

**GOAL 1: TO REDUCE LOSS OF LIFE, INJURY, AND DISRUPTIONS TO ESSENTIAL PUBLIC SERVICES AND INFRASTRUCTURE BY REDUCING THE VULNERABILITY TO CRITICAL FACILITIES DURING HAZARD EVENTS THAT COULD RESULT IN LOSS OF LIFE OR INJURY.**

**OBJECTIVE 1.1: MINIMIZE THE DISRUPTION TO AND ENHANCE RAPID RESTORATION OF SYSTEMS AND SERVICES.**

**Action 1.1.1: Remove debris from streams that cause damages to bridges, culverts, and transportation facilities.**

**Benefits:** Natural and man-made activities generate a variety of debris that includes but is not limited to, trees and vegetative matter, building construction material, appliances, personal property, mud, and sediment deposits. The quantity and of type of debris generated from any particular disaster will be a function of the location and kind of event experienced, as well as its magnitude, duration and intensity. This action will reduce the damages to existing and future facilities caused by debris that can block the flow of water in streams thus increasing flooding and pressure buildup.

**Jurisdiction(s):** All; especially in Pendleton County and along Fourmile Creek in Campbell County  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** Flood  
**Estimated Costs:** high  
**Funding Method(s):** Local Funds, Prevention Grants & Natural Resources Grants

**Action 1.1.2: Develop a coordinated, sustained interagency debris removal plan.**

**Benefits:** Debris from tornados, severe thunderstorms, earthquakes, and winter storms can damage needed utility services, as well as block transportation facilities such as roads and bridges for emergency first responders. Debris generated from Natural Hazards may cause damages to existing structures if not properly mitigated before and after a natural disaster. Debris generated from public and private property may increase damages to other structures if not properly mitigated. The recommended components of a debris removal plan are:

1. Develop a Proposed Command Structure
2. Pre-Designate Staging and Dumping Sites
3. Pre-Qualify Contractors to be used.
4. Identify Specialized Equipment Needs
5. Provide for Recycling of Materials
6. Debris removal from public and private properties.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention / Property Protection  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** high  
**Funding Method(s)** Pre-Disaster Mitigation Grants, Local Match, & Flood Control Grants

**OBJECTIVE 1.2: MINIMIZE THE DISRUPTION AND ENHANCE RAPID RESTORATION OF UTILITY SYSTEMS. ~~ASSURE~~ ENSURE THAT ALL EMERGENCY FACILITIES HAVE TEMPORARY BACKUP POWER CAPABILITIES.**

**Action 1.2.1: Trim trees and debris away from overhead power lines and roads.**

**Benefits:** Removing or trimming trees and obstructions as well as removing debris away from utilities and infrastructure would greatly reduce the potential losses to utility lines, roads and structures. During winter storms that involve a great deal of ice buildup, trees tend to fall onto overhead power lines causing significant power outages, as well as dollar losses sustained by the local jurisdictions and utility companies. Additionally, with the number of ash trees dying due to the Invasive species, the Emerald Ash Borer, it is important to be proactive in removing dead trees from powerlines and roadways.

**Jurisdiction(s):** All, and utilities with overhead lines  
**Category of Action:** Prevention  
**Hazard(s) Mitigated:** Severe Thunderstorms, Severe Winter Storms, Tornados, Flooding  
**Estimated Costs** high

**Funding Method** Local Funds

**Action 1.2.2: Encourage all critical facilities, including utilities and planning agencies, to acquire temporary or fixed backup power capabilities.**

**Benefits:** In the event that power and utilities are lost, generators allow critical facilities to remain operational in order to continue to offer needed services to the jurisdictions. Fire Departments, Emergency Operations Centers and dispatch centers, GIS information agencies, hospitals, water treatment and pump stations and emergency shelters and schools, which can be used as shelters, are examples of critical facilities important during a disaster event. Though this action does not reduce the number or types of existing buildings in the hazard area, it allows these facilities to function during a hazard event.

**Jurisdiction(s):** All  
**Category of Action:** Emergency Services  
**Hazard(s) Mitigated:** All  
**Estimated Costs** moderate  
**Funding Method** Emergency Service Grants, Local Sources

**Action 1.2.3: Encourage residents to have the ability to be self-sufficient for up to 72 hours in the event there is a loss of utility services.**

**Benefits:** During the evaluation of the risk assessment, it was determined that several structures are at risk from various hazards. The local mitigation committees recognized that it is the responsibility of local governments and individuals to mitigate against the effects of disasters. Homeowners that take precautions and are prepared to endure a disaster will significantly reduce the effects of natural hazards upon them and their family. Local mitigation committees stressed the importance of the individual's responsibility to be prepared and mitigate damages and effects of the damages from hazards.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** All  
**Estimated Costs:** low  
**Funding Method(s)** Prevention Grants, Local Funds

**Action 1.2.4: Place new utilities underground where feasible.**

**Benefits:** Placing utilities underground protects from damage from wind and debris.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** All  
**Estimated Costs:** high  
**Funding Method(s)** Prevention Grants, Local Funds

**Action 1.2.5: Encourage fuel sources/suppliers to have back-up power.**

**Benefits:** While it is important for critical facilities and other infrastructure noted in Action 1.2.2 to have backup power capabilities, it does little good if there is no fuel for emergency vehicles and generators. Thus, it is important to encourage fuel sources and suppliers to also have back-up power to increase the resiliency of the entire area.

**Jurisdiction:** All  
**Category of the Action:** Emergency Services  
**Hazard(s) Mitigated:** All  
**Estimated Costs:** moderate

**Funding Method(s)** private

**OBJECTIVE 1.3: MINIMIZE THE DAMAGES TO GROUNDWATER AND THE ENVIRONMENT AS A RESULT OF DAMAGES CAUSED BY HAZARDS.**

**Action 1.3.1: Develop and continue to improve a Stormwater Management Plan that reduces flooding, erosion, and damage caused to the environment.**

**Benefit:** Many of the problems that arise from flooding are due to the lack of proper stormwater facilities and drainage. Stormwater management plans will identify the best placement and construction of stormwater drainage facilities that will reduce the amount of flooding and lessen potential damages as a result of flooding.

**Jurisdiction(s):** All

**Category of the Action:** Prevention

**Hazard(s) Mitigated:** Flooding

**Estimated Costs:** n/a

**Funding Method(s)** Pre-Disaster Mitigation Funds, HMGP Funds, Local Matches, Flood Control Grants

**OBJECTIVE 1.4: MINIMIZE DAMAGE TO ROADS, BRIDGES, CULVERTS AND OTHER INFRASTRUCTURE THROUGH RELOCATION, REBUILDING AND OTHER MEANS IN ORDER TO REDUCE DAMAGE FROM NATURAL HAZARD EVENTS.**

**Action 1.4.1: Develop policies and a plan for reducing or eliminating damage to roads and culverts from natural hazards, particularly flooding.**

**Benefit:** There are many roads, bridges, culverts and other infrastructure that are older and can no longer handle the amount of water that pass over, through or around them. Developing plans to replace, move, or strengthen this infrastructure will be beneficial in mitigating future loss from hazards, particularly due to an inundation of water.

**Jurisdiction(s):** All

**Category of the Action:** Prevention/Structural Projects

**Hazard(s) Mitigated:** Flooding, Dam Failure

**Estimated Costs:** n/a

**Funding Method(s)** Pre-Disaster Mitigation Funds, HMGP Funds, Local Matches, Flood Control Grants

**Action 1.4.2: Develop and implement plans to clear dead or vulnerable trees from near roads and power lines.**

**Benefit:** The invasive species, Emerald Ash Borer, has killed a vast majority of the ash trees in the NKADD region. There are millions of these trees that are dead and will become more susceptible to falling as they rot. Ash trees are large and could damage structures within several dozen feet of them if they fall. There are many ash trees near power lines and roads that utilities and many road crews have been proactive in cutting these hazards down. It is a costly and time-consuming undertaking, so developing plans will be beneficial in the long run. There are other invasive species that are harmful to trees that could potentially invade our region as well.

**Jurisdiction(s):** All

**Category of the Action:** Prevention

**Hazard(s) Mitigated:** Invasive Species, Wind

**Estimated Costs:** n/a

**Funding Method(s)** Pre-Disaster Mitigation Funds, HMGP Funds, Local Matches

**GOAL 2: PROTECT EACH JURISDICTION'S MOST VULNERABLE POPULATIONS, BUILDINGS AND CRITICAL FACILITIES THROUGH THE IMPLEMENTATION OF COST-EFFECTIVE AND TECHNICALLY FEASIBLE MITIGATION PROJECTS.**

**OBJECTIVE 2.1: REDUCE THE NUMBERS OF CRITICAL INFRASTRUCTURE AND FACILITIES IN IDENTIFIED HAZARD AREAS.**

**Action 2.1.1: Adopt recognized building code standards for the State of Kentucky for each jurisdiction within the region and encourage the use of adoption of property and maintenance codes.**

**Benefits:** The International Building Code represents minimum standards that must be met by the private sector construction industry to safeguard public health and safety. It incorporates resistance to natural disasters, fire protection, and security of building systems into its construction codes. Costs for jurisdictions to adopt are minimal. Costs of compliance will be borne by the construction industry and are expected to be minimal. Most jurisdictions reference and follow the building codes set by the State of Kentucky, which are similar but sometimes more strict than the International Building Code.

**Jurisdiction(s):** All  
**Category of the Action:** Property Protection  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** n/a  
**Funding Method(s):** Local Government

**Action 2.1.2: Direct that development and installation of new critical facilities be out of hazard areas. Also relocate any critical facilities currently in special flood hazard area above that area.**

**Benefits:** The Local Mitigation committees determined the most effective way for jurisdictions to mitigate any potential losses to future buildings is to guide development away from the hazard areas, especially flood hazard and landslide hazard areas. Kenton County’s Emergency Management Center is located within the floodplain. It was determined that relocating the facility outside of the floodplain would be a high priority in hazard mitigation and its ability to maintain communications in the event of flood. There are a few other critical facilities in the region that are in hazard areas, which will be a priority to find funding to assist moving them to safer locations.

**Jurisdictions:** All; specifically relocate fire stations in Mentor, Melbourne, Silver Grove and Camp Springs  
**Category of the Action:** Property Protection/Emergency Services  
**Hazard(s) Mitigated:** Flooding, Landslide  
**Estimated Costs:** n/a  
**Funding Method(s):** local funds, HMGP, PDM, flood control grant

**OBJECTIVE 2.2: MINIMIZE RISK TO VULNERABLE POPULATIONS THROUGH THE CONSTRUCTION OF COMMUNITY SHELTERS.**

**Action 2.2.1: Build severe weather shelters for vulnerable populations, including but not limited to tornado safe rooms.**

**Benefits:** The primary mission of local government and emergency services is to protect their citizens in times of hazards and disasters. To that end, providing safe shelters for people to wait out severe weather and other hazards would be very beneficial. Particularly in tornado-prone areas like our region.

**Jurisdictions:** All  
**Category of the Action:** Emergency Services  
**Hazard(s) Mitigated:** All  
**Estimated Costs:** moderate  
**Funding Method(s):** local funds, HMGP, PDM

**GOAL 3: ENHANCE EXISTING OR DESIGN NEW JURISDICTIONAL POLICIES THAT WILL REDUCE THE POTENTIAL DAMAGING EFFECTS OF HAZARDS WITHOUT HINDERING OTHER COMMUNITY GOALS.**

**OBJECTIVE 3.1: ENFORCE AND ENHANCE EXISTING POLICIES AND AUTHORITIES.**

**Action 3.1.1: Adopt and maintain current FIRMs (Flood Insurance Rate Maps) and local flood protection ordinances.**

**Benefits:** Enforcement of existing policies is relatively low in cost, and reaps great benefits in reducing potential losses.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention, Awareness  
**Hazard(s) Mitigated:** Flood

**Estimated Costs:** minimal  
**Funding Method(s):** Local Revenue

**Action 3.1.2: Encourage participation in the Risk MAP program.**

**Benefits:** The Risk MAP program is a FEMA program provides guidelines and requirements for NFIP flood risk analysis and addresses the performance of flood mitigation projects and other related activities. Communities that participate in the NFIP and Risk MAP are communities that are actively working towards flood mitigation and prevention.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention, Awareness  
**Hazard(s) Mitigated:** Flood  
**Estimated Costs:** minimal  
**Funding Method(s):** Local Revenue

**OBJECTIVE 3.2: DEVELOP NEW POLICIES SUCH AS ORDINANCES AND BUILDING CODES THAT WILL REQUIRE NEW STRUCTURES MEET STANDARDS FOR HAZARD AREAS.**

**Action 3.2.1: Improve the enforcement of current building codes to include mitigation objectives.**

**Benefits:** Building codes that are currently in place will be enhanced by including mitigation activities where applicable and feasible. Any cost of these activities will primarily be borne by the individual or construction developer during projects, and will likely be minimal.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention, Awareness  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** minimal  
**Funding Method(s):** Developers, Property owners

**Action 3.2.2: Develop and continue with zoning and land use ordinances that will regulate development in hazard areas. (this will only apply to jurisdictions that currently undertake land use planning and zoning activities)**

**Benefits:** Development and continuation of zoning and land use regulations will allow the local jurisdiction to regulate the type of development in hazard areas. Regulation of development is a proven way to reduce potential losses without posing a financial strain on the jurisdiction.

**Jurisdiction(s):** Boone, Campbell, Gallatin, Grant, Kenton, & Pendleton  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** minimal  
**Funding Method(s):** Local Revenue

**Action 3.2.3: Eliminate repetitive loss structures through property acquisition.**

**Benefits:** Development of zoning and land use regulations will allow the local jurisdiction to regulate the type of development in hazard areas. Regulation of development is a proven way to reduce potential losses without posing a financial strain on the jurisdiction.

**Jurisdiction(s):** Boone, Campbell, Carroll, Gallatin, Kenton, & Pendleton; especially along Ohio River in Campbell County  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** Flooding  
**Estimated Costs:** moderate

**Funding Method(s):** HMGP, PDM, other grant sources, local funds

**Action 3.2.4: Conduct pre-disaster mitigation activities for residential structures in the floodway.**

**Benefits:** While it is important to have plans and policies in place that enforce floodplain activity, there are many residential structures that have been in place before floodplain policies were enacted. As flood events continue to worsen, it is important to assess and conduct pre-disaster mitigation activities for these structures.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** Flooding  
**Estimated Costs:** moderate  
**Funding Method(s):** HMGP, PDM, other grant sources, local funds

**OBJECTIVE 3.3: INTEGRATE HAZARD MITIGATION PLAN INTO OTHER COMMUNITY PLANS.**

**Action 3.3.1: Continue to reference the Hazard Mitigation Plan in other plans and grant applications.**

**Benefits:** Continuing to revisit the Hazard Mitigation Plan in between updates and to make it a part of other plans and policies is important for communities to truly mitigate their hazard risks and to become resilient.

**Jurisdiction(s):** All  
**Category of the Action:** All  
**Hazard(s) Mitigated:** All  
**Estimated Costs:** low  
**Funding Method(s):** HMGP, PDM, other grant sources, local funds

**Action 3.3.2: Encourage communities, developers, and other organizations to consult the hazard mitigation plan for future developments, capital improvement programs, and other actions that have community-wide impacts**

**Benefits:** Making others, not only the public, but decision makers aware of the hazard mitigation plan and the different policies and plans that it can affect is important. Hazard Mitigation works best when all stakeholders are involved and invested.

**Jurisdiction(s):** All  
**Category of the Action:** Education and Awareness  
**Hazard(s) Mitigated:** All  
**Estimated Costs:** low  
**Funding Method(s):** HMGP, PDM, other grant sources, local funds

**Action 3.3.3: Encourage communities to participate in the Community Rating System (CRS).**

**Benefits:** The Community Rating System is a program that encourages communities to commit to various flood mitigation measures and in return lowers resident's flood insurance rates.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** Floods  
**Estimated Costs:** low  
**Funding Method(s):** local funds

**OBJECTIVE 3.4: ENCOURAGE POLICIES AND PROGRAMS THAT PREVENT SLIPS, SLIDES AND EROSION ON SLOPES AND LAND, PARTICULARLY WHERE ROADS AND VULNERABLE POPULATIONS ARE CONCERNED.**

**Action 3.4.1: Encourage communities to coordinate with KYTC, County road departments, and utilities in order to create policies and plans that prevent slips, slides and other land erosion problems that affect roadways. Examples of this include but are not limited to improving drainage systems, culverts, and road re-location.**

**Benefits:** Coordination between agencies to protect infrastructure from slips, slides and erosion will mitigate loss from hazard events, but also protect populations near the vulnerable infrastructure from being isolated during emergencies or prevented from reaching employment.

**Jurisdiction(s):** All  
**Category of the Action:** Prevention  
**Hazard(s) Mitigated:** Landslides, erosion  
**Estimated Costs:** high  
**Funding Method(s):** local funds, HMGP, PDM, other grants

**GOAL 4: PROTECT PUBLIC HEALTH, SAFETY AND WELFARE BY INCREASING THE PUBLIC AWARENESS OF EXISTING HAZARDS AND BY FOSTERING BOTH INDIVIDUAL AND PUBLIC RESPONSIBILITY IN MITIGATING RISKS DUE TO THOSE HAZARDS.**

**OBJECTIVE 4.1: EDUCATE THE PUBLIC ABOUT HAZARDS PREVALENT IN THEIR JURISDICTIONS.**

**Action 4.1.1: Educate residents of the location of hazard areas by providing maps and hazard information.**

**Benefits:** Educating residents about the locations of hazard area will result in the reduction of the potential losses when the property owner taking the appropriate precautions to avoid or minimize exposure to known hazards.

**Jurisdiction(s):** All  
**Category of the Action:** Awareness  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** minimal  
**Funding Method(s)** Local Revenues, Prevention Grants

**Action 4.1.2: Educate the public about early warning systems and promote the use of NOAA “All Hazards” radios, and outdoor warning sirens for early warning and post event information.**

**Benefits:** NOAA Weather Radio is a nationwide network of radio stations broadcasting continuous weather information direct from nearby National Weather Service offices. These stations broadcast warnings, as well as post event information for all types of hazards, both natural and man-made. These broadcasts are generated 7 days per week, 24 hours per day. NOAA radios are a single source for the most comprehensive weather and emergency information available to the public. These warnings provide people time to react and take preventative measures before dangerous weather or other hazard conditions strike their area. NOAA weather radios will bring awareness to the public regarding all hazards. Outdoor Warning sirens will alert citizens in the vicinity to take shelter.

**Jurisdictions:** All  
**Category:** Awareness  
**Hazards Mitigated:** All  
**Estimated Costs:** minimal  
**Funding Method:** local funds

**Action 4.1.3: Educate the public about the Floodplain Ordinance.**

**Benefits:** Making residents aware of Floodplain dangers and regulations will reduce the likelihood that structures will be built in flood hazard areas.

**Jurisdiction(s):** Boone, Campbell, Carroll, Gallatin, Grant, Kenton, Owen, Pendleton  
**Category of Action:** Prevention  
**Hazard(s) Mitigated:** Floods  
**Estimated Costs** minimal  
**Funding Method:** local funds

**Action 4.1.4: Educate citizens about evacuation plans, policies, and procedures for all hazards.**

**Benefits:** Counties currently have evacuation plans included in the Emergency Operations Plan. This action will develop more detailed, refined evacuation procedures for specific hazard areas, especially flooding and landslide hazards. This action will help protect the public health and safety by having plans in place to assist those people threatened by various emergency conditions evacuate to safety in a timely manner. The plans to be developed will include a determination of the conditions under which evacuation may be necessary, a clear chain of command, specific evacuation routes, plans and procedures for different types of emergencies and geographic areas and provisions for assisting those with disabilities.

**Jurisdiction(s):** All  
**Category of Action:** Prevention  
**Hazard(s) Mitigated:** All  
**Estimated Costs** minimal  
**Funding Method:** grants, local funds

**Action 4.1.5: Educate the public about measures that can be taken to reduce damages caused by natural hazards to homes and personal property.**

**Benefits:** By making residents aware of specific steps they can take to protect their homes and property individuals would be able to prepare their homes for a hazard, homes that were prepared would have a greater chance of withstanding an event, thereby sustaining less damage.

**Jurisdiction(s):** All  
**Category of Action:** Prevention  
**Hazard(s) Mitigated:** All  
**Estimated Costs** minimal  
**Funding Method:** grants, local funds

**Action 4.1.6: Encourage community resilience by educating residents about 72-hour emergency plans and kits.**

**Benefits:** By making residents aware of 72-hour emergency plans and kits, how to prepare, and what to include in the kits, communities can make their residents much more resilient and therefore encourage quicker recovery from disasters.

**Jurisdiction(s):** All  
**Category of Action:** Prevention  
**Hazard(s) Mitigated:** All  
**Estimated Costs** minimal  
**Funding Method:** grants, local funds

**GOAL 5: INCREASE THE TECHNICAL CAPABILITIES OF LOCAL JURISDICTIONS TO REDUCE POTENTIAL LOSSES.**

**OBJECTIVE 5.1: IMPROVE EACH JURISDICTIONS CAPABILITY TO IDENTIFY AND MAP VULNERABLE STRUCTURES AND CRITICAL FACILITIES IN HAZARD AREAS.**

**Action 5.1.1: Create and maintain a GIS database inventory of all critical facilities and structures in each hazard area.**

**Benefits:** During the risk assessment, several structures and facilities were identified as being in hazard areas. However, data on each of those structures and facilities is very limited. Creating and maintaining a database will allow more detailed information to be collected on type, value, personnel, elevation, and construction materials of each facility. This data can be incorporated into a GIS database. This data would provide a geographic link to other information such as parcel data maintained by the county Property Valuation Administrator (PVA) office.

**Jurisdictions:** All  
**Category of Action:** Prevention/Awareness  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs** minimal  
**Funding Method** Pre-Disaster Mitigation, local funds

**Action 5.1.2: Update local mapping system capabilities including hardware and software.**

**Benefits:** A GIS database is not useful if some jurisdictions cannot use it if they lack the necessary hardware or software. Such hardware or software would allow some smaller jurisdictions to utilize data specific to them and become more prepared prior to hazard events.

**Jurisdictions:** All  
**Category of Action:** Prevention/Awareness  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** minimal  
**Funding Method:** Pre-Disaster Mitigation, local funds

**OBJECTIVE 5.2: INCREASE THE JURISDICTIONS ABILITY TO COMMUNICATE AND DIRECT EMERGENCY SERVICES AND RESOURCES TO THE APPROPRIATE HAZARD AREAS.**

**Action 5.2.1: Upgrade Emergency Services communication equipment and general technology and create redundancy.**

**Benefit(s):** This action will not reduce the risk, but it will have 2 important benefits. First, the communications equipment would facilitate communications among responders from different agencies, utilizing different types and frequencies of radios. Second, it would provide for a direct communication from the Emergency Operations Center that controls resources to the responders at the scene of a disaster. Thirdly, creating redundancy would protect the system in case of failure and ensure continuity of operation.

**Jurisdiction(s):** All  
**Category of Action:** Emergency Services  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** Very high (\$35 million)  
**Funding Method:** Homeland Security Grants, First Responder, Grants, FEMA Fire Act Grants, CDBG Disaster Relief Grants

**Action 5.2.2: Design and Implement a protection program for critical information systems and infrastructure and ensure survivability of the region's communication system. (Ex. E-911 dispatch, communications, etc.)**

**Benefits:** Each jurisdiction relies on its information and communication systems infrastructure. Loss of critical information and communication systems and infrastructure would result in major impacts and interruptions to all emergency responders, road crews, and emergency management officials responding to a hazard event. This action will enhance a jurisdiction's ability to avoid a disastrous event to critical information and communication systems infrastructure, thus minimizing the impacts and interruptions to city services and emergency response capabilities. This action will assess weaknesses and strengths and design a program that will reduce the losses to the information systems and facilities that direct emergency services.

**Jurisdictions:** All  
**Category of Action:** Emergency Services  
**Hazard(s) Mitigated:** All Hazards  
**Estimated Costs:** moderate  
**Funding Method:** Pre-Disaster Mitigation, CDBG Disaster Relief Grants

**Action 5.2.3: Expand warning and notification systems such as outdoor warning sirens and NOAA/All-Hazard/weather radios.**

**Benefits:** Early warning systems provide a means to quickly provide advance warning to the public of the onset severe weather.

**Jurisdictions:** All  
**Category of Action:** Emergency Services

<b>Hazard(s) Mitigated</b>	Thunderstorms/Severe Wind, Tornados
<b>Estimated Costs</b>	moderate
<b>Funding Method</b>	Pre-Disaster Mitigation, CDBG Disaster Relief Grants

**Action 5.2.4: To ensure continuity of operation at Emergency Operations Centers, implement infrastructure and technology improvements.**

**Benefits:** During a disaster, Emergency Operations Centers are the center of the recovery effort. Improvements to technology and infrastructure are necessary to ensure continuity of services and operations.

<b>Jurisdictions:</b>	All
<b>Category of Action</b>	Emergency Services
<b>Hazard(s) Mitigated</b>	All
<b>Estimated Costs</b>	High
<b>Funding Method</b>	Pre-Disaster Mitigation, CDBG Disaster Relief Grants

**Action 5.2.5: Encourage the use of the Integrated Public Alert and Warning System (IPAWS), social media, and other mass notification tools.**

**Benefits:** During a disaster, timely and accurate information disseminated to as many people as possible is vital. Mass notification tools, with the increasing usage of smart phones and smart devices, are one of the best and easiest ways to providing information to many people at once.

<b>Jurisdictions:</b>	All
<b>Category of Action</b>	Emergency Services
<b>Hazard(s) Mitigated</b>	All
<b>Estimated Costs</b>	High
<b>Funding Method</b>	Pre-Disaster Mitigation, CDBG Disaster Relief Grants

**GOAL 6: BUILD LOCAL SUPPORT AND COMMITMENT TO CONTINUOUSLY BECOME LESS VULNERABLE TO HAZARDS.**

**OBJECTIVE 6.1: TRAIN VOLUNTEERS AND STAFF TO SUPPORT AND IMPLEMENT MITIGATION ACTIVITIES THAT WILL ENHANCE THE RESPONSE CAPABILITIES OF THE LOCAL JURISDICTIONS.**

**Action 6.1.1: Recruit and Train volunteers to serve on Citizen Corps, CERT, American Red Cross and other volunteer programs.**

**Benefit(s):** These volunteers will be called upon to supplement existing professional staff in the delivery of emergency related services. These volunteers will deliver emergency preparedness presentations, maintain a database of disaster relief resources, support public safety officials with evacuations and staffing for relief centers, and aid in damage assessment teams.

<b>Jurisdiction(s):</b>	All
<b>Category of Action</b>	Prevention
<b>Hazard(s) Mitigated</b>	All
<b>Estimated Costs</b>	moderate
<b>Funding Method</b>	Pre-Disaster Mitigation

**Action 6.1.2: Encourage more coordination between jurisdictions on hazard mitigation issues.**

**Benefit(s):** A theme in these actions, committees stressed the coordination and cooperation between agencies is key to mitigating losses and being prepared to recover from disasters.

<b>Jurisdiction(s):</b>	All
<b>Category of Action</b>	Prevention
<b>Hazard(s) Mitigated</b>	All
<b>Estimated Costs</b>	moderate

**Funding Method** Pre-Disaster Mitigation

**Action 6.1.3: Train staff and disaster responders for hazard events, ensuring responders are qualified. Specifically, require NIMS training.**

**Benefit(s):** Properly trained staff and volunteers are vital to disaster and mitigation issues, training programs like NIMS ensure that staff and responders have had appropriate training.

**Jurisdiction(s):** All  
**Category of Action** Prevention/Education  
**Hazard(s) Mitigated** All  
**Estimated Costs** moderate  
**Funding Method** Pre-Disaster Mitigation