

### **3.4 Mitigation Strategy**

The Lincoln Trail Regional Hazard Mitigation Plan includes mitigation strategies intended to reduce or eliminate the impacts of natural hazard events identified through the risk assessment process. The mitigation strategies developed for this plan are the result of gathering pertinent data from every jurisdiction, extensive research and analysis of hazard data and profiles, and careful assessment of regional vulnerability.

*Process Summary: Integration of Hazard Mitigation Plan with Other Planning Mechanisms.*

The process of gathering hazard data, evaluating local resources and mitigation tools and updating the Lincoln Trail Regional Hazard Mitigation Plan has given all local units of government insight into the importance of incorporation hazard mitigation into local community planning efforts, emergency operations plans, capital improvement plans, local law, and public education outreach efforts whenever practical and applicable. An exhaustive list of these capabilities and planning mechanisms is contained in tables 3.4.1.1.1, 3.4.1.1.2 and 3.4.1.1.3.

This effort is exemplified throughout the migration strategy section of this plan and reflected in the regional goals, jurisdictional legal authorities, mitigation strategies, completed and proposed projects, and public education outreach efforts cited.

#### **3.4.1 - Capabilities Assessment**

The success of any mitigation strategy is incumbent on the resources and capabilities of the regional jurisdictions to implement action plans that successfully achieve mitigation goals. Local communities submitted information used to identify regional capabilities. Assessment of these capabilities will enable the region to identify disparities and capitalize on local resources as a means of accomplishing mitigation goals.

Since approval of the Lincoln Trail Regional Hazard Mitigation Plan in 2005, the Plan received dual approval under the multi-hazard and flood mitigation categories. All jurisdictions are now eligible to apply for Flood Mitigation Assistance (FMA) funds in addition to Pre-Disaster and Hazard Mitigation grant assistance.

A capabilities assessment illustrates the resources available to achieve goals, and identifies gaps where improvements can be made to improve regional resiliency and preparedness.

#### **Legal Authority of Local Jurisdictions**

Local units of government in Kentucky are empowered to implement mitigation programs, policies and actions. Local governments can utilize their powers of regulation, acquisition, taxation and spending to implement a successful hazard mitigation program within their respective jurisdictions. Utilization of all four is the best approach to formulating a comprehensive program that diminishes the propensity for oversights.

#### **Regulation**

*Police Power:* The Kentucky Revised Statutes bestow general police power to local units of government. This enables them to enact and enforce ordinances that define, prohibit, regulate or abate actions, omissions, or conditions deemed detrimental to the welfare of the public, and to abate nuisances.

Police power is an effective tool that allows local units of government to implement hazard mitigation programs to protect public health, safety and welfare through the use of local ordinances. Local ordinances may also be used to mitigate any circumstance that threatens the general health and safety of the public.

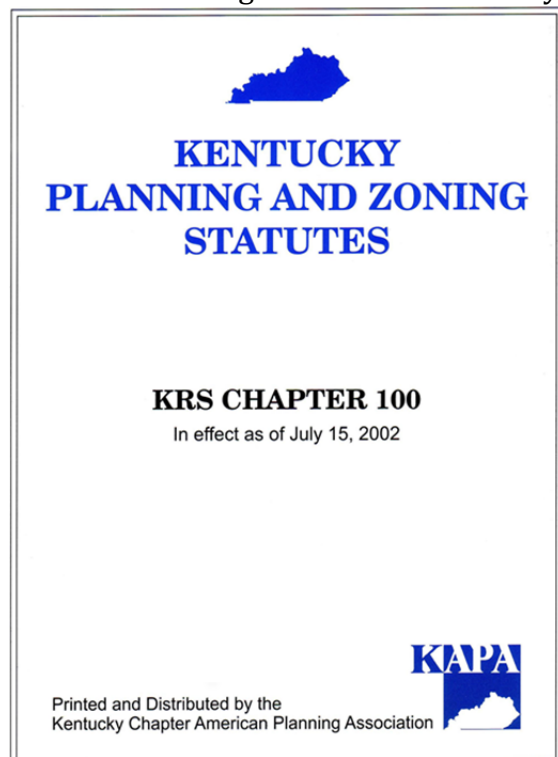
Each jurisdiction within the Lincoln Trail Region has the authority to enact and enforce regulatory ordinances designed to protect the health, safety and general welfare of its citizens.

*Building Codes and Building Inspection:* Mitigation measures may regulate the standards for the construction and retrofit of structures within a community, in order to make buildings more resilient to the effects of natural hazards. State and Federal building codes and regulations are designed to help meet these standards.

When appropriate, local jurisdictions are encouraged to develop and enforce building codes that exceed the standards provided in State and Federal regulations. The ability of local units of government to develop codes specific to their geography and vulnerabilities is an essential tool to ensure that mitigation strategies are appropriate and successful.

*Land Use:* KRS 100 enables local units of government to create a comprehensive plan for land use. In counties with populations of 300,000 or more, KRS 100 mandates countywide planning; otherwise, it is an enabling statute. The Lincoln Trail Region does not have any counties with a population of 300,000. KRS 100 allows local governments to utilize a powerful tool for controlling land use within each jurisdiction. Land use controls can determine the amount, timing, density, quality and location of all new development. These land use controls can help to determine the level of vulnerability each jurisdiction will experience as a result of a natural disaster. Land Use Plans become a chapter in each participating jurisdiction's comprehensive plan and can be enforced through planning, zoning ordinances, floodplain ordinances and subdivision regulations.

*Planning:* KRS 100 establishes three types of planning units: independent, joint and regional. The type of planning unit determines the land area within its purview. The Lincoln Trail



***Zoning:*** When local planning units have adopted all of the required elements of a comprehensive plan, then the legislative bodies and fiscal courts within the planning unit may enact zoning and other growth management regulations to promote public health, safety, morals and general welfare of the planning unit, in accordance with KRS 100.201. Specifically, zoning can be used to protect natural resources, specific areas of the planning unit that need special protection, and to prevent the loss of life, health, or property from fire, flood and other dangers.

[illegible]

FIRM Breckinridge County 21027C0250C. *Source: FEMA.*

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*Subdivision Regulations:* KRS 100 defines subdivision as “the division of a parcel of land into three (3) or more lots or parcels except in a county containing a city of the first, second or third class or in an urban-county government or consolidated local government where a subdivision means the division of a parcel of land into two (2) or more lots or parcels; for the purpose, whether immediate or future, of sale, lease, or building development, or if a new street is involved, any division of a parcel of land; provided that a division of land for agricultural use and not involving a new street shall not be deemed a subdivision.” A planning unit may develop subdivision regulations for a number of purposes, to include: the protection and preservation of the value of the land, buildings and improvements upon the land, the protection and provision of public health, safety and general welfare of the jurisdiction, to minimize the pollution of air, streams and ponds, to assure that drainage facilities are adequate, safeguard the water table, preserve the natural features of the area, and to encourage wise use and management of natural resources.

Subdivision regulations, pertaining to flooding, usually require developers to install adequate drainage systems and design water and sewer facilities that minimize flood damage and avoid contamination.

*Floodplain Ordinance:* State and federal governments can play a significant role in assisting communities to develop and implement floodplain management programs and encourage the effective use of mitigation strategies. However, the final responsibility rests with local units of government. Flood plains are important water resource areas when left in their natural, undisturbed state. They are often very fertile areas for farming as well, and several exist within the Lincoln Trail Region. Flood plains serve three major purposes: as natural water storage and conveyance; water quality maintenance; and as a ground water recharge area. Unsuitable development in, or manipulation of a flood plain can destroy its value and have an adverse environmental impact on the area. An example of adverse impact would be the flooding of previously dry land when fill is added to any area of a flood plain.

All eight counties and eighteen of the twenty-seven cities within the Lincoln Trail Region participate in the National Flood Insurance Program (NFIP), thus making flood insurance available to their citizens. These communities became eligible for participation in NFIP by adopting floodplain management regulations intended to reduce or eliminate future losses due to flooding. Only those property owners who purchase flood insurance are covered for losses due to flooding, since homeowner’s insurance does not cover flood damage or losses. Floodplain management regulations, the creation and enforcement of floodplain ordinances and the use of digital floodplain maps are all valuable tools in mitigating damage and losses due to flooding.

## **Acquisition**

KRS 104.030 empowers cities to extend flood control measures outside corporate boundaries through the acquisition of property. For the purpose of protecting property within and beyond their corporate limits, cities of all classes are authorized to extend a municipal flood control system beyond city limits by constructing, enlarging, extending,

equipping, maintaining and operating walls or other barriers with necessary appurtenances and equipment, beyond the municipal corporate boundaries.

In 1997, Meade County utilized a FEMA Hazard Mitigation Program Grant to exercise the power of acquisition to buy out a portion of the Concordia Community in Meade County. The land was an area of repetitive flood damage, so the County cleared the land and now keeps it in perpetuity as green space. This action removed twelve homes and several area residents, from an area that was a repetitive hazard and eliminated the potential for future losses there.

## **Taxation**

The Commonwealth of Kentucky empowers local units of government with the ability to levy taxes and impose special assessments. The power of taxation can be used to impact the pattern of development within a community and help fund mitigation programs such as storm water management. As a result of expanding regulations from the Clean Water Act of 1977 and the National Pollutant Discharge Elimination System (NPDES), several of our local units of government have initiated a Storm Water Utility Fee to help fund mitigation projects that reduce losses and infrastructure damage as a result of flooding and pollution caused by storm water.

## **Spending**

The Kentucky General Assembly has empowered local units of government with the ability to make expenditures in the public interest. The economic impact of natural disasters to each jurisdiction plays a role in spending decisions and annual budgets. Money must be allocated to cover the cost of capital improvement projects that mitigate the effects of natural hazards as well as expenses incurred for snow removal, debris pickup and the manpower necessary to respond to any kind of natural disaster.

## **Political Arena**

While most residents of an area are aware of what natural hazards are prevalent in their locale and the potential impact that such events can have, there is a gap in knowledge regarding mitigation measures that can be initiated to mitigate those harmful impacts. Educating the general populace about mitigation measures and strategies that could potentially decrease or eliminate the adverse effects of any disaster, will be a key factor in the planning efforts of our region.

The devastating effects of recent natural hazard events and the profound impact they have had on the region, will certainly affect the political climate and put an emphasis on hazard mitigation planning and strategies.

### **3.4.1.1 Community Capability Assessment**

Each of the thirty-five jurisdictions within the Lincoln Trail Region participated in the process of planning and reviewing the 2015 Lincoln Trail Regional Hazard Mitigation Plan Update. To be as thorough and inclusive as possible, each community was asked to complete a “Capability Assessment Worksheet” that evaluated many aspects of community resiliency and preparedness. The areas covered were planning and regulatory, administrative and technical, financial, and education and outreach. It should be noted that not every category surveyed was applicable to every community. The twenty-seven cities within the region range in size from populations of 113 to 28,531, and have greatly disparate tax bases and amenities. The eight counties range in size from populations of 11,717 to 105,543 and cover areas ranging from 263 square miles to 628 square miles. The table below summarizes the feedback that these 35 communities contributed. Individual jurisdictional responses are on file at the LTADD office.

<b>Table 3.4.1.1.1 - Lincoln Trail Region Capability Assessment Summary</b>		
<b>Planning and Regulatory Assessments</b>		
<b>Plans</b>	<b>Number of Cities</b>	<b>Number of Counties</b>
Comprehensive/Master Plan	15	5
Capital Improvements Plan	2	4
Economic Development Plan	3	4
Local Emergency Operations Plan	27	8
Continuity of Operations Plan	11	7
Transportation Plan	27	8
Storm Water Management Plan	9	4
Community Wildfire Protection Plan	1	2
Other Plans (e.g., brownfields, redevelopment, disaster)	0	0
<b>Building Code, Permitting, and Inspections</b>		
Building Code	9	3
Building Code Effectiveness Grading Schedule Score	2	0
Fire Department ISO Rating	17	4
Site Plan Review Requirements	7	4
<b>Land Use Planning and Ordinances</b>		
Zoning Ordinance	14	4
Subdivision Ordinance	13	4
Floodplain Ordinance	12	4
Natural Hazard (storm water, steep slope, wildfire)	11	2
Flood Insurance Rate Maps (DFIRM)	27	8
Acquisition of Land for Open Space and Public Recreation Areas	7	0
<b>Lincoln Trail Region Capability Assessment Summary</b>		
<b>Administrative and Technical</b>		
<b>Administration</b>	<b>Number of</b>	<b>Number of</b>



	Cities	Counties
Planning Commission	15	5
Mitigation Planning Commission	27	8
Maintenance Programs to Reduce Risk (e.g., tree trimming, clearing drainage systems)	13	7
Mutual Aid Agreements	27	8
Staff		
Chief Building Official	5	4
Floodplain Administrator	10	5
Emergency Manager	27	8
Community Planner	2	2
Civil Engineer	4	1
GIS Coordinator	3	2
Technical		
Warning Systems/Services (Reverse 911, outdoor warning sirens)	27	7
Hazard Data and Information	27	8
Grant Writing	27	8

All of the Lincoln Trail Region cities and counties have access to services provided by the LTADD. LTADD staff write and administer grants for any jurisdiction in need of assistance. Every jurisdiction is included in the Regional Hazard Mitigation Plan, and the process and activities necessary to keep it relevant and informative. That includes access to hazard data, information, and risk assessments. There are regional mutual aid agreements in place that include first response personnel and resources from all jurisdictions, as part of NIMS compliance. All jurisdictions have access to DFIRM maps, GIS/GPS assistance, hazard data information, transportation planning, and community planning help, through the Lincoln Trail Area Develop District as well.

Almost the entire region is covered by an outdoor warning system and many have enhanced warning systems such as reverse 911 or Code Red.

The Lincoln Trail Region has two joint planning commissions in LaRue County and Nelson County that provide comprehensive land use plans and regulations for both counties, and the five cities within their respective jurisdictions. Hardin, Meade and Washington Counties have their own planning commissions, as do an additional thirteen cities. All twenty-seven cities are covered by the eight county emergency managers and are included in the EOP of their county. LTADD staff provides land use planning assistance and training on an individual and regional basis. City and County ISO ratings ranged from 4 to 9, with an average of 5.809. The City of West Point is located at the confluence of the Ohio and Salt Rivers and has taken steps to mitigate flood hazards with a *Flood Damage Prevention Plan Ordinance* that requires all new construction to be in compliance with base flood elevations.

**Table 3.4.1.1.2 - Lincoln Trail Region Capability Assessment Summary**

<b>Financial</b>		
<b>Funding Resource</b>	<b>Number of Cities</b>	<b>Number of Counties</b>
Capital Improvements Project Funding	9	1
Authority to Levy Taxes for Specific Purposes	0	0
Fees for Water, Sewer, Gas, or Electric Service	19	1
Impact Fees for New Development	1	1
Storm Water Utility Fee	3	0
Incur Debt Through Private Activities	4	0
Incur Debt Through General Obligation Bonds	27	8
Community Development Block Grant	27	8
Other Federal Funding Programs	27	8
State Funding Programs	27	8

All of the jurisdictions in the Lincoln Trail Region, with the exception of Elizabethtown, which receives entitlement funding through HUD, are eligible for Community Development Block Grants as well as other State and Federally funded programs. Many communities would like to enhance their storm water management capabilities and are considering a storm water utility fee as a means for funding those activities and projects.

<b>Table 3.4.1.1.3 - Lincoln Trail Region Capability Assessment Summary</b>		
<b>Education and Outreach</b>		
<b>Programs/Organization</b>	<b>Number of Cities</b>	<b>Number of Counties</b>
Local Citizen Groups or Non-profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, Etc.	27	8
Ongoing Public Education or Information Program (e.g., Fire Safety, Household Preparedness, Environmental Education)	27	8
Natural Disaster or Safety Related School Programs	All Cities with Schools	8
StormReady Certification		1
Firewise Communities Certification	0	0
Public-private Partnership Initiatives Addressing Disaster Related Issues	2	2

All communities throughout the region have access to local citizens groups or non-profit organizations such as the American Red Cross, the Medical Reserve Corps, Local Emergency Planning Committee (LEPC) groups, Amateur Ham Radio Operators, and the Kentuckiana Volunteer Aviators; these groups are available to assist in emergency situations and in response to a natural hazard event.



Every city and county with a school has a safety education program to inform families about safety and preparedness in the event of a natural disaster or fire. A component of these programs is the dissemination of information about natural disasters and individual and family preparedness. Each of these schools conducts fire and severe weather drills each year. In addition, all communities have access to information through LTADD and from websites such as FEMA's.

Planning to make this eight-county region more resilient and prepared, has been incorporated into many projects and regional trainings over the last five years, and during this update process. All communities have received training and information on the importance of proactive land use planning, and the need to avoid development in hazard prone areas. In addition, every city and county has received information on making their existing infrastructure and critical facilities more resilient to the effects of hazard events.

As part of the Lincoln Trail Region's planning process for updating the Lincoln Trail Regional Hazard Mitigation Plan, each of the eight counties was allocated some regional funding to work toward "StormReady" Certification. Those projects are currently under way and will be completed before the end of 2015. While Hardin County is currently the only "StormReady" certified county, Meade County will be eligible for that certification once their projects are completed. In addition, the National Oceanic and Atmospheric Administration has recognized the Meade County Emergency Management Agency as a "Weather-Ready Nation Ambassador." Over the last 5 years, this region has made great strides in resiliency and preparedness due to the planning efforts of the Lincoln Trail Hazard Mitigation Committee, and the coordinated efforts of the twenty-seven cities and eight counties.

### **3.4.1.2 Existing Governmental Structures**

The table below briefly outlines the jurisdictions that are included in the Lincoln Trail Regional Hazard Mitigation Plan as well as, the characteristics of each governing body.

<b>Table 3.4.1.2.1 - Lincoln Trail Regional Units of Government</b>		
<b>Jurisdiction</b>	<b>Population 2010 Census</b>	<b>Type of Government</b>
<b>Breckinridge County</b> encompasses 567.17 square miles with a population density of approximately 35.4 people per square mile. Elevations in the County range from 383 to 920 feet above sea level.		
Breckinridge County	20,059 18,888 (2014 estimate)	One County Judge/Executive & Six Fiscal Court Magistrates
City of Cloverport	1,152	One Mayor & Six City Council Members
City of Hardinsburg	2,343	One Mayor & Six City Council Members
City of Irvington	1,181	One Mayor & Six City Council Members

<b>Grayson County</b> encompasses 496.7 square miles with a population density of approximately 51.8 people per square mile. Elevations in the County range from 395 to 963 feet above sea level.		
Grayson County	25,746 26,194 (2014 estimate)	One County Judge/Executive & Six Fiscal Court Magistrates
City of Caneyville	608	One Mayor & Four City Commissioners
City of Clarkson	875	One Mayor & Four City Commissioners
City of Leitchfield	6,699	One Mayor & Six City Council Members

<b>Hardin County</b> encompasses 623.28 square miles with a population density of approximately 169.3 people per square mile. Elevations in the County range from 383 to 1,017 feet above sea level.		
Hardin County	105,543 108,266 (2014 estimate)	One County Judge/Executive & Eight Fiscal Court Magistrates
City of Elizabethtown	28,531	One Mayor & Six City Council Members
City of Radcliff	21,688	One Mayor & Six City Council Members
City of Sonora	513	One Mayor & Four City Commissioners
City of Upton	683	One Mayor & Four City Commissioners
City of Vine Grove	4,520	One Mayor & Six City Council Members
City of West Point	797	One Mayor & Six City Council Members
<b>LaRue County</b> encompasses 261.52 square miles of land with a population density of approximately 54.3 people per square mile.		
LaRue County	14,193 14,180 (2014 estimate)	One County Judge/Executive & Four Fiscal Court Magistrates
City of Hodgenville	3,206	One Mayor & Six City Council Members
<b>Marion County</b> encompasses 343.01 square miles of land with a population density of approximately 57.8 people per square mile.		
Marion County	19,820 20,007 (2014 estimate)	One County Judge/Executive & Five Fiscal Court Magistrates
City of Bradfordsville	294	One Mayor & Four City Commissioners
City of Lebanon	5,539	One Mayor & Six City Council Members
City of Loretto	713	One Mayor & Four City Commissioners
City of Raywick	134	One Mayor & Four City Commissioners
<b>Meade County</b> encompasses 305.42 square miles of land with a population density of approximately 93.6 people per square mile.		
Meade County	28,602 29,139	One County Judge/Executive & Six Fiscal Court Magistrates

	(2014 estimate)	
City of Brandenburg	2,643	One Mayor & Six City Council Members
City of Ekron	135	One Mayor & Four City Commissioners
City of Muldraugh	947	One Mayor & Six City Council Members

<b>Nelson County</b> encompasses 417.51 square miles of land with a population density of approximately 104.0 people per square mile.		
Nelson County	43,437 44,812 (2014 estimate)	One County Judge/Executive & Five Fiscal Court Magistrates
City of Bardstown	11,700	One Mayor & Six City Council Members
City of Bloomfield	838	One Mayor & Six City Council Members
City of Fairfield	113	One Mayor & Four City Commissioners
City of New Haven	855	One Mayor & Four City Commissioners
Washington County encompasses 297.27 square miles of land with a population density of approximately 39.4 people per square mile.		
<b>Washington County</b>	11,717 11,959 (2014 estimate)	One County Judge/Executive & Six Fiscal Court Magistrates
City of Mackville	222	One Mayor & Four City Commissioners
City of Springfield	2,519	One Mayor & Six City Council Members
City of Willisburg	282	One Mayor & Four City commissioners

#### 3.4.1.3 Local Jurisdiction's "Professional Staff" Assessment

The following table lists the professional staff departments that serve the jurisdictions within the Lincoln Trail Region. It should be noted that police, sheriff and public safety offices are identified in a separate table. Social services in the region are provided by a regional community mental health system. Every county has a presiding county judge/executive and county clerk, and every city has a mayor and city clerk. Every county also has a PVA and a county board of education. Cities with independent boards of education include: Cloverport, Elizabethtown, and West Point.

<b>Table 3.4.1.3.1 - Local Jurisdiction's- Professional Staff</b>					
Jurisdiction	PVA (Tax Assessment)	Road Dept.	Health Dept.	Emergency Management	Building Inspections
<b>Breckinridge County</b>	Y	Y	Independent Department	Y	Y
Cloverport	*	PW	*	*	Y
Hardinsburg	*	PW	*	*	Y
Irvington	*	PW	*	*	Y
<b>Grayson County</b>	Y	Y	Y	Y	Y
Caneyville	*	*	*	*	*
Clarkson	*	*	*	*	*
Leitchfield	*	PW	*	*	Y

<b>Hardin County</b>	Y	Y	Y	Y	Y
Elizabethtown	*	PW	*	Y	Y
Radcliff	*	PW	*	Y	*
Sonora	*	*	*	Y	*
Upton	*	*	*	Y	*
Vine Grove	*	PW	*	Y	Y
West Point	*	PW	*	Y	Y
<b>LaRue County</b>	Y	Y	Y	Y	Y
Hodgenville	*	PW	*	*	*
<b>Marion County</b>	Y	Y	Y	Y	State Inspector
Bradfordsville	*	No	*	*	*
Lebanon	*	PW	*	Y	Y
Loretto	*	No	*	*	*
Raywick	*	No	*	*	*
<b>Meade County</b>	Y	Y	Y	Y	Y
Brandenburg	*	PW	*	*	*
Ekron	*	*	*	*	*
Muldraugh	*	PW	*	*	*
<b>Nelson County</b>	Y	Y	Y	Y	Y 2 inspectors
Bardstown	*	PW	*	*	Y
Bloomfield	*	PW	*	*	*
Fairfield	*	*	*	*	*
New Haven	*	PW	*	*	*
<b>Washington County</b>	Y	Y	Y	Y	Y
Mackville	*	*	*	*	*
Springfield	*	PW	*	*	Y
Willisburg	*	*	*	*	*

(NA – Not Applicable), (\* - Covered by County), (Y – Yes), (PW – Public Works)

The duties and responsibilities of the professional city and county offices are outlined below.

**Boards of Education:** The Lincoln Trail Region has eight county boards of education and four independent districts. County boards are responsible for evaluating educational goals; providing financial resources for budgeting purposes; involving the public in the planning process; developing and maintaining a statement of mission, vision and values; and evaluating the effectiveness of school policies and their implementation. All members of a school board are elected to serve by the people of each district.

**Building Inspector:** A city or county building inspector enforces the State and Local Building Codes, the National Flood Insurance Program, the Community Rating System, and other applicable codes through the process of inspections and permitting.

**PVA, City/County Clerk, Sheriff:** The Property Valuation Administrator (PVA) is responsible for the valuation of property for tax purposes. A city clerk is hired by the mayor and is responsible for the maintenance and safekeeping of the permanent records of the city, and is the official custodian of records under KRS 61.870 to 61.884. Per KRS 83A.085, the city clerk must submit a list of current city information to the Department for Local Government no later than January 31 of each year. The county clerk is elected by the citizens of the county every four years and performs the clerical duties of fiscal court such as issuing, registering, recording and keeping legal records; registering and purging voter rolls; conducting election duties; and conducting tax duties. A county clerk may serve as clerk of fiscal court. The county sheriff is elected every four years and operates on a budget annually approved by fiscal court. The sheriff is responsible for the collection of real property taxes and enforcement of state and local laws.

**City Police:** City Police Departments are responsible for the enforcement of local and state laws within their jurisdictions. KRS 95.440 requires cities of the second and third class as well as urban-county government to establish and maintain police and fire departments.

**Road Departments:** Road Departments are responsible for the repair and maintenance of all public roadways. This responsibility includes snow and debris removal.

**Utility Departments:** Local utility departments, in conjunction with utility commissions, local units of government and the Kentucky Utility Commission, work in concert to ensure that the entire region has access to safe and reliable water, gas, electric, communication, and sewer services. There could potentially be numerous service providers in any one county.

**Emergency Management:** Each county emergency management office is responsible for all operations that deal with both natural and man-made disasters. This responsibility extends to mitigation strategies, preparedness, response efforts and recovery operations. Kentucky Revised Statutes mandate that each county establish an emergency management office.

**City and County Treasurer:** City and County Treasurers are responsible for the oversight and management of either the city or county budget and fiscal programs.

**Mayor and County Judge Executive:** A mayor or a county judge/executive is elected every four years and is responsible for the oversight of the daily operations of either the city or county government, and the enforcement of city or county policies and regulations. According to the Kentucky Constitution, section 124, and KRS 67.040, a County Judge Executive serves as a member and presiding officer of the fiscal court and acts as the county's chief executive and administrative official.

**Health Department/Social Services:** In the Lincoln Trail Region, the Lincoln Trail District Health Department and Central Kentucky Community Action agencies provide individuals and communities with programs and services designed to protect public health, provide medical assistance and administer numerous social service programs.

#### **3.4.1.4 First Responder Resources**

First responder resources are critical components of the region's level of resiliency and preparedness. Homeland Security grants have enabled many of the Lincoln Trail Region's local jurisdictions to acquire communication and first responder equipment.

<b>Table 3.4.1.4.1 - Lincoln Trail Region First Responder Resources</b>		
<b>Jurisdiction</b>	<b>Personnel Resources</b>	<b>Vehicle &amp; Equipment Resources</b>
Breckinridge County	Sheriff, 9 officers & 2 staff Trained volunteer firefighters at Stephensport, McQuady, McDaniels, Custer, Webster, Harned County Emergency Mgr.	36 vehicles and 13 portable generators
City of Cloverport	Police Chief Trained volunteer firefighters	4 vehicles
City of Hardinsburg	Police Chief, 4 officers 7 trained volunteer firefighters	36 vehicles and 40 pieces of equipment
City of Irvington	Police Chief, 3 officers, Fire Chief, 22 Trained volunteer firefighters	10 vehicles and 4 pieces of equipment
Grayson County	Sheriff, 9 full-time & 3 part-time officers & 6 staff Trained volunteer firefighters at Anneta Fire District #792, Falls of the Rough Fire & Rescue, Wax Fire & Rescue, East Grayson Fire & Rescue County Emergency Mgr.	31 vehicles and 1 piece of equipment
City of Caneyville	Police Chief Fire Chief, 15 trained volunteers	14 vehicles, utility trailer, 2 generators, firefighter gear, extrication hydraulic tools
City of Clarkson	Police Chief Fire Chief and trained volunteer firefighters	15 vehicles



City of Leitchfield	Police Chief & 14 Officers Fire Chief & 2 trained firefighters, trained volunteer firefighters	20 police vehicles, trailer & generator 15 fire vehicles, boat w/ motor, trailer, 2 generators
Hardin County	Sheriff & 11 officers Trained volunteer firefighters at Stephensburg, White Mills, West 84, Central Hardin, & KY 86 County Emergency Mgr.	8 pumper/tanker vehicles, 3 rescue vehicles, 6 tankers, & 43 other vehicles
City of Elizabethtown	Elizabethtown Police has 49 sworn officers and 18 staff people Paid Fire Dept. has 3 stations & 50 employees	40 police patrol vehicles & SWAT team equipment for police dept.  Fire dept. has 4 fire engines, 2 aerial ladder trucks, 3 brush trucks, hazardous material equipment, swift water rescue equipment, a trench equipment trailer
City of Radcliff	Radcliff Police Dept. has chief, 41 officers, 1 public relations officer & 11 staff personnel Fire Dept. has chief, 22 full-time pd. Firefighters & 7 volunteers	Radcliff law enforcement has a fleet of response vehicles. The fire dept. has 8 vehicles, 8 generators, a mobile incident command center, portable lighting and assorted equipment and gear.
City of Sonora	Fire chief and trained volunteer firefighters	Fire dept. has several fire trucks.
City of Upton	Fire chief and volunteer firefighters	6 fire trucks and an emergency generator
City of Vine Grove	Police chief & 7 officers Fire chief, deputy chief, assistant chief and volunteer firefighters	Police patrol vehicles and equipment 6 fire fighting vehicles and fire fighting gear and equipment.

City of West Point	3 police officers Fire chief & 11 trained volunteer firefighters	Police patrol vehicles and equipment 3 fire fighting vehicles and fire fighting gear and equipment
LaRue County	Sheriff & 4 officers Trained volunteer firefighters at 4 county locations	Law enforcement patrol vehicles Firefighting vehicles and equipment
City of Hodgenville	City police dept. with 6 officers Fire chief & 11 trained volunteer firefighters	6 law enforcement vehicles 4 firefighting vehicles, a boat and portable pump
Marion County	Sheriff & 7 officers Marion Co. EMS Marion Co. Rescue	Law enforcement vehicles 5 ambulances EM vehicle EMS director vehicle Firefighting vehicles and equipment
City of Bradfordsville	Fire chief & 15 trained volunteer firefighters	Fire tanker and trucks Emergency generator at community center, sewer plant and fire station
City of Lebanon	Police chief & 16 officers Fire chief & 20 trained volunteer fire fighters	18 law enforcement vehicles Fire fighting vehicles and equipment
City of Loretto	Fire chief & trained volunteer firefighters	4 – class A pumpers 1 – class A pumper/tanker 2 – utility vehicles
City of Raywick	NA	NA
Meade County	Sheriff & 8 officers County-wide fire protection with trained volunteer firefighters at 10 stations throughout the county EMS, EM	Sheriff Dept. vehicles Earth moving equipment Water Dist. Trucks Fire District tankers, brush trucks and assorted firefighting equipment
City of Brandenburg	Police chief & 4 officers	6 police patrol vehicles 3 emergency generators Maintenance and road dept. vehicles
City of Ekron	NA	NA

City of Muldraugh	Police chief & 3 officers Fire chief & 19 trained volunteer firefighters	Law enforcement patrol vehicles (4) 2 pumpers 1 brush truck 1 ladder truck 4 diesel generators 1 decontamination vehicle
Nelson County	Sheriff, 5 command officers, 7 patrol officer, office staff EM EMS Bardstown-Nelson Co. Volunteer Fire Dept.	Law enforcement vehicles Fire fighting vehicles and equipment
City of Bardstown	Police chief & 24 officers Fire chief & 9 trained volunteer firefighters	25 law enforcement vehicles 2 fire truck pumpers and 1 aerial pumper Backup emergency generators at city hall, water treatment plant and wastewater treatment plant
City of Bloomfield	Police chief & 1 officer Fire chief & 5 trained volunteer firefighters	2 law enforcement patrol vehicles 2 fire engines, 1 aerial truck, 2 fire tankers, 2 brush units & 1 support vehicle 2 water trucks, 1 dump truck, 1 portable emergency generator
City of Fairfield	NA	NA
City of New Haven	Police chief Fire chief & 11 trained firefighters	1 law enforcement patrol vehicle 2 fire truck pumpers, 1 boat, 2 emergency generators, mutual aid rescue equipment
Washington County	Sheriff & 3 officers County Emergency Mgmt., County EMS & County Fire Dept.	5 Law enforcement vehicles 4 ambulances 5 rescue trucks 5 fire tankers 6 fire engines 1 command post
City of Mackville	NA	NA
City of Springfield	Police chief & 7 officers Fire chief, 9 officers and 15 trained volunteer firefighters	Law enforcement vehicles Fire Truck, pumper, & assorted fire fighting equipment and gear Dump truck Emergency generators Bobcat w/ bucket
City of Willisburg	Fire chief	NA

### 3.4.1.5 Utilities and Services

The following chart outline some of the critical utility and service providers in the eight-county, Lincoln Trail Region.

**Table 3.4.1.5.1 - Utility and Service Providers**

<b>Breckinridge County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	Big Rivers Electric Corp. Kenergy Corporation Meade Co. RECC East Kentucky Power Cooperative Nolin RECC	Breckinridge County
Natural/Propane Gas	Atmos Energy Corp. Valley Gas, Inc.	Breckinridge County
Potable Water	Cloverport Water & Sewer System (distribution only) Hardinsburg Water Dept.  Irvington Water System (distribution only)	City of Cloverport  City of Hardinsburg and Rural Breckinridge Co. City of Irvington
Sewer Service	Cloverport Sewer System Hardinsburg Sewer System Irvington Sewer System USCOE Rough River Lake	City of Cloverport City of Hardinsburg  City of Irvington Local Package Plant
Low-rent/Section 8 Housing	Housing Authority of Irvington Weatherholt Hills Apartments	City of Irvington  City of Cloverport
Local Exchange Carriers	Brandenburg Telecom, LLC AT&T Kentucky	Breckinridge County

<b>Grayson County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	Big Rivers Electric Corp. Meade Co. RECC East Kentucky Power Cooperative Farmers RECC Kentucky Utilities (a PPL company) Tennessee Valley Authority Warren RECC	Grayson County
Natural/Propane Gas	Leitchfield Utilities	City of Leitchfield
Potable Water	Caneyville Water & Sewer System (distribution only) Grayson Co. Water District Leitchfield Utilities	City of Caneyville Grayson County City of Leitchfield
Sewer Service	Caneyville Sewer System Clarkson Sewer System Leitchfield Utilities Commission Rough River Dam State Resort Park (pkg. plant)	City of Caneyville City of Clarkson City of Leitchfield Falls of the Rough
Low-rent/Section 8 Housing	NA	
Local Exchange Carriers	Windstream Kentucky East	Grayson County
<b>Hardin County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	Big Rivers Electric Corp. Meade Co. RECC East Kentucky Power Cooperative Nolin RECC Kentucky Utilities (a PPL company) Louisville Gas & Electric (a PPL company)	Hardin County
Natural/Propane Gas	Elizabethtown Water & Gas (distribution only) Louisville Gas & Electric (a PPL company)	City of Elizabethtown Hardin County

Potable Water	Hardin Co. Water Dist. #1 (Fort Knox) Hardin Co. Water Dist. #1  Hardin Co. Water Dist. #2  Vine Grove Water Dept. (distribution only) West Point Water Dept.	Fort Knox  City of Radcliff, Northern Hardin County City of Elizabethtown Southern Hardin County City of Vine Grove  City of West Point
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Sewer Service	Airview Estates Subdivision (pkg. plant) East Hardin Middle School (package plant) Elizabethtown Wastewater System Glendale Auto Truck Plaza (package plant) Hardin Co. Water Dist. #1 Radcliff Sewer System Hardin Co. Water Dist., #2 Heartland Mobile Home Community (pkg. plant) Lincoln Trail Elementary School (pkg. plant) Sonora Auto Truck Plaza (pkg. plant) US Army Hardin Co. Water Dist. #1 Vine Grove Sewer System West Point Sewer System Petro Stopping Centers (pkg. plant)	Airview Estates Subdivision School in Glendale  City of Elizabethtown  Truck Plaza in Glendale  City of Radcliff  Hardin County Mobile Home Community in Rineyville Lincoln Trail Elementary School Truck Plaza in Sonora  City of Radcliff  City of Vine Grove City of West Point Petro in Glendale
Low-rent/Section 8 Housing	Housing Authority of Elizabethtown Housing Authority of Radcliff	City of Elizabethtown  City of Radcliff
Local Exchange Carriers	Brandenburg Telecom, LLC AT&T Kentucky	Hardin County

<b>LaRue County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	East Kentucky Power Cooperative Farmers RECC Inter-County Energy Cooperative Nolin RECC Salt River Electric Cooperative Corp. Kentucky Utilities (a PPL company)	LaRue County
Natural/Propane Gas	Louisville Gas & Electric (a PPL company)	LaRue County
Potable Water	Hodgenville Water Works LaRue Co. Water District #1 (distribution only)	City of Hodgenville LaRue County
Sewer Service	Hodgenville Sewer System	City of Hodgenville
Low-rent/Section 8 Housing	Housing Authority of Hodgenville	City of Hodgenville
Local Exchange Carriers	Windstream Kentucky East South Central Rural Telephone	LaRue County
<b>Marion County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	East Kentucky Power Cooperative Inter-County Energy Cooperative Salt River Electric Cooperative, Corp. Taylor County RECC Kentucky Utilities (a PPL company)	Marion County
Natural/Propane Gas	Atmos Energy Corporation Louisville Gas & Electric (a PPL company)	Marion County



Potable Water	Lebanon Water Works Co., Inc. Marion County Water Dist. (distribution only)	City of Lebanon Rural Marion County
Sewer Service	Bradfordsville Sewer System Lebanon Sewer System Loretto Wastewater System (collection only)	City of Bradfordsville City of Lebanon City of Loretto
Low-rent/Section 8 Housing	Housing Authority of Lebanon	City of Lebanon
Local Exchange Carriers	Windstream Kentucky East	Marion County
<b>Meade County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	Big Rivers Electric Coop Meade Co. RECC East KY Power Coop Nolin RECC Louisville Gas & Electric (a PPL company)	Meade County
Natural/Propane Gas	Louisville Gas & Electric (a PPL company)	Meade County
Potable Water	Brandenburg Water Works Doe Valley Utilities, Inc. Meade Co. Water District Muldraugh Water Dept. (distribution only)	City of Brandenburg Doe Valley Development Rural Meade County City of Muldraugh
Sewer Service	Brandenburg Sewer System Doe Valley Assoc., Inc. (pkg. plant) Muldraugh Sewer System (collection only)	City of Brandenburg Doe Valley Association City of Muldraugh
Low-rent/Section 8 Housing	NA	NA
Local Exchange Carriers	Brandenburg Telecom, LLC AT&T Kentucky	Meade County

<b>Nelson County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	East KY Power Coop Inter-County Energy Coop Salt River Electric Coop Corp. Kentucky Utilities (a PPL company) Bardstown Municipal Electric & Gas	Nelson County
Natural/Propane Gas	Louisville Gas & Electric (a PPL company)	Nelson County
Potable Water	Bardstown Municipal Water Department Bloomfield Water & Sewer Department (distribution only) New Haven Municipal Water Works (distribution only) North Nelson Water Dist. (distribution only)	Bardstown & adjacent area Bloomfield & Northeastern Nelson Co.  City of New Haven & adjacent areas  Northern Nelson County
Sewer Service	Abbey of Gethsemani (pkg. plant) Bardstown Sewer System Cox's Creek Elementary School New Haven Sewer System	Abbey at Gethsemani  City of Bardstown Cox's Creek  City of New Haven
Low-rent/Section 8 Housing	Housing Authority of Bardstown	City of Bardstown
Local Exchange Carriers	Brandenburg Telecom, LLC. AT&T Kentucky	Nelson County
<b>Washington County</b>		
Utility or Service	Utility or Service Provider	Area Served
Electricity	East KY Power Coop Blue Grass Energy Coop Corp. Inter-County Energy Coop Salt River Electric Coop Corp. Kentucky Utilities (a PPL company)	Washington County

Natural/Propane Gas	Atmos Energy Corporation Louisville Gas & Electric (a PPL company)	Washington County
Potable Water	Springfield Water & Sewer Commission	Springfield and Washington County
Sewer Service	Springfield Water & Sewer Commission Washington County Elementary School (pkg. plant)	City of Springfield  School in Willisburg
Low-rent/Section 8 Housing	Housing Authority of Springfield	City of Springfield
Local Exchange Carriers	AT&T Kentucky	Washington County

**Findings Summary:** The mission statement of the Lincoln Trail Hazard Mitigation Committee (LTHMC) is: *To Reduce or Eliminate the Negative Physical and Economic Impacts Natural Hazards have on our Communities.* All jurisdictions desire to accomplish this mission, but disparate resources hinder this effort. The capabilities assessment contained within this document would appear to indicate relative equality across all eight counties. However, each county is unique, with populations that range from more than 105,000 people to less than 12,000, and land mass areas ranging from 300 square miles to 600. Financial disparity is also prevalent due to each county's size and tax base. Many of our counties rely solely on volunteer first responders, while others can afford full-time, paid personnel, in addition to volunteer responders.

Kentucky Emergency Management's goal is to coordinate a system of mitigation, preparedness, response and recovery actions that protect the lives, environment and property of the people of Kentucky. Toward that end, Kentucky Emergency Management requires each county to prepare and update a countywide Emergency Operations Plan (EOP). Each county EOP enumerates policies and provisions for a coordinated local, state and federal emergency response to any natural, technological or manmade emergency or disaster. Each county EOP details preparedness activities for each local government, prior to a disaster. These preparedness actions include, but are not limited to, the selection and training of staff and emergency response personnel, development of operation plans, equipping an emergency operations center (EOC), and the establishment of procedures that will effectively prepare the area to respond to emergencies and disasters. These county plans and the extensive coordination requirements they contain, ensure that the aftermath of any natural or manmade disaster will be minimized. These planning efforts will minimize the length of power outages, expedite efforts to keep roads open, and reduce the amount of time and number of residents who may be displaced from their homes.

In contrast to county emergency operations plans, the Regional Hazard and Flood Mitigation Plan is designed to define activities that local units of government can take to

decrease, eliminate or diffuse their vulnerability to disasters prior to an actual disaster event.

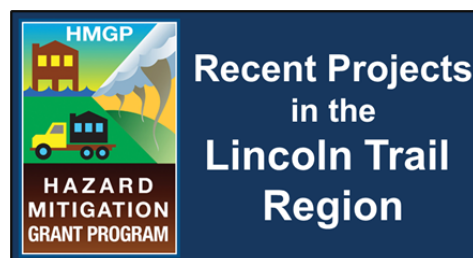
The LTHMC has worked with local units of government in the Lincoln Trail Region, during the planning phase of this plan update, to inventory completed mitigation projects, report on current actions and develop future activities that will minimize community vulnerability across the region and decrease adverse impacts that may occur as a result of any future disaster. The Lincoln Trail Hazard and Flood Mitigation Plan Update will contain goals and objectives that pertain to the entire region, are county specific, and address single issues within individual cities. The plan exemplifies a planning effort that is pro-active in addressing actions that will effectively mitigate future natural hazards, as well as a documentation of mitigation initiatives that have solved some past vulnerability issues. To date, the region has accomplished several successful mitigation projects, some are still in progress and others are planned when sufficient funding can be secured.

#### **3.4.1.6 Lincoln Trail Region Community Hazard Mitigation Projects**

The hazard mitigation projects in the Lincoln Trail Region, fall into three categories:

1. Projects Completed
2. Projects Presently Underway
3. Future Projects

The Region has planned for projects that will mitigate loss of property and human life and eliminate repetitive losses when possible. The region has used local funds, State funding, FEMA funding, CDBG Funds, and Homeland Security funding to accomplish these projects.



##### **3.4.1.6.1 Completed Projects (1997 through 2014)**

#### **Breckinridge County**

##### **County**

Flood Mitigation: Two bridges in the County located on Marks Ridge Road West (CR-1520) and Shot Pouch Creek Road (CR-1405) were replaced to mitigate flooding issues that previously closed the roads and stranded local residents in their homes, or prevented farmers from reaching their fields and livestock.

### Cloverport

**Flood Mitigation:** Three Ohio Riverfront properties were acquired and relocated to different sites. Land was converted to recreational use in perpetuity.

**Slope Stabilization:** Bank stabilization measures were taken to prevent damage to a housing complex for the elderly.



### Hardinsburg

**Disaster Response:** The City used grant funding and local funds to improve its emergency response capability by purchasing a mobile command center for use during any kind of disaster response. In addition, a permanent generator was purchased for use in the City Hall and Fire Department so that critical services can be provided during a power outage. The City also purchased a swift water rescue motorized boat for use during flooding incidents.

West Marks Ridge Rd Bridge, Breckinridge Co. Federal Disaster Declaration 1818 Source: LTADD Archive.

### Irvington

**Early Warning System:** The City purchased and installed two new early warning sirens to enhance its public warning system.

### **Grayson County**

### County

**Flood Mitigation:** Grayson County built 3 new bridges to mitigate road flooding that stranded county citizens and prevented emergency response efforts from reaching them.





Bloomington Rd Bridge, Grayson Co. Federal Disaster Declaration 1818. *Source: LTADD Archive.*

### Caneyville

**Early Warning System:** The City joined the County's "One Call" service.

**Public Safety:** Caneyville subscribed to a service that would provide an emergency generator, laptop computer and communication system to the City, in the event of a power outage. This will enable continuity of operations.

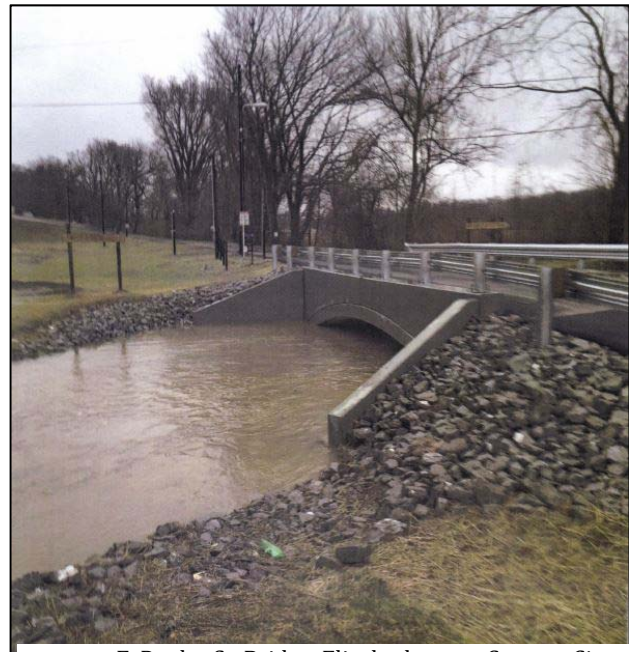
### Leitchfield

**Public Safety:** The City purchased an emergency generator for the water treatment plant. Potable water can be supplied to residents even during a power outage.

### **Hardin County**

#### County

**Early Warning System:** Hardin County enhanced its public early warning system by purchasing and installing an outdoor siren in the unincorporated community of Stephensburg. The County also implemented a reverse 911 early warning system, countywide.



E. Poplar St. Bridge, Elizabethtown. *Source: City of Elizabethtown.*

### Elizabethtown and surrounding area

**Early Warning System:** Hardin County initiated a study to determine the placement of 16 audible warning sirens in Elizabethtown and the surrounding area. The project provided an early warning system where there had been none. The City also replaced 7 aging, outdoor sirens.

**Flood Mitigation:** The City purchased 3 repetitive loss properties to eliminate future flooding issues. Land was preserved as green space and a storm water retention basin. The City also mitigated flood issues by replacing a bridge on East Poplar St. to facilitate floodwater flow.



Radcliff generator, 2010 Flooding Declaration, *Source: LTADD Archive.*

### Radcliff

**Public Safety:** Radcliff purchased generators to facilitate power to the community center, which also acts as a shelter, and to power city hall so that critical services can be provided in the event of a power outage.

**Early Warning System:** The City purchased and installed 3 new outdoor warning sirens and upgraded the current system.

### Upton

**Early Warning System:** Upton purchased and installed an outdoor siren.

### Vine Grove

**Flood Mitigation:** The City repaired the banks of a creek to eliminate road flooding. Vine Grove also replaced sewer lines lying within a waterway to eliminate the potential for sewage to spill into storm water runoff.



## West Point

**Flood Mitigation:** Repetitive loss properties were acquired and their respective structures demolished. Land was preserved as community green space. Four houses, two mobile home parks and three vacant lots were purchased. The City also relocated 5 lift station electrical panels from a floodway to higher points and initiated a local storm water fee to fund future flood mitigation projects.

**Public Safety:** The City purchased an emergency generator for the wastewater treatment plant so that service could continue in the event of a power outage.



West Point Lift Station. Source: LTADD Archive.

## **LaRue County**

### County

**Public Safety:** The County purchased an emergency generator for both the County Courthouse and Hodgenville City Hall to ensure that critical services can be provided in the event of a power outage.

### Hodgenville

**Public Safety:** Emergency generators were purchased for the water plant and sewer plants.

**Flood Mitigation:** Storm water management improvements completed to address flooding issues on 3 city streets.

## **Marion County**

### County

The County built a replacement bridge over Scuffle Creek that frequently flooded and cut off access to 32 residences and farms.



Scuffle Creek Bridge, Marion Co., Federal Disaster Declaration 1818.  
Source: LTADD Archive.

## Bradfordsville

**Public Safety:** The City completed a safe room to serve the entire community. Signage was also installed to identify and locate the facility.

**Early Warning System:** An outdoor siren was installed in the City and weather radios were distributed to the elderly, disabled and rural residents.

## Lebanon

**Flood Mitigation:** A storm water management project was completed to mitigate flooding in the Derring Ct. neighborhood. Three hundred feet of an existing storm drainage channel was relocated, improved and straightened to mitigate repetitive flooding issues. Additional repairs were made to a storm water channel that was causing local flooding.

## Loretto

**Public Safety:** The City purchased and installed an emergency generator for the City Hall/Community Center so that critical services can be provided in the event of a power outage.

## **Meade County**

### County

**Public Safety:** Meade County purchased and equipped a mobile trailer to use wherever a long-term shelter needs to be established for displaced persons. The trailer carries supplies for a 100 person shelter.



Mobile Trailer, Meade Co., 2010 KOHS Grant. Source: Meade Co EM.

### Concordia Community

**Flood Mitigation:** Meade County acquired land in the unincorporated community of Concordia to mitigate repetitive flood damage. Ten residential housing units and the land on which they were built was acquired. Structures were demolished and the land preserved as green space in perpetuity.

### Muldraugh

**Public Safety:** Muldraugh built Kentucky's largest, above ground safe room to mitigate loss of life and injury to the community's entire population. The facility can also serve as a long-term shelter for displaced residents. The City also purchased a used decontamination trailer for use in the event of a hazardous material incident.



Muldraugh Storm Shelter Dedication 24 Oct. 2013.  
*Source: LTADD Archive.*

### **Nelson County**

#### County

**Public Safety:** County purchased emergency backup generators for the County EOC, the 911 center and law enforcement facilities.

**Flood Mitigation:** Improvements made at the county landfill to address flooding issues.

### Bardstown

**Public Safety:** Bardstown relocated and buried power lines in an area that served 120 residences and 10 commercial facilities to eliminate power outages due to severe weather events.

### Bloomfield

**Public Safety:** Bloomfield wired a smaller lift station to accept an emergency portable generator.

**Flood Mitigation:** The City completed storm drain and sewer improvement projects to mitigate flooding issues.

## **Washington County**

### County

**Public Safety:** Washington County completed an emergency notification system for the County.

**Flood Mitigation:** The County completed the following bridge projects to mitigate flooding issues: Tick Creek, Walker Lane, Froman Lane, Grundy Home Road, Tatum Ridge Road, Roye Lane, and Willis Lane.

**Bank Stabilizations:** Washington County completed bank stabilization projects on Sulphur Lick Road, Glenns Creek Road, Coulter Lane, Hardesty Road, Trent Lane, Gregory Lane, and Hardesty Road.

### Fredericktown Community

**Flood Mitigation:** Washington County acquired land in the unincorporated community of Fredericktown to mitigate repetitive flood losses. Twelve structures were either purchased and demolished, or elevated, depending on the preference of owners, to mitigate flood damage.

### Mackville

**Public Safety:** The City has installed an emergency generator at the fire department and has set up a safe room at the local community center. Mackville also installed a siren to notify residents of potential bad weather.

## **3.4.1.6.2 Projects Presently Underway**

## **Hardin County**

### Vine Grove

**Public Safety:** Vine Grove is in the process of constructing a community safe room.

## **Meade County**

### Ekron

**Public Safety:** Ekron is clearing land for the construction of a community safe room.

## **Regional**

**Public Safety:** All eight, Lincoln Trail Counties, are in the process of enhancing their respective preparedness capabilities. The following list outlines what projects each is

undertaking to be better prepared according to the criteria established in the “StormReady” National Weather Service Program.

**Breckinridge Co.:** Purchasing equipment to establish a County Emergency Operations Center (EOC).

**Grayson Co.:** Purchasing communication equipment for use among first responders and the County Emergency Operations Center to be used in a disaster response situation. Also purchasing weather radios for distribution to all County critical facilities.

**Hardin Co.:** Purchasing computer equipment for use in the County’s mobile Emergency Operations Center.

**LaRue Co.:** Purchasing a “Code Red” public warning system.

**Marion Co.:** Purchasing materials to construct a new mobile Emergency Operations Center.

**Meade Co.:** Purchasing an emergency generator to power County’s Emergency Operations Center. Purchasing equipment to measure weather events.

**Nelson Co.:** Purchasing a “Code Red” public warning system.

**Washington Co.:** Purchasing emergency generators to power first responder communication equipment during a power outage.

## **Regional**

All eight Lincoln Trail Counties are in the process of distributing 180 weather radios to critical facilities and to vulnerable citizens such as those who are elderly, disabled, or live in rural areas where outdoor warning systems don’t reach.

### **3.4.1.6.3 Future Projects (Pending Funding)**

#### **Breckinridge County**

##### County

Flood Mitigation: Breckinridge County would like to raise a bridge on Tar Springs Rd. that regularly floods, making six family residences inaccessible during high water. Estimated cost = \$400,000

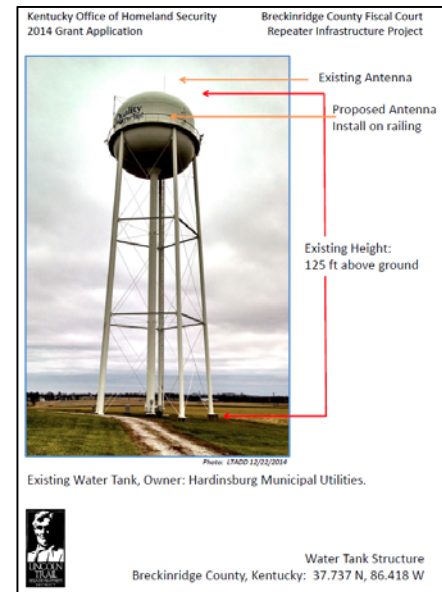
Flood Mitigation: The County would like to raise the roadbed of the Stonehill-Ford Rd. approximately 4 foot on both sides and install new drainage tiles to eliminate reoccurring flooding. This is a moderately traveled, connecting road; it is completely blocked during times of flooding. Estimated cost = \$150,000



**Public Safety:** The County has radio repeaters located on a water tower on Highway 259 in Harned. During a power outage, the repeaters are down and communication capability for EMS, EMA and fire departments is compromised. An on-site generator would resolve this issue. Estimated cost = \$8,400

**Public Safety:** The County needs to purchase a portable emergency generator capable of providing backup electricity to a public housing complex during a power outage. Estimated cost = \$30,000

**Public Safety:** The unincorporated community of Garfield needs an outdoor siren to alert citizens of impending severe weather. Estimated cost = \$30,000



HWY 259 Water Tower Repeater Application.  
Source: LTADD.

**Landslide Mitigation:** The County has a landslide problem on Tar Springs Rd. The road is sliding downhill. The purchase of additional land would enable the County to move the road and eliminate the hazard. Estimated cost = \$175,000

## Hardinsburg

**Public Safety:** Hardinsburg would like to construct a community safe room that could also serve as an alternate emergency operations center. Estimated cost = \$2 million

The City would like to purchase and install 3 new outdoor warning sirens. Estimated cost = \$90,000

Purchase and install permanent generators for the water and sewer plant. Estimated cost = \$100,000 each

**Flood Mitigation:** Hardinsburg wants to install culverts to mitigate flooding issues. Estimated cost = \$40,000 each

## **Grayson County**

### County

**Public Safety:** Grayson County would like to construct safe rooms throughout the County. They would also like to install an outdoor siren system and purchase emergency generators to maintain critical public services during a widespread power outage. Estimated cost = \$180,500 (generators), \$2 million (safe room)

## Caneyville

Public Safety: Caneyville would like to construct a FEMA compliant safe room and purchase emergency generators for city facilities such as city hall, fire dept., sewer plant, lift stations and the community center. Estimated cost = \$166,500 (generators), \$1.2 million (safe room)

Flood Mitigation: Caneyville would like to dredge out the creek that flows through town and often floods the area. Estimated cost = \$200,000

## Leitchfield

Public Safety: Leitchfield would like to purchase a generator for City Hall so that critical public services can be provided in the event of a power outage. The City would also like to construct a community safe room and install outdoor warning sirens on the south and west sides of town. Estimated cost = \$40,000 (generator), \$1.2 million (safe room), \$6,000 (2 outdoor sirens)

## **Hardin County**

### County

Flood Mitigation: Hardin County would like to construct 2 new bridges and culverts to mitigate flooding issues in the County. Estimated cost = \$95,000

Public Safety: The County would like to construct 2 tornado safe rooms in the County and upgrade the current outdoor warning siren system with the addition of 4 new sirens. They would also like to purchase 10 emergency generators to power critical facilities in the event of a power outage. It would also like to upgrade its mobile command post with new communication equipment. Estimated cost = \$2 million (safe rooms), \$80,000 (outdoor warning sirens), \$65,000 (generators), \$15,000 (mobile command post communications upgrades)

## Elizabethtown

Public Safety: Elizabethtown would like to make upgrades to the Pritchard Community Center that serves as the area's long-term shelter for people displaced by local disasters. It would also like to upgrade its current outdoor warning sirens and purchase 6 portable generators for use at critical facilities in the event of a power outage. Estimated cost = \$500,000 (Pritchard upgrades), \$360,00 (warning sirens), \$180,00 (generators)

## Radcliff

Public Safety: Radcliff would like to upgrade its emergency outdoor warning sirens with the purchase of 4 new sirens. The City would also like to construct a community safe room and purchase an emergency backup generator for the police dispatch center. Estimated



cost = \$74,600 (outdoor warning sirens), \$1.5 million (safe room), \$70,00 (backup emergency generator)

### Vine Grove

Public Safety: Vine Grove would like to purchase 4 emergency, backup generators for use at its police dept., sewer plant, public works dept., and fire dept. for provision of critical services during a power outage. The City would also like to install transfer switches for 8 lift stations throughout the City. Estimated cost = \$200,000 (generators), \$11,000 (switches for lift stations)

### West Point

Flood Mitigation: West Point has two flood mitigation projects they wish to complete. The City would like to complete a storm water management project in the Riverview Dr. neighborhood to eliminate flooding issues there. The City would also like to address storm water infiltration issues with its sewer system that causes flooding. Estimated cost = \$100,00 (Riverview Dr. project), \$500,000 (sewer infiltration project)

## **LaRue County**

### Hodgenville

Flood Mitigation: Hodgenville would like to complete a storm water mitigation project on Main St., with the installation of a box culvert drainage system. Estimated cost = \$200,000

## **Marion County**

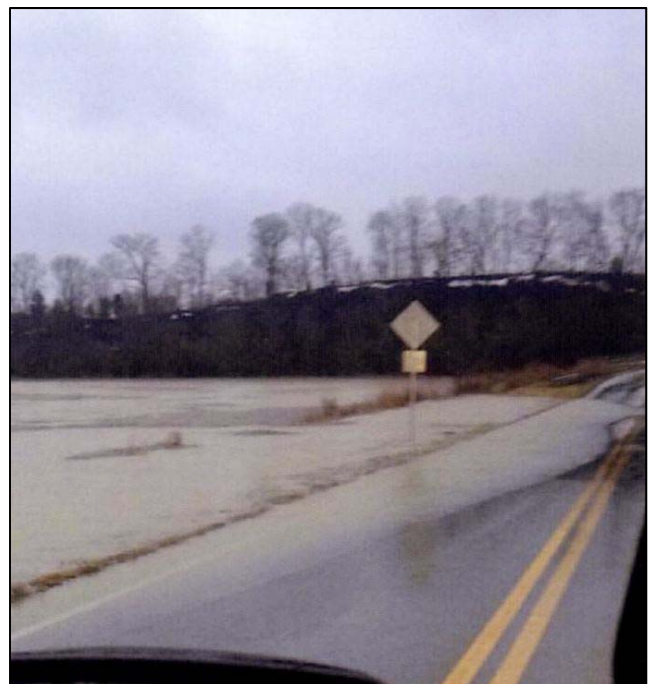
### Bradfordsville

Flood Mitigation: Bradfordsville needs to overhaul its storm water management system to eliminate flooding in homes, businesses and civic facilities and to eliminate the need to close roads due to standing water. Estimated cost = \$350,000

## **Meade County**

### Brandenburg

Flood Mitigation: Brandenburg would like to complete a project to stabilize the bank of the Ohio River to eliminate flooding issues that affects critical water wells and localized flooding. Estimated cost = \$1.2 million



Bradfordsville Street Flooding, April 2015.  
Source: Mayor David Edelen.

### Ekron

Public Safety: Ekron would like to construct a centrally located safe room that would provide all area residents with a safe shelter from any kind of severe weather event. The facility would be within a 5-minute walk for the entire community. Estimated cost = \$1 million

### Muldraugh

Public Safety: Muldraugh would like to purchase a 200kw natural gas emergency generator to power city hall and the police dept., in the event of a power outage. The City would also like to upgrade its outdoor weather siren system. Estimated cost = \$150,000 (generator), \$6,800 (sirens)

Flood Mitigation: The City would like to construct 5,200 feet of a storm water management culvert. Estimated cost = \$500,000

## **Nelson County**

### Bardstown

Public Safety: Bardstown would like to purchase and install an emergency backup generator for the City's sewer pump station. They would also like to construct an emergency road that would allow access to the Town Creek Waste Water Treatment Plant in the event of flooding. Estimated cost = \$94,000 (generator), \$20,000 (road)

Flood Mitigation: The City wants to construct a watershed detention pond to prevent downstream flooding. Estimated cost = \$200,000

### Bloomfield

Public Safety: Bloomfield would like to purchase 2 emergency generators to provide backup power to the water dept. and city hall in the event of a power outage. Estimated cost = \$60,000

Flood Mitigation: The City would like to raise the Perry Street Bridge and install larger culverts to mitigate flooding that closes the road. Estimated cost = \$250,000

### Fairfield

Public Safety: Fairfield would like to purchase two emergency backup generators for use at the sites designated by the city to serve as emergency shelters. Estimated cost = \$3,500

## **Washington County**

### County

Flood Mitigation: Washington County would like to install box culverts along Grundy Home Road to mitigate flooding. In addition, the County needs to replace two bridges; the Ann Osborne Bridge and the Mayfield Lane Bridge. Estimated cost = \$48,000 (culvert boxes), \$140,000 (Mayfield Lane Bridge), \$200,000 (Ann Osborne Bridge)

Bank Stabilization: The County needs to stabilize the banks along Cardwell-Tablow Road and on Hardesty Road. Estimated cost = \$200,000 each

### Springfield

Flood Mitigation: Springfield would like to install approximately 1,800 linear feet of a storm water management system to eliminate flooding issues in the Rizer Ave. neighborhood. Estimated cost = \$118,000

The City would also like to complete a 400-foot storm water management project in the Maplewood Ave. neighborhood to address flooding issues. Estimated cost = \$8,000

The Lebanon Hill neighborhood needs a storm water management system to address flooding issues. Estimated cost = \$90,000

Springfield would also like to completely replace the downtown Main St. storm water management system to improve capacity and eliminate flooding. Estimated cost = \$120,000

The Grundy Ave. neighborhood experiences flooding that could be eliminated by a proper storm water management system. Estimated cost = \$175,000

Springfield plans to complete a large flood mitigation project within a Zone A flood area in the City. Part of the project would be the construction of a large storm water management system and part of the plan would be the acquisition and demolition of residences that have suffered repetitive flood losses. Estimated cost = \$250,000 (Storm water system), \$315,000 (acquisition activities)

The City needs to reconstruct a low water bridge that isolates the public works garage due to flooding. Estimated cost = \$190,000

Public Safety: Springfield has a plan to purchase a backup generator system that would provide emergency power to its storm shelter, city hall and public works garage. Estimated cost = \$75,000

The City would install a "One Call System" as an enhancement of its current 911 program. Estimated cost = \$20,000

A plan to bury utility lines in the downtown business district would diminish the propensity for power outages and enable local businesses to continue to serve the community during severe weather events. Estimated cost = \$750,000

### **3.4.2 - Lincoln Trail Regional Hazard Mitigation Goals**

The goals and objectives of the Lincoln Trail Regional Hazard Mitigation Plan evolved as a result of serious discussion, planning and careful thought among the eight counties and twenty-seven cities in the region. Local units of government, planning organizations, emergency management teams, concerned residents and first response agencies collected and analyzed hazard data relevant to the region and closely examined local levels of resiliency and preparedness. The planning process included training, review of past efforts, data analysis, and careful consideration of the region's vulnerability. Local funding was utilized to enable each county to improve its level of resiliency and preparedness through criteria established in the National Weather Service "StormReady" program. Projects completed included establishment of county emergency operations centers, "Code Red" early warning systems and the purchase of emergency power generators for emergency management. Funding was also used to improve citizen preparedness; weather radios, designed for use by people with hearing or sight impairments, were distributed to vulnerable populations throughout the eight county region. The following goals and objectives have been part of the region's plan since the plan was first written, but have been edited and expanded to reflect increased awareness of potential hazards.

Representatives from the region developed the mitigation goals and objectives based on the review and evaluation of research data and local vulnerability. While mitigation goals throughout the state and nation closely parallel those of this region, the goals, objectives and action plans in this regional plan are specific to the Lincoln Trail ADD geographic location and population demographics.

Six mitigation strategies have been addressed previously, however, evaluation of those strategies led to consolidation of strategies into four, with emergency services and structural projects incorporated into four main strategies, which were used to develop goals and objectives. The four basic components of the mitigation plan goals are:

**1. Prevention:** Local governmental, regulatory or planning actions and/or processes that regulate land use, development standards, the integrity of built structures, and allocation of local funds. This strategy controls public and private activity that can reduce or eliminate losses due to regional hazards.

Examples include, but are not limited to:

- Planning and Zoning
- Building Codes
- Land Use Controls
- Medium and Long Range Planning
- Capital Improvement Programs

- Preservation/Protection of Open Spaces, Fragile Ecosystems and Local Geographic Features
- Storm Water Management
- Routine Inspection, Maintenance, and Repair of Infrastructure

**2. Protection of Life and Property:** Local governmental and agency actions that plan for, fund and execute activities that protect human life and prevent the loss of property. Examples include:

- Acquisition
- Elevation
- Relocation
- Structural Retrofits
- Construction of Mitigation Projects
- Safe Rooms
- Inspection, Repair and Maintenance of All Infrastructure
- Flood Control Projects
- Emergency Power
- Continuity of Operations
- Public Warning Systems
- Emergency Response Services and Facilities
- Evacuation Plans

**3. Public Education and Awareness:** Local units of government can prepare and plan for hazard mitigation, but, ultimately, personal responsibility plays a key role in hazard mitigation and community resiliency. Educating the public, from a very early age, about disaster preparedness is a key component of this regional plan and an integral part of community resiliency. Information must be disseminated to all citizens on hazard mitigation and include:

- Real Estate Disclosure Statements
- Land Use Information
- Personal Preparedness and Responsibility
- Education on Hazards
- Child and Adult Education Programs and Classes
- Community Outreach Efforts
- National Flood Insurance Program

**4. Protection of Natural Resources and Geographic Features:** Actions taken to preserve natural resources, systems and geographic features ultimately serve to also mitigate hazards. These actions include:

- Sediment and Erosion control
- Stream and Corridor Restoration
- Protection of Sink Holes and Karst Topography
- Watershed Management
- Forest and Vegetation Management

- Conservation Efforts
- Wetlands Preservation
- Conservation of Riparian Forest Buffers

## **Regional Problem Statements, Goals and Objectives**

In order to identify regional goals and effective action plans in the form of objectives, regional representatives identified problem statements. The problem statements illustrate regional challenges that face all of the local jurisdictions. Without exception, the problems, goals and objectives are generally applicable to the entire Lincoln Trail Region, and could easily address some aspect of all hazards experienced in the area. Potential funding for each action is fluid and includes HMPG, CDBG, Homeland Security, ADF, AFG, and local funds and fees. The people responsible for implementing each action come from each unit of government and its first response agencies, as well as, the Lincoln Trail Area Development District. The Lincoln Trail ADD Board of Directors and Hazard Mitigation Committee is made up of the eight County Judge Executives and Mayors from the counties' respective cities.

Problem Statements and corresponding goals and objectives were identified during the planning, review and research stages of the Regional Hazard Mitigation Plan Update. The goals are basically unchanged, but rapidly improving technology has made data research and gathering more comprehensive.

**Problem Statement 1:** During the research and review process of the plan update, comprehensive and exact data for the specific Lincoln Trail region was difficult to find. Regional representatives did not believe that the level of hazard data available and the corresponding estimates of damage and losses were accurate.

**Goal 1:** The Region's first goal and corresponding objectives and action items remain in the plan with some minor modifications. The goal and objectives are generally applicable across the entire region. County specific projects follow the original plan.

### Review of Original Plan

Since approval of the original Regional Plan in 2005, advancing technology and local awareness has resulted in additional and more accurate data collection. Mesonet stations have been completed throughout the region and this update includes that information. PDM (Pre-disaster Mitigation) funding allowed LTADD staff to map all structures in floodplains and all critical facilities throughout the region. Losses in floodplains can now be more accurately forecast. All eight counties have now completed the map modernization program and each has had all critical facilities mapped. Additional sources of data have been accessed and Emergency Management Agencies throughout the eight counties have tracked local data and mitigation projects and achievements. All eight counties have received information and funding to become "StormReady", a program

sponsored by the National Weather Service. Each county is aware of weather gauge technology that would enable each county to track localized weather information.

<b>Table 3.4.2.1 - Regional Goal #1</b>			
<b>Goal 1: Gather and Maintain a Comprehensive and Accurate database of jurisdictional specific natural hazard and parcel data.</b>	Category of Action	Estimated Cost to Implement Action	Potential Responsible Entity
<b>Objective 1.1:</b> Establish methodology for gathering natural hazard data			
Action 1.1a: Align criteria and procedures for gathering and reporting natural hazard event data with the National Environmental Information Center.	Prevention	NA	LTADD
Action 1.1b: Identify county contact for collecting natural hazard data.	Prevention	NA	LTHMC, Emergency Manager
<b>Objective 1.2:</b> Collect, store and analyze natural hazard event data			
Action 1.2a: Incorporate GIS into mapping and tracking natural hazard event data	Prevention	\$10,000	LTADD, Emergency Manager
Action 1.2b: Encourage updating flood plain and area maps.	Prevention, Awareness	NA	LTHMC, Local Government, Emergency Manager
Action 1.2c: Maintain and update maps of critical facilities	Prevention, Awareness	\$3-5,000 per county	LTADD, Emergency Manager, Planning/Zoning

**Problem Statement 2:** Since the last Lincoln Trail Regional Hazard Mitigation Plan update in 2010, all professionals across the 8-county area have come to better understand the capabilities and resources each brings to the region in response potential. Still, more work is needed to inform each jurisdiction of the power and potential for an effective first response, when mutual aid agreements are in place, professional knowledge is shared, and resources are pooled. A heightened sense of unity and strength will greatly reduce response time, better assist local residents, and decrease any kind of social or economic impact on local communities in the event of natural disaster.

**Goal 2:** Goal 2 and the corresponding objectives and action steps remain in the plan with some minor modifications. The regional council agrees that the goal and objectives are

generally applicable across all jurisdictions. County specific projects follow the original plan.

### Review of Original Plan

The Lincoln Trail Region has worked to ensure that all first responders and emergency service agencies have improved their coordinated capabilities. The Region has been participating in the National Incident Management System (NIMS) since its inception in 2005, and supports the NIMS goal for “all response and support agencies to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.”

Although there is little regional support for Citizen Emergency Response Teams (CERT), the region has a Medical Reserve Corps (MRC) through the local district health department. Volunteers trained in medical and non-medical areas make up the MRC and can be called up in the event of a disaster. The region also has an organization made up of ham radio operators that assists in disaster response, damage assessment and recovery.

Regional emergency response equipment and infrastructure has been acquired and installed throughout the area with funding through Homeland Security, ADF, local funds and other grants. Updated communication equipment, generators, community warning systems and weather tracking technology have been purchased and installed in all 8 counties.

<b>Table 3.4.2.2 - Regional Goal 2</b>			
<b>Goal 2: Improve emergency response time, constituent service and education, and regional organizational efficiencies.</b>	Category of Action	Estimated Cost to Implement Action	Potential Responsible Entity
<b>Objective 2.1:</b> Organize regional first responders. Educate the public about personal responsibility, services and available resources, in the event of a natural disaster.			
Action 2.1a: Create a regional inventory of services available to respond to a natural hazard.	Prevention Awareness	NA	Emergency Management LTADD
Action 2.1b: Disseminate information on family preparedness to the public	Prevention Awareness	\$200-\$500 per county	Local Governments LTADD
<b>Objective 2.2:</b> Organize volunteers to enhance emergency response capabilities.			



Action 2.2a: Organize and train volunteers from agencies across the region	Prevention	NA	Emergency Managers Local Agencies
<b>Objective 2.3:</b> Maintain an inventory of local first response resources and facilities.			
Action 2.3a: Encourage the use of mutual aid agreements that allow the use of first response equipment regionally, when & where needed.	Prevention	NA	Emergency Managers Local units of government
Action 2.3b: Purchase emergency response equipment needed	Prevention	Project Specific	Local Government

**Problem Statements 3 & 4:** Several natural hazards are prevalent in the nation, but do not affect the Lincoln Trail Region. Analysis of hazard data, identifies the following hazards as most prevalent:

- Floods
- Tornadoes
- Winter Storms
- Severe Thunderstorms (some with imbedded hail)

Thunderstorms are most frequent, followed by floods and flash flooding. Tornadoes do not occur as frequently, but have caused more loss of life over the past 50 years, than the other hazards combined. Hailstorms have resulted in the greatest property damage regionally. As of 7-31-2015, the region has received over \$8,316,959 in FEMA assistance for flood losses since 01-01-1978.

The following goals and objectives were developed in response to the following criteria:

1. Several jurisdictions have facilities that accommodate vulnerable populations such as children, the elderly, and disabled persons.
2. Regionally, there are an estimated 20 critical facilities and numerous residential structures located in floodplains.
3. Funding opportunities to address natural hazard issues are underutilized.

Eliminating and/or diminishing the physical and economic impact of natural disasters are goals of this plan. The LTHMC recognizes that this must be a regional endeavor that involves all stakeholders from individual citizens to local units of government. Responsible action requires this plan to provide an in-depth knowledge of the scope of natural disasters and the appropriate mitigation actions to protect citizens and property from hazards.

**Goals 3 & 4:** The following goals and modified objectives and action steps are generally applicable to jurisdictions throughout the region.

### Review of Original Plan:

The Lincoln Trail Region has sponsored numerous efforts to promote individual and community preparedness. Efforts, to disseminate educational material to citizens on the importance of individual preparedness to mitigate the effects of hazards on personal safety and property, have increased.

LTADD advises all jurisdictions on the availability of mitigation funding and local applications for assistance have greatly increased over the last five years. Several projects have been completed including flood mitigation projects to address low water fords and bridges. Three applications for safe rooms were approved, and safe rooms have been completed in the Cities of Bradfordsville and Muldraugh. A safe room is currently under construction in Vine Grove. The City of Bardstown completed a project to bury power lines to prevent power outages in areas of residential and commercial development. Regionally, ADF, Homeland Security, Local, and Hazard Mitigation funds have been utilized for the purchase of communication equipment, generators, weather radios, weather gauges, and public alert/warning systems.

<b>Table 3.4.2.3 - Regional Goal 3</b>			
<b>Goal 3: Educate all regional stakeholders about natural hazards and the shared responsibility to mitigate impacts on public health, welfare and safety.</b>	Category of Action	Estimated Cost to Implement Action	Potential Responsible Entity
<b>Objective 3.1:</b> Educate entire region on prevalence of natural hazards in this area.			
Action 3.1a: Disseminate information regionally, concerning emergency response and mitigation measures	Prevention Awareness	\$500-\$1000 per county annually	LTADD Emergency Management
Action 3.1b: Advertise and promote the availability and benefits of the National Flood Insurance Program.	Prevention Awareness	\$500-\$1000 per county annually	Flood Plain Managers Insurance Agencies
Action 3.1c: Distribute information on personal preparedness and safety	Prevention Awareness	\$200-\$400 per county annually	LTADD Local Government
Action 3.1d: Provide potential property buyers with hazard data and maps	Prevention Awareness	\$1000-\$2000 per county	P&Z Insurance Agencies

Action 3.1e: Develop, maintain and publicize evacuation routes	Prevention Awareness	\$3000-\$5000 per county	Emergency Management Local Government
Action 3.1f: Support the “FAST” program of the Area Agency on Aging to facilitate response to the elderly in coordination with the regional MRC, in the event of a disaster.	Prevention Protection	NA	LTADD Aging Dept. Regional Medical Reserve Corps
Action 3.1g: Provide local units of government with Continuity of Operations Planning (COOP).	Prevention Protection	NA	LTADD Regional Health Dept. State
<b>Objective 3.2:</b> Inform the Public about the damage that results from wind borne debris as a result of a tornado or severe storm.			
Action 3.2a: Educate the public about the advantages of proper tree maintenance.	Prevention Protection	\$2000-\$3000 per county	Local Government Utility Companies
<b>Objective 3.3:</b> Maximize citizen preparedness for severe weather			
Action 3.3a: Educate the public about public warning systems, shelter locations, and individual preparedness measures.	Prevention Protection Awareness	\$500-\$2000 per county	Media Local Government Emergency Management
<b>Objective 3.4:</b> Publicize Hazard Mitigation Program Grants and their potential benefits			
Action 3.4a: Post notice of available funding opportunities on the LTADD website	Public Education & Awareness	NA	LTADD

<b>Table 3.4.2.4 - Regional Goal 4</b>	
<b>Goal 4: Develop and implement cost effective policies and measures that aid in mitigating the effects of natural hazards to human safety, infrastructure and natural resources throughout the region.</b>	
<b>Objective 4.1:</b> Decrease losses associated with flooding, landslides, and karst topography/sinkholes.	

Action 4.1a: Train local officials and planning & zoning commissions on the importance of incorporating hazard mitigation into land use planning.	Prevention Education Protection	NA	LTADD FEMA
Action 4.1b: Use acquisition programs to increase green space and recreational opportunities in flood prone areas.	Prevention	Specific to Project	Local Government
Action 4.1c: Protect natural resources and environmentally sensitive areas with regulations and zoning that precludes development in areas such as floodplains, wetlands, steep slopes, and karst topography/sinkholes.	Prevention	NA	Local Government Planning & Zoning Commissions
<b>Objective 4.2:</b> Reduce the vulnerability of critical facilities from effects of all natural hazards			
Action 4.2a: Prioritize mitigation projects that reduce the vulnerability of critical facilities from natural hazards.	Prevention	Project Specific	Local Government
Action 4.2b: Partner with all stakeholders to accomplish proper maintenance on utility easements.	Prevention	Project Specific	Local Government Utilities
<b>Objective 4.3:</b> Develop and implement regulations, ordinances, building codes, or zoning that improve community resiliency.			
Action 4.3a: Require safe rooms in residential developments of manufactured housing or mobile homes.	Prevention	NA	Local Government Planning & Zoning
Action 4.3b: Reduce storm water flooding with systems funded with storm water utility fees. Require such systems in new developments with subdivision regulations.	Prevention	Project Specific	Local Government Planning & Zoning.
<b>Objective 4.4:</b> Create jurisdiction specific hazard mitigation policies that: 1. Increase CRS rating in NFIP communities 2. Decrease disruptions to services and transportation 3. Minimize damage to public infrastructure.			

Action 4.4a: Develop a flood plain management ordinance that does not permit the base flood elevation (BFE) to be raised.	Prevention	NA	Local Government Planning & Zoning
Action 4.4b: Incorporate cumulative substantial damage data or improvement requirements into flood prevention ordinance.	Prevention	NA	Local Government Planning & Zoning
Action 4.4c: Develop maintenance policy to routinely clean debris from waterways.	Prevention	Jurisdiction Specific	Local Government
Action 4.4d: Prioritize cleanup and repair of roads after a natural hazard event.	Prevention	Jurisdiction Specific	Local Government
Action 4.4e: Bury utility lines in areas with repetitive power outages due to natural hazards.	Prevention	Jurisdiction Specific	Local Government Utility Companies
<b>Objective 4.5:</b> Improve severe weather warning systems to serve the population of the region.			
Action 4.5a: Encourage the purchase of weather radios for homes, businesses, and all care giving and educational facilities.	Prevention	\$50 per unit	Individuals Emergency Management
Action 4.5b: Track population growth to determine the need for additional outdoor warning systems.	Prevention	Jurisdiction Specific	LTADD Local Government Emergency Management

### 3.4.3 Implementation of Mitigation Measures

Approximately 60 elected officials and representatives from throughout the 8-county region, along with LTADD staff, prioritized the actions developed from the Regional Plan's goals and objectives. The table below shows the scoring criteria used in the prioritization process and reflects circumstances within each county. It should be noted that any kind of severe weather event could impact the scoring criteria for each jurisdiction. However, the goals and objectives contained in this plan are generally applicable throughout the region.

Implementation of these actions is dependent upon local resources, imminent need, and the availability of grant funds. However, a timetable has been assigned to each of the three ratings. The table lists actions and each county's corresponding score. Review of the scoring criteria helps to illustrate the similarities among the eight counties and

underscores the potential for multi-jurisdictional projects and grant applications. As funding opportunities arise, jurisdictions can reference these tables to choose projects.

Timetable and corresponding score.

- High = 1 – 3 years to implement
- Medium = 4 – 6 years to implement
- Low = 7 – 10 years to implement

<b>Table 3.4.3.1 - Prioritization Table</b>	
Parameter	Scoring Criteria
Appropriateness of Action	1 – High: Reduces vulnerability 2 – Medium: Needed, but not linked to vulnerabilities 3 – Low: Inconsistent with identified needs
Consistent with existing plan and capabilities assessment	1 – High: Consistent with plan and priorities 2 – Medium: Somewhat consistent 3 – Low: Conflicts with plans and priorities
Potential to save lives, reduce property damage and loss of services	1 – High: Major impact 2 – Medium: Some impact 3 – Low: Minimal impact
Cost benefit analysis (refer to estimated cost column with actions)	1 – High: Extremely beneficial 2 – Medium: Beneficial 3 – Low: Minimum benefit

<b>Table 3.4.3.2 - 2015 Ratings of Actions for Lincoln Trail Region by County</b>								
<b>Goal 1:</b> Gather and Maintain a Comprehensive and Accurate Database of jurisdiction specific natural hazard and parcel data	Breckinridge	Grayson	Hardin	LaRue	Marion	Meade	Nelson	Washington
Action 1.1a: Align criteria and procedures for gathering and reporting natural hazard event data with the National Environmental Information Center.	H	H	H	M	H	H	H	H
Action 1.1b: Identify county contact for collecting natural hazard event data	M	H	H	H	H	H	H	H
Action 1.2a: Incorporate GIS into mapping and tracking natural hazard event data.	M	H	H	H	H	H	H	H
Action 1.2b: Encourage updating flood plain and area maps.	H	H	H	H	H	H	H	H

<b>Goal 2:</b> Improve emergency response time, constituent service and education, and regional organizational efficiencies.	Breckinridge	Grayson	Hardin	LaRue	Marion	Meade	Nelson	Washington
Action 2.1a: Organize regional first responders. Educate the public about personal responsibility, services and available resources, in the event of a natural disaster.	M	H	M	M	H	H	H	H
Action 2.1b: Disseminate information on family preparedness to the public	H	H	H	H	H	H	H	H
Action 2.2a: Organize and train volunteers from agencies across the region	M	M	M	H	M	H	H	H
Action 2.3a: Encourage the use of mutual aid agreements that allow the use of first response equipment when & where needed.	H	H	H	H	H	H	H	H
Action 2.3b: Purchase emergency response equipment needed.	H	H	H	H	H	H	H	H
<b>Goal 3:</b> Educate all regional stakeholders about natural hazards and the shared responsibility to mitigate impacts on public health, welfare and safety.	Breckinridge	Grayson	Hardin	LaRue	Marion	Meade	Nelson	Washington
Action 3.1a: Disseminate information regionally, concerning emergency response and mitigation measures.	M	H	M	M	M	H	M	H
Action 3.1b: Advertise and promote the availability and benefits of the National Flood Insurance Program.	M	M	H	H	M	H	H	M
Action 3.1c: Distribute information on personal preparedness and safety.	H	H	H	H	H	H	H	H
Action 3.1d: Provide potential property buyers with hazard data and maps.	M	M	L	L	H	H	M	M
Action 3.1e: Develop, maintain and publicize evacuation routes.	M	M	H	H	H	H	M	H

Action 3.1f: Support the “FAST” program of the Area Agency on Aging to facilitate response to the elderly in coordination with the regional MRC, in the event of a disaster.	H	H	H	H	H	H	H	H
Action 3.1g: Provide local government with Coop training.	H	H	H	H	H	H	H	H
Action 3.2a: Educate the public about the advantages of proper tree maintenance.	M	M	L	M	M	H	H	M
Action 3.3a: Educate the public about public warning systems and shelter locations.	H	H	H	H	H	H	H	H
Action 3.4a: Post notice of available funding opportunities on the LTADD website.	M	H	M	M	H	H	H	H
<b>Goal 4:</b> Develop and implement cost effective policies and measures that aid in mitigating the effects of natural hazards to human safety, infrastructure, and natural resources throughout the region.	Breckinridge	Grayson	Hardin	LaRue	Marion	Meade	Nelson	Washington
Action 4.1a: train local officials and planning & zoning people on the importance of incorporating hazard mitigation into land use planning.	M	H	M	M	H	H	H	H
Action 4.1b: Use acquisition programs to increase green space and recreational opportunities in flood prone areas.	M	M	L	M	M	M	H	M
Action 4.1c: Protect natural resources and environmentally sensitive areas with regulations and zoning that precludes development in areas such as floodplains, wetlands, steep slopes, and karst topography/sinkholes.	M	H	M	M	H	H	H	H
Action 4.2a: Prioritize mitigation projects that reduce the vulnerability of critical facilities from natural hazards.	H	H	H	H	H	H	H	H
Action 4.2b: Partner with all stakeholders to accomplish proper maintenance on utility easements.	M	H	L	M	H	H	H	M



Action 4.3a: Require safe rooms in residential development of manufactured housing & mobile homes.	M	H	M	H	H	M	M	M
Action 4.3b: Reduce storm water flooding with systems funded with storm water utility fees. Require such systems in new developments with subdivision regulations.	M	H	H	M	H	H	H	H
Action 4.4a: Develop a flood plain ordinance that does not permit the BFE to be raised.	M	H	H	M	H	H	H	H
Action 4.4b: Incorporate cumulative substantial damage data or improvement requirements into flood prevention ordinances.	M	H	M	M	H	H	H	M
Action 4.4c: Develop maintenance policy to routinely clean debris from waterways	M	H	M	H	H	H	H	H
Action 4.4d: Prioritize cleanup and repair of roads after a natural hazard event.	M	H	H	M	H	H	H	H
Action 4.4e: Bury utility lines in areas with repetitive power outages due to natural hazards	H	H	H	H	H	H	H	H
Action 4.5a: Encourage the purchase of weather radios for homes, businesses, and all care giving and educational facilities.	H	H	H	H	H	H	H	H
Action 4.5b: Track population growth to determine the need for additional outdoor warning systems.	H	H	H	H	H	H	H	H

### 3.4.4 - Multi-Jurisdictional Strategy

The preceding actions are applicable to all jurisdictions throughout the region and are based on risk assessment (section 3.3). The Lincoln Trail Regional Hazard Mitigation Plan has been adopted by each jurisdiction by resolution. Each local government understands that the implementation of these actions is dependent on several factors, such as available funding and cooperative agreements.

The information contained within the Regional Plan has assisted the eight Lincoln Trail Counties to increase mitigation efforts and complete projects, since the last update in 2010. The vulnerabilities in the plan have guided these efforts and been helpful in completing

grant applications. An inventory of projects completed and underway was outlined in this section.

Through review of past successful projects and existing vulnerabilities, each county and city developed a list of future projects that pertain to the specific populations and conditions in each jurisdiction. During October and November of 2015, the elected officials of the Region, had the opportunity to review and discuss this list and add and/or change projects and prioritizations. The prioritization process comes from the original plan and is based on project cost, number of constituents served, and the potential impact on the region if no action is taken. When funds become available, this project list will be referenced to determine what project(s) should be undertaken.

Local partnerships among adjoining cities and counties will remain a priority when projects are chosen. This cooperative effort will be a vital component in the success of this regional plan.

Priority Ranking Reference

1 = High - 1-3 years to implement

2 = Medium - 4-6 years to implement

3 = Low - 7-10 years to implement

<b>Table 3.4.4.1 - Future Mitigation Projects: Breckinridge County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
B1: Raise Bridge on Tar Springs Road	County 6 Households	Prevention Protection	Flooding	\$400,000	1
B2: Raise Roadbed of Stonehill-Ford Rd.	County 20,059* population	Prevention Protection	Flooding	\$150,000	1
B3: Purchase One Generator for Repeater in Harned	County 20,059* population	Prevention Protection	All Identified Weather Hazards	\$8,400	1
B4: Purchase One Generator for Public Housing Site	County 25 Households	Prevention Protection	All Identified Weather Hazards	\$30,000	2
B5: Install Outdoor Siren System in Garfield	County 45 Households	Prevention Protection	Thunderstorms & Tornadoes	\$30,000	2
B6: Bank Stabilization on Tar Springs Road	County 20,059* population	Prevention	Landslides	\$175,000	2

B7: Construct Safe Room in Hardinsburg	Hardinsburg 2,343* population	Protection	Thunderstorms & Tornados	\$2 Million	1
B8: Install three new outdoor sirens	Hardinsburg 2,343* population	Protection	Thunderstorms & Tornados	\$90,000	1
B9: Install New Generator at Water/Sewer Plant	Hardinsburg Serves Co. of 20,059*	Prevention Protection	All Identified Weather Hazards	\$200,000	2
B10: Install Storm Water Culverts	Hardinsburg 2,343* population	Prevention Protection	Flooding	\$40,000 Each	2
*All population data is from the 2010 Census					

These Breckinridge County projects will be funded with local money, homeland security, FEMA and hazard mitigation grant funds as they become available. All decisions will be analyzed using cost/benefit analysis to determine that funds are used wisely to benefit the greatest number of people.

<b>Table 3.4.4.2 - Future Mitigation Projects: Grayson County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
G1: Construct Two Safe Rooms in County	County 25,746* population	Prevention Protection	Thunderstorms & Tornados	\$2,000,000	1
G2: Install Outdoor Siren System	County 25,746* population	Prevention Protection	Thunderstorms & Tornados	\$90,000	1
G3: Purchase Five Generators to Power Critical Facilities	County 25,746* population	Prevention Protection	All Identified Weather Hazards	\$180,500	2
G4: Construct New Community Safe Room	Caneyville 608* population	Prevention Protection	Thunderstorms & Tornados	\$1,200,000	1
G5: Purchase Four Generators	Caneyville 608* population	Prevention Protection	All Identified Weather Hazards	\$166,500	1
G6: Dredge Creek	Caneyville 608* population	Prevention Protection	Flooding	\$200,000	1
G7: Generator for City Hall	Leitchfield 6,699* population	Prevention Protection	All Identified Weather Hazards	\$40,000	1

G8: Construct New Community Safe Room	Leitchfield 6,699* population	Prevention Protection	Thunderstorms & Tornados	\$1,200,000	2
G9: Purchase and Install Two Outdoor Sirens	Leitchfield 6,699* population	Prevention Protection	Thunderstorms & Tornados	\$60,000	1
*All population data is from the 2010 Census					

These Grayson County projects will be funded with local money, homeland security, FEMA and hazard mitigation funds as they become available. All decisions will be analyzed using cost/benefit analysis to determine that funds are used wisely to benefit the greatest number of people.

<b>Table 3.4.4.3 - Future Mitigation Projects: Hardin County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
H1: Construct Two New Bridges and Culverts	County 105,543* population	Prevention Protection	Flooding	\$95,000	1
H2: Construct Two New Safe Rooms	County 105,543* population	Prevention Protection	Thunderstorms & Tornados	\$2,000,000	1
H3: Install Four New Outdoor Sirens	County 105,543* population	Prevention Protection	Thunderstorms & Tornados	\$80,000	1
H4: Purchase Ten Generators	County 105,543* population	Prevention Protection	All Identified Weather Hazards	\$65,000	1
H5: Mobile EOC Communication Upgrades	County 105,543* population	Prevention Protection	All Identified Weather Hazards	\$15,000	1
H6: Make Upgrades to Community Shelter	Elizabethtown 28,531* population	Prevention Protection	All Identified Weather Hazards	\$500,000	2
H7: Upgrade City's Outdoor Warning System	Elizabethtown 28,531* population	Prevention Protection	Thunderstorms & Tornados	\$360,000	1
H8: Purchase 6 Emergency Generators	Elizabethtown 28,531* population	Prevention Protection	All Identified Weather Hazards	\$180,000	1

H9: Upgrade City's Outdoor Warning System	Radcliff 21,688* population	Prevention Protection	Thunderstorms & Tornadoes	\$74,600	1
H10: Construct New Community Safe Room	Radcliff 21,688* population	Prevention Protection	Thunderstorms & Tornadoes	\$1,500,000	2
H11: Purchase An Emergency Generator for Police	Radcliff 21,688* population	Prevention Protection	All Identified Weather Hazards	\$70,000	2
H12: Purchase Four Emergency Generators	Vine Grove 4,520* population	Prevention Protection	All Identified Weather Hazards	\$200,000	1
H13: Install Transfer Switches for 8 Lift Stations	Vine Grove 4,520* population	Prevention Protection	All Identified Weather Hazards	\$11,000	2
H14: Install Storm Water System in Riverview Area	West Point 797* population	Prevention Protection	Flooding	\$100,000	1
H15: Address I & I Issues with Sewer Plant	West Point 797* population	Prevention Protection	Flooding	\$500,000	1
*All population data is from the 2010 Census					

These Hardin, LaRue and Marion County projects will be funded with local money, homeland security, FEMA and hazard mitigation funds as they become available. . All decisions will be analyzed using cost/benefit analysis to determine that funds are used wisely to benefit the greatest number of people.

<b>Table 3.4.4.4 - Future Mitigation Projects: LaRue County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
L1: Complete Storm Water Mitigation Project Along Main Street	Hodgenville 3,206* population	Prevention Protection	Flooding	\$200,000	1
*All population data is from the 2010 Census					

<b>Table 3.4.4.5 - Future Mitigation Projects: Marion County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
M1: Storm Water System Overhaul for Entire Community	Bradfordsville 294* population	Prevention Protection	Flooding	\$500,000	1
*All population data is from the 2010 Census					

<b>Table 3.4.4.6 - Future Mitigation Projects: Meade County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
Md1: Bank Stabilization on Ohio River Downtown Brandenburg	Brandenburg 2,643* population	Prevention Protection	Flooding	\$1,200,000	1
Md2: Construct New Community Safe Room	Ekron 135* population	Prevention Protection	Thunderstorms & Tornadoes	\$1,000,000	1
Md3: Purchase One Emergency Generator to Power City Hall & Police Department	Muldraugh 947* population	Prevention Protection	All Identified Weather Hazards	\$150,000	1
Md4: Upgrade City's Outdoor Warning System	Muldraugh 947* population	Prevention Protection	Thunderstorms & Tornadoes	\$6,800	2
Md5: Construct 5,200' of a Storm Water System	Muldraugh 947* population	Prevention Protection	Flooding	\$500,000	1
*All population data is from the 2010 Census					

The Meade and Nelson County projects will be funded with local money, homeland security, FEMA, and hazard mitigation grant funds as they become available. All decisions will be analyzed using cost/benefit analysis to determine that funds are used wisely to benefit the greatest number of people.

<b>Table 3.4.4.7 - Future Mitigation Projects: Nelson County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
N1: Purchase Backup Emergency Generator for City Sewer Pump	Bardstown 11,700* population	Prevention Protection	All Identified Weather Hazards	\$94,000	1
N2: Construct Emergency Road to Waste Water Treatment Plant	Bardstown 11,700* population	Prevention Protection	Flooding	\$20,000	2
N3: Construct Watershed Detention Pond	Bardstown 11,700* population	Prevention Protection	Flooding	\$200,000	1
N4: Purchase Two Emergency Generators	Bloomfield 838* population	Prevention Protection	All Identified Weather Hazards		2
N5: Raise Perry St. Bridge & Install Larger Culverts	Bloomfield 838* population	Prevention Protection	Flooding		1
N6: Purchase Two Emergency Generators	Fairfield 113* population	Prevention Protection	All Identified Weather Hazards	\$3,500	1
*All population data is from the 2010 Census					

<b>Table 3.4.4.8 - Future Mitigation Projects: Washington County</b>					
<b>Project</b>	<b>Location/ Population Benefit</b>	<b>Category of Action</b>	<b>Hazard(s) Addressed</b>	<b>Estimated Cost</b>	<b>Priority Ranking</b>
W1: Install box Culverts on Grundy Home Road	County 11,717* population	Prevention Protection	Flooding	\$48,000	2
W2: Replace the Ann Osborne Bridge	County 11,717* population	Prevention Protection	Flooding	\$200,000	2
W3: Replace the Mayfield Lane Bridge	County 11,717* population	Prevention Protection	Flooding	\$140,000	2
W4: Stabilize Banks of Cardwell-Tablow Rd. & Hardesty Road	County 11,717* population	Prevention Protection	Landslides	\$200,000 Each	1



W5: Install 1,800' of Storm Water Mgmt. System	Springfield 2,519* population	Prevention Protection	Flooding	\$118,000	1
W6: Install 400' Storm Water Mgmt. System on Maplewood Ave.	Springfield 2,519* population	Prevention Protection	Flooding	\$8,000	1
W7: Install Storm Water Mgmt. System in Lebanon Hill Neighborhood	Springfield 2,519* population	Prevention Protection	Flooding	\$90,000	1
W8: Replace Main St. Storm Water Mgmt. System	Springfield 2,519* population	Prevention Protection	Flooding	\$120,000	1
W9: Install Storm Water Mgmt. System on Grundy Ave.	Springfield 2,519* population	Prevention Protection	Flooding	\$175,000	1
W10: Install Storm Water Mgmt. System in Zone A Flood Area	Springfield 2,519* population	Prevention Protection	Flooding	\$250,000	1
W11: Relocate 7 Homes on Ballard St. & Eddleman Ct. from Zone A Flood Area	Springfield 7 Households	Prevention Protection	Flooding	\$315,000**	1
W12: Reconstruct Low Water Bridge	Springfield 2,519* population	Prevention Protection	Flooding	\$190,000	3
W13: Purchase Emergency Backup Generator	Springfield 2,519* population	Prevention Protection	All Identified Weather Hazards	\$75,000	2
W14: Install "One Call System" to Enhance 911 Program	Springfield 2,519* population	Prevention Protection	All Identified Weather Hazards	\$20,000	2
W15: Bury Utility Lines in Business District	Springfield 2,519* population	Prevention Protection	All Identified Weather Hazards	\$750,000	3
*All population data is from the 2010 Census **Based on Repetitive Claims on Properties					

These Washington County projects will be funded with local money, homeland security, FEMA, and hazard mitigation grant funds as they become available. All decisions will be analyzed using cost/benefit analysis to determine that funds are used wisely to benefit the greatest number of people.

## **Appendix A: Forms**

Hazard Mitigation Plan Update Evaluation Worksheet  
Public Opinion Survey

# LINCOLN TRAIL REGION PLAN UPDATE EVALUATION WORKSHEET

Jurisdiction: \_\_\_\_\_

Date of Evaluation: \_\_\_\_ / \_\_\_\_ /20 \_\_\_\_



PLAN SECTION	CONSIDERATIONS	Y/N/NA	COMMENT
Planning Process	Should new jurisdictions and/or districts be invited to participate in future plan updates?		
	Have any internal or external agencies been invaluable to the mitigation strategy?		
	Can any procedures (e.g., meeting announcements, plan updates) be done differently or more efficiently?		
	Has the Planning Team undertaken any public outreach activities?		
	How can public participation be improved?		
	Have there been any changes in public support and/or decision-maker priorities related to hazard mitigation?		
Capability Assessment	Have jurisdictions adopted new policies, plans, regulations, or reports that could be incorporated into this plan?		
	Are there different or additional administrative, human, technical, and financial resources available for mitigation planning?		
	Are there different or new education and outreach programs and resources available for mitigation activities?		
	Has NFIP participation changed in the participating jurisdictions?		

<i>Risk Assessment</i>	Has a natural and/or technical or human-caused disaster occurred?		
	Should the list of hazards addressed in the plan be modified?		
	Are there new data sources and/or additional maps and studies available? If so, what are they and what have they revealed? Should the information be incorporated into future plan updates?		
	Do any new critical facilities or infrastructure need to be added to the asset lists?		
	Have any changes in development trends occurred that could create additional risks?		
	Are there repetitive losses and/or severe repetitive losses to document?		
<i>Mitigation Strategy</i>	Is the mitigation strategy being implemented as anticipated? Were the cost and timeline estimates accurate?		
	Should new mitigation actions be added to the Action Plan? Should existing mitigation actions be revised or eliminated from the plan?		
	Are there new obstacles that were not anticipated in the plan that will need to be considered in the next plan update?		
	Are there new funding sources to consider?		
	Have elements of the plan been incorporated into other planning mechanisms?		
<i>Plan Maintenance Procedures</i>	Was the plan monitored and evaluated as anticipated?		
	What are needed improvements to the procedures?		

# Mitigation Public Opinion Survey

## For 2015 Regional Hazard Mitigation Plan Update



Your household has been randomly selected to participate in this survey about public perceptions and opinions regarding natural hazards in your county. In addition, we would like information regarding the methods and techniques you prefer for reducing the risks and losses associated with these hazards. The questionnaire should be completed by an adult, preferably the head of household. The information you provide will be used to help improve public/private coordination, mitigation, and risk reduction efforts in your county. The survey should take less than 30 minutes to complete.

This is a public opinion survey, the results of which will inform local natural hazard mitigation planning in Kentucky. Your returned, completed survey indicates your willingness to take part in the study. Participation in this study is voluntary. The survey is not intended to contribute to "generalizable knowledge" and none of the information you provide will be attributed to you directly. If you have questions regarding your rights as a research participant, please contact the Lincoln Trail Area Development District, PO Box 604, Elizabethtown KY, 42702, Phone 270-769-2393, website [www.ltadd.org](http://www.ltadd.org)

### NATURAL HAZARD INFORMATION

First we would like to know about your experiences involving natural hazards and your exposure to preparedness information.

- During the past five years in the county you currently reside in, have you or someone in your household directly experienced a natural disaster such as an earthquake, severe windstorm, flood, wildfire, or other type of natural disaster?
  - ☐ Yes
  - ☐ No (*IF NO Skip to Question 2*)

**If "YES",** which of these natural disasters have you or someone in your household experienced in the past five years?

*(Please check all that apply)*

- |  |   |
|--|---|
| <input type="checkbox"/> Drought                 | <input type="checkbox"/> Windstorm              |
| <input type="checkbox"/> Dust Storm              | <input type="checkbox"/> Volcanic Eruption      |
| <input type="checkbox"/> Earthquake              | <input type="checkbox"/> Severe Winter Storm    |
| <input type="checkbox"/> Flood                   | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Landslide / Debris Flow |   |
| <input type="checkbox"/> Wildfire                |   |

- How concerned are you about the following natural disasters affecting your county?  
*(Check the corresponding box for each hazard)*

Natural Disaster	Very Concerned	Somewhat Concerned	Neutral	Not Very Concerned	Not Concerned
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dust Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide / Debris Flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcanic Eruption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wind Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Have you ever received information about how to make members of your household and your home safer from natural disasters?

- ☐ Yes  
☐ No (*IF NO Skip to Question 5*)

If "YES", how recently?

- ☐ Within the last 6 months  
☐ Between 6 and 12 months  
☐ Between 1 and 2 years  
☐ Between 2 and 5 years  
☐ 5 years or more

4. From whom did you **last** receive information about how to make members of your household and your home safer from natural disasters?

(Please check only one)

- |   |  |
|---|--|
| <input type="checkbox"/> News media                         | <input type="checkbox"/> Elected official              |
| <input type="checkbox"/> Government agency                  | <input type="checkbox"/> American Red Cross            |
| <input type="checkbox"/> Insurance agent or company         | <input type="checkbox"/> Other non-profit organization |
| <input type="checkbox"/> Utility company                    | <input type="checkbox"/> Social media (e.g. Facebook)  |
| <input type="checkbox"/> University or research institution | <input type="checkbox"/> Not sure                      |
| <input type="checkbox"/> Neighbor / friend / family member  | <input type="checkbox"/> Other: _____                  |

5. Whom would you most trust to provide you with information about how to make your household and home safer from natural disasters?

(Please check up to three)

- |   |  |
|---|--|
| <input type="checkbox"/> News media                         | <input type="checkbox"/> Elected official              |
| <input type="checkbox"/> Government agency                  | <input type="checkbox"/> American Red Cross            |
| <input type="checkbox"/> Insurance agent or company         | <input type="checkbox"/> Other non-profit organization |
| <input type="checkbox"/> Utility company                    | <input type="checkbox"/> Social media (e.g. Facebook)  |
| <input type="checkbox"/> University or research institution | <input type="checkbox"/> Not sure                      |
| <input type="checkbox"/> Neighbor / friend / family member  | <input type="checkbox"/> Other: _____                  |

6. What is the most effective way for you to receive information about how to make your household and home safer from natural disasters?

(Please check up to three)

Newspapers:

- ☐ Newspaper stories  
☐ Newspaper ads

Television:

- ☐ Television news  
☐ Television ads

Radio:

- ☐ Radio news  
☐ Radio ads

Internet:

- ☐ Email newsletters  
☐ Online news outlets  
☐ Social media (e.g. Facebook)

Other methods:

- ☐ Schools  
☐ Outdoor advertisements (billboards, etc.)  
☐ Books  
☐ Mail  
☐ Fire Department/Rescue  
☐ Fact sheet/brochure  
☐ Chamber of Commerce  
☐ Public workshops/meetings  
☐ Magazine  
☐ University or research institution  
☐ Other: \_\_\_\_\_

7. Prior to receiving this survey, were you aware of your county's Natural Hazard Mitigation Plan (NHMP)?

- ☐ Yes  
☐ No

8. Prior to receiving this survey, were you aware that the Federal Emergency Management Agency (FEMA) requires your county to update the NHMP every five years in order for your county to be eligible for federal pre- and post-disaster hazard mitigation funds?

- ☐ Yes  
☐ No

## COMMUNITY VULNERABILITIES AND HAZARD MITIGATION STRATEGIES

In order to assess community risk, we need to understand which community assets may be vulnerable to natural hazards in the region. Vulnerable assets are those community features, characteristics, or resources that may be impacted by natural hazards (e.g. populations with functional needs, economic components, environmental resources, etc.). The next set of questions will focus on vulnerable assets in your community and your preferred strategies to mitigate risk to those assets.

9. Community assets are features, characteristics, or resources that either make a community unique or allow the community to function. In your opinion, which of the following *categories* are most susceptible to the impacts caused by natural hazards in your county?

**(Please rank the community assets in order of vulnerability, 1 being most vulnerable and 6 being least vulnerable)**

Community Assets	Potential Natural Hazard Impact	Order of Vulnerability
Human	Loss of life and/or injuries	_____
Economic	Business closures and/or job losses	_____
Infrastructure	Damage or loss of bridges, utilities, schools, etc.	_____
Cultural/Historic	Damage or loss of libraries, museums, fairgrounds, etc.	_____
Environmental	Damage or loss of forests, rangeland, waterways, etc.	_____
Governance	Ability to maintain order and/or provide public amenities and services	_____

10. Next we would like to know what specific types of community assets are most important to you.

**(Check the corresponding box for each asset)**

Community Assets	Very Important	Somewhat Important	Neutral	Not Very Important	Not Important
Elder-care facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools (K-12)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospitals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Major bridges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire/Police Stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Museums/Historic buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Major employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College / University	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
City Hall / Courthouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



11. A number of activities can reduce your community's risk from natural hazards. These activities can be both regulatory and non-regulatory. **Please check the box that best represents your opinion of the following strategies to reduce the risk and loss associated with natural disasters.**

Community-wide Strategies	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Sure
I support a regulatory approach to reducing risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support a non-regulatory approach to reducing risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support a mix of both regulatory and non-regulatory approaches to reducing risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support policies to prohibit development in areas subject to natural hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support the use of tax dollars (federal and/or local) to compensate land owners for not developing in areas subject to natural hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support the use of local tax dollars to reduce risks and losses from natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support protecting historical and cultural structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would be willing to make my home more disaster-resistant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support steps to safeguard the local economy following a disaster event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support improving the disaster preparedness of local schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support a local inventory of at-risk buildings and infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support the disclosure of natural hazard risks during real estate transactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Natural hazards can have a significant impact on a community, but planning for these events can help lessen the impacts. The following statements will help determine citizen priorities regarding planning for natural hazards in your county. **Please tell us how important each one is to you.**

Statements	Very Important	Somewhat Important	Neutral	Not Very Important	Not Important
Protecting private property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protecting critical facilities (e.g. transportation networks, hospitals, fire stations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventing development in hazard areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enhancing the function of natural features (e.g. streams, wetlands)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protecting historical and cultural landmarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protecting and reducing damage to utilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strengthening emergency services (e.g.- police, fire, ambulance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disclosing natural hazard risks during real estate transactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promoting cooperation among public agencies, citizens, non-profit organizations, and businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## MITIGATION AND PREPAREDNESS ACTIVITIES IN YOUR HOUSEHOLD

Households can mitigate and prepare for natural hazards in order to prevent damage to property, injuries, and loss of life. The precautions you take and training you receive can make a big difference in your ability to recover from a natural disaster or emergency. Access to basic services, such as electricity, gas, water, telephones and emergency care may be cut off temporarily, or you may have to evacuate at a moment's notice. The following questions focus on your household's preparedness for disaster events.

13. In the following list, please check those activities that you have done in your household, plan to do in the near future, have not done, or are unable to do.

*(Please check one answer for each preparedness activity)*

In your household, have you or someone in your household:	Have Done	Plan To Do	Not Done	Unable To Do
Attended meetings or received written information on natural disasters or emergency preparedness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Talked with members in your household about what to do in case of a natural disaster or emergency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developed a "Household/Family Emergency Plan" in order to decide what everyone would do in the event of a disaster?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prepared a "Disaster Supply Kit" (stored extra food, water, batteries, or other emergency supplies)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the last year, has anyone in your household been trained in First Aid or Cardio-Pulmonary Resuscitation (CPR)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prepared your home by having smoke detectors on each level of the house	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussed or created a utility shutoff procedure in the event of a natural disaster?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## GENERAL HOUSEHOLD INFORMATION

Finally, we would appreciate any information you are willing to share with us about you and your household. This information will remain confidential and is for survey comparison purposes only.

14. Please indicate your age: \_\_\_\_\_

15. Gender: ☐ Male ☐ Female

16. Please indicate your level of education:

- ☐ High school graduate/GED  
☐ Some college/trade school  
☐ College degree

- ☐ Postgraduate degree  
☐ Other (please specify): \_\_\_\_\_

17. What is your total household income?

- ☐ Less than \$10,000  
☐ \$10,000 - \$19,999  
☐ \$20,000 - \$29,999  
☐ \$30,000 - \$39,999  
☐ \$40,000 - \$49,999  
☐ \$50,000 - \$59,999
- ☐ \$60,000 - \$69,999  
☐ \$70,000 - \$79,999  
☐ \$80,000 - \$89,999  
☐ \$90,000 - \$99,999  
☐ \$100,000 - \$149,999  
☐ More than \$150,000

18. Zip code (optional): \_\_\_\_\_

19. County:

- ☐ Breckinridge County
- ☐ Grayson County
- ☐ Hardin County
- ☐ LaRue County

- ☐ Marion County
- ☐ Meade County
- ☐ Nelson County
- ☐ Washington County

20. Please specify your race:

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American

- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White

21. Please specify your ethnicity:

- ☐ Hispanic or Latino

- ☐ Not Hispanic or Latino

22. How long have you lived in Kentucky?

- ☐ Less than one year
- ☐ 1-5 years
- ☐ 5-9 years

- ☐ 10-19 years
- ☐ 20 years or more

23. Do you own or rent your home?

☐ Own

☐ Rent

24. Do you own/rent a:

- ☐ Single-family home
- ☐ Duplex
- ☐ Apartment (3-4 units in structure)
- ☐ Apartment (5 or more units in structure)

- ☐ Condominium / townhouse
- ☐ Manufactured home
- ☐ Other: \_\_\_\_\_

Please feel free to provide any additional comments in the space provided:

**THANK YOU VERY MUCH FOR PROVIDING THIS INFORMATION**

*The Lincoln Trail Area Development District prepared this survey. Implementation of this survey has been made possible by funding from the Federal Emergency Management Agency and Lincoln Trail ADD.*

*For more information, please contact the Lincoln Trail ADD at:*

*PO Box 604, Elizabethtown, KY 42702*

*or phone at 270-769-2393 or visit [www.ltadd.org/hazardmitigation](http://www.ltadd.org/hazardmitigation)*

## Appendix B: Bibliography

Cutter, Susan L.: “*Vulnerability to Environmental Hazards*” from *Progress in Human Geography*, 20, 4 pp. 529-539, Dept. of Geography, University of South Carolina, Columbia, SC, Arnold, 1996.

Cutter, Susan L., Mitchell, Jerry T., and Scott, Michael S.: *Handbook for Conduction a GIS-Based Hazards Assessment at the County Level*, Hazards Research Lab, Dept. of Geography, University of South Carolina, Columbia, SC, 1997.

Odeh, David J.: “*Natural Hazards Vulnerability Assessment for Statewide Mitigation Planning in Rhode Island*” from *Natural Hazards Review*, Vol. 3, Num. 4, pp177-187, American Society of Civil Engineers, 2002.

FEMA: *Local Mitigation Planning Handbook*, Federal Emergency Management Agency, March 2013.

Access to information from the internet was critical to the completion of this plan. The following sites were primary sources of data used in this effort.

### Government

Federal Emergency Management Agency (FEMA)  
[www.fema.gov](http://www.fema.gov)

Focus: hazard types, mitigation strategies and hazard planning.

United States Census Bureau  
[www.census.gov](http://www.census.gov)

Focus: demographic data on populations, TIGER GIS data.

National Oceanic and Atmospheric Agency (NOAA)  
[www.noaa.gov](http://www.noaa.gov)

Focus: historic climatic data, events, costs.

National Center for Environmental Information(NCEI), NOAA & National Weather Service  
<http://www.ncdc.noaa.gov/oa/ncdc.html>

Focus: Weather Event data, 1950-Sept. 2015.

United States Geologic Survey (USGS)  
<http://usgs.gov/>

<http://earthquake.usgs.gov/activity/past.html>

Focus: National Earthquake Information Center (NEIC) Databases, "USGS/NEIC 1973-2015" & "Eastern, Central and Mountain States of U.S., 1534 - 1986".

Disaster Help  
[www.disasterhelp.gov](http://www.disasterhelp.gov)

Focus: Public information about disasters and response issues.

USDA Risk Management Agency  
<http://www.rma.usda.gov/other/>

Focus: Agricultural loss statistics.

## **Educational**

University of South Carolina, Hazard Research Lab  
<http://www.cas.sc.edu/geog/hrl/index.htm>

Focus: SHEL DUS Data Base, July 2003.

University of Nebraska – Lincoln, National Drought Mitigation Center  
<http://www.drought.unl.edu/index.htm>

Focus: Drought issues and statistics.

University of Colorado, Natural Hazards Center  
<http://www.colorado.edu/hazards/>

Focus: Numerous links and data about natural hazards.

Stanford University, National Performance of Dams Program

<http://npdp-devserv.stanford.edu/front.html>

Focus: Information about dams and failure issues.

Cornell University, USDA Economics, Statistics and Market Information System  
<http://usda.mannlib.cornell.edu/>

Focus: Agricultural Census data and miscellaneous economic factors.

## **Private**

Natural Hazards.org

<http://www.naturalhazards.org/>

Focus: Numerous links and data about natural hazards.

National Crop Insurance Services

<http://www.ag-risk.org/>

Focus: Crop disaster issues and data.

## **Appendix C: Notices, Resolutions**

County Participation Resolutions

Sample shown - Breckinridge County

Public Hearing Notice for comment Jan 7<sup>th</sup>, 2016

County Adoption Resolution

Sample shown – Hardin County

RESOLUTION NO. 2015-0309  
Resolution to Participate in the Planning Process for The Lincoln Trail  
Regional Hazard Mitigation and Flood Mitigation 2015 Plan Update

Breckinridge County, Kentucky

WHEREAS, the County recognized the threat that natural hazards pose to people and property within Breckinridge County; and


WHEREAS, the County has prepared a multi-hazard and flood mitigation plan, hereby known as the Lincoln Trail Regional Hazard Mitigation and Flood Mitigation Plan in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS, the Lincoln Trail Regional Hazard Mitigation and Flood Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Breckinridge County from the impacts of future hazards and disasters; and

WHEREAS, participation in the planning process by the County demonstrates their commitment to the hazard and flood mitigation plan and updating data, goals and actions in the 2015 Lincoln Trail Regional Hazard and Flood Mitigation Plan Update.

NOW THEREFORE, BE IT RESOLVED BY BRECKINRIDGE COUNTY, KENTUCKY, THAT, the local governing body will participate in planning for the 2015 Lincoln Trail Regional Hazard Mitigation and Flood Mitigation Plan Update.

Done this 9<sup>th</sup> Day of March 2015.

  
Maurice Lucas  
County Judge-Executive

3/9/2015  
Date

ATTEST

Kathina Bell  
Kathina Bell  
Breckinridge County Fiscal Court Clerk

3/9/2015  
Date



## Public Hearing Notice

To all interested citizens of the Kentucky Counties of Breckinridge, Grayson, Hardin, LaRue, Marion, Meade, Nelson and Washington:

The *Lincoln Trail Regional Hazard Mitigation Plan* has been rewritten and updated and is available for review and comments. A regional public hearing will be held Thursday, January 7, 2016 4:00 to 7:00 p.m. EST, with an alternate date of January 12, 2016 in the event of inclement weather. The purpose of this hearing is to obtain views on the plan, review proposed activities, goals and proposed mitigation projects, and solicit public comment. The meeting will be held at the office of Lincoln Trail Area Development District, 613 College St. Rd., Elizabethtown, KY. 42701.

Participation in the Lincoln Trail Hazard Mitigation Plan, by the 35 jurisdictions it represents, is a federal requirement by the Federal Emergency Management Agency:

- A. Per Title 44 Code of Federal Regulations (CFR) Part 201, for FEMA assistance in the event of a disaster.
- B. To participate in the Emergency Management Activities of mitigation, prevention, protection, preparedness, response and recovery.
- C. To increase regional resiliency and preparedness.

### Comments on The Lincoln Trail Regional Hazard Mitigation Plan

A draft copy of the Plan is available for citizens' review and comment at the Lincoln Trail ADD website ([ltadd.org](http://ltadd.org)). Comments on the proposed application may be submitted to the attention of Janice Rawson at the above address, until the close of business on Tuesday, January 12, 2016.

### Discrimination Clause

Lincoln Trail ADD does not discriminate on the basis of race, color, national origin, sex, age, religion or disability, and provides, upon request, reasonable accommodation, including auxiliary aids and services, to afford an individual with a disability an equal opportunity to participate in all services, programs and activities. Any persons requiring special needs assistance should contact Janice Rawson at 877.255.8233 at least five days prior to the meeting. The TDD number for the hearing impaired is 800.648.6057.

### NOTE: ADA Contacts

Department for the Blind	800.877.KYBLIND	<a href="http://www.apps.blind.ky.gov">www.apps.blind.ky.gov</a>
American Printing House	800.223.1839	<a href="http://www.aph.org">www.aph.org</a>
Commission for the Deaf and Hard of Hearing	800.372.2907	<a href="http://www.kcdhh.org">www.kcdhh.org</a>
For Interpreter Director		<a href="http://www.hcdhh.org/access/interpdire.html">www.hcdhh.org/access/interpdire.html</a>
State Relay TTY Number	800.648.6057	

**Resolution To Adopt The Lincoln Trail Regional Hazard Mitigation and Flood  
Mitigation 2015 Plan Update**  
**Resolution Number \_\_\_\_\_**

Hardin County, Kentucky

WHEREAS the County recognizes the threat that natural hazards pose to people and property within Hardin County; and

WHEREAS the County has prepared a multi-hazard and flood mitigation plan, hereby known as the Lincoln Trail Regional Hazard Mitigation and Flood Mitigation Plan in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the Lincoln Trail Regional Hazard Mitigation and Flood Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Hardin County from the impacts of future hazards and disasters; and

WHEREAS adoption by the County demonstrates their commitment to hazard and flood mitigation and achieving goals outlined in the 2015 Lincoln Trail Regional Hazard and Flood Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY HARDIN COUNTY, KENTUCKY, THAT:

1. Hardin County adopts the Lincoln Trail Hazard and Flood Mitigation Plan; and
2. Vests the Lincoln Trail Area Development District with the responsibility, authority and means to inform all concerned parties of this action; and
3. Agrees to review the document on a regular basis according to the Plan Maintenance Procedures; and
4. Agrees to carry out plan actions to achieve objectives of the Lincoln Trail Regional Hazard and Flood Mitigation Plan.

Adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

\_\_\_\_\_  
County Judge/Executive

\_\_\_\_\_  
Date

Attest:

\_\_\_\_\_

\_\_\_\_\_  
Date