate parenting practices through providing information and/or skills practice opportunities. Research supports the effectiveness of parenting education programs for changing parents' beliefs and practices.

2. Ultimate goal(s) of this Program
Reduced child abuse and neglect.

(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program


<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
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</tr>
<tr>
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<tr>
<td>2013</td>
<td>9.2</td>
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</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and multi-sessions programs; develop curriculum and educational resources, including print and web materials; provide training; work with media; partnering with other agencies and states.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td></td>
</tr>
<tr>
<td>● Workshop</td>
<td>● Newsletters</td>
</tr>
<tr>
<td>● Education Class</td>
<td>● Web sites</td>
</tr>
<tr>
<td>● Other 2 (answering individual questions)</td>
<td></td>
</tr>
<tr>
<td>● Group Discussion</td>
<td></td>
</tr>
<tr>
<td>● One-on-One Intervention</td>
<td></td>
</tr>
<tr>
<td>● Other 1 (web-based instruction)</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Parents or others acting in a parenting role (e.g., grandparents, other relatives, foster parents).

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
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<tr>
<td>2013</td>
<td>2000</td>
<td>1000</td>
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</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted
Expected Patent Applications

<table>
<thead>
<tr>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
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</tr>
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<tbody>
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<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Number of classes/workshops provided (face-to-face or web).
  
<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>

- Number of individual questions answered.
  
<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
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</table>

- Number of guide sheets distributed.
  
<table>
<thead>
<tr>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
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<td>0</td>
<td>0</td>
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</table>

- Number of website visitors.
  
<table>
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<tr>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>200000</td>
<td>200000</td>
<td>200000</td>
<td>200000</td>
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</table>

- Number of in-service trainings provided.
  
<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td>0</td>
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</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target

Percent of participants who show increased knowledge of appropriate parenting practices (as defined by National Extension Parent Education Model [NEPEM]).

2. Outcome Type :

   Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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<td>60</td>
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</table>

3. Associated Institute Type(s)

   • 1862 Extension

4. Associated Knowledge Area(s)

   • 802 - Human Development and Family Well-Being

1. Outcome Target

Number of participants who have adopted appropriate parenting practices (as defined by NEPEM).
2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Programatic Challenges
- Economy
- Natural Disasters (drought, weather extremes, etc.)
- Populations changes (immigration, new cultural groupings, etc.)
- Government Regulations
- Appropriations changes
- Public Policy changes
- Competing Public priorities

Description

{NO DATA ENTERED}

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Comparisons between program participants (individuals, group, organizations) and non-participants
- After Only (post program)
- Retrospective (post program)
- During (during program)
- Before-After (before and after program)

Description

{NO DATA ENTERED}

2. Data Collection Methods

- On-Site
- Whole population
- Mail
- Structured
- Unstructured
- Sampling
- Telephone

Description

{NO DATA ENTERED}


\(\text{A. Planned Program (Summary)}\)

1. **Name of the Planned Program**
   
   Pasture Based Dairy Systems

2. **Brief summary about Planned Program**
   
   The objective of the planned Pasture-Based Dairy Systems program is to promote, enhance and encourage the development of economically viable and sustainable forage-based dairy production systems in Missouri. The major goal of the program is to improve and enhance the economic viability and profitability of Missouri’s family dairies. Economic data collected from 12 participating pasture-based cooperators since 1999 clearly show a profit margin adequate to support a farm family on the dairy. Average size of the cooperating dairies is 100 cows, with the largest at 270 cows managed under an intensive grazing management system. The six-year-averaged operating margin reported was $822/cow. From this operating margin, interest, principal and unpaid family living is paid. Grass-based dairying fits well into Missouri’s agriculture as grass is a natural renewable resource. It is important the grass is managed to provide consistently high-quality forage to the lactating herd. This type of management system has a low capital requirement for facilities; therefore most capital is invested into income-generating dairy cows and land that does not depreciate. Dairy producers wishing to profitably manage a grass-based dairy need to acquire business skills in financial management, agronomic skills in learning what constitutes high-quality pasture forage and animal husbandry skills enabling the entire herd to calve in a 60-day window in spring so the cows all can be dried off in late December. This two-month vacation from milking is attractive to producers because it provides for quality family time. Core dairy groups of dairy producers learn the essential skills to successfully manage a grass-based dairy. These dairy producers in turn are able to share their learned skills with other neighbors. Currently there are four core dairy grazing groups formed. The presence of the grass-based dairy at the University of Missouri Southwest Experiment Station at Mt. Vernon has greatly reinforced adoption of successful forage production practices and management of the dairy cows by clientele. The core groups conduct monthly pasture walks. The pasture walks allow the clientele to meet and discover forage management strategies. Several classroom-style meetings each year will bring the group together to review peer-generated financial data. These learning experiences are well received by the producers. The Ozark Dairy Grazing Conference is an annual event to share new research-based information to in-state clientele. This conference is visualized as a multistate activity, therefore identifying the Ozark region of Missouri as a grazing center.

3. **Program existence** : Mature (More then five years)

4. **Program duration** : Long-Term (More than five years)

5. **Expending formula funds or state-matching funds** : Yes

6. **Expending other than formula funds or state-matching funds** : Yes

\(\text{B. Program Knowledge Area(s)}\)

1. **Program Knowledge Areas and Percentage**

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2009 University of Missouri Extension Plan of Work

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<tbody>
<tr>
<td>205</td>
<td>Plant Management Systems</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>301</td>
<td>Reproductive Performance of Animals</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>302</td>
<td>Nutrient Utilization in Animals</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>303</td>
<td>Genetic Improvement of Animals</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>307</td>
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<tr>
<td>315</td>
<td>Animal Welfare/Well-Being and Protection</td>
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<td>Economics of Agricultural Production and Farm Management</td>
<td>10%</td>
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<td></td>
</tr>
<tr>
<td>801</td>
<td>Individual and Family Resource Management</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Two thousand four data indicate there are 1,800 farms marketing milk in Missouri. It is estimated these farms generate $300 million in gross farm income, which was used to purchase agricultural inputs and support family living, which in turn is spent in local communities. The economic multiplier effect supports almost 4,200 additional jobs in the state and provides an additional $200 million to Missouri’s economy. However, during the past 10 years Missouri has experienced a loss of 40 percent of its dairies. This loss erodes state and local economies as well as affecting the infrastructure of the dairy industry. While the economic impact is substantial, even greater is the impact on the health of rural families. Data collected from farm families and others in rural communities indicated the mental health problems associated with farm failures leads to increased physical illness, family and animal abuse, divorce and suicide. The social and psychological problems extend to others associated with agribusinesses in the community. Many communities begin to display social symptoms similar to the psychological problems displayed by farm families. This “collective depression” is most evident in the community’s sense of hopelessness and despair. Although competition from large-confinement dairies threatens small family dairies, competition alone is not causing the rapid decline in dairy operations. Rather family dairies are ceasing due to inadequate financial management, high input costs per unit of product sold, and increasing costs of environmental regulations. Family dairy farms need to do three things to survive: First, they need to learn basic financial management skills; many producers keep financial records for tax purposes only. Dairy producers need complete records to calculate financial indicators such as feed cost per unit of milk produced, investment per cow, and profitability. Dairy farmers not only need to maintain adequate records, but also know how to make profitable decisions from the records. Second, dairy farmers need to reduce feed costs while maintaining milk production. Research from Missouri and other states indicates an effective way to reduce input costs and increase profitability is to adopt pasture-based dairying, or management-intensive grazing (MiG). Data from southwest Missouri show that when dairy farms rely on pasture, producers realize a greater profit per cow than...
This is achieved by reducing feed costs by 30 percent, while maintaining milk production. Finally, dairy producers must find an inexpensive means to comply with environmental regulations, especially those involving waste handling. The most feasible way to manage waste is to use pastures instead of lagoons. Pasture-based dairying results in dairy animals distributing waste more evenly across the grazing system. This reduces the need for large lagoons and their associated construction costs, fly control and expensive manure-handling equipment.

2. Scope of the Program

- In-State Research
- In-State Extension
- Integrated Research and Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Financial data from the previous pasture-based dairy program clearly show the proposed effort needs to continue. Summary of the Southwest Missouri Family Dairy Farm Outreach and Development project shows a family farm can be sustainable with a 100-cow pasture-based dairy. The absence of high capital investment in facilities and equipment, a less stressful lifestyle, and a livestock enterprise environmentally compatible with the community are all reasons existing pasture-based dairy producers are continuing with their dairy businesses.

2. Ultimate goal(s) of this Program

The ultimate goal or long-term objective is the successful establishment of 250 profitable pasture-based dairy farms in the state of Missouri by 2010.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
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</tr>
<tr>
<td>2011</td>
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</tr>
<tr>
<td>2012</td>
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</tr>
<tr>
<td>2013</td>
<td>4.6</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Extension specialists will teach "expert producers" who in turn will teach other producers. Methods will include monthly meetings, newsletters, pasture walks, helping producers learn how to use the web(A webpage has already been established from the ODF project.), provide annual Ag. Lenders workshop, establish forage demonstration plots, and hold annual dairy grazing symposium at the University of Missouri Agricultural Experiment Station in Mt. Vernon, Missouri, which has an established grass-based dairy research and demonstration program.
2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Group Discussion</td>
<td>● TV Media Programs</td>
</tr>
<tr>
<td>● Demonstrations</td>
<td>● Web sites</td>
</tr>
<tr>
<td>● One-on-One Intervention</td>
<td>● Other 1 (News Releases)</td>
</tr>
<tr>
<td>● Workshop</td>
<td>● Newsletters</td>
</tr>
<tr>
<td></td>
<td>● Other 2 (Manuals)</td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Young families seeking a livelihood in agriculture and to live in the rural areas of Missouri. Existing dairy producers who seek a less stressful farm management lifestyle. Foreign investors who seek to establish profitable investments as grass-based dairies in Missouri.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults Target</th>
<th>Indirect Contacts Adults Target</th>
<th>Direct Contacts Youth Target</th>
<th>Indirect Contacts Youth Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>300</td>
<td>400</td>
<td>600</td>
<td>750</td>
</tr>
<tr>
<td>2010</td>
<td>350</td>
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<td>2011</td>
<td>350</td>
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<td>2012</td>
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<tr>
<td>2013</td>
<td>450</td>
<td>800</td>
<td>650</td>
<td>850</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>Patent Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<tr>
<td>2010</td>
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<tr>
<td>2011</td>
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<tr>
<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2013</td>
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<td>0</td>
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</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target


Provide in-service training session(s) for regional Extension specialists on an annual basis.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
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</tr>
</tbody>
</table>

Develop or revise guide sheets a year for regional Extension specialists to use in producer meetings.

<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
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<td>4</td>
<td>4</td>
<td>4</td>
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</table>

Revise the pasture-based dairy manual on a semiannual basis for regional Extension specialists to use in producer meetings.

<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
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<tbody>
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</tr>
</tbody>
</table>

Y(I). State Defined Outcome

1. Outcome Target

Number of clientele gaining knowledge of forages and grazing systems management.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
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<th>2012</th>
<th>2013</th>
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</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 302 - Nutrient Utilization in Animals
- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Increase the number of MO dairy farms that adopt the Missouri Pasture-based model resulting in increased profitability.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 301 - Reproductive Performance of Animals
- 307 - Animal Management Systems
- 315 - Animal Welfare/Well-Being and Protection
- 601 - Economics of Agricultural Production and Farm Management
- 801 - Individual and Family Resource Management

1. Outcome Target

Quality of life as expressed by family farm operators.
2. **Outcome Type:** Change in Condition Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tbody>
</table>

3. **Associated Institute Type(s)****

- 1862 Extension

4. **Associated Knowledge Area(s)****

- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 801 - Individual and Family Resource Management

1. **External Factors which may affect Outcomes**

   - Competing Public priorities
   - Economy
   - Other (Attitude)
   - Natural Disasters (drought, weather extremes, etc.)
   - Populations changes (immigration, new cultural groupings, etc.)

**Description**

Cost of land (competing pressures for available land): In Missouri there is growing pressure for land for recreation (hunting) and the desire to build a house with 40 acres in rural areas. Weather extremes: As new beginning farmers establish their pastures, drought can make it more difficult the first three years. Industry attitude: Industry attitude initially was skeptical of managed grazing. As farmers improve their profitability others will begin to consider the management-intensive grazing system. The presence of two New Zealand investment groups has the potential to significantly influence interest in grass-based dairying. One New Zealand investor dairy will be the largest grass-based dairy in the United States.

2. **Data Collection Methods**

   - Unstructured
   - Case Study
   - On-Site
   - Telephone
   - Mail
   - Structured
   - Whole population
   - Sampling
   - Observation

**Description**

(NO DATA ENTERED)
(A). Planned Program (Summary)

1. Name of the Planned Program
Personal Financial Management

2. Brief summary about Planned Program
Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)
5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

(B). Program Knowledge Area(s)

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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</thead>
<tbody>
<tr>
<td>607</td>
<td>Consumer Economics</td>
<td>40%</td>
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<tr>
<td>801</td>
<td>Individual and Family Resource Management</td>
<td>60%</td>
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<td></td>
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<td></td>
<td>Total</td>
<td>100%</td>
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</tbody>
</table>

(C). Planned Program (Situation and Scope)

1. Situation and priorities
Increasingly, workers must rely on personal savings and private pensions for their retirement. As individuals increase their use of financial markets, it is critical they understand at least the basics of money management, saving and investment. Former Federal Reserve Board Chairman, Alan Greenspan, addressing the National Council on Economic Education said, “Education enabling individuals to overcome their reluctance or inability to take full advantage of technological advances and product innovation can be a means of increasing economic opportunity… …Indeed, surveys repeatedly demonstrate a strong link between education and the use of new financial technologies. In 1998, the typical user of an electronic source of information for savings or borrowing decisions had a college degree—[which is] achieved by only about one-third of U.S. households. The most recent data from the survey [provide]… evidence that we need to reach further to engage those who have not been able to participate fully. For example, while the median real net worth for all families increased 17.5 percent between 1995 and 1998, this trend did not hold true where the head of the household had a high-school level of education or less, family earnings were less than $25,000 annually, or the ethnicity of the respondent was non-white or Hispanic. [This…is, of course, troubling, and the survey results warrant a closer look.” Consumers need timely financial education regarding retirement and estate planning, and retirement asset distribution. Financial abuse—particularly of the elderly—is on the rise. At an age when the labors of a lifetime should be enjoyed, many elders are being exploited by con artists, unscrupulous companies and even family members or caregivers. The Survey of Consumer Finances (SCF) shows a rise in families’ median level of debt burden, financial stress (when debt payments take more than 40 percent of income) and the incidence of late payments. The increases cut across all income and age groups with the highest levels of financial stress in households headed by people 65 and older and earning less than $25,000 annually. The Fair Credit Reporting Act (FCRA) protects the privacy and ensures the accuracy of consumer report information. Rules require consumers be told if credit report information is used against them, have access to their own file, be allowed to dispute credit report inaccuracies, and
have outdated information removed. Employers must have consumer consent to access credit report information and consumers’ names cannot be given to companies who offer credit or insurance information the consumer did not request. Consumers need accurate information to navigate an increasingly complex marketplace. The subprime mortgage industry grew by 1000 percent over the past ten years, according to the Center for Responsible Lending. Borrowers lose about $9.1 billion annually on predatory mortgages, $3.4 billion on payday loans, and $3.5 billion on other abuses like overdraft loans, excessive credit card debt and tax refund loans. Consumer issues programming arms consumers with the information they need to protect themselves in today’s marketplace.

2. Scope of the Program

- In-State Research
- Multistate Extension
- In-State Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

University of Missouri Extension is well-positioned to provide the general public, special target groups, youth from pre-school to high school, older citizens, and agency personnel with basic, unbiased personal finance information. With established state and national curricula that target the general public, low-income families, high school students through teachers (NEFE’s High School Financial Planning Program), elders (CSREES Financial Security in Later Life), and family agencies, we hope to increase our curriculum offerings in this program to include college students, young couples, women, unbanked consumers, divorcing families, students and youngsters from day-care through high school, consumers meeting financial education requirements for bankruptcy discharge, and estate planning and retirement asset distribution strategies. Consumers need information and programming about predatory practices and consumer regulation, because such information is not readily available otherwise. Extension field faculty offer such programming statewide. They are trained to identify relevant information and assist consumers with interpreting and applying the information. Faculty report participants are often uninformed about their basic rights and consumers often comment they wish consumer information had been taught to them before they got into financial trouble. Communities statewide identified the need for consumer issues programming during the statewide needs assessment process. It will be incorporated into broader financial management workshops, newsletters and media work, provided via the worldwide web, and offered one-on-one upon request at local Extension offices. Faculty will follow best practices learned from years of experience at the local level.

2. Ultimate goal(s) of this Program

Consumers are financially literate and capable of effectively functioning in the financial marketplace. Students are on a path to financial literacy and capable of becoming effective navigators within the financial marketplace, now and for their futures. Older individuals are equipped to deal with financial issues related to later stages of life. Consumers understand the hazards and high costs of predatory lending. Consumers have greater ability to protect themselves in the marketplace.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
<td>2009</td>
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<tr>
<td>2010</td>
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<tr>
<td>2011</td>
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<td>2012</td>
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</tr>
<tr>
<td>2013</td>
<td>7.7</td>
<td>0.0</td>
</tr>
</tbody>
</table>
1. Activity for the Program
University of Missouri campus and regional specialist will: Work in partnership to identify audience needs; Develop appropriate curriculum and program strategies; and Evaluate the impact of the educational experiences. Delivery strategies will include: Workshops; One-on-one coaching sessions; Training for professionals and eldercare providers; Written materials; Educational packets; Newsletters; Newspaper articles; Radio and television spots; and Web-based informational tools.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
</tr>
<tr>
<td>Workshops</td>
</tr>
<tr>
<td>Education Class</td>
</tr>
<tr>
<td>Group Discussion</td>
</tr>
<tr>
<td>One-on-One Intervention</td>
</tr>
</tbody>
</table>

3. Description of targeted audience
General population, general adult population, low income families, unbanked consumers, consumers going through bankruptcy, youth from pre-school through high school, college students, young couples, divorcing couples, women, older individuals and the elderly (55 and beyond), and family agencies.

V(G). Planned Program (Outputs)

1. Standard output measures
Target for the number of persons(contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Target</th>
<th>Indirect Contacts Adults</th>
<th>Target</th>
<th>Direct Contacts Youth</th>
<th>Target</th>
<th>Indirect Contacts Youth</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>3000</td>
<td>5000</td>
<td>400</td>
<td>500</td>
<td></td>
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</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</tbody>
</table>

3. Expected Peer Review Publications
V(H). State Defined Outputs

1. Output Target

- Number of workshops.

- Number of radio spots.
  2009:0   2010 :0   2011 :0   2012:0   2013 :0

- Number of one-on-one counseling sessions.
  2009:100  2010 :100  2011 :100  2012:100  2013 :100

- Number of newsletter articles.
  2009:0  2010 :0  2011 :0  2012:0  2013 :0

- Number of unique website visits.

- Number of participant contacts.

- Number of guide sheets distributed.
  2009:0  2010 :0  2011 :0  2012:0  2013 :0

V(I). State Defined Outcome

1. Outcome Target

Increased knowledge of debt management.

2. Outcome Type : Change in Knowledge Outcome Measure

2009 :0  2010 :0  2011 :0  2012:0  2013 :0

3. Associated Institute Type(s)

• 1862 Extension

4. Associated Knowledge Area(s)

• 607 - Consumer Economics
• 801 - Individual and Family Resource Management
1. Outcome Target
Increased knowledge of the benefits of saving on a regular basis.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 607 - Consumer Economics
• 801 - Individual and Family Resource Management

1. Outcome Target
Increased knowledge of basic personal financial management.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 607 - Consumer Economics
• 801 - Individual and Family Resource Management

1. Outcome Target
# of participants who have reduced their debt.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 607 - Consumer Economics
• 801 - Individual and Family Resource Management

1. Outcome Target
# of participants who began saving on a regular basis.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 607 - Consumer Economics
• 801 - Individual and Family Resource Management
### Outcome Target

Percent of participants who increased the amount of money they save regularly.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tr>
</tbody>
</table>

#### Associated Institute Type(s)

- 1862 Extension

#### Associated Knowledge Area(s)

- 607 - Consumer Economics
- 801 - Individual and Family Resource Management

### Outcome Target

Number of participants who check their credit report.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>0</td>
</tr>
</tbody>
</table>

#### Associated Institute Type(s)

- 1862 Extension

#### Associated Knowledge Area(s)

- 607 - Consumer Economics
- 801 - Individual and Family Resource Management

### Outcome Target

Percent of participants who understand their rights under the Fair Credit Reporting Act.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35</td>
<td>40</td>
<td>50</td>
<td>55</td>
<td>60</td>
</tr>
</tbody>
</table>

#### Associated Institute Type(s)

- 1862 Extension

#### Associated Knowledge Area(s)

- 607 - Consumer Economics
- 801 - Individual and Family Resource Management
V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
   - Public Policy changes
   - Government Regulations
   - Natural Disasters (drought, weather extremes, etc.)
   - Economy
   - Competing Public priorities
   - Competing Programatic Challenges
   - Populations changes (immigration, new cultural groupings, etc.)
   - Appropriations changes

Description
All external factors listed above have an impact on family finances and the ability of communities to provide support to families. Identity theft is a growing threat. In 2002, identity theft resulted in more than $24 billion in losses in the U.S. By the end of 2005, losses from identity theft could amount to $2 trillion worldwide. The subprime mortgage industry has grown by 1000% over the past ten years, according to the Center for Responsible Lending. Borrowers lose an estimated $9.1 billion annually on predatory mortgages, $3.4 billion on payday loans, and $3.5 billion on other lending abuses like overdraft loans, excessive credit card debt and tax refund loans. There are few laws to protect consumers from predatory practices. In Missouri, for example, rent-to-own store fees are not subject to regulation. Stores can charge whatever effective annual percentage rate (APR) they want--as rental fees. Payday loan stores must disclose their APRs but there is no limit to what they can charge. In 2004, the average APR for Missouri payday loans was 408.3%. Entry level jobs often do not pay enough to support an individual, much less a family. At today's $5.15 per hour minimum wage, a single parent with two children working full time would remain below the poverty level. That parent would need $7.74 an hour to even get to the poverty line. A wage as high as $27.04 an hour is necessary to make ends meet in some high cost areas of Missouri. Underemployment, estimated at 9.6% of the workforce in 2004, is also a problem. Pawn shops and car title lenders have regulated APRs, but are allowed to charge whatever they want for storage and insurance fees for merchandise in their possession. Predatory subprime mortgage lenders are free to charge whatever they choose for upfront costs, even if the fees are disproportionate to the additional risk they assume with "bad credit" borrowers. Consumers struggling to survive at or near minimum wage often do not have (or do not know they have) better options. It is easier for predatory lenders to take advantage of consumers who do not understand their rights or what businesses are and are not allowed to do.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - Before-After (before and after program)
   - During (during program)
   - Time series (multiple points before and after program)
   - After Only (post program)

Description
Most curricula within this program have end of session/series evaluations. Some curricula (e.g., Get Checking) will implement a post-program follow-up, perhaps multiple points, depending on feasibility. More will be developed as new curricula in this program area are developed and added.

2. Data Collection Methods
   - Mail
   - Telephone
   - On-Site
   - Whole population

Description
(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
   Plant Protection for the 21st Century

2. Brief summary about Planned Program
   The Plant Protection for the 21st Century program will use multiple delivery methods to reach the primary target audiences of agricultural producers, commercial applicators and homeowners. The program will cover the fundamental concepts of the proper pest control (weeds, diseases, insect), including pest identification, scouting, understanding pesticide labels, pesticide regulations, calibration, safety, storage and integrated pest management (IPM). The overriding goal for the program is to improve the program participants knowledge of safe and environmentally sound pesticides selection, use and storage. In addition, program participants will meet the requirements for private pesticide applicator certification and recertification. Commercial applicators will also receive training to prepare for the commercial applicator license test and will meet the requirements for recertification. Some major learning needs addressed through this program include: Producers will acquire knowledge and skills to successfully adopt and integrate pest management into their management systems; Producers and scouts will acquire the current research-based knowledge related to all aspects of plant protection; Producers will be knowledgeable of current trends (e.g., soybean rusts) and recommended control measures; Producers will develop and implement a plant biosecurity plan for their farm; Participants will meet the legal requirements for certification by improving their knowledge of pesticides and their use; There will be an increase in the number of acres protected from pests through the use of integrated pest management; In the long-term, the responsible use of pesticides will result in a cleaner and safer environment, and the public will show greater acceptance of agricultural practices involving the use of pesticides.

3. Program existence : Mature (More then five years)
4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes
6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage
### Planned Program (Situation and Scope)

#### 1. Situation and priorities

Agriculture plays a key role in Missouri’s economy with nearly $5 billion in annual farm cash receipts. The state ranks among the nation’s top ten states in the production of hay, sorghum, rice, soybeans, watermelons, corn and cotton. Missouri also produces significant horticultural crops such as apples, peaches, grapes, tobacco, cucurbits, ornamentals, turfgrass and small fruits. The state’s diverse soils and climate mean agricultural production occurs in a diverse range of ecosystems. Missouri’s climate fosters an environment conducive to pest development. Weed, insect and disease management is necessary for profitable crop production. Producers must use the latest technology to effectively and economically manage pest populations. Implementation of effective pest control technology will improve profitability. The use of pesticides is a necessary tool in the effective management of agricultural pests. The vast majority of Missouri’s producers resort to pesticides as a significant portion of their integrated pest management plans. To legally purchase and apply restricted-use pesticides, they must meet certification and licensing requirements as set by the Missouri Department of Agriculture. A memorandum of understanding between University of Missouri Extension and the Missouri Department of Agriculture has authorized Extension to provide educational programs to meet the certification requirements necessary to obtain the license. Regional and campus Extension specialists have taught fundamental concepts of the proper handling of pesticides, including understanding pesticide labels, pesticide regulations, calibration, pest identification and safety. There has been tremendous participation in the Pesticide Applicator Training Program since its inception. Currently there are about 35,000 certified private and 7,000 certified commercial pesticide applicators in Missouri. State law requires applicators to attend a recertification program every three to five years to keep their certifications valid. The University of Missouri has combined integrated pest management (IPM) and pesticide applicator training (PAT) into the Plant Protection Programs. Programs are developed and delivered with input from an internal steering committee and an outside advisory committee. This combination has improved cooperation among pest management specialists and has improved the efficiency of program delivery.

#### 2. Scope of the Program

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>211</td>
<td>Insects, Mites, and Other Arthropods Affecting Plants</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>212</td>
<td>Pathogens and Nematodes Affecting Plants</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>213</td>
<td>Weeds Affecting Plants</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>214</td>
<td>Vertebrates, Mollusks, and Other Pests Affecting Plants</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>215</td>
<td>Biological Control of Pests Affecting Plants</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>216</td>
<td>Integrated Pest Management Systems</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total**: 100%
1. Assumptions made for the Program

Pest management will continue to be one of the most important aspects of crop production. Uncontrolled pest infestation as well as unnecessary application of pesticides can reduce profit margins to less than zero. The agricultural chemical industry is undergoing significant change as it adjusts to the availability of biotech traits. University of Missouri Extension is one of only a few Missouri sources of unbiased pest management information. But for Extension to continue to be an effective source of information it must be able to respond quickly to rapidly changing influences. Sound science from carefully designed experiments, knowledgeable personnel and efficient means of disseminating information are essential if we are to meet our responsibility to protect the environment and enhance economic development in all segments and regions of Missouri.

2. Ultimate goal(s) of this Program

Crop producers and their advisers will not only be aware of the latest research related to pest and pesticide management, but will also learn appropriate techniques of using that information to build efficient integrated pest management systems. The ultimate goal is to sustain an economically viable crop production industry in Missouri while reducing potential negative impacts of crop production systems on the environment. This will enhance the economic and social viability of rural and urban Missouri.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
<td>2009</td>
<td>6.0</td>
<td>0.0</td>
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<tr>
<td>2012</td>
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</tr>
<tr>
<td>2013</td>
<td>6.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

Campus and regional faculty members will conduct several regional workshops and short courses in partnership with commodity groups and private industry. Venues include commodity district meetings, soil and crop conferences, Ag Science Week, regional short courses, field days and demonstration projects. A suite of full color print publications related to pest and crop management will be developed, published and revised. Several websites are available for public use. The integrated pest management site also contains interactive information for clientele interested in black cutworm status. Weekly teleconferences among state and regional faculty members will be held during spring, summer and autumn for timely commodity and pest updates. Funding will be provided to regional extension specialists for local demonstrations of integrated pest management practices.
2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Other 1 (Professional Development)</td>
<td>● Other 2 (Guides)</td>
</tr>
<tr>
<td>● Education Class</td>
<td>● Newsletters</td>
</tr>
<tr>
<td>● Workshop</td>
<td>● Other 1 (News Releases)</td>
</tr>
<tr>
<td>● Other 2 (Clinic)</td>
<td>● Web sites</td>
</tr>
<tr>
<td>● Group Discussion</td>
<td>● TV Media Programs</td>
</tr>
<tr>
<td>● Demonstrations</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

The primary target audiences are crop producers and their advisers, and private and commercial pesticide applicators. Programs will be developed for crop producers with a diversity of farm sizes, crops produced, and land resource bases. Crop advisers and service providers are important targets because of their extensive contact with crop producers, which makes them ideal intermediates for passing on Extension programming to a wider range of producers than could be reached by Extension personnel alone. Because the future of Missouri agriculture depends on young professionals replacing retiring farmers and personnel, youth organizations including FFA, 4-H, Young Farmers, and their teachers will receive specially designed programs.

V. (G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
<td>3000</td>
<td>5000</td>
<td>500</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>3000</td>
<td>5000</td>
<td>500</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>3000</td>
<td>5000</td>
<td>750</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>3500</td>
<td>6000</td>
<td>750</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>3500</td>
<td>6500</td>
<td>750</td>
<td>0</td>
</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>Expected Patent Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
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<td>2011</td>
<td>0</td>
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<tr>
<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2011</td>
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</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
\(V(H). \) State Defined Outputs

1. Output Target

- Provide in-service training session(s) for regional Extension specialists on an annual basis.

\[
\begin{array}{cccccc}
2009 &: 1 & 2010 &: 3 & 2011 &: 2 & 2012 &: 3 & 2013 &: 2 \\
\end{array}
\]

- Develop or revise guide sheets on an annual basis for regional Extension specialists to use in producer meetings.

\[
\begin{array}{cccccc}
2009 &: 5 & 2010 &: 5 & 2011 &: 6 & 2012 &: 8 & 2013 &: 10 \\
\end{array}
\]

- Develop or revise plant protection program manuals on an annual basis for regional Extension specialists to use in producer meetings.

\[
\begin{array}{cccccc}
2009 &: 3 & 2010 &: 3 & 2011 &: 3 & 2012 &: 3 & 2013 &: 3 \\
\end{array}
\]

- Two print and electronic newsletters devoted to pest and crop management will be developed and distributed to regional specialists and other clientele.

\[
\begin{array}{cccccc}
\end{array}
\]

\(V(I). \) State Defined Outcome

1. Outcome Target

Number of IPM educational materials developed or revised either on paper or electronically (source = internal).

2. Outcome Type : Change in Action Outcome Measure

\[
\begin{array}{cccccc}
\end{array}
\]

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 214 - Vertebrates, Mollusks, and Other Pests Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems

1. Outcome Target

50% of MO producers and crop advisors will indicate they have increased knowledge and plan to adopt at least one IPM strategy and/or system(s) into their operation.

2. Outcome Type : Change in Action Outcome Measure

\[
\begin{array}{cccccc}
2009 &: 0 & 2010 &: 0 & 2011 &: 0 & 2012 &: 0 & 2013 &: 0 \\
\end{array}
\]

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
1. Outcome Target
Two thousand (2,000) private pesticide applicators will meet the legal need of certification by improving their knowledge of pesticides and their use.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 211 - Insects, Mites, and Other Arthropods Affecting Plants
• 212 - Pathogens and Nematodes Affecting Plants
• 213 - Weeds Affecting Plants
• 214 - Vertebrates, Mollusks, and Other Pests Affecting Plants
• 215 - Biological Control of Pests Affecting Plants
• 216 - Integrated Pest Management Systems

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
• Appropriations changes
• Competing Programatic Challenges
• Public Policy changes
• Government Regulations
• Economy
• Natural Disasters (drought, weather extremes, etc.)

Description
{NO DATA ENTERED}

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
• After Only (post program)
• During (during program)
• Before-After (before and after program)

Description
{NO DATA ENTERED}

2. Data Collection Methods
● Mail
● Sampling
● Case Study
● Tests
● On-Site

Description
{NO DATA ENTERED}
V(A). Planned Program (Summary)

1. Name of the Planned Program
Profit Focused Agriculture

2. Brief summary about Planned Program
Profit Focused Agriculture targets the following audiences: farmers/ranchers (beginning, primary income, secondary income and transitioning), landowners and agribusinesses/agencies. Landowners includes heirs one or more generations removed from the farm, persons purchasing land for investment or recreation and resident retired farmers. Beginning farmers are individuals starting a farm operation for primary or secondary income. Primary-income farmers are individuals whose farm income is the primary source of business and household income, including limited resource and ethnically diverse persons. Secondary-income farmers are persons whose farm income is important to the household, but it is not the main source of family revenues. Transitioning farmers are existing farmers (primary or secondary income) making major business/life changes, including exiting the business or reducing involvement in the operation. Agribusinesses/agencies are entities (commercial and governmental) whose functions affect farm income. Profit Focused Agriculture is a team effort of state and regional University of Missouri Extension faculty partnering with private businesses, agencies and other educators focused on enhancing the economic viability and sustainability of Missouri agriculture. This will be accomplished through high-quality, research-based, frontier educational programs designed to increase Missouri agricultural producers’ knowledge, skills and abilities in making risk management and strategic planning decisions leading to increased profitability and improved quality of life.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage
### 2009 University of Missouri Extension Plan of Work

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>601</td>
<td>Economics of Agricultural Production and Farm Management</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>602</td>
<td>Business Management, Finance, and Taxation</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>603</td>
<td>Market Economics</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>604</td>
<td>Marketing and Distribution Practices</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>605</td>
<td>Natural Resource and Environmental Economics</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>606</td>
<td>International Trade and Development</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>607</td>
<td>Consumer Economics</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>610</td>
<td>Domestic Policy Analysis</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>611</td>
<td>Foreign Policy and Programs</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total** 100%

---

### (C). Planned Program (Situation and Scope)

1. **Situation and priorities**

Production agriculture is an important contributor to the economic viability of Missouri. During 2004, the state's 106,000 farms produced and sold crops, livestock, and other agricultural commodities worth $5.82 billion. Nationally, Missouri ranks second in the number of farms but 15th in total cash receipts. Diverse topography, a moderate climate, and the availability of water for irrigation contribute to Missouri’s ability to produce a variety of agricultural products. However, these same features are attractive for nonagricultural uses, increasing the demand for land and reducing slightly the amount of affordable land available for farming each year.

2. **Scope of the Program**

- In-State Extension
- In-State Research
- Multistate Extension
- Integrated Research and Extension
V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
This program design is based on a long history of successful Extension agricultural programming in Missouri while incorporating
developing technology to more economically and effectively serve the target audiences.

2. Ultimate goal(s) of this Program
The Profit Focused Agriculture program’s objective is to improve the profitability and viability of Missouri’s farms and agricultural
industry. Program goals include improving farm financial management through greater use of strategies to reduce risk; expanding
opportunity and wealth through entrepreneurship that links production opportunities with market demand; and protecting business
growth, improving environmental quality and enhancing community well-being through education about legal and regulatory issues.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>15.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2010</td>
<td>15.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2011</td>
<td>15.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2012</td>
<td>15.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2013</td>
<td>15.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program
Conduct multisession workshops using curricula or other appropriate material. Participate in or give presentations at meetings,
workshops, conferences, seminars. Develop or update curricula or educational materials. Provide individual assistance as follow-up
to group activities. Consult with individuals upon request. Develop and distribute information on current issues related to
farm/agricultural profitability through newsletters, Internet postings, personal contacts, and media releases. Keep updated and
assist farmers with computer and Internet applications. Conduct surveys or develop case studies relevant to improving
farm/agricultural profitability. Evaluate the effectiveness of workshops, training, and other activities. Cooperate with agencies and
organizations on activities related to the program objectives.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Other 1 (Newspaper Articles)</td>
</tr>
<tr>
<td>● Demonstrations</td>
<td>TV Media Programs</td>
</tr>
<tr>
<td>● One-on-One Intervention</td>
<td>Other 2 (Trade Magazines)</td>
</tr>
<tr>
<td>● Education Class</td>
<td>Newsletters</td>
</tr>
<tr>
<td>● Group Discussion</td>
<td>Web sites</td>
</tr>
<tr>
<td>● Workshop</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience
Farmers/ranchers (beginning, primary income, secondary income and transitioning) Landowners (absentee, women, seniors) and
agribusinesses/agencies, agribusinesses/agencies (commercial, farmer cooperatives), and agencies/farm organizations
(governmental, commodity groups).
V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>7000</td>
<td>18000</td>
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<tr>
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<td>18500</td>
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<td>2011</td>
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<td>2013</td>
<td>8000</td>
<td>19500</td>
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<td>750</td>
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2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
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<tr>
<th>Year</th>
<th>Research Target</th>
</tr>
</thead>
<tbody>
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<td>2012</td>
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<td>2013</td>
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</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
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<th>Extension Target</th>
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<tbody>
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<tr>
<td>2013</td>
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</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Annual training for regional specialists on curriculum-based MO programs and new programs related to Ag Business Management series teaching programs conducted by regional specialists will be monitored and participants invited to complete evaluations.

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<tr>
<td>2013</td>
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</tr>
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</table>

V(I). State Defined Outcome

1. Outcome Target

Fifty percent of the participants in Annie's Project will develop a strategic plan. A follow-up survey will be conducted after training is complete.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2012</td>
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<tr>
<td>2013</td>
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</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)
1. Outcome Target
Fifty percent of the participants in Golden Age Framing will develop an estate plan. A follow-up survey will be conducted after training is complete.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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<th>2010</th>
<th>2011</th>
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</table>

3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 605 - Natural Resource and Environmental Economics
- 606 - International Trade and Development
- 607 - Consumer Economics
- 610 - Domestic Policy Analysis
- 611 - Foreign Policy and Programs

1. Outcome Target
New value-added collective agricultural business organizations will be established annually. A follow-up survey will be conducted after training is complete.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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3. Associated Institute Type(s)
- 1862 Extension

4. Associated Knowledge Area(s)
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
1. Outcome Target
Program participants will report a 50 percent increase in their awareness of existing resources that will increase the profitability of their enterprise. Evaluation forms will be used.

2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tbody>
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</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 601 - Economics of Agricultural Production and Farm Management
• 602 - Business Management, Finance, and Taxation
• 603 - Market Economics
• 604 - Marketing and Distribution Practices
• 605 - Natural Resource and Environmental Economics
• 606 - International Trade and Development
• 607 - Consumer Economics
• 610 - Domestic Policy Analysis
• 611 - Foreign Policy and Programs

1. Outcome Target
There will be a 30 percent increase in program participants' use of risk management tools. A follow-up survey will be conducted after training is complete.

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 601 - Economics of Agricultural Production and Farm Management
• 602 - Business Management, Finance, and Taxation
• 603 - Market Economics
• 604 - Marketing and Distribution Practices
• 605 - Natural Resource and Environmental Economics
• 606 - International Trade and Development
V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
   - Natural Disasters (drought, weather extremes, etc.)
   - Appropriations changes
   - Economy
   - Populations changes (immigration, new cultural groupings, etc.)
   - Competing Programatic Challenges
   - Government Regulations
   - Competing Public priorities
   - Public Policy changes

Description
Extension programming is responsive to the needs of the citizens. As their needs change, Extension programming also changes.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - Case Study
   - Other (Comparisons between states)
   - Retrospective (post program)
   - After Only (post program)
   - Before-After (before and after program)
   - During (during program)
   - Comparisons between program participants (individuals, group, organizations) and non-participants
   - Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
   - Time series (multiple points before and after program)

Description
Follow-up surveys of program participants will be conducted.

2. Data Collection Methods
   - Telephone
   - Sampling
   - Tests
   - Structured
   - Whole population
   - Unstructured
   - Case Study
   - Observation
   - Mail
   - On-Site
   - Portfolio Reviews

Description
Evaluation/change forms will be used with program participants to measure outcomes.
V(A). Planned Program (Summary)

1. Name of the Planned Program
Show-Me-Select Replacement Heifer Program

2. Brief summary about Planned Program
Many of the industry related issues confronting modern beef production ultimately begin with selection and management of replacement beef heifers. Future programming related to continuation of the Show-Me-Select Replacement Heifer Program will therefore involve a wide spectrum of issues that currently confront beef producers in Missouri. The program will address a number of topic areas using multiple delivery methods to target program participants representing a wide range of backgrounds. Diversity among producer participants will include differences in herd size, forage availability, level of management, years of experience in the industry, level of education and more. The primary goal for the program is to improve economic viability and resulting competitiveness of Missouri beef producers resulting from improvements in herd management and genetics. A primary aim in accomplishing this goal is the long-term sustainability of farms and ranches involved with the production and sale of beef cattle in concert with environmental stewardship of the land and water resource. Educational programming will assist learner participants in various aspects of beef herd management beginning with the heifer portion of the calf crop. Programming areas will address a range of learning needs and include: Knowledge of principles involved with breeding/mating decisions that will result in improved genetics of heifers retained for breeding purposes; Knowledge of herd health management that will improve biosecurity of farms and ranches involved in the cow-calf enterprise; Knowledge of improved methods of reproductive management that include estrus synchronization, artificial insemination, and embryo transfer; Knowledge of nutritional management of replacement beef heifers that is important to long-term production and reproductive efficiency; Knowledge of economics related to replacement beef heifer development and marketing; Knowledge of proper animal identification that will support on-farm record keeping and contribute to biosecurity and product traceability.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>Reproductive Performance of Animals</td>
<td>60%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>303</td>
<td>Genetic Improvement of Animals</td>
<td></td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>307</td>
<td>Animal Management Systems</td>
<td></td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>308</td>
<td>Improved Animal Products (Before Harvest)</td>
<td></td>
<td>10%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 100%
(C). Planned Program (Situation and Scope)

1. Situation and priorities

Beef farms are major contributors to the Missouri agricultural economy. Missouri ranks second in the U.S. in total number of beef cows in production, with 2,062,000 cows on nearly 60,000 farms. Revenue generated from cattle production in 1999 contributed $890 million to Missouri’s economy. Over a 10-year period the value of Missouri cattle production is nearly tied with the value of Missouri soybean production as the number one commodity in the state. In 1999, U.S. beef production accounted for approximately 62 percent of U.S. total meat production, and cattle production accounted for 73 percent of total U.S. gross livestock income (USDA, 2000). Beef enterprises are finding it increasingly difficult, however, to compete in a global marketplace where large producers use economies of scale to be more profitable. This is especially true for producers in Missouri, given the average herd size of 34 cows. This model outlines a process designed to increase profitability of beef farms involved with the production and sale of beef cattle. Best Management Practices for replacement beef heifers, when collectively viewed as a “program”, can assist producers in more effectively managing reproduction and production. These practices ensure heifers entering a herd as raised or purchased replacements add value to the general performance and productivity of herds both immediately and in the long-term (Patterson et al., 2000). Heifers that calve early during their first breeding season have higher lifetime calf production than those that calve late (Lesmeister et al., 1973). How heifers develop to first calving also affects subsequent breeding and calving performance. Despite these known effects, up to 40 percent of beef heifers nationwide that became pregnant as yearlings fail to conceive in the second breeding season or lose calves by the end of their second calving period (Bellows and Short, 1990; Wiltbank, 1990). A number of management procedures have been cited over the past several decades to have a significant impact on growth and reproductive performance of replacement beef heifers. Only a limited percent of beef cattle operations in the U.S. use these management procedures on replacement beef heifers to increase reproductive integrity of their herds and improve profitability. Implementation by herd owners of existing and new technologies will improve beef enterprise profitability overall. Clearly a focused program is needed so that improved production practices are implemented into beef heifer development programs (USDA National Animal Health Monitoring System or NAHMS, 1998). Enhancing beef farm profitability through development of effective and practical management systems and increasing the successful use of AI in beef heifers is an essential step toward increasing profitability and maintaining the competitiveness of these industries.

2. Scope of the Program

- In-State Research
- Integrated Research and Extension
- In-State Extension

(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The University of Missouri initiated the Show-Me-Select Replacement Heifer Program to improve agricultural profitability and viability of farms involved with production and sale of beef cattle. Organized programs, such as Missouri’s Show-Me-Select Replacement Heifer Program, are examples that draw on the fundamental basis upon which Extension and the Land Grant System was founded: the use and application of what we know to create knowledge (Patterson, 1998). The success of the program is in great part due to the partnerships developed during delivery of the program. These include: University Extension, College of Agriculture, Food & Natural Resources Division of Animal Sciences, College of Veterinary Medicine, Veterinary Practitioners, Beef Cattle Improvement Association, Cattlemen's Association, Department of Agriculture, and Livestock Marketing Association. Data collection is part of the delivery process and reinforces the development of sound management practices on individual farms regardless of size (Randle, 1999). Producers, along with their veterinarians and extension specialists, analyze data generated on their own farms to focus on action alternatives based on the data. Technology transfer of management practices involved is not size dependent but rather producer dependent in terms of introducing a fundamental change in the approach to management and marketing that will impact future farm profitability. Success of this program lies in effecting change in heifer development practices on farms of the target audience. These efforts support program priorities outlined in University of Missouri Extension 21st Century Strategic Direction. Missourians involved with the production and sale of beef cattle benefit from knowledge, skills, practices and policies derived from the Show-Me-Select Replacement Heifer Program which should result in improved profitability and enhanced economic viability of participating farms.

2. Ultimate goal(s) of this Program

This program is unique in that it is first and foremost, an educational program targeted at improving production efficiency through increased use of existing technology, coupled with the marketing component. The opportunity to critically assess impact on this target audience from both a production and economic aspect is therefore significant. This program will continue to grow
significantly over the course of the next several years as the target audience expands. The outcomes of this program can be expected to occur in three different ways: 1) Programmatic or extension-related outcomes; 2) Individual farm outcomes; 3) Collective or statewide agricultural outcomes. Specific outcomes include the following: Regional Extension Livestock Specialists, farmers, veterinarians, and allied industry representatives will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices to improve beef heifer development through distance-learning applications; Regional Extension Livestock Specialists, practicing veterinarians, producers, and future professionals will acquire new knowledge and skills to aid in the adoption of emerging biotechnologies in heifer development, including estrus synchronization and artificial insemination; Regional Extension Livestock Specialists, practicing veterinarians and producers will be able to identify and discuss the economic implications of implementing production practices associated with the Show-Me-Select Replacement Heifer Program; Participating producers developed a plan that establishes the Show-Me-Select Replacement Heifer Program as a producer owned and managed system.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension</th>
<th></th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
<tr>
<td>2011</td>
<td>11.6</td>
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<tr>
<td>2012</td>
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<tr>
<td>2013</td>
<td>11.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

V(F). Planned Program (Activity)

1. Activity for the Program

The learner-focused outcomes of this program will expand the scope of the Missouri Show-Me-Select Replacement Heifer Program. These outcomes include: 1) Regional Extension Livestock Specialists, veterinarians, farmers, and allied industry representatives will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices to improve beef heifer development; 2) Regional Extension Livestock Specialists, practicing veterinarians, producers, and future professionals will acquire new knowledge and skills to aid in the adoption of emerging biotechnologies in beef heifer development, including estrus synchronization and artificial insemination; 4) Regional Extension Livestock Specialists, practicing veterinarians and producers will be able to identify and discuss the economic implications of implementing production practices associated with the Show-Me-Select Replacement Heifer Program; and 5) Participating producers will develop a plan that establishes the Show-Me-Select Replacement Heifer Program as a producer owned and managed system.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Web sites</td>
</tr>
<tr>
<td>Group Discussion</td>
<td>Newsletters</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>TV Media Programs</td>
</tr>
<tr>
<td>Workshop</td>
<td>Other 1 (News Releases)</td>
</tr>
<tr>
<td>One-on-One Intervention</td>
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</tr>
<tr>
<td>Education Class</td>
<td></td>
</tr>
<tr>
<td>Other 1 (Professional Development)</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

The audiences targeted in this program are farmers across Missouri actively involved in cow-calf production and marketing. There
are no limitations placed on the program in terms of farm or size of cow-herd. The program to date has involved herds as small as 8 cows and as large as 6,000 cows. Numerous sectors of the Missouri livestock industry come together as a result of this program, including University Extension, the Division of Animal Sciences, the University of Missouri College of Veterinary Medicine, the Commercial Agriculture Program, the Missouri Beef Cattle Improvement Association, the Missouri Cattlemen’s Association, the Missouri Department of Agriculture, and the Missouri Livestock Marketing Association.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
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2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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<th>2010 :0</th>
<th>2011 :0</th>
<th>2012 :0</th>
<th>2013 :0</th>
</tr>
</thead>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
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<td>0</td>
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</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Provide in-service training session(s) for regional Extension specialists on an annual basis.

<table>
<thead>
<tr>
<th>Year</th>
<th>2009 :1</th>
<th>2010 :2</th>
<th>2011 :1</th>
<th>2012 :2</th>
<th>2013 :1</th>
</tr>
</thead>
</table>

- Develop or revise power point presentations for regional Extension specialist to use in producer meetings.

  |------|----------|----------|----------|----------|----------|

- Regional and state specialist will conduct demonstrations on an annual basis.

  |------|---------|---------|---------|---------|---------|

Report Date 07/23/2008
Regional specialist will assist with producer sales.


V(I). State Defined Outcome

1. Outcome Target
Economic assessment of the program and impact based on surveys of participating farmers.

2. Outcome Type: Change in Knowledge Outcome Measure

2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 301 - Reproductive Performance of Animals
• 303 - Genetic Improvement of Animals
• 307 - Animal Management Systems
• 308 - Improved Animal Products (Before Harvest)

1. Outcome Target
Increase in the number of animals (heifers) enrolled in the program.

2. Outcome Type: Change in Knowledge Outcome Measure

2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 301 - Reproductive Performance of Animals
• 303 - Genetic Improvement of Animals
• 307 - Animal Management Systems
• 308 - Improved Animal Products (Before Harvest)

1. Outcome Target
Increase in the number of programmatic participating veterinarians on a region-to-region basis.

2. Outcome Type: Change in Knowledge Outcome Measure

2009: 0  2010: 0  2011: 0  2012: 0  2013: 0

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
• 301 - Reproductive Performance of Animals
• 303 - Genetic Improvement of Animals
• 307 - Animal Management Systems
• 308 - Improved Animal Products (Before Harvest)
1. Outcome Target
Annual economic impact of the Show-Me-Select heifer program on the state's economy.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
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<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 301 - Reproductive Performance of Animals
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)

1. Outcome Target
Number of farmers participating in the SMS program and the % of producers adopting management protocol.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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</table>

3. Associated Institute Type(s)
• 1862 Extension

4. Associated Knowledge Area(s)
- 301 - Reproductive Performance of Animals
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
- Other (Marketing Fluctuations)
- Economy

Description
(NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- Case Study
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals, group, organizations) and non-participants

Description
The Show-Me-Select Replacement heifer program provides significant opportunity to assess impact for the following reasons: 1) the programs are targeted and individualized; 2) farmers use data generated on their own farms; 3) the program implements...
management strategies based on data generated on each farm or ranch; and 4) there is a negotiated participatory process involving extension specialists, veterinarians, and farmers and ranchers. The outcomes proposed in this project will be evaluated as follows: Regional Extension Livestock Specialists, farmers, veterinarians, and campus specialists will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices to improve beef heifer development. Evaluation will be determined from the number of individuals that utilize curricula developed in support of the Show-Me-Select Replacement Heifer Program and the various audiences they represent; Regional Extension Livestock Specialists, practicing veterinarians, producers, and future professionals will acquire new knowledge and skills to aid in the adoption of emerging biotechnologies in heifer development, including estrus synchronization and artificial insemination. Evaluation will be made from the number of individuals that utilize curricula developed in support of the Show-Me-Select Replacement Heifer Program and the various audiences they represent. A fundamental aspect of the evaluation will be to first determine expectations shared by the participants. Testing procedures will be developed and evaluated to ensure the training process effectively brings about a change in knowledge, learning and application. This will be ultimately assessed by the success rates associated with the various estrus synchronization and AI programs, including estimates of numbers of heifers expressing estrus and inseminated, and the number pregnant as a result of artificial insemination; Regional Extension Livestock Specialists, practicing veterinarians and producers will be able to identify and discuss the economic implications of implementing production practices associated with the Show-Me-Select Replacement Heifer Program. Evaluation will be made based on the economic value of participating in the Show-Me-Select Replacement Heifer Program. New participants will be asked why they opted to participate in the program; Participating producers will develop a plan that establishes the Show-Me-Select Replacement Heifer Program as a producer owned and managed system. This outcome will be coordinated and evaluated through the Missouri Value-Added Development Center through University of Missouri Extension. This effort will be ongoing.

2. Data Collection Methods
   - Sampling
   - On-Site
   - Observation
   - Structured
   - Mail
   - Unstructured
   - Case Study
   - Whole population

   Description
   (NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Strengthening Families

2. Brief summary about Planned Program
The Strengthening Families Planned Program will provide families and professionals information and skills to strengthen families in their relationships, interactions and communications.

3. Program existence: Mature (More then five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
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<td>806</td>
<td>Youth Development</td>
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</table>

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
In 2005, University of Missouri Extension conducted a Plan of Work process to assess what Extension should focus on for the next five years. Councils, public members, and Extension faculty gave their thoughts on what Extension needs to do. Families, Parenting, and Socialization were one theme that surfaced as an important focus (e.g., family health and well-being of children and teens from the phone surveys).

2. Scope of the Program
   - In-State Extension
   - Integrated Research and Extension
   - Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
Research shows strong families communicate with one another, spend time together, show each other caring and appreciation, cope with change, and show each other affection. Participants who are treated as co-learners learn better. Families have strengths that they can build on. The Strengthening Families Program will help families find their strengths and learn new skills to build on those strengths. They will be treated as co-learners who have life experiences to bring to the learning process.

2. Ultimate goal(s) of this Program
Healthy, functioning families involved in their communities.
V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
<tr>
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<th>Extension</th>
<th>Research</th>
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V(F). Planned Program (Activity)

1. Activity for the Program
Conduct workshops, multi-session programs and meetings; develop products, curriculum and resources; provide training; work with media; partnering with other agencies and with other state extensions.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
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<tbody>
<tr>
<td>Direct Methods</td>
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<tr>
<td>● Education Class</td>
<td>● Web sites</td>
</tr>
<tr>
<td>● Other 1 (ITV)</td>
<td>● Newsletters</td>
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<tr>
<td>● One-on-One Intervention</td>
<td>● TV Media Programs</td>
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<tr>
<td>● Demonstrations</td>
<td>● Public Service Announcement</td>
</tr>
<tr>
<td>● Workshop</td>
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<tr>
<td>● Other 2 (School fairs, etc)</td>
<td></td>
</tr>
<tr>
<td>● Group Discussion</td>
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</table>

3. Description of targeted audience
Adults, parents, teens, childcare providers, grandparents, foster parents, professionals, teachers, agency educators, youth ages 5-12.

V(G). Planned Program (Outputs)

1. Standard output measures
Target for the number of persons(contacts) to be reached through direct and indirect contact methods
2009 University of Missouri Extension Plan of Work

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
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2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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3. Expected Peer Review Publications

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V(H). State Defined Outputs

1. Output Target

- Number of workshops, multi-session programs, fairs, and conferences.
  
<table>
<thead>
<tr>
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- Number of guide sheets distributed.

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- Number of professional childcare providers and agency educators trained.

<table>
<thead>
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<th>2011</th>
<th>2012</th>
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- Number of website visits.

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<thead>
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<th>2012</th>
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- Number of individual questions answered (through email, phone, etc).

<table>
<thead>
<tr>
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<th>2011</th>
<th>2012</th>
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### V(I). State Defined Outcome

#### 1. Outcome Target

Number of participants reporting improved family relationships.

#### 2. Outcome Type: Change in Action Outcome Measure

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</table>

#### 3. Associated Institute Type(s)

- 1862 Extension

#### 4. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being
- 806 - Youth Development

---

#### 1. Outcome Target

Number of professionals trained.

#### 2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
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<th>Year</th>
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<th>2011</th>
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</table>

#### 3. Associated Institute Type(s)

- 1862 Extension

#### 4. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being
- 806 - Youth Development

---

#### 1. Outcome Target

Number of participants who increased their knowledge of appropriate strengthening families practices.

#### 2. Outcome Type: Change in Knowledge Outcome Measure

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<thead>
<tr>
<th>Year</th>
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<th>2011</th>
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</table>

#### 3. Associated Institute Type(s)

- 1862 Extension

#### 4. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being
- 806 - Youth Development

---

#### 1. Outcome Target

Percent of participants reporting improved family communication.

#### 2. Outcome Type: Change in Action Outcome Measure

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<th>2011</th>
<th>2012</th>
<th>2013</th>
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</table>

#### 3. Associated Institute Type(s)

- 1862 Extension

#### 4. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being
- 806 - Youth Development
V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
   - Populations changes (immigration, new cultural groupings, etc.)
   - Competing Programatic Challenges
   - Competing Public priorities
   - Economy
   - Public Policy changes
   - Government Regulations
   - Natural Disasters (drought, weather extremes, etc.)
   - Appropriations changes

Description
   (NO DATA ENTERED)

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
   - During (during program)
   - Retrospective (post program)
   - After Only (post program)

Description
   (NO DATA ENTERED)

2. Data Collection Methods
   - On-Site
   - Mail

Description
   (NO DATA ENTERED)
(A). Planned Program (Summary)

1. Name of the Planned Program
Volunteer Development

2. Brief summary about Planned Program
Through workshops, volunteer forums, leadership roles and web-based instruction, state and county extension faculty will help adult and youth volunteer leaders gain knowledge and skills to communicate, manage programs, design and deliver education events, develop interpersonal skills and create environments that promote positive youth development.

3. Program existence: Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>Youth Development</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Total 100%

(C). Planned Program (Situation and Scope)

1. Situation and priorities
Volunteers: both adult and youth are the backbone of the Missouri 4-H Youth Development Programs. 4-H volunteers teach skills, manage work of others, mentor youth, work with teachers and schools, coordinate county and state events, develop environments and promote 4-H. Providing a variety of quality educational experiences for volunteers will result in individuals who feel competent and capable of providing experiences for adults and youth that promote positive youth development. Missouri citizens expressed their concerns through the University of Missouri Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

2. Scope of the Program
- In-State Extension
- Multistate Extension

(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program
When environments include sustained opportunities for young people to gain a sense of belonging, independence, mastery and generosity, youth can: master skills to make positive life choices; effectively contribute to decision making and act responsibly; and positively influence their communities and beyond. On-going caring relationships are essential to positive youth development.

2. Ultimate goal(s) of this Program
Adults sustain safe and supportive environments where youth can thrive. Positive youth development has improved the quality of life in communities through improved social, environmental and economic conditions in communities.
V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

<table>
<thead>
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<th>Year</th>
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<th>Research 1862</th>
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</table>

V(F). Planned Program (Activity)

1. Activity for the Program

County, regional and state volunteer workshops and forums, Communications, Program management, Educational Design and Delivery, Interpersonal Skills, and Youth Development; Leadership roles of 4-H clubs, projects, county and state educational events, Letters to New Leaders, and Make the Best Better Modules; Web-based instruction; Youth Protection Policies and Procedures (Volunteer Screening).

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Indirect Methods</th>
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<tr>
<td>Workshop</td>
<td>Web sites</td>
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<tr>
<td>Demonstrations</td>
<td>Newsletters</td>
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<tr>
<td>Other 2 (Camps, Educational Events)</td>
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<tr>
<td>Other 1 (Exhibition, Judging, Field Trips)</td>
<td></td>
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<tr>
<td>Indirect Methods</td>
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<tr>
<td>Other 1 (Exhibition, Judging, Field Trips)</td>
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</tbody>
</table>

3. Description of targeted audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 5 - 19.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults Target</th>
<th>Indirect Contacts Adults Target</th>
<th>Direct Contacts Youth Target</th>
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2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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3. Expected Peer Review Publications

<table>
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V(H). State Defined Outputs

1. Output Target

- County, regional and state volunteer workshops and forums; Leadership roles of 4-H clubs, projects, county and state educational events; Web-based instruction; Youth Protection Policies and Procedures (Volunteer Screening).

<table>
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<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>550</td>
<td>600</td>
<td>650</td>
</tr>
<tr>
<td>2010</td>
<td>600</td>
<td>650</td>
<td>700</td>
</tr>
<tr>
<td>2011</td>
<td>650</td>
<td>700</td>
<td>800</td>
</tr>
<tr>
<td>2012</td>
<td>700</td>
<td>700</td>
<td>1400</td>
</tr>
<tr>
<td>2013</td>
<td>700</td>
<td>800</td>
<td>1500</td>
</tr>
</tbody>
</table>

V(I). State Defined Outcome

1. Outcome Target

5,000 adults and youth volunteers will increase knowledge and awareness of practices fostering positive youth development.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Change in Knowledge Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5000</td>
</tr>
<tr>
<td>2010</td>
<td>6000</td>
</tr>
<tr>
<td>2011</td>
<td>5000</td>
</tr>
<tr>
<td>2012</td>
<td>5000</td>
</tr>
<tr>
<td>2013</td>
<td>5000</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

5,000 adult and youth volunteers apply practices of positive youth development through leadership roles.

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Change in Action Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5000</td>
</tr>
<tr>
<td>2010</td>
<td>5000</td>
</tr>
<tr>
<td>2011</td>
<td>5000</td>
</tr>
<tr>
<td>2012</td>
<td>5000</td>
</tr>
<tr>
<td>2013</td>
<td>5000</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Number of volunteers in local, county, regional and state 4-H leadership roles.
Change in Knowledge Outcome Measure

2. Outcome Type:
   Change in Knowledge Outcome Measure

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 806 - Youth Development

1. Outcome Target
   Number of volunteers attending workshops and/or forums for personal growth.

2. Outcome Type:
   Change in Knowledge Outcome Measure

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 806 - Youth Development

1. Outcome Target
   Number of volunteers completing Volunteers: The Foundation of Youth Development.

2. Outcome Type:
   Change in Knowledge Outcome Measure
   2009: 100 2010: 100 2011: 100 2012: 100 2013: 5000

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 806 - Youth Development

1. Outcome Target
   Number of volunteers screened prior to service.

2. Outcome Type:
   Change in Knowledge Outcome Measure

3. Associated Institute Type(s)
   • 1862 Extension

4. Associated Knowledge Area(s)
   • 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Competing Public priorities
- Populations changes (immigration, new cultural groupings, etc.)
- Economy
- Government Regulations
- Competing Programatic Challenges
- Public Policy changes

Description
The ability to provide volunteer training and educational experiences for youth is dependent on having a well educated, motivated, local and state faculty.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned
- Before-After (before and after program)
- Retrospective (post program)
- During (during program)
- Other (see below)

Description
Other: Competent completion of local, county, regional and state leadership roles.

2. Data Collection Methods
- On-Site
- Portfolio Reviews
- Other (Volunteer Recognition)
- Sampling
- Whole population
- Observation

Description
(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Watershed Management and Planning

2. Brief summary about Planned Program
The University of Missouri Extension Watershed Management and Planning program at the request of local communities, Missouri Department of Natural Resources and the U.S. Environmental Protection Agency has assisted communities throughout Missouri to address water quality issues resulting from watershed land use. The philosophy of the Water Quality program is to provide local watershed communities with a process and the resources to evaluate the economic, environmental and social interactions of their watershed planning decisions. The program works with local watershed communities to evaluate, plan and implement locally designed watershed management programs throughout Missouri. It will continue to develop and expand collaboration and partnerships with agencies, individuals, elected officials and organizations that have responsibility for protecting water resources.

3. Program existence: Intermediate (One to five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Soil, Plant, Water, Nutrient Relationships</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>Conservation and Efficient Use of Water</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>Watershed Protection and Management</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131</td>
<td>Alternative Uses of Land</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>133</td>
<td>Pollution Prevention and Mitigation</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>608</td>
<td>Community Resource Planning and Development</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>723</td>
<td>Hazards to Human Health and Safety</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V(C). Planned Program (Situation and Scope)

1. Situation and priorities

In a statewide plan of work review process in 2005, Missouri county Extension councils, elected officials, and citizens were asked to identify issues and trends most likely to affect their quality of life during the upcoming four-year plan-of-work cycle. Water quality and quantity were identified as issues needing to be considered in all eight University regions and in three of the five Extension programming efforts. Missouri Department of Natural Resources and the U.S. Environmental Protection Agency have identified 180 Missouri surface water bodies to be placed on the 303(d) list of impaired waters. Each of the impoundments (lakes, reservoirs or streams) identified will require a plan for total maximum daily load (TMDL) to reduce the amounts of identified pollutants. The University of Missouri Extension Water Quality program continues to provide watershed management and planning assistance for watersheds throughout Missouri. The U.S. Environmental Protection Agency’s nine required Elements of Watershed Management will be the focus of the watershed management process shared with local watershed communities as they evaluate their watersheds and design strategies to protect water quality. Collaborations and partnerships with other University of Missouri programs (Community Development, Agronomy, Livestock, Public Policy Institute, etc.) and nonuniversity watershed planning and management partners (USDA agencies, Missouri Department of Natural Resources, Missouri Department of Agriculture, Missouri Department of Health, etc.) will be expanded and improved to provide watershed communities the most reliable information available as they embark on watershed management activities.

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Research has shown that when local people become involved in the process of making decisions that affect the community, outcomes from the process become theirs. When it becomes locally owned, people are more willing to adopt and follow strategies to obtain desired outcomes. Agencies with responsibility for ensuring a constant supply of safe water see the importance of locally led watershed management activities. The increasing requests from federal and state agencies for us to assist communities, having water quality issues, in organizing watershed planning and management groups has been constant and will continue to increase in the future.

2. Ultimate goal(s) of this Program

Five local watershed citizen groups, with advisory support from agencies and organizations, will adopt a locally driven watershed planning and management process to organize local watershed planning groups to protect their water resources. Five local watershed committees will understand an approach to watershed management that includes economic, environmental and social concerns and will be able to integrate this approach into their decision-making. Existing collaborative partnerships (private and public) will be strengthened, and new partnerships developed to provide local watershed communities with the most current information to assist them in conducting watershed planning and management activities.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program
1. Activity for the Program

Invite people from Missouri watershed communities to participate in workshops to develop partnerships for watershed management as part of the Heartland 406 (b) USDA grant. Facilitate deliberative sessions with agency partners and others to discuss strategies for expanding collaborative efforts and roles each agency might fill in assisting communities in watershed management activities. Continue efforts to assist communities in the development of watershed management plans.

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td>Indirect Methods</td>
</tr>
<tr>
<td>● Group Discussion</td>
<td>● Other 1 (Distance Education)</td>
</tr>
<tr>
<td>● Demonstrations</td>
<td>● Web sites</td>
</tr>
<tr>
<td>● Workshop</td>
<td>● Newsletters</td>
</tr>
<tr>
<td>● One-on-One Intervention</td>
<td>● Public Service Announcement</td>
</tr>
<tr>
<td>● Education Class</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

Target audience will consist of local watershed community citizens, elected officials, agency leaders and staff members with a concern or a part to play in watershed management activities. Extension state and regional specialists will have opportunities to attend regional workshops designed to keep abreast of the most current and reliable sources of information relating to a process of working with local communities to develop and implement watershed management plans.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>2009</td>
<td>1200</td>
<td>2000</td>
<td>900</td>
<td>1000</td>
</tr>
<tr>
<td>2010</td>
<td>1400</td>
<td>2250</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>2011</td>
<td>1400</td>
<td>2500</td>
<td>1100</td>
<td>1000</td>
</tr>
<tr>
<td>2012</td>
<td>1400</td>
<td>2750</td>
<td>1200</td>
<td>1000</td>
</tr>
<tr>
<td>2013</td>
<td>1500</td>
<td>3000</td>
<td>1500</td>
<td>1000</td>
</tr>
</tbody>
</table>
2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<tr>
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<tr>
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</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- Educational classes will be held to educate agency and Extension personnel to understand the process for involving local communities in the development and planning of watershed management plans.


- Group discussion will be held with the watersheds advisory groups in the developmental stages of watershed planning.


- Demonstrations will be held in watershed areas to demonstrate the effectiveness of best management practices for improving water quality.


V(I). State Defined Outcome

1. Outcome Target

Watershed Management and Planning will empower local citizens to organize watershed advisory groups to begin a process of evaluating, planning and implementing strategies for protecting water resources.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2010</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 131 - Alternative Uses of Land
- 133 - Pollution Prevention and Mitigation
- 608 - Community Resource Planning and Development
723 - Hazards to Human Health and Safety

1. Outcome Target

50 percent of the participants that attend a watershed planning and management educational program will indicate increased knowledge of the process to develop and implement a watershed plan.

2. Outcome Type:  Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>600</td>
</tr>
<tr>
<td>2010</td>
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</tr>
<tr>
<td>2011</td>
<td>700</td>
</tr>
<tr>
<td>2012</td>
<td>700</td>
</tr>
<tr>
<td>2013</td>
<td>750</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 131 - Alternative Uses of Land
- 133 - Pollution Prevention and Mitigation
- 608 - Community Resource Planning and Development
- 723 - Hazards to Human Health and Safety

1. Outcome Target

Increase in the number of communities each year that form advisory committees to be actively involved in the development of watershed management plans.

2. Outcome Type:  Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2</td>
</tr>
<tr>
<td>2010</td>
<td>3</td>
</tr>
<tr>
<td>2011</td>
<td>4</td>
</tr>
<tr>
<td>2012</td>
<td>5</td>
</tr>
<tr>
<td>2013</td>
<td>6</td>
</tr>
</tbody>
</table>

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 131 - Alternative Uses of Land
- 133 - Pollution Prevention and Mitigation
- 608 - Community Resource Planning and Development
- 723 - Hazards to Human Health and Safety

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes
\begin{itemize}
  \item Appropriations changes
  \item Public Policy changes
  \item Competing Programatic Challenges
  \item Natural Disasters (drought, weather extremes, etc.)
  \item Economy
  \item Competing Public priorities
  \item Government Regulations
\end{itemize}

\textbf{Description}

Many factors can affect how local citizens set priorities for watershed and environmental issues. Local economic concerns, state and federal appropriations, regulations and natural disasters that affect quality of life can play a major role in the amount of effort local watershed citizens will expend on developing a plan of action and finding the funds to implement a plan. When concerns about water quality are directly related to an immediate health concern, more emphasis will be placed on eliminating the problem and improving the condition. If the watershed concerns are driven by specific environmental issues, such as a Total maximum daily load (TMDL) that can affect the local economy, then more direct emphasis is placed on compliance with the environmental controls. If the watershed concerns are not considered pressing at this time, community support and interest can easily shift to other issues.

\textbf{V(K). Planned Program (Evaluation Studies and Data Collection)}

\textbf{1. Evaluation Studies Planned}

\begin{itemize}
  \item During (during program)
  \item Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
  \item After Only (post program)
  \item Case Study
\end{itemize}

\textbf{Description}

Three forms of evaluation will be used: Number of watershed groups that have formed and are working on developing watershed management plans. Number of watershed groups implementing watershed plans with practices affecting water quality/quantity. Case studies done in four states through resources made available by a USDA Water Quality 406 grant will be used to determine the effectiveness of the local Community Development Watershed Management process for building local capacity in watershed communities as they begin participating in, and implementing practices associated with, improving water quality.

\textbf{2. Data Collection Methods}

\begin{itemize}
  \item On-Site
  \item Case Study
  \item Observation
\end{itemize}

\textbf{Description}

Through the use of case studies, data has been collected to see the long-term effect of locally led watershed planning and implementation. This data will show a change in behavior based on education about watershed planning and capacity building for the local community watershed leaders. Once solutions are determined and accepted by local citizens, long-term watershed issues can be resolved, thereby promoting environmental stewardship and economic viability.