

Chapter 8

MERAMEC REGION

DISASTER and ECONOMIC RECOVERY

and RESILIENCY STRATEGY

BACKGROUND

The Meramec Region is made up of eight counties (Crawford, Dent, Gasconade, Maries, Osage, Phelps, Pulaski and Washington) located in southeast-central Missouri, covering 5,131 square miles. The region is currently home to some 201,254 people, according to the 2010 census. Since 1950, the population of the region has grown by over 100 percent, from 100,202 people in 1950 to 201,254 people in 2010; an increase of 101,052.

Each year natural disasters take the lives of hundreds of people and injure thousands more in the United States alone. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses and individuals recover from disasters. Taxpayer dollars only partially reflect the total cost of disasters. Insurance companies and non-governmental organizations that respond to disasters and/or assist with recovery also contribute enormous sums of money in the wake of natural disasters. Many of these events are predictable and loss of life and property damage could be reduced or eliminated with proper planning and preparation.

The frequency and cost of natural disasters has increased significantly since 2000. The cost of thunderstorms alone has increased three-fold in just ten years (Munich RE.) Stabilizing local businesses is an important but often overlooked aspect of preserving and serving human interest needs. When people are able to work, they have a better chance of putting their homes and lives back together after disaster.

In many communities, no plan exists to prepare the private sector (businesses, trade associations, manufacturers and retailers) for disaster. According to the Insurance Information Institute 40 percent of businesses affected by disaster may ultimately close. A well-constructed recovery plan can help to prevent that from happening.

The purpose of the following framework provides a tool for our local leaders to substantially and permanently reduce the region's vulnerability to natural hazards and expedite the recovery of not only public and private infrastructure but also economic recovery. This strategy demonstrates the region's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities, increase preparedness, speed response and guide recovery.

One of the key aspects in disaster mitigation is to take into account all aspects of a disaster - and not just human relief and rehabilitation. Economic, social and environmental impacts need to be anticipated and appropriate measures taken. The entire disaster cycle of prevention, preparedness, assessment, mitigation and response should be part of any disaster mitigation plans.

Prevention and preparedness need to be the cornerstone of any emergency plan. Anticipating the level of damage with geographical information systems, simulation software, early warning etc. are also critical elements of a good disaster preparedness and mitigation plan. This has to be integrated with a post-disaster assessment, which can be used to draw lessons for preparedness and mitigation.

The framework is intended to promote sound public policy designed to protect citizens, critical facilities, infrastructure, private property, economic viability, and the natural environment. This can be achieved by increasing public awareness, documenting resources for risk reduction and loss-prevention, and identifying activities to guide the members of the region towards the development of safer, more sustainable communities.

DISASTER MANAGEMENT CYCLE

The disaster cycle is a tool used by emergency management (EM) professionals and applies to the health, safety, and welfare of the general public in response to either natural or man-made disaster. Community recovery after a disaster includes maintaining a healthy economy and this requires prioritizing elements which are not always as obvious as those aimed at preserving safety and health.



Developmental considerations contribute to all aspects of the disaster management cycle. One of the main goals of disaster management, and one of its strongest links with development, is the promotion of sustainable livelihoods and their protection and recovery during disasters and emergencies. Where this goal is achieved, people have a greater capacity to deal with disasters and their recovery is more rapid and long lasting. In a development oriented disaster management approach, the objectives are to reduce hazards, prevent disasters, and prepare for emergencies. Therefore, developmental considerations are strongly represented in the mitigation

and preparedness phases of the disaster management cycle. Inappropriate development processes can lead to increased vulnerability to disasters and loss of preparedness for emergency situations.

Mitigation

Mitigation activities actually eliminate or reduce the probability of disaster occurrence, or reduce the effects of unavoidable disasters. Mitigation measures include building codes; vulnerability analyses updates; zoning and land use management; building use regulations and safety codes; participation in the National Flood Insurance Program (NFIP); preventive health care; and public education.

Mitigation will depend on the incorporation of appropriate measures in national and regional development planning. Its effectiveness will also depend on the availability of information on hazards, emergency risks, and the countermeasures to be taken. The mitigation phase, and indeed the whole disaster management cycle, includes the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property, and infrastructure.

Preparedness

The goal of emergency preparedness programs is to achieve a satisfactory level of readiness to respond to any emergency situation through programs that strengthen the technical and managerial capacity of governments, organizations, and communities. These measures can be described as logistical readiness to deal with disasters and can be enhanced by having response mechanisms and procedures, rehearsals, developing long-term and short-term strategies, public education and building early warning systems. Preparedness can also take the form of ensuring that strategic reserves of food, equipment, water, medicines and other essentials are maintained in cases of national or local catastrophes.

During the preparedness phase, governments, organizations, and individuals develop plans to save lives, minimize disaster damage, and enhance disaster response operations. Preparedness measures include preparedness plans; emergency exercises/training; warning systems; emergency communications systems; evacuations plans and training; resource inventories; emergency personnel/contact lists; mutual aid agreements; and public information/education. As with mitigations efforts, preparedness actions depend on the incorporation of appropriate measures in national and regional development plans. In addition, their effectiveness depends on the availability of information on hazards, emergency risks and the countermeasures to be taken, and on the degree to which government agencies, non-governmental organizations and the general public are able to make use of this information.

Following a disaster, state and federal agencies as well as insurance companies will require pre-disaster records to assist in the proof of loss and determine monetary reimbursement. Governments, organizations and individuals should also create and maintain detailed records of all structures, infrastructure, and roads including photos, location by coordinates, age, life expectancy, maintenance history, measurements, construction material and condition. Although these types of files take time to create and maintain, they will save extensive time during the recovery after a disaster.

Response

The aim of emergency response is to provide immediate assistance to maintain life, improve health and support the morale of the affected population. Such assistance may range from providing specific but limited aid, such as assisting displaced residents or stranded travelers with transport, temporary shelter, and food, to establishing longer term semi-permanent settlement in camps and other locations. It also may involve initial repairs to damaged infrastructure. The focus in the response phase is on meeting the basic needs of the people until more permanent and sustainable solutions can be found.

During a disaster, humanitarian agencies and military units are often called upon to deal with immediate response and recovery. Humanitarian organizations are often strongly present in this phase of the disaster management cycle. To be able to respond effectively, these agencies must have experienced leaders, trained personnel, adequate transport and logistic support, appropriate communications, and guidelines for working in emergencies. If the necessary preparations have not been made, the humanitarian agencies will not be able to meet the immediate needs of the people.

It is important to document all activities during disaster response. This includes all personnel, hours worked, equipment used, equipment hours operated and tasks accomplished. This information will be required when dealing with SEMA and FEMA for reimbursement for a disaster.

Recovery

As the emergency is brought under control, the affected population is capable of undertaking a growing number of activities aimed at restoring their lives and the infrastructure that supports them. There is no distinct point at which immediate relief changes into recovery and then into long-term sustainable development. There will be many opportunities during the recovery period to enhance prevention and increase preparedness, thus reducing vulnerability. Ideally, there should be a smooth transition from recovery to on-going development.

Recovery activities continue until all systems return to normal or better. Recovery measures, both short and long term, include returning vital life-support systems to minimum operating standards; temporary housing; public information; health and safety education; reconstruction; counseling programs; and economic impact studies. Information resources and services include data collection related to rebuilding, and documentation of lessons learned.

Disasters are becoming more complex, where a range of multiple factors in the social, cultural and natural spheres are increasing the risks associated with disasters.

The well-known saying by Benjamin Franklin, of "An ounce of prevention is worth a pound cure", can be applied to disaster management. It is increasingly becoming apparent that planning and preparedness, prevention, mitigation, response and relief, and recovery, when tackling disasters are critical in order to reduce the negative impacts and effects of such events.

The role of communities and individual families in taking appropriate action to mitigate the impacts of disasters has been emphasized, as local governments and emergency services realize

that response to an emergency situation can be hampered by the disaster itself, and relief can best be delivered by those closest at hand. Community-based disaster management is now becoming an integral part of any local or national disaster management planning.

REGIONAL IMPLEMENTATION FRAMEWORK

The following Implementation Strategy is intended to provide a framework for all jurisdictions within the Meramec Region to prepare for future disasters to limit damage and hasten recovery. Although lengthy, the following strategy should never be considered all inclusive and those who find themselves responsible for planning for future disasters are encouraged to expand the framework and avoid being limited by this document.

Phase I: Pre-disaster Preparedness

Plan and prepare for the unexpected. During a disaster assets and resources become precious commodities. Mutual Aid agreements with other jurisdictions can reduce the stress on equipment and manpower as well as assist in a more dynamic response and faster recovery. Mutual Aid agreements should be discussed and details worked out prior to a disaster situation. Elected officials and local responders should reach out to several other communities or counties in the surrounding area to broker agreements to maximize the benefit. Traditional thinking limits mutual aid as assistance for fire or police protection, but it can be a valuable tool for public works as well.

It is essential for the local officials and groups that will deal with a disaster to know one another before the chaos starts. Community involvement is the key to the hasty recovery from disaster. Establish a group made up of stakeholders from across the community, including but not limited to local officials and community leaders, private sector representation including banks, chambers of commerce, private utilities, county and regional economic development organizations and workforce development to name a few.

When a disaster begins, it may resemble a minor issue of inconvenience until the true magnitude is revealed. Once you realize a disaster is unfolding, it is critical to know what support is available and have a list of key stakeholders in your community organizations, agencies and contacts you can call on for assistance, this includes economic contacts.

Hazard Mitigation

Based on past history and future probability the counties of the region are susceptible to individually or together face the effect by any of the disasters listed below.

Dam Failure	Drought
Earthquake	Extreme Heat
Flood	Landslide
Land Subsidence/Sinkholes	Severe Storm (Hailstorm/Windstorm)/Tornado
Severe Winter Weather	Wildfire
Windstorm	

Crawford, Gasconade, Maries, Osage, Phelps, Pulaski and Washington counties within the region have a FEMA approved Hazard Mitigation Plan. These plans include a detailed community profile, identification of risks and vulnerabilities, hazard analysis, inventory of resources, capability assessment, vulnerability assessment and mitigation program covering the county and each community within its boundary. These plans are reviewed every five years.

As part of the hazard mitigation planning process, each county has established goals and objectives to assist in reducing the vulnerability and loss during disaster. Each county is urged to work toward implementation of all goals and objectives listed in their hazard mitigation plan. Following are each county's goals and objectives, action steps for implementation are provided in the each county's hazard mitigation plan.

Crawford County Hazard Mitigation Goals and Objectives

Goal 1: Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

Objectives

- 1.1 Advise the public about health and safety precautions to guard against injury and loss of life from natural hazards.
- 1.2 Use the latest technology to provide adequate warning, communication, and mitigation of hazard events.
- 1.3 Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Goal 2: Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

Objectives

- 2.1 Implement cost-effective activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to natural hazards.
- 2.2 Discourage new development and encourage preventive measures for existing development in areas vulnerable to natural hazards, thereby reducing repetitive losses to the National Flood Insurance Program.
- 2.3 Use regulation to ensure that development will not put people in harm's way or increase threats to existing properties.

Goal 3: Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

Objectives

- 3.1 Heighten public awareness of the full range of natural hazards by developing education and outreach programs.
- 3.2 Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.
- 3.3 Publicize and encourage the adoption of appropriate hazard mitigation measures by county and city governments.
- 3.4 Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.

Goal 4: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.

Objectives

- 4.1 Build and support local partnerships to continuously become less vulnerable to hazards.
- 4.2 Encourage active participation and responsibility of chief elected officials in mitigation planning and activities.

Goal 5: Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

- 5.1 Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
- 5.2 Promote beneficial uses of hazardous areas while expanding open space and recreational opportunities.

Goal 6: Secure resources for investment in hazard mitigation

- 6.1 Research the use of local and outside sources of funding
- 6.2 Encourage participation of property owners in investing in hazard mitigation projects on their own property.
- 6.3 In the event of a disaster declaration, be prepared to apply for hazard mitigation grants for prioritized projects.

Gasconade County Hazard Mitigation Goals and Objectives

Goal 1: Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

Objectives

- 1.4 Advise the public about health and safety precautions to guard against injury and loss of life from natural hazards.
- 1.5 Use the latest technology to provide adequate warning, communication, and mitigation of hazard events.
- 1.6 Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Goal 2: Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

Objectives

- 2.4 Implement cost-effective activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to natural hazards.
- 2.5 Discourage new development and encourage preventive measures for existing development in areas vulnerable to natural hazards, thereby reducing repetitive losses to the National Flood Insurance Program.
- 2.6 Use regulation to ensure that development will not put people in harm's way or increase threats to existing properties.

Goal 3: Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

Objectives

- 3.5 Heighten public awareness of the full range of natural hazards by developing education and outreach programs.
- 3.6 Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.
- 3.7 Publicize and encourage the adoption of appropriate hazard mitigation measures by county and city governments.
- 3.8 Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.

Goal 4: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.

Objectives

- 4.3 Build and support local partnerships to continuously become less vulnerable to hazards.
- 4.4 Encourage active participation and responsibility of chief elected officials in mitigation planning and activities.

Goal 5: Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

Objectives

- 5.3 Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
- 5.4 Promote beneficial uses of hazardous areas while expanding open space and recreational opportunities.

Goal 6: Secure resources for investment in hazard mitigation

Objectives

- 6.4 Research the use of local and outside sources of funding
- 6.5 Encourage participation of property owners in investing in hazard mitigation projects on their own property.
- 6.6 Be prepared to apply for hazard mitigation grants for prioritized projects in the event of a disaster declaration.

Maries County Hazard Mitigation Goals and Objectives

Goal 1: Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

Objectives

- 1.1 Advise the public about health and safety precautions to guard against injury and loss of life from natural hazards.
- 1.2 Use the latest technology to provide adequate warning, communication, and mitigation of hazard events.
- 1.3 Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Goal 2: Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

Objectives

- 2.1 Implement cost-effective activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to natural hazards.
- 2.2 Discourage new development and encourage preventive measures for existing development in areas vulnerable to natural hazards, thereby reducing repetitive losses to the National Flood Insurance Program.
- 2.3 Use regulations to ensure that development will not put people in harm's way or increase threats to existing properties.

Goal 3: Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

Objectives

- 3.1 Heighten public awareness of the full range of natural hazards by developing education and outreach programs. (Both)
- 3.2 Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.
- 3.3 Publicize and encourage the adoption of appropriate hazard mitigation measures by county and city governments.
- 3.4 Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.

Goal 4: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.

Objectives

- 4.1 Build and support local partnerships to continuously become less vulnerable to hazards.
- 4.2 Encourage active participation and responsibility of chief elected officials in mitigation planning and activities.

Goal 5: Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

Objectives

- 5.1 Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
- 5.2 Promote beneficial uses of hazardous areas while expanding open space and recreational opportunities.

Goal 6: Secure resources for investment in hazard mitigation

Objectives

- 6.1 Research the use of local and outside sources of funding
- 6.2 Encourage participation of property owners in investing in hazard mitigation projects on their own property.
- 6.3 In the event of a disaster declaration, be prepared to apply for hazard mitigation grants for prioritized projects.

Osage County Hazard Mitigation Goals and Objectives

Goal 1: Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

Objectives

- 1.7 Advise the public about health and safety precautions to guard against injury and loss of life from natural hazards.
- 1.8 Use the latest technology to provide adequate warning, communication, and mitigation of hazard events.
- 1.9 Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Goal 2: Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

Objectives

- 2.7 Implement cost-effective activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to natural hazards.
- 2.8 Discourage new development and encourage preventive measures for existing development in areas vulnerable to natural hazards, thereby reducing repetitive losses to the National Flood Insurance Program.
- 2.9 Use regulation to ensure that development will not put people in harm's way or increase threats to existing properties.

Goal 3: Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

Objectives

- 3.9 Heighten public awareness of the full range of natural hazards by developing education and outreach programs.
- 3.10 Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.
- 3.11 Publicize and encourage the adoption of appropriate hazard mitigation measures by county and city governments.
- 3.12 Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.

Goal 4: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.

Objectives

- 4.5 Build and support local partnerships to continuously become less vulnerable to hazards.
- 4.6 Encourage active participation and responsibility of chief elected officials in mitigation planning and activities.

Goal 5: Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

Objectives

- 5.5 Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
- 5.6 Promote beneficial uses of hazardous areas while expanding open space and recreational opportunities.

Goal 6: Secure resources for investment in hazard mitigation

Objectives

- 6.7 Research the use of local and outside sources of funding.
- 6.8 Encourage participation of property owners in investing in hazard mitigation projects on their own property.
- 6.9 In the event of a disaster declaration, be prepared to apply for hazard mitigation grants for prioritized projects.

Phelps County Hazard Mitigation Goals and Objectives

Goal 1: Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

Objectives

- 1.10 Advise the public about health and safety precautions to guard against injury and loss of life from natural hazards.
- 1.11 Use the latest technology to provide adequate warning, communication, and mitigation of hazard events.
- 1.12 Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Goal 2: Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

Objectives

- 2.10 Implement cost-effective activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to natural hazards.
- 2.11 Discourage new development and encourage preventive measures for existing development in areas vulnerable to natural hazards, thereby reducing repetitive losses to the National Flood Insurance Program.
- 2.12 Use regulation to ensure that development will not put people in harm's way or increase threats to existing properties.

Goal 3: Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

Objectives

- 3.13 Heighten public awareness of the full range of natural hazards by developing education and outreach programs.
- 3.14 Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.
- 3.15 Publicize and encourage the adoption of appropriate hazard mitigation measures by county and city governments.

- 3.16 Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.

Goal 4: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.

Objectives

- 4.7 Build and support local partnerships to continuously become less vulnerable to hazards.

- 4.8 Encourage active participation and responsibility of chief elected officials in mitigation planning and activities.

Goal 5: Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

Objectives

- 5.7 Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

- 5.8 Promote beneficial uses of hazardous areas while expanding open space and recreational opportunities.

Goal 6: Secure resources for investment in hazard mitigation

Objectives

- 6.10 Research the use of local and outside sources of funding

- 6.11 Encourage participation of property owners in investing in hazard mitigation projects on their own property.

- 6.12 In the event of a disaster declaration, be prepared to apply for hazard mitigation grants for prioritized projects.

Pulaski County Hazard Mitigation Goals and Objectives

Goal 1: Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

Objectives

- 1.1 Advise the public about health and safety precautions to guard against injury and loss of life from natural hazards.
- 1.2 Use the latest technology to provide adequate warning, communication, and mitigation of hazard events.
- 1.3 Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Goal 2: Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

Objectives

- 2.1 Implement cost-effective activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to natural hazards.
- 2.2 Discourage new development and encourage preventive measures for existing development in areas vulnerable to natural hazards, thereby reducing repetitive losses to the National Flood Insurance Program.
- 2.3 Use regulations to ensure that development will not put people in harm's way or increase threats to existing properties.

Goal 3: Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

Objectives

- 3.1 Heighten public awareness of the full range of natural hazards by developing education and outreach programs.
- 3.2 Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.
- 3.3 Publicize and encourage the adoption of appropriate hazard mitigation measures by county and city governments.
- 3.4 Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.

Goal 4: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.

Objectives

- 4.1 Build and support local partnerships to continuously become less vulnerable to hazards.
- 4.2 Encourage active participation and responsibility of chief elected officials in mitigation planning and activities.

Goal 5: Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

Objectives

- 5.1 Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
- 5.2 Increase the availability of storm shelters for individual families and large groups.
- 5.3 Promote beneficial uses of hazardous areas while expanding open space and recreational opportunities.

Goal 6: Secure resources for investment in hazard mitigation

Objectives

- 6.1 Research the use of local and outside sources of funding
- 6.2 Encourage participation of property owners in investing in hazard mitigation projects on their own property.
- 6.3 In the event of a disaster declaration, be prepared to apply for hazard mitigation grants for prioritized projects.

Washington County Hazard Mitigation Goals and Objectives

Goal 1: Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

Objectives

- 1.13 Advise the public about health and safety precautions to guard against injury and loss of life from natural hazards.
- 1.14 Use the latest technology to provide adequate warning, communication, and mitigation of hazard events.
- 1.15 Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Goal 2: Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

Objectives

- 2.13 Implement cost-effective activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to natural hazards.
- 2.14 Discourage new development and encourage preventive measures for existing development in areas vulnerable to natural hazards, thereby reducing repetitive losses to the National Flood Insurance Program.
- 2.15 Use regulation to ensure that development will not put people in harm's way or increase threats to existing properties.

Goal 3: Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

Objectives

- 3.17 Heighten public awareness of the full range of natural hazards by developing education and outreach programs.
- 3.18 Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.
- 3.19 Publicize and encourage the adoption of appropriate hazard mitigation measures by county and city governments.
- 3.20 Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.

Goal 4: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.

Objectives

- 4.9 Build and support local partnerships to continuously become less vulnerable to hazards.
- 4.10 Encourage active participation and responsibility of chief elected officials in mitigation planning and activities.

Goal 5: Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

Objectives

- 5.9 Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
- 5.10 Promote beneficial uses of hazardous areas while expanding open space and recreational opportunities.

Goal 6: Secure resources for investment in hazard mitigation

Objectives

- 6.13 Research the use of local and outside sources of funding
- 6.14 Encourage participation of property owners in investing in hazard mitigation projects on their own property.
- 6.15 In the event of a disaster declaration, be prepared to apply for hazard mitigation grants for prioritized projects.

BUSINESS CONTINUITY PLANNING

Local elected officials should encourage and promote business continuity planning to all business leaders within their jurisdiction. Based on information from the Insurance Information Institute 40 percent of businesses affected by natural disaster or human-caused disaster never reopens. This could result in a loss of sales tax revenue, immediate high loss of employment for residents as well as a loss in job opportunities for the unemployed, and loss of quality of life, ending in a loss of population as those residents unable to find work, move away to find better opportunities. In other words, lack of continuity planning could result in an economic disaster for an already struggling community.

Communities should also have a continuity plan with established triggers in place which would automatically cut spending as well as reduce operating costs. Local governments are also encouraged to discuss with their accountant the establishment of a contingency (reserve) fund based on losses from previous disasters. This fund will assist the local government in closing the financial gap between expenditures from a disaster and reimbursement from FEMA.

Wisconsin has established the Local Economic Advisory Recovery Network (LEARN). The group is made up of representatives from economic development organizations, civic leaders and elected officials, Chambers of Commerce and business support groups. The purpose of LEARN is to foster better regional and local collaboration to prepare economies for the impact of a disaster, specifically the impact disasters have on local business and the economic health of the community. Information on this initiative can be found at www.goo.gl/iljv.

The business continuity planning process should take an “all hazards” approach. There are many different threats or hazards. The probability that a specific hazard will impact a business is hard to determine. That’s why it’s important to consider many different threats and hazards and the likelihood they will occur.

Strategies for prevention/deterrence and risk mitigation should be developed as part of the planning process. Threats or hazards that are classified as probable and those hazards that could cause injury, property damage, business disruption or environmental impact should be addressed.

In developing an all hazards preparedness plan, potential hazards should be identified, vulnerabilities assessed and potential impacts analyzed. The risk assessment identifies threats or hazards and opportunities for hazard prevention, deterrence, and risk mitigation. It should also identify scenarios to consider for emergency planning. The business impact analysis (BIA) identifies time sensitive or critical processes and the financial and operational impacts resulting from disruption of those business processes. The BIA also gathers information about resources requirements to support the time sensitive or critical business processes.

This information is useful in making informed decisions regarding investments to offset risks and avoid business disruptions. This information and additional information regarding business continuity planning may be found at the FEMA website www.ready.gov.

Business Continuity Management

Leadership and Commitment

Business continuity is built on a foundation of management leadership, commitment and financial support. Without management commitment and financial support, it will be difficult to build a continuity preparedness program, maintain resources and keep the program up-to-date.

It is important to invest in a preparedness program for the following reasons:

1. Up to 40% of businesses affected by a natural or human-caused disaster never reopen. (Source: Insurance Information Institute)
2. Customers expect delivery of products or services on time. If there is a significant delay, customers may go to a competitor.
3. Larger businesses are asking their suppliers about preparedness. They want to be sure that their supply chain is not interrupted. Failure to implement a preparedness program risks losing business to competitors who can demonstrate they have a plan.
4. Insurance is only a partial solution, it does not cover all losses and it will not replace customers.
5. Many disasters — natural or human-caused — may overwhelm the resources of even the largest public agencies. Or they may not be able to reach every facility in time.
6. News travels fast and perceptions often differ from reality. Businesses need to reach out to customers and other stakeholders quickly.
7. An Ad Council survey reported that nearly two-thirds (62%) of respondents said they do not have an emergency plan in place for their business.
8. According to the Small Business Administration, small businesses:
 - Represent 99.7% of all employer firms
 - Employ about half of all private sector employees
 - Have generated 65% of net new jobs over the past 17 years
 - Made up 97.5% of all identified exporters.

How much should be invested in a preparedness program depends upon many factors. Regulations establish minimum requirements and beyond these minimums each business needs to determine how much risk it can tolerate. Many risks cannot be insured, so a preparedness program may be the only means of managing those risks. Some risks can be reduced by investing in loss prevention programs, protection systems and equipment. An understanding of the likelihood and severity of risk and the costs to reduce risk is needed to make decisions.

Preparedness Policy

A preparedness policy that is consistent with the mission and vision of the business should be written and disseminated by management. The policy should define roles and responsibilities. It should authorize selected employees to develop the program and keep it current. The policy should also define the goals and objectives of the program. Typical goals of the preparedness program include:

1. Protect the safety of employees, visitors, contractors and others at risk from hazards at the facility. Plan for persons with disabilities and functional needs.
2. Maintain customer service by minimizing interruptions or disruptions of business operations
3. Protect facilities, physical assets and electronic information
4. Prevent environmental contamination
5. Protect the organization's brand, image and reputation

Program Committee and Program Coordinator

Key employees should be organized as a program committee that will assist in the development, implementation and maintenance of the preparedness program. A program coordinator should be appointed to lead the committee and guide the development of the program and communicate essential aspects of the plan to all employees so they can participate in the preparedness effort.

Program Administration

The preparedness program should be reviewed periodically to ensure it meets the current needs of the business. Keep records on file for easy access. Lastly, where applicable, make note of any laws, regulations and other requirements that may have changed.

Implementation

Implementation of the preparedness program includes identifying and assessing resources, writing plans, developing a system to manage incidents and training employees so they can execute plans.

1. Resource Management: Resources needed for responding to emergencies, continuing business operations and communicating during and after an incident should be identified and assessed.
2. Emergency Response Plan: Plans to protect people, property and the environment should be developed. Plans should include evacuation, sheltering in place and lockdown as well as plans for other types of threats identified during the risk assessment.
3. Crisis Communications Plan: A plan should be established to communicate with employees, customers, the news media and stakeholders.
4. Business Continuity Plan: A business continuity plan that includes recovery strategies to overcome the disruption of business should be developed.
5. Information Technology Plan: A plan to recover computer hardware, connectivity and electronic data to support critical business processes should be developed.

6. Employee Assistance & Support: The business preparedness plan should encourage employees and their families to develop family preparedness plans. Plans should also be developed to support the needs of employees following an incident.
7. Incident Management: An incident management system is needed to define responsibilities and coordinate activities before, during and following an incident.
8. Training: Persons with a defined role in the preparedness program should be trained to do their assigned tasks. All employees should be trained so they can take appropriate protective actions during an emergency.

Testing and Exercises

Testing and exercises should be conducted to evaluate the effectiveness of the preparedness program, make sure employees know what to do and find any missing parts. There are many benefits to testing and exercises:

1. Train personnel; clarify roles and responsibilities
2. Reinforce knowledge of procedures, facilities, systems and equipment
3. Improve individual performance as well as organizational coordination and communications
4. Evaluate policies, plans, procedures and the knowledge and skills of team members
5. Reveal weaknesses and resource gaps
6. Comply with local laws, codes and regulations
7. Gain recognition for the emergency management and business continuity program

Testing the Plan

When testing the plan, it is not considered a pass or fail evaluation. Look for parts of the preparedness program that will not work in practice. Consider a recovery strategy that requires relocating to another facility and configuring equipment at that facility. Can equipment at the alternate facility be configured in time to meet the planned recovery time objective? Can alarm systems be heard and understood throughout the building to warn all employees to take protective action? Can members of emergency response or business continuity teams be alerted to respond in the middle of the night? Testing is necessary to determine whether or not the various parts of the preparedness program will work.

Exercises

Exercising the preparedness program helps to improve the overall strength of the preparedness program and the ability of team members to perform their roles and to carry out their responsibilities. There are several different types of exercises that can help evaluate the program and its capability to protect employees, facilities, business operations, and the environment

Program Improvement

There are opportunities for program improvement following an actual incident. A critique should be conducted to assess the response to the incident. Lessons learned from incidents that occur

within the community, within the business' industry or nationally can identify needs for preparedness program changes. Best practices and instructional guidance published by trade associations, professional societies, newsletters and government website can be resources to evaluate and improve your preparedness program.

Gaps and deficiencies identified during reviews should be recorded and addressed through a corrective action program. Reviews, evaluations and improvements should be documented and maintained on file.

Phase II: Post-disaster Planning and Implementation

Disaster Assessment

The implementation of mitigation strategies will not stop a disaster from occurring, but it will reduce the effects of the disaster.

Disaster assessment should begin immediately when it becomes apparent a disaster is unfolding and periodically updated as the disaster progresses. This information is vital for emergency responders, public works personnel and elected officials who are in the process of determining response actions. There are five major categories which should be assessed starting early in the event and revised as often as necessary until recovery has been completed. The assessments are:

1. Assess the nature and magnitude of the disaster.
2. Assess the effect of the disaster on the health, safety and welfare of the public.
3. Assess the impact on transportation and public infrastructure.
4. Assess the impact on housing, schools and healthcare facilities.
5. Assess the impact on the economy (business, industry, labor market, etc. affected)

The following procedures are intended to be a guide to perform disaster assessments at the local level and to describe the types of assistance available immediately after a disaster has occurred. A copy of these procedures should be included in each county's Local Emergency Operations Plan.

SITUATION AND ASSUMPTIONS

1. Situation

- a. A thorough damage assessment is essential before a community can:
 - i. Conduct effective emergency operations

- ii. Recover from the effects of a disaster in a manner that will insure safety while minimizing the time required for the recovery.
 - iii. Mitigate against future disasters.
- b. Chapter 44, RSMo provides for the establishment of the Structural Assessment and Visual Evaluation (SAVE) Volunteer Program to be activated in the event of a catastrophic earthquake or other natural disaster. This program allows the services of architects, professional engineers and building inspectors to assist local officials in the inspection of buildings. Requests for these services are made through the State Emergency Management Agency.
- c. There may be other disaster situations where the volunteers mentioned above would not be needed, but there is still a need for the local jurisdiction to conduct damage assessments in order to determine the magnitude and impact of the incident on individuals, businesses, and the public infrastructure within that jurisdiction. These initial assessments will normally be conducted by that jurisdiction's personnel.
- d. To assist local jurisdiction in conducting these assessments and to provide a standard method of reporting that information, SEMA has developed several damage assessment forms.

2. *Assumptions*

- a. Following a major disaster, federal, and state personnel will be available to assist in the final damage estimates.
- b. A properly completed damage assessment will provide information that can mitigate or lessen the effects of future disasters and will assist local officials in using limited resources in the most effective manner.
- c. Following a natural disaster, several damage assessments may be conducted. The local jurisdiction will conduct an assessment to determine the impact of the incident on them. This will be used to assign local resources and assess the need for additional help. The state, if requested, will conduct an assessment to determine the need for state resources and/or federal assistance. If warranted, the state will request a joint federal/state/local assessment to determine if the incident is of such a magnitude to warrant federal assistance.
- d. The documentation obtained by the local jurisdiction during its initial damage assessment and forwarded to SEMA will be used to determine if additional aid is needed. It is important that the jurisdiction conduct this

damage assessment and provide the information to SEMA as soon as possible.

CONCEPT OF OPERATIONS. Timeframes for performing these actions are listed in parenthesis.

1. Prepare for potential disasters by participating in a hazard vulnerability analysis, preparing damage assessment procedures and formats, recruiting and training damage assessment personnel.
2. There are three types of damage assessments:
 - a. Those made before an emergency exists. These assessments are made every day by city employees or the person on the street. They simply indicate a certain potential problem exists and should be examined. This could come in the form of a report by an employee to a supervisor or an angry citizen's complaint. It is the responsibility of each department head to recognize these and act accordingly. (MITIGATION)
 - b. Next are the damage reports that come in during actual emergency response operations. Again, they can come from government employees operating in the field or from private citizens. They are useful in allocating resources during the disaster and in prioritizing recovery operations after. (RESPONSE, RECOVERY)
 - c. The third type is the assessment completed after the disaster. It is made by selected individuals (damage survey teams) and is important in developing recovery plans, seeking outside assistance, and mitigating future disasters. (RESPONSE, RECOVERY)
3. Once a disaster has occurred, the local emergency management coordinator and/or the jurisdiction's chief elected official will notify the State Emergency Management Agency of the situation by the fastest means possible. In the event of a catastrophic earthquake or natural disaster, this will provide the need for the Structural Assessment and Visual Evaluation (SAVE) program to be implemented. (RESPONSE)
4. The county or the effected city will activate their EOC(s) and respond to the disaster according to this emergency operations plan. Accurate emergency logs and expenditure records must be kept from the start of the disaster. This will help document potentially eligible costs in the event that a presidential disaster declaration is received. (PREPAREDNESS, RESPONSE, and RECOVERY)
5. Damage assessments in the county will be made by survey teams dispatched from the EOC. These teams will consist mostly of local officials and personnel, but also

should include skilled persons from the private sector (real estate agents, contractors, insurance agents, etc.). Reports of damages may be coming into the EOC through first responders in the field, private citizens, etc. Use the information collected to complete the Damage Estimate forms and forward them to SEMA. (RESPONSE, RECOVERY)

6. Communications support for the survey team will be provided by the EOC. Other support will be required by the various emergency sections. (RESPONSE, RECOVERY)
7. If the necessary response is beyond the capability of the local jurisdiction, the chief executive or his/her designated successor may request assistance from the Governor through the State Emergency Management Agency (SEMA). SEMA will conduct a joint damage assessment with local officials to determine the extent of the incident and the need for state assistance. If recovery from the incident is beyond the capability of the local and state government, SEMA will initiate the request for a federal damage assessment from FEMA. *NOTE – Federal assistance is supplemental to state assistance, which is supplemental to local capabilities.* (RESPONSE)
8. When federal/state damage survey teams are working in a jurisdiction, they will be accompanied by a member of the local damage survey team and/or a local official. (RESPONSE, RECOVERY)
9. In anticipation of making a request to the President for federal assistance, SEMA, in cooperation with the Federal Emergency Management Agency (FEMA), will conduct a preliminary damage assessment with one of two different teams. One team assesses the effects of damage to individuals, residences, and small businesses (Individual Damage Assessment) and is comprised of, but not limited to, SEMA, FEMA, Red Cross, and Small Business Administration (SBA). The other team will assess damages to the public infrastructure (Public Assistance Assessment) and is usually comprised of, but not limited to, FEMA and SEMA personnel. Individuals from the Mo. Dept. of Transportation, Mo. Dept. of Natural Resources, and the U.S. Army Corps of Engineers may also be used depending on the situation. Appropriate local officials will accompany each team and participate in the surveys. (RESPONSE)
10. If the situation is determined to be beyond the capability of local and state government, the Governor may request from the President either an "Emergency" or "Major Disaster" declaration for assistance. The Governor's request for federal assistance is sent through FEMA, Region VII, Kansas City, to their national office in Washington, D.C., and hence to the President for consideration. (RESPONSE)

11. If FEMA determines that the impact of the incident is not beyond the combined capabilities of the local and state government, a presidential disaster declaration will **not** be received. (RESPONSE, RECOVERY)
12. If the President grants federal assistance, the President will declare either an emergency or major disaster and implement the applicable disaster assistance programs as provided for under the provisions of Public Law 93-288, as amended. (RECOVERY)
13. If a presidential disaster declaration is received, the state and federal governments will disseminate the disaster assistance information to the public through the news media. (RECOVERY)
14. SEMA and FEMA may, with the assistance of the local government, establish Disaster Application Centers (DACs) where individuals may come and obtain information/assistance from various government agencies and private organizations. Counseling for disaster victims may also be available at these centers. The local, state, and federal emergency management organizations will jointly determine the locations, dates, and times of operation for the DACs which would most benefit the disaster victims. (RECOVERY)

ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

1. Damage assessment activities within a county are under the direction and control of the county commission with assistance of the county Emergency Manager. The mayor of a community will direct disaster assessment activities in their respective jurisdiction. If necessary, the county will lend assistance with damage assessment in the municipalities.
2. The county or affected community may choose to appoint a coordinator to handle damage assessment responsibilities, which include the following:
 - a. Assign and manage local damage survey teams.
 - b. Gather and display (in the EOC) damage assessment information, as well as brief EOC staff on this information.
 - c. Compile situation reports and forward this information to SEMA with the approval of the chief elected officials; also, complete the Damage Estimate forms and forward it to SEMA.
 - d. Accompany state and federal damage assessment teams, when possible.
3. The damage survey teams are responsible for assessing both public (government, public utilities, etc.) damages and private (individuals, small business, etc.) damages.

4. The county assessor will provide records on private property values for residences in the county.
5. The road and bridge supervisors/public works directors for the county and/or city will provide value estimates on damages to county and city maintained roads and bridges.
6. The city public works director will provide damage estimates on electric, water, and sewer systems.
7. Other public and private utilities serving the jurisdiction will provide estimates of their damages to the damage assessment coordinator/EOC.
8. The Red Cross will support this function by providing trained damage survey teams for the Red Cross.

DIRECTION AND CONTROL

1. The damage assessment coordinators are important members of the EOC's direction and control staff. In a widespread disaster, the coordinators will jointly control their operations from the EOC.
2. All damage reports that come to the EOC will go through this section for analysis and plotting.
3. The eastern and western District County Commissioners will be assisted with the damage assessment function by the Presiding Commissioner and the Emergency Management Director. If necessary, additional support will come from volunteer organizations and the private sector.
4. Communications support will be provided by local law enforcement agencies; transportation will be provided by the resource and supply section.

CONTINUITY OF GOVERNMENT

1. The line of succession for the damage assessment coordinators will be through the County Commission.
2. Lines of succession for the mayors will be according to their normal operating procedures.
3. Plans should be made to protect essential records vital to the damage assessment function.

ADMINISTRATION AND LOGISTICS

1. Damage assessment information will be provided to the State Emergency Management Agency for necessary release to the appropriate federal agencies.
2. Communications for this function will be provided by the Communications and Warning Coordinator.
3. The Damage Assessment Coordinator is responsible for providing the necessary damage report forms to the survey teams working at the disaster scene.
4. All other logistical requirements should be handled by the Resource and Supply section.

Develop and/or Implement Recovery Timeline

1. List and Prioritize recovery activities to be performed.

- a. When disaster assessments were previously discussed it was noted that assessments should begin when it becomes apparent a disaster is unfolding. Based on the type of disaster updates to the assessments will be required to ensure the most up to date information is being used.
- b. Assessments should be listed and prioritized as they are received by the EOC. Depending on the type and extent of the disaster, the prioritization could be broad (restore electric service), or very detailed (restore electric service to Community Hospital).
- c. As the prioritized list is being created, responsibilities should be assigned to those individuals, departments or organizations which will be responsible for accomplishing the recovery.
- d. The prioritized list will require re-prioritization from time to time, based on updated assessments, workload, unforeseen obstacles, lack of personnel/equipment, etc.

2. Identify Resources (Federal, state, local, private sector) needed for each activity.

- a. Each community should have a list of resources which can be called upon or activated in case of a disaster. This list should include specific details of the resource capabilities, primary/alternate contact information as well as an approximate response time.

- b. Below are some of the resources listed in no certain order, which should be considered when the creating the list. Although somewhat lengthy, the jurisdiction is encouraged to add more resources.

Local Police	Local Red Cross	Department of Transportation
Sheriff Department	City Manager/Administrator	County Sewer Dept.
Highway Patrol	Local Fire Department	County Water Dept.
Mutual Aid Police Dept.	Mutual Aid Fire Dept.	Local Chamber of Commerce
FEMA/SEMA	Public Works Department	Local Churches
County Commissioners	Mutual Aid Public Works	Local School District
County EOC	Street Superintendent	Local Visitor Bureau
Local Emergency Manager	Mutual Aid for Street	Local Banks
MRPC	Private Utility Company	Member Utility Alliance
Local Elected Officials	Community Organizations Active in Disaster (COAD)	

- 3. Determine the timeframe for each recovery activity.** Recovery activities should be broken down into four categories and again prioritized to provide a target for completion. Below are the four categories and a few sample activities which fall into them.

a. **Immediate (In some cases while in response)**

- i. Establish shelter for displaced residents, travelers/tourists.
- ii. Extinguish fires
- iii. Evacuate
- iv. Provide information to stranded travelers/tourists
- v. Search and Rescue
- vi. Clear roads
- vii. Evaluate and repair utilities
- viii. Protect/re-establish utilities to hospitals/nursing homes/childcare facilities.
- ix. Protect/re-establish utilities to major commercial areas.
- x. Implement and utilize mutual aid agreements.
- xi. Assess damage, response and recovery efforts.
- xii. Document all activities in detail.

b. **Short-term (Less than one week)**

- i. Continue to improve shelter for displaced residents, travelers/tourists.
- ii. Search and Rescue

- iii. Clear roads
- iv. Evaluate and repair utilities
 - v. Protect utilities to hospitals/nursing homes/childcare facilities.
 - vi. Repair utilities to minor commercial areas.
 - vii. Protect utilities to major commercial areas.
- viii. Involve Chamber of Commerce to establish extent of economic impact.
- ix. Involve MRPC for information on grants and obtain businesses assistance.
- x. Implement economic recovery plan.
- xi. Activate COAD/VOAD
- xii. Provide information for displaced residents on assistance.
- xiii. Assess damage and recovery efforts.
- xiv. Document all activities in detail if still conducting response.

c. Intermediate (Weeks – Months)

- i. Consolidate/close shelters
- ii. Encourage re-building of houses and businesses.
- iii. Evaluate and repair utilities
- iv. Evaluate economic impact
- v. Involve Chamber of Commerce to track recovery of businesses and tourism.
- vi. Involve MRPC to provide information to businesses on grants and obtain assistance.
- vii. Implement economic recovery plan.
- viii. Activate COAD/VOAD
- ix. Provide information for displaced residents on assistance.
- x. Assess damage and recovery efforts.

d. Long-term (Months – Years)

- i. Encourage re-building of houses and businesses.
- ii. Encourage new commercial growth through financial incentives.
- iii. Evaluate economic impact
- iv. Involve Chamber of Commerce to track recovery of business and tourism.
- v. Assess damage and recovery efforts.

4. Establish Recovery Action Plan.

- a. A recovery action plan is a vital component of the recovery after a disaster. A solid plan will provide a road map for the recovery and properly identified benchmarks or milestones will provide a measurable way to determine if actions are being successful and the end goal of recovery will be completed in the time frame established. To establish the recovery action plan determine the extent of recovery and the time frame to accomplish. For example, if a disaster had an economic impact on a community of \$1 million per year loss in sales tax, the community leaders could set a goal that the sales tax would be back to pre-disaster levels in twelve months. This would mean the benchmark or milestone for each quarter would be the reported sales tax would have to increase by \$250,000 to reach the goal.
- b. When establishing a recovery action plan the following steps should be followed:
 - i. **Know where you're going.** Successful leaders and professionals understand a simple core concept: if you don't know where you're going, you're likely to wind up anywhere.
 - ii. **Be specific.** Not only must the goal be specific, but also create a specific intention as well as very specific tasks or steps that will move you toward the completion of that goal.
 - iii. **Create measurable milestones.** Once a clear picture of the goal to be accomplished, as well as what targets are needed to hit throughout the time span of the project or period, the next step is to create measurable milestones.
 - iv. **Make a list.** Create a list and accompanying time line of specific action items or tasks to complete in order to hit those milestones.
 - v. **Break large tasks into smaller, more manageable pieces.** Some tasks or milestones may seem more difficult to achieve than others. Break these down into more manageable pieces.
 - vi. **Put timelines on everything.** Without specific time frames and deadlines, work will definitely expand to fill the time allotted, and some tasks may never be accomplished.
 - vii. **Create a visual timeline.** You might use a flowchart, a Gantt chart, a spreadsheet, or some other type of business tool to create a visual reference or even a simple desk calendar.
 - viii. **Schedule your milestones.** Ensure all involved in the completion of a milestone is aware of the deadline.

- ix. **Don't stop working the plan.** Once the plan is established, shared with the team, and milestones are scheduled, the next step is simple: take daily action and follow up with responsible parties to ensure that everyone is on task.
- x. **Change the date if needed, but never give up on reaching the goal.** Circumstances or unforeseen events can arise which slow progress and a milestone is unachievable. Evaluate the cause, reschedule and keep moving forward.

Implementation of the Recovery Plan (Long-term Recovery). The key to a post disaster recovery is the rapid return to business as usual. Getting major employers back to business and employees back to work provide incentive for residents to return and rebuild their lives. Local officials should work with the local chamber of commerce and business organizations to identify job losses and create opportunities for employment. Some employment opportunities can be a result of the disaster such as repair and reconstruction of homes and long term repair and replacement of public and private infrastructure.

Identification of business, economic and entrepreneurial rebuild and workforce initiatives. Local governments have an opportunity during the post-disaster recovery to utilize Transportation Development Districts (TDD), Tax Increment Financing (TIF), Neighborhood Improvement Districts (NIDS) and Commercial Improvement Districts (CID), to name a few to spur economic redevelopment in hard hit areas.

The Missouri Department of Economic Development has numerous business programs to stimulate economic growth within the state. Below is a list of programs identified on the department website. For detailed information on each program including eligibility and requirements refer to <http://ded.mo.gov/businesses/ProgramsBusinesses.aspx>.

1. Business Development

- Action Fund Loan
- BUILD
- Business Facility Tax Credit Program
- Chapter 100 Guidance for Local Governments
- Chapters 100 Sales Tax Exemption, Personal Property
- Employment Transition Team
- Film Production Tax Credit
- Global Market Access Program
- Industrial Development Bonds
- Industrial Infrastructure Grant
- Missouri Export Finance Program
- Missouri Works Program

- MORESA
- Mutual Fund Tax Apportionment
- Private Activity Bond Allocation "Tax Exempt" Bond Cap
- Qualified Energy Conservation Bond
- Small Business Incubator Tax Credit
- Small Business Loan Program
- Wine and Grape Tax Credit
- Work Opportunity Tax Credit

2. Infrastructure (CDBG) and Site Development

- Action Fund Loan
- Industrial Infrastructure Grant
- Interim Financing Loan
- Microenterprise
- Tax Credit for Contribution Program

3. Redevelopment

- Brownfield Redevelopment Program
- Chapter 353 Tax Abatement
- Downtown Preservation
- Historic Preservation
- MORESA
- State Supplemental Tax Increment Financing

4. Workforce Development

- Industry Training Programs
- Jobs.mo.gov

5. Housing Development

- Private Activity Bond Allocation "Tax Exempt" Bond Cap

6. Previously Approved and Proposed Projects Only

- Enhanced Enterprise Zone

- Enterprise Zone Tax Benefit
- Land Assemblage Tax Credit Program
- Missouri Quality Jobs Program
- MODESA
- New Markets Tax Credit Program
- Rebuilding Communities
- Urban Enterprise Loan

7. Small Business and Entrepreneurship

- Grow Missouri Loan
- Missouri Technology Center
- Small Business Incubator Tax Credit
- Small Business Loan Program
- Urban Enterprise Loan

State and federal disaster recovery funding programs and assistance.

The State of Missouri has numerous programs to provide disaster assistance and relief. Below is a list of programs identified on the SEMA website. For detailed information on each program including eligibility and requirements refer to http://sema.dps.mo.gov/recover/assistance_resources.asp.

1. Agriculture

- **Missouri Department of Agriculture** -- (573) 751-4211
For questions related to disaster assistance for Missouri agricultural operations.

2. Consumer Protection

- **Missouri Attorney General** - (800) 392-8222
The Missouri Attorney General accepts consumer complaints about disaster-related scams and price gouging. For more information about how to protect yourself from becoming a victim of fraud, visit the SEMA "**Avoiding Scams & Fraud**" page.

3. Debris and Historic Buildings --

- **Missouri Department of Natural Resources (DNR)** - (800) 361-4827
DNR handles questions related to **debris removal** and **historic buildings**.

4. Elderly, Mental Health, and Disabilities

- **Department of Mental Health**
Click to locate the nearest Access Crisis Intervention (ACI) hotline.
- **Missouri Statewide Independent Living Council**
Locate the nearest Center for Independent Living.
- **Missouri Aging Information Network**
Discover the many services available in Missouri for seniors, disabled adults and family caregivers.

5. Employment

- **Missouri Career Source** - (888) 728-JOBS (5627)
Resources for job seekers from the Missouri Division of Workforce Development.
- **Missouri Division of Employment Security** - (800) 788-4002 or (573) 751-3215
Disaster Unemployment Insurance is for **individuals not benefit-eligible under state unemployment insurance**. Call or **email** with questions.

6. Insurance

- **Missouri Department of Insurance** -- (800) 726-7390 or (573) 751-4126
Questions about disaster insurance can be answered by the Consumer Protection Division

7. Taxes

- **Missouri Department of Revenue** (573) 751-3505
Call the Missouri Department of Revenue with questions about State of Missouri tax relief. Questions about Federal tax relief should be directed to the **Internal Revenue Service** at (800) 829-1040.

The federal government has disaster aid broken down into three major categories; individual assistance, public assistance and hazard mitigation. Below is a brief explanation of the categories as identified on the FEMA website. For detailed information on each program including eligibility and requirements refer to <http://www.fema.gov/disaster-process-disaster-aid-programs>.

1. Individual Assistance

Immediately after the declaration, disaster workers arrive and set up a central field office to coordinate the recovery effort. A toll-free telephone number is published for use by affected residents and business owners in registering for assistance. Disaster Recovery Centers also are opened where disaster victims can meet with program representatives and obtain information about available aid and the recovery process.

Disaster aid to individuals generally falls into the following categories:

- **Disaster Housing** may be available for up to 18 months, using local resources, for displaced persons whose residences were heavily damaged or destroyed. Funding also can be provided for housing repairs and replacement of damaged items to make homes habitable.
- **Disaster Grants**, are available to help meet other serious disaster related needs and necessary expenses not covered by insurance and other aid programs. These may include replacement of personal property, and transportation, medical, dental and funeral expenses.
- **Low-Interest Disaster Loans** are available after a disaster for homeowners and renters from the U.S. Small Business Administration (SBA) to cover uninsured property losses. Loans may be available for repair or replacement of homes, automobiles, clothing or other damaged personal property. Loans are also available to businesses for property loss and economic injury.
- **Other Disaster Aid Programs** include crisis counseling, disaster-related unemployment assistance, legal aid and assistance with income tax, Social Security and Veteran's benefits. Other state or local help may also be available.
- **Assistance Process** - After the application is taken, the damaged property is inspected to verify the loss. If approved, an applicant will soon receive a check for rental assistance or a grant. Loan applications require more information and approval may take several weeks after application. The deadline for most individual assistance programs is 60 days following the President's major disaster declaration.

Audits are done later to ensure that aid went to only those who were eligible and that disaster aid funds were used only for their intended purposes. These federal program funds cannot duplicate assistance provided by other sources such as insurance.

After a major disaster, FEMA tries to notify all disaster victims about the available aid programs and urge them to apply. The news media are encouraged to visit a Disaster Recovery Center, meet with disaster officials, and help publicize the disaster aid programs and the toll-free teleregistration number.

2. Public Assistance

Public Assistance is aid to state or local governments to pay part of the costs of rebuilding a community's damaged infrastructure. Generally, public assistance programs pay for 75 per cent of the approved project costs. Public Assistance may include debris removal, emergency protective measures and public services, repair of damaged public property, loans needed by communities for essential government functions and grants for public schools.

3. Hazard Mitigation

Disaster victims and public entities are encouraged to avoid the life and property risks of future disasters. Examples include the elevation or relocation of chronically flood-damaged homes away from flood hazard areas, retrofitting buildings to make them resistant to earthquakes or strong winds, and adoption and enforcement of adequate codes and standards by local, state and federal government. FEMA helps fund damage mitigation measures when repairing disaster-damaged structures and through the Hazard Mitigation.

The Department of Commerce's Economic Development Administration (EDA) can assist communities in addressing long-term disaster relief and recovery needs. Through competitive grants to eligible applicants, EDA's disaster recovery generally falls within three categories. Below is a brief explanation of the categories as identified on the U.S. Economic Development Administration website. For detailed information on each program refer to <http://www.eda.gov/disasterrecovery.htm>.

1. Strategic Planning and Technical Assistance

EDA offers financial resources and technical assistance to help develop and enhance economic development plans following a disaster. This is generally achieved through the funding of disaster recovery plans, strategies, and funding for disaster recovery coordinators.

2. Infrastructure Design and Development

EDA offers grant funds to support the construction design and engineering, or to support the building of new infrastructure, or the retro fit and expansion of existing facilities to foster economic development to retain or attract jobs to the region

3. Capital for Alternative Financing

EDA offers grants to create Revolving Loan Funds (RLF), or to recapitalize existing RLFs, who provide below market rate loans to businesses to help recovery efforts and business expansion/creation.