V(A). Planned Program (Summary)

Program # 17

1. Name of the Planned Program

Ensuring Safe Communities

☑ Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
805	Community Institutions, Health, and Social Services	99%			
806	Youth Development	1%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	4.0	0.0	0.0	0.0
Actual Paid Professional	4.0	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	**1890 Extension**	**Hatch**	**Evans-Allen**
166660	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
171536	0	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Establish and assist COAD (Community Organizations Active in Disasters). Provide disaster educational materials and workshops 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. Provide training for preparedness. Assist local entities in identification of funding sources for community emergency management and homeland security, e.g., USDA-RD, fire grants, etc. Provide disaster preparedness and mitigation leadership for Extension itself. Coordinate and participate in Extension disaster activities.

2. Brief description of the target 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.

3. How was eXtension used?

Faculty participated in professional development related to disaster preparedness and recovery offered via eXtension. Faculty regularly drew upon EDEN to answer questions and find resources not available in Missouri as we responded to the complexities of recovery especially after flooding and tornadoes. Several examples included determining guidelines for mold cleanup of various types of structures, working with youth after such traumatic events, family financial guidance, etc. Faculty also contributed to the EDEN eXtension learning community and material development. One of our state leadership team members regularly posts updates on the internal communication page regarding our activities post disaster. Finally as one of five states collaborating on a special needs grant to work with flood and tornado recovery, we used EDEN and eXtension tools to share documents, facilitating proposal development and access to resources developed by other states to share with those affected by the disasters.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	16671	96323	969	197

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

Patent Applications Submitted

Year:	2012
Actual:	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	4	0	4

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

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

Year	Actual
2012	98

Output #2

Output Measure

- Number of partner hours leveraged.

Year	Actual
2012	997

Output #3

Output Measure

- Number of unique visits(hits) to Community Emergency Management Web page.

Year	Actual
2012	12056

Output #4

Output Measure

- Number of volunteer hours leveraged.

Year	Actual
2012	4000

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Average change in mean score of workshop participants' (Likert 5 pt scale with 5 highest) self-reported learning from post-pre-post survey.
2	Number of Community Organizations Active in Disaster (COADs) created and/or functioning to meet local needs.
3	Percent of participants in workshops/training having adopted practices such as disaster plans and kits developed.
4	Number of organizations that make changes after conduct of emergency management exercise in the community.
5	Number of county Extension offices that adopted or reviewed disaster plans and preparedness measures during the past year.
6	Dollar value of resources leveraged (volunteer hours, grants for warning systems, etc.) for emergency management.

Outcome #1

1. Outcome Measures

Average change in mean score of workshop participants' (Likert 5 pt scale with 5 highest) self-reported learning from post-pre-post survey.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Missouri experienced no significant severe weather events or flooding in FY12. The greatest focus of programing was working on long-term recovery issues with communities affected the previous year with massive flooding and tornadoes as well as issues surrounding severe drought. Long-term recovery is an essential function of restoring communities, families and businesses.

What has been done
Workshops were conducted including drought preparedness, flood recovery and flooded farmland remediation. County offices distributed information in the office, at county fairs and post-event multi-agency resource centers. TV, web, and radio materials were developed and distributed. Guide to the use of Social Media in disasters was developed and delivered. Extension Specilists were primary instructors in Community Emergency Response Teams (CERT) courses and Teen CERT courses.

Results
Participants reported learning about seasonal natural hazards, developing a family emergency plan; roles of governmental and non-governmental partner; long-term effects of flood water on arable land; the effects of drought on local food systems, water systems and mental health, roles of non-governmental organizations in COADs and LTRCs; grant management; disaster case management; disaster first aid; business disaster planning and recovery; making home/car emergency kits; using a fire extinguisher; working as a team; the basic tenants of Incident Command Systems; and becoming involved in a CERT. More than 52,000 people followed Facebook pages during the initial month of the tornado and flooding disasters, and numbers continue to grow.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
806	Youth Development

Outcome #2

1. Outcome Measures

Number of Community Organizations Active in Disaster (COADs) created and/or functioning to meet local needs.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	70

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Missouri had no major disaster declarations in FY 2012 but continued with the laborious process of long term recovery for farms, business and families effected by the large disaster events of 2010 & 2011: MU Extension often takes a lead role in forming and supporting COADs and LTRCs. Extension personnel and facilities are often used to facilitate difficult deliberations and support case management for disaster survivors.

What has been done
Extension specialists were called upon regularly to facilitate unmet-needs committees and COADs/LTRCs. In many cases they comprised the day-to-day leadership and often used Extension offices and resources. The coordination of many recovery conversations and planning has been facilitated by Extension. In addition, we provided information and other appropriate technical assistance.

Results
Established COADs assisted in mitigation, preparedness, response and recovery?contributing to community resiliency to disaster. Seventy COADs/LTRCs (an increase of 36 this year) are creating a greater breadth and depth of disaster resiliency, expanding training, education and disaster exercises for preparedness. Two COADs in Montgomery and Lincoln Counties have expanded preparedness plans using our Community Issues Management system to upload GIS, other data, and local data for emergency response planning in the first three days following a disaster (http://www.cim-network.org/muext/). Several COADs have been successful in obtaining funding to support case management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
806	Youth Development

Outcome #3

1. Outcome Measures

Percent of participants in workshops/training having adopted practices such as disaster plans and kits developed.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	43

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Communities, organizations, and businesses must be prepared for the possibility of a multitude of disasters. Key to addressing current and potential disasters is integration of multidisciplinary research and education into a coordinated mitigation, preparedness, response and recovery that includes collaboration with local, state and federal partners. Knowing about preparedness is important but application of learning is critical to true preparedness.

What has been done
Training conducted included workshops on CERT, safety, agricultural security and planning, business preparedness, farm recovery and management planning post-flooding, and drought issues. The web and social media were used to help people develop family plans, evacuate along flooding rivers, deal with clean up and insurance. Social media was used extensively in post tornado and in flooding that spread across months.

Results
After preparedness courses, citizens have reported positive actions including: Looking through their home environment for potential dangers, writing their family disaster plan and talking with their families about disaster preparedness, developing their family and pet disaster kits, purchasing weather radios and disaster supplies and home fire extinguishers, building an emergency car kit, and officially joining local CERT teams or local faith-based programs that support local emergency management programs. This past year, the FAPRI-prepared economic

assessment of damage and impact for the Missouri and Mississippi Rivers? flooding was used by producers, lenders and agribusinesses as well as governments for recovery planning and services.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
806	Youth Development

Outcome #4

1. Outcome Measures

Number of organizations that make changes after conduct of emergency management exercise in the community.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	12

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Emergency exercises (disaster simulations) are a critical part of better prepared city, county, state, and federal governments. Communities, businesses, and volunteer organizations who assess their capabilities in disaster prevention, preparedness, response, and recovery activities in a risk-free environment are much more able to respond when the disaster occurs.

What has been done
CERT training and other preparedness presentations were conducted in several counties. Several counties conducted exercises to test written plans and procedures. After Action Report Improvement Plans were written by Extension Specialists and given to exercise participants.

Results
After Action Review Improvement Plans were developed and given to local jurisdictions for their implementation. Included were qualitative and quantitative descriptions of improvements the jurisdiction could make in the emergency plans and procedures. One county official said, "Thank you University Extension for the excellent exercise and the comprehensive improvement plan. We now have a detailed plan we can use to improve our existing emergency procedures."

Counties that conducted exercises have adjusted plans to be more prepared.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #5

1. Outcome Measures

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

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	31

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Missouri has been and will likely continue to experience a number of disasters. Each is costly in dollars and can cost lives. Disaster preparedness can help mitigate cost and hasten recovery. MU Extension is a key partner with local state and federal agencies. MU Extension employees and county offices must be prepared for potential emergencies or disasters that affect its employees or places of work.

What has been done
We continue to promote and use the county office based disaster plan template (2008) and the MU Extension Emergency Management Guidance. Each year during preparedness campaigns--Earthquake Awareness, Severe Weather Awareness and National Preparedness Months--all offices were encouraged to pull out the plan and review it for refreshing faculty and staff on procedures and make possible changes needed.

Results
All 111 offices have the plan in place; 31 offices reported reviewing their plan during one of the major hazard awareness campaigns. We are seeing significant engagement of regional extension faculty in providing Community Emergency Response Team (CERT) training, participating in Local Emergency Planning Committees (LEPC), Community Organizations Active in Disasters (COAD), Citizen Corps programs, and Long Term Recovery Committees-all encouraged via the

MU Extension Emergency Management Guidance. With each significant disaster event, county offices, faculty and administrators have followed the guidance appropriately to secure the safety of individuals and their families and the offices in order to be able to serve the public.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #6

1. Outcome Measures

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

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	1120500

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Missouri has experienced a number of disasters (and this will likely continue). Although Missouri had no Presidential disaster declarations in FY12, numerous counties were still recovering from devastating floods and tornadoes in 2011 and beginning to deal with drought. Engaging citizens and organizations in disaster preparedness can help mitigate cost and hasten recovery as well as secure funding for disaster preparedness and recovery efforts that can save money and lives.

What has been done
We trained CERT and faith-based groups and assisted numerous COADs and LTRCs as they worked on tornado and flood recovery and case management of unmet human needs. We worked closely with the SBA to assist businesses in their recovery, opened a Business Recovery Center in Joplin to provide key financial services to businesses impacted by the tornado, and followed with personally contacting nearly 200 businesses.

Results
The work with several of LTRCs and COADS resulted in garnering additional funds for training and recovery activities in the communities. An example of long term impact includes Wayne County. In 2007, Extension drew together a disparate group of individuals from a variety of agencies to form the Wayne County LTRC in 2007, which has worked to help area citizens

impacted by floods and other natural disasters. To date, over $1.2 million in repair and replacement of property has occurred in Wayne County as a result.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

MU Extension faculty have been fully engaged in local, state and federal recovery efforts since the flooding and tornadoes of 2011. MU Extension played a major role in creating and assisting in long term recovery committees in counties affected by the flooding on Mississippi and Missouri Rivers and in Joplin (facilitation, community organizing, coordination, extension information, educational programming, and linkages to other agencies and organizations, hosting). We participated in state level multi-agency meetings (MOVOAD/Partnership) and provided faculty expertise as requested.

MU Extension has always responded to urgent needs of communities and citizens but has created its Community Emergency Management Program to support federal, state and local efforts using only internal financial and human resources. This program is supported by leveraging federal funds and by using very limited internal funds and faculty to support this important program.

While we have an incredible set of teams across the state working on this, we have limitations. Our state emergency management specialist was deployed in April 2011 and returned September 2012, we covered that responsibility by reassigning existing faculty to form a team for this program during a time when we were dealing with recovery from major tornadoes and severe Missouri and Mississippi River flooding as well as the onset of drought.

Each member of every regional CEMP team has other primary responsibilities to other programs. We have had a hiring freeze in effect since November 2008, state appropriation cuts from 2010 through 2012 of nearly 20%, and reduced local funding--all of which have limited our capacity to deliver local and state programs and develop follow up evaluation. In addition, we have spent considerable time on relationship building with our funding stakeholders. Some of these stakeholders have also been severely affected by state budget cuts. The need to garner grant and contract funding is essential.

Therefore, priorities shifted to focus on long-term disaster recovery, with less focus

on programming to conduct exercises and some impact collection. We are also working to bring into alignment our reporting system with the impact indicators and provide sufficient training for faculty and staff in evaluation and reporting. This has been a slow process but we continue to improve. For Northwest Missouri, an Extension economist conducted an analysis as to how the prolonged flooding would impact sales tax and property tax income for county governments using data from past significant flood events for rural counties on both the Missouri and Mississippi Rivers. Local extension councils were also given assistance in planning as some saw six months of promised funding from county government disappear with drops in sales tax expected from the prolonged closure of interstate highways and the halt of tourism and local commercial activity. Local government officials were targeted with assistance in communication and coordination.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Surveys conducted with workshop participants generally indicated a high degree of learning and intent to use what had been learned. Likewise 69 of 136 Extension faculty delivering programming responded to an online survey conducted in July 2012: 79% worked with community partners, 67% shared disaster resources from EDEN, responses, 45% conducted educational programs, 15% conducted moisture tests. The average ratings on 5 pt. Likert scale (5 being highest) of regional faculty indicating their competence to locate the following were: printed guides 4.21, web based guides 4.21, phone numbers for disaster recovery 3.99, services available for recovery 3.88, MU Extension policy guidance for recovery 4.22; They indicated feeling prepared to address post disaster stress 3.39; importance of training for post disaster stress 3.75; importance for facilitating community collaboration 4.34.

A focus group each conducted in Joplin and in a rural flood county explored impact of the coordinated long-term recovery efforts in which Extension was one of the key partners. Both communities were active in meeting the basic needs of their residents, which included making sure different populations within the community were being served. For example, resource sheets were available in Spanish; mobile meals programs assured that mobility impaired residents were informed of unfolding events, proactively assessed the homebound for support needs, and provided caregiver training. Cited were many examples of problem solving, initiative, responsibility and innovation taken by local leaders to form relationships across traditional boundaries for the benefit of the entire community, noting "In fair-weather time, we form relationships." Although participants were vocal about the collaborative nature of the recovery activities, they identified specifically Extension's role in forming the LTRC, developing resource guides, the FAPRI study, coordinating bimonthly resource coffees/daily briefings in both communities, staffing resource centers, working collaboratively, facilitating business recovery, and being an integral part of the community prior to the disaster.

We also determined from our work and monitoring that effective and functioning COADs and LTRCs are growing in numbers as a result of our work and the demands created by the disasters. Several have accomplished preventative work that will pay off: installation of emergency warning systems in the community, planning for disasters, conduct of exercises to simulate disaster, etc.

Presentations made at EDEN (panels) and at two other national conferences on the collaboration among the five states of MO, TN, MS, LA and AR provided valuable lessons learned in each state and across states in dealing with the flooding and tornadoes.

Key Items of Evaluation

Community emergency management has been the epitome of a nimble, reliable, responsive and relevant Extension engagement in disaster preparedness, mitigation and recovery. Every bit of previous training and planning was used by specialists' time over large regions of the state.

This year MU Extension became heavily involved in the long-term recovery process collaborating with local, state and federal partners at community based and state-based disaster organizations. Through the Community Emergency Management Program we assisted in recovery from 2011 flooding, tornadoes in Joplin, Sedalia, St. Louis, and Branson, and emerging severe drought in 2012--focusing assistance to long term recovery committees and contributing to revival of resilient families, businesses, farms and communities. Communities' disaster recovery periods have been shortened. Lives, jobs and countless dollars in emergency recovery operations have been saved. And the whole community builds a greater sense of cohesion. In follow-up evaluation with severely affected communities, long term recovery committees credited Extension for its work in providing educational resources and supporting long term recovery efforts. One striking example is one business owner who lost both his home and business in the tornado. He approached the local Chamber for assistance, who directed him to University of Missouri Extension to assist him. The MU Extension office offered resources; ultimately, the business owner not only rebuilt, but expanded his business offerings and hired additional employees.

Documenting impact of the work with COADs, disaster recovery, and community resiliency is difficult. Yet we are seeing these longer term efforts yielding more prepared communities and community capacity to respond and recover. Without the work of Extension, many communities in rural areas would not have systems in place to deal as well as they have with long-term disaster recovery. They are much better at advocating for themselves in the policy arena as well.

Long -term recovery will continue to be our primary focus for Joplin and communities and farms along the Missouri and Mississippi Rivers.