Shelby County
Multi-Jurisdictional Hazard Mitigation Plan Update
Planning Meeting #2
February 13, 2018
1:30 p.m.

Agenda

Welcome/Introductions

Cindy Hultz, Executive Director Mark Twain Regional Council of Governments

Brief Review

Public Comments Update

Participation Requirements/Status

Plan Update Format

Sample Results of Countywide Risk Assessment Update

Update Mitigation Goals

Discuss Mitigation Action Updates

Next Steps

Meeting #3— April 2018

Eligible Activities

Eligible Activities	HMGP	PDM	FMA
1. Mitigation Projects	Х	×	ж
Property Acquisition and Structure Demolition	Х	Х	×
Property Acquisition and Structure Relocation	Х	Х	ж
Structure Elevation	Х	ж	ж
Mitigation Reconstruction	X	Ж	ж
Dry Floodproofing of Historic Residential Structures	Х	Х	x
Dry Floodproofing of Non-residential Structures	x	Х	×
Generators	Х	Х	
Localized Flood Reduction Projects	X	х	х
Non-localized Flood Risk Reduction Projects	Х	Х	
Structural Retrofitting of Existing Buildings	Х	X	ж
Non-structural Retrofitting of Existing Buildings and Facilities	х	Х	Х
Safe Room Construction	x	Х	
Wind Retrofit for One- and Two-Family Residences	Х	Х	
infrastructure Retrofit	Х	х	x
Soil Stabilization	х	Х	X
Wildfire Mitigation	Х	х	
Post-Disaster Code Enforcement	х		
Advance Assistance	Х		
Percent Initiative Projects	X		
/liscellaneous/Other ⁽¹⁾	X	Х	×
. Hazard Mitigation Planning	Х	х	χ
lanning Related Activities	Х		
Technical Assistance			Х
. Management Costs	х	Х	X

3.4.9 Thunderstorm/High Winds/Lightning/Hail

Hazard Profile

Hazard Description

Thunderstorms

A thunderstorm is defined as a storm that contains lightning and thunder which is caused by unstable atmospheric conditions. When cold upper air sinks and warm moist air rises, storm clouds or 'thunderheads' develop resulting in thunderstorms. This can occur singularly, as well as in clusters or lines. The National Weather Service defines a thunderstorm as "severe" if it includes hail that is one inch or more, or wind gusts that are at 58 miles per hour or higher. At any given moment across the world, there are about 1,800 thunderstorms occurring. Severe thunderstorms most often occur in Missouri in the spring and summer, during the afternoon and evenings, but can occur at any time. Other hazards associated with thunderstorms are heavy rains resulting in flooding (discussed separately in **Section 3.4.6**) and tornadoes (discussed separately in **Section 3.4.10**).

High Winds

A severe thunderstorm can produce winds causing as much damage as a weak tornado. The damaging winds of thunderstorms include downbursts, microbursts, and straight-line winds. Downbursts are localized currents of air blasting down from a thunderstorm, which induce an outward burst of damaging wind on or near the ground. Microbursts are minimized downbursts covering an area of less than 2.5 miles across. They include a strong wind shear (a rapid change in the direction of wind over a short distance) near the surface. Microbursts may or may not include precipitation and can produce winds at speeds of more than 150 miles per hour. Damaging straight-line winds are high winds across a wide area that can reach speeds of 140 miles per hour.

Lightning

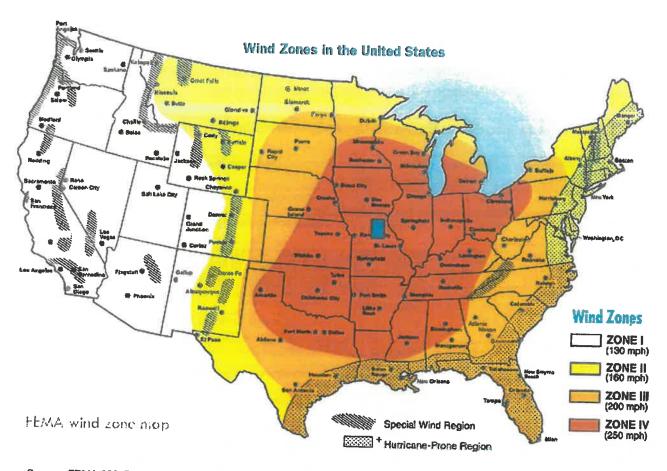
All thunderstorms produce lightning which can strike outside of the area where it is raining and is has been known to fall more than 10 miles away from the rainfall area. Thunder is simply the sound that lightning makes. Lightning is a huge discharge of electricity that shoots through the air causing vibrations and creating the sound of thunder.

Hail

According to the National Oceanic and Atmospheric Administration (NOAA), hail is precipitation that is formed when thunderstorm updrafts carry raindrops upward into extremely cold atmosphere causing them to freeze. The raindrops form into small frozen droplets. They continue to grow as they come into contact with super-cooled water which will freeze on contact with the frozen rain droplet. This frozen droplet can continue to grow and form hail. As long as the updraft forces can support or suspend the weight of the hailstone, hail can continue to grow before it hits the earth.

At the time when the updraft can no longer support the hailstone, it will fall down to the earth. For example, a ¼" diameter or pea sized hail requires updrafts of 24 miles per hour, while a 2 ¾" diameter or baseball sized hail requires an updraft of 81 miles per hour. According to the NOAA, the largest hailstone in diameter recorded in the United States was found in Vivian, South Dakota on

Figure 3.13. Wind Zones in the United States



Source: FEMA 320, Taking Shelter from the Storm, 3rd edition, https://www.fema.gov/pdf/library/ism2_s1.pdf Planning area indicated with blue square.

Severity/Magnitude/Extent

Severe thunderstorm losses are usually attributed to the associated hazards of hail, downburst winds, lightning and heavy rains. Losses due to hail and high wind are typically insured losses that are localized and do not result in presidential disaster declarations. However, in some cases, impacts are severe and widespread and assistance outside state capabilities is necessary. Hail and wind also can have devastating impacts on crops. Severe thunderstorms/heavy rains that lead to flooding are discussed in the flooding hazard profile. Hailstorms cause damage to property, crops, and the environment, and can injure and even kill livestock. In the United States, hail causes more than \$1 billion in damage to property and crops each year. Even relatively small hail can shred plants to ribbons in a matter of minutes. Vehicles, roofs of buildings and homes, and landscaping are also commonly damaged by hail. Hail has been known to cause injury to humans, occasionally fatal injury.

In general, assets in the County vulnerable to thunderstorms with lightning, high winds, and hail include people, crops, vehicles, and built structures. Although this hazard results in high annual losses, private property insurance and crop insurance usually cover the majority of losses. Considering insurance coverage as a recovery capability, the overall impact on jurisdictions is reduced.

Table 3.26. Crop Insurance Claims Paid in Shelby County from high Winds, [2005-2016]

Crop Year	Crop Name	Cause of Loss Description	Insurance Paid
2010	Corn	Wind/Excess Wind	\$23,483.00
2011	Corn	Wind/Excess Wind	\$4,634.00
2013	Corn	Hot Wind	\$10,147.00
2015	Corn	Wind/Excess Wind	\$32,487.00
Total		, = 3555 ********************************	\$70,751.00

Source: USDA Risk Management Agency, Insurance Claims, https://www.rma.usda.gov/data/cause

Table 3.27. Crop Insurance Claims Paid in Shelby County from Hail, [2005-2016].

Crop Year	Crop Name	Cause of Loss Description	Insurance Paid
2010	Corn	Hail	\$4,469.00
2010	Corn	Hail	\$15,841.00
2010	Soybeans	Hail	\$7,067.00
2011	Wheat	Hail	\$2,364.00
2011	Corn	Hail	\$34,537.00
2011	Soybeans	Hail	\$5,728.00
2014	Soybeans	Hail	\$2,450.00
Total			\$72,456.00

USDA Risk Management Agency, Insurance Claims, https://www.rma.usda.gov/data/cause

The onset of thunderstorms with lightning, high wind, and hail is generally rapid. Duration is less than six hours and warning time is generally six to twelve hours. Nationwide, lightning kills 75 to 100 people each year. Lightning strikes can also start structural and wildland fires, as well as damage electrical systems and equipment.

Previous Occurrences

Table 3.28. Reported Events and Damages in Shelby County from Thunderstorms 2007 - 2016 Events Summarized by

Wind Magnitude	Number of Events	Property Damages	Crop Damages
50 – 55	10	0	n
56 – 60	8	0	0
61 - 65	2	0	. 0
66 - 70	1	0	0
71 - 75	0	0	0
76 +	1	0	0

June 2008- Damaging downburst winds caused spotty damage to the north and south of Clarence as a severe thunderstorm moved through. North of Clarence the thunderstorm winds caused moderate damage to an outbuilding and an air conditioning unit for a home was moved off its concrete pad. Also, the downburst caused minor damage to a large machine shed as it punched a hole in the roof and blew out the doors on that side of the building. South of Clarence, several outbuildings on a farm sustained minor damage.

lightning damaging computers for the 911 system and the sheriff's office, radio consoles, and various other electronic equipment. Damage is estimated around \$100,000.

July 2008- Lightning struck the county courthouse for the fourth time since June 4th of this year. This time it knocked out part of the 911 capabilities, along with other software and computers throughout the courthouse.

Probability of Future Occurrence

Thunderstorms

Thunderstorm wind events 50 knots and greater have a probability of occurring 2.2 times per year in the planning area in any given year. These rates are expected to continue in the future.

High Winds

High wind events with 52 knots or greater have a probability of occurring 1 time during a ten year period and are expected to occur infrequently over a ten year period.

Lightning

Lightning events occurred .20 times over the coverage period and are expected to occur infrequently over a ten year period.

Hail

Based on this data, there have been 22 events in a 10 year period, producing an average of 2.2 hail events each year in Shelby County. When limiting probability analysis to hail events producing hail 1.00 inches and smaller, there have been 21 events in a 10 year period. Based on history, the probability of a hail event in any given year is 100 percent. Thus making the probability as likely in any given year.

Figure 3.14 is based on hailstorm data from 1980 -1994. The figure shows the probability of hailstorm occurrence (2" diameter or larger) based on number of days per year. Shelby County is located in the region to receive between .75 and 1 hailstorms annually.

review period is extended to the last 66 years there is 6 events that occurred in Shelby County.

Previous and Future Development

Shelby County's trend in increased development will likely increase vulnerability to thunderstorms, high winds, hail and lightning. With more development of housing neighborhoods and businesses, the increased population will be vulnerable to all the hazards.

Hazard Summary by Jurisdiction

Thunderstorms/high winds/ lightning/hail events are area-wide, NCDC data did not seem to indicate that any particular community had higher losses as compared to another.

Problem Statement

Thunderstorms can damage power lines with the high winds or fallen debris such as tree limbs. Not everyone in the county utilizes social media, texting or have access to a weather radio, smaller communities do not have warning sirens, rural areas do not have warning sirens.

3.4.6 Flooding (Flash and River)

Hazard Profile

Hazard Description

A flood is partial or complete inundation of normally dry land areas. Riverine flooding is defined as the overflow of rivers, streams, drains, and lakes due to excessive rainfall, rapid snowmelt, or ice. There are several types of riverine floods, including headwater, backwater, interior drainage, and flash flooding. Riverine flooding is defined as the overflow of rivers, streams, drains, and lakes due to excessive rainfall, rapid snowmelt or ice melt. The areas adjacent to rivers and stream banks that carry excess floodwater during rapid runoff are called floodplains. A floodplain is defined as the lowland and relatively flat area adjoining a river or stream. The terms "base flood" and "100- year flood" refer to the area in the floodplain that is subject to a one percent or greater chance of flooding in any given year. Floodplains are part of a larger entity called a basin, which is defined as all the land drained by a river and its branches.

Flooding caused by dam and levee failure is discussed in Section 3. $\underline{23}$ and Section 3. $\underline{58}$ respectively. It will not be addressed in this section.

A flash flood occurs when water levels rise at an extremely fast rate as a result of intense rainfall over a brief period, sometimes combined with rapid snowmelt, ice jam release, frozen ground, saturated soil, or impermeable surfaces. Flash flooding can happen in Special Flood Hazard Areas (SFHAs) as delineated by the National Flood Insurance Program (NFIP), and can also happen in areas not associated with floodplains.

Ice jam flooding is a form of flash flooding that occurs when ice breaks up in moving waterways, and then stacks on itself where channels narrow. This creates a natural dam, often causing flooding within minutes of the dam formation.

In some cases, flooding may not be directly attributable to a river, stream, or lake overflowing its banks. Rather, it may simply be the combination of excessive rainfall or snowmelt, saturated ground, and inadequate drainage. With no place to go, the water will find the lowest elevations — areas that are often not in a floodplain. This type of flooding, often referred to as sheet flooding, is becoming increasingly prevalent as development outstrips the ability of the drainage infrastructure to properly carry and disburse the water flow.

Most flash flooding is caused by slow-moving thunderstorms or thunderstorms repeatedly moving over the same area. Flash flooding is a dangerous form of flooding which can reach full peak in only a few minutes. Rapid onset allows little or no time for protective measures. Flash flood waters move at very fast speeds and can move boulders, tear out trees, scour channels, destroy buildings, and obliterate bridges. Flash flooding can result in higher loss of life, both human and animal, than slower developing river and stream flooding.

In certain areas, aging storm sewer systems are not designed to carry the capacity currently needed to handle the increased storm runoff. Typically, the result is water backing into basements, which damages mechanical systems and can create serious public health and safety concerns. This combined with rainfall trends and rainfall extremes all demonstrate the high probability, yet generally unpredictable nature of flash flooding in the planning area.

Although flash floods are somewhat unpredictable, there are factors that can point to the likelihood of flash floods occurring. Weather surveillance radar is being used to improve monitoring capabilities of intense rainfall. This, along with knowledge of the watershed characteristics, modeling techniques, monitoring, and advanced warning systems has increased the warning time for flash floods.

Geographic Location

Riverine flooding is most likely to occur in SFHAs. FEMA has not mapped the Shelby County and maps are not available. Table (**Table 3.20**) shows Shelby County flood event history using a 20-year time frame for previous events.

Table 3.19. Shelby County NCDC Flood Events by Location, 1996-2016

Location	# of Events
Unincorporated Shelby County	# Of Everits
	4
Source: National Climatic Data Contor	

Flash flooding occurs in SFHAs and those locations in the planning area that are low-lying. They also occur in areas without adequate drainage to carry away the amount of water that falls during intense rainfall events. NCDC data was used to determine which jurisdictions are most prone to flash flooding during the 20 year time period. **Table 3.21** shows the number of flash flood events by location recorded in NCDC for the 20 year period.

Table 3.20. Shelby County NCDC Flash Flood Events by Location, 1996-2016

Location	# of Events
Unincorporated Shelby County	n of Etonio
-Unincorporated County (unspecified)- 7 flood events	
-Unincorporated County West Portion- 1 flood events	
-Unincorporated County Hagers Grove- 1 flood events	17
-Unincorporated County Maud- 4 flood events	
-Unincorporated County Cherry Box- 3 flood events	
-Unincorporated County Sigsbee- 1 flood events	
Bethel	2
Hunnewell	
Shelbina	1
Courses: National Climatic Data Contain	1

Source: National Climatic Data Center

Severity/Magnitude/Extent

Missouri has a long and active history of flooding over the past century, according to the 2010 State Hazard Mitigation Plan. Flooding along Missouri's major rivers generally results in slow-moving disasters. River crest levels are forecast several days in advance, allowing communities downstream sufficient time to take protective measures, such as sandbagging and evacuations. Nevertheless, floods exact a heavy toll in terms of human suffering and losses to public and private property. By contrast, flash flood events in recent years have caused a higher number of deaths and major property damage in many areas of Missouri.

Flooding presents a danger to life and property, often resulting in injuries, and in some cases, fatalities. Floodwaters themselves can interact with hazardous materials. Hazardous materials stored in large containers could break loose or puncture as a result of flood activity. Examples are bulk propane tanks. When this happens, evacuation of citizens is necessary.

Public health concerns may result from flooding, requiring disease and injury surveillance. Community sanitation to evaluate flood-affected food supplies may also be necessary. Private water and sewage sanitation could be impacted, and vector control (for mosquitoes and other entomology concerns) may be necessary.

When roads and bridges are inundated by water, damage can occur as the water scours materials around bridge abutments and gravel roads. Floodwaters can also cause erosion undermining road beds. In some instances, steep slopes that are saturated with water may cause mud or rock slides onto roadways. These damages can cause costly repairs for state, county, and city road and bridge maintenance departments. When sewer back-up occurs, this can result in costly clean-up for home and business owners as well as present a health hazard.

National Flood Insurance Program (NFIP) Participation

Table 3.22 provides details on NFIP participation for the communities in the planning area. **Table 3.23** provides details with the number of policies in force, amount of insurance in force, number of closed losses, and total payments for each jurisdiction, where applicable.

Table 3.21. NFIP Participation in Shelby County as of November 2017

				Regular-
Community ID #	Community Name	NFIP Participant (Y/N)	Current Effective Map	Emergency Program Entry Date
291014	Bethel	Yes		
290665				10/27/2017
Source NEID Co.	Shelbina	Yes	04/01/2014	04/01/2014

Source: NFIP Community Status Book, 9/26/2013; BureauNet, http://www.fema.gov/national-flood-insurance-program/na

Table 3.22. NFIP Policy and Claim Statistics as of September 2017

Community Name	Policies in Force	Insurance in Force	Closed Losses	Total Payments
Shelbina	6	\$492,500.00	-	1 dan i dymones
Source: NFIP Community Sta	tus Book September	30 2017: RureauNot bite	ullbac afterest force in	

*Closed Losses are those flood insurance claims that resulted in payment. Loss statistics are for the period from [date] to [date].

No information could be found on the community with the most in insurance payments and how much those payments were.

Repetitive Loss/Severe Repetitive Loss Properties

Repetitive Loss Properties are those properties with at least two flood insurance payments of \$5,000 or more in a 10-year period. According to the Flood Insurance Administration, jurisdictions included in the planning area have a combined total of 0 repetitive loss properties.

Previous Occurrences

June 2008- (DR 1773) Federal Disaster declaration was issued on June 2008 due to flooding in Northern Missouri. Reports from the state indicated that 2,421 homes were impacted by the flooding with 582 being affected, 535 sustained major damage, 225 sustained major damage and 1,079 were destroyed. The flood prompted FEMA to buyout houses in Monkey Run that had suffered substantial

damage during previous floods.

August 2010- (DR-1934) There were 90 approved projects for this declaration with more than 75% for repair of roads, damaged culverts and bridges.

July 2013- (DR-4130) Up to five inches of rain fell over Shelby County in a short amount of time causing flash flooding. Numerous roads were flooded including Highway 151 just north of Clarence.

August 2015- (DR-4238) Federal Disaster declaration was issued for several counties throughout Missouri. Numerous roads were closed in the planning area and the flooding caused a substantial amount of damage left to clean up.

Table 3.23. NCDC Shelby County Flash Flood Events Summary, 1996 to 2016

Year	# of Events	# of Deaths	# of Injuries	Property Damages	Crop Damages
1996	1	0	0	Durinages	Orop Dairiages
1998	3	0	0	0	0
2002	3	0	0	0	0
2004	1 1	0		0	0
2007	+ + -	0	0	0	0
2008		0	0	0	0
	4	0	0	\$1,000.00	0
2009	2	0	0	0	0
2010	2	0	0	0	0
2013	1	0	0	1 0	0
2015	1	0	0	1 0	1 0
2016	2	0	1 0	1 0	+ 0
2017	1	1 0	0	0	0

Source: NCDC, data accessed November 12, 2017

Table 3.24. NCDC Shelby County Riverine Flood Events Summary, 1996 to 2016

Year	# of Events	# of Deaths	# of Injuries	Property Damages	Cron Down
2001	1	0	n or injuries	Damages	Crop Damages
2002	3	0	0	<u> </u>	0
	C data accessed Novemb	0	0	0	0

Source: NCDC, data accessed November 12, 23017

June 1998- Very heavy rain caused flash flooding across parts of central Missouri. In northern Boone County, County roads NN and CC went under water. In western Audrain County, Route NN went under water. Route 15 between Shelbina and Paris in Shelby and Monroe counties went under water. Route J near Granville in Monroe County was under water. Route 151 near Duncan's Bridge was flooded by Middle Fork Creek.

May 2002- Rainfall estimated as high as 6 inches caused widespread flash flooding across the area. Numerous roads became impassable as nearly every creek and small stream flooded. Two men suffered minor injuries near Hurdland in Knox County when they drove their truck into a flooded road. Another man had to be rescued after he was swept down a slough along Route K near Colony. Near Newark, 2 men drove into high water, abandoned their vehicle, but did not notify any official source. The 2 were issued summonses for not reporting the incident, as rescue attempts were made on the submerged vehicle. In Edina, the Farm & Home store was flooded with virtually the entire inventory destroyed. In Knox County, Routes 11 and 151, and County Roads C, J, F, V, K, M, TT were all closed. In Shelby County, Highways 151, N and K were all closed. The North River flooded several times over the first half of May due to several heavy rain events. The river peaked about 9 feet over flood stage on May 9th. Damage was limited to flooded farmland and closed roads.

July 2009- Between 2 and 4 inches of rain fell in a short amount of time on already saturated soils causing flash flooding. Several roads were flooded including U.S. Highway 36 east of Lakenan near the North Fork of the Salt River.

July 2010- Up to 9 inches of rain fell over a 24 hour period causing flash flooding. Numerous roads were flooded including Routes M and H near Leonard, Route K west of Shelbyville along Black Creek, and Highway N southwest of Shelbyville.

June 2015- Up to four inches of rain fell in a short amount of time causing flash flooding. Numerous primary and secondary roads were flooded. Also, several vehicles were off the highway and partially submerged along U.S. Highway 36 and Highway 15 near Shelbina. No injuries or deaths were reported.

Probability of Future Occurrence

With the history of flooding in the planning area, it is likely that flooding of various levels will occur. The probability of a flash flood event occurring in the planning area in any given year is 60%. Although Flood events occur in the planning area there is only a 10% probability of occurring in any given year.

<u>Vulnerability</u>

Vulnerability Overview

Flooding in the planning area has occurred frequently in the last 20 years with 21 events making flooding a 65% probability flooding will occur in any given year.

Potential Losses to Existing Development

The existing development is in very minimal damage as all but one flood event has occurred in rural areas of the counties. The one flash flood event caused minimal damage to residents basements in the planning area. No critical facilities are in danger during a flood event.

Impact of Previous and Future Development

Any future development in floodplains would increase risk in those areas. For the two communities participating in the National Flood Insurance Program, enforcement of the floodplain management regulations will ensure mitigation of future construction in those areas. However, even if structures are mitigated, evacuation may still be necessary due to rising waters. In, addition, floods that exceed mitigated levels may still cause damages.

Hazard Summary by Jurisdiction

All of the communities can be impacted by flooding of major roads and low water crossings in the areas proximate to their corporate limits. Several incorporated areas in the county are susceptible to street flooding during periods of heavy rain as evidenced by the previous occurrences by location. The area affected would mainly be unincorporated areas.

According to the Missouri State Plan the total amount of individuals that would be displaced due to flood is 1 and 91 households would be affected.

Problem Statement

Flooding or flash flooding affects the rural areas of Shelby County. Possible solutions are to increase the education to residents, promote the use of social media or texting and work with officials to identify flood prone areas.

Each Jurisdiction Must Complete and Submit to Cindy Hultz by March 1, 2018

- 1. Look at each page to see if your jurisdiction chose an action item and strategy
- 2. Write one of the following on the same line as the action item (sample page is included)

Completed- Provide date completed and funding amount if applicable

Delete- Provide reason for deleting- ex. Everyday activity

Continue In- Progress- provide details on progress made to-date

Continue Not Started- provide any details on any plans to initiate action

Page 15

Goal 1 Public Awareness—Using a variety of communications avenues to increase the otizens' awareness of and promote education about the natural hazards that they may face, their vulnerability to these hazards, and flow to lessen the effect of future natural hazards. Objective 1 Provide informational brochures, websites and programs to educate the public about hazards that may affect them in the future.

Five Year Update Revision		Available within the BOCA codes	Add-information-to-city webpage	County websites.	Delete-acudar	achiatro	
Shelby Co. R-IV SD				×	×		
North Shelby SD				×	×		
Shelbyville	×	×		×			
Shelbina	×	×		×			
Leonard	×		×				
llewennuH	×						
Clarence	×		×	×			
Bethel	×		×	×			
Shelby County	×	×					
Funding****	4	5	<u>+</u>	5	1		
wəM—N R—Revision BriognOO	0	z	0	z	0		
Structures ***	Ž	A A	NA A	шZ	A A		
əniJ əmiT	6 Me Ongoing	Ongoing	Ongoing	6 months - 1 year	Ongoing		
Coordinating Organization	HMC, EMD	HMC, EMD	HMC	HMC, City Government, media	School		
Action Item and Strategy	Provide "What to Do During Natural Hazards" brochures at city and county offices.	Make Design Construction Awareness brochures available	to create	Informational brochures on earthquake safety made available to the public at city hall and on city website. Articles published in local newspaper.	Schools in the county conduct several drills throughout the school year		
brazaH Hazard	АН	EQ, Τ	АН	EQ	T, EQ, F		

iderstorms, **WW** Winter Weather, **EH** Extreme Heat, **EQ** Earthquakes, **DR** Drought, **DF** Dam Failure, **WF** Wildfire, **SH** Sinkholes Land
*** E—Existing N—New
*** E—Existing N—New
nagement Director EOC---Emergency Operations Center MODOT—Missouri Dept of Trans Subsidence, LS Landslide, LF Levee Failure, AH All Hazards
HMC—Hazard Mitigation Committee EMD—Emergency Management Director

Goal 1 Public Awareness—Using a variety of communications avenues to increase the citizens' awareness of and promote education about the natural hazards that they may face, their vulnerability to these hazards, and how to lessen the effect of future natural hazards.

Objective 1 Provide informational brochures, websites and programs to educate the public about hazards that may affect them in the future.

Five Year Update Revision		Available within the BOCA codes	Add information to city webpage	Add information to city and county websites.		
Shelby Co. R-IV SD				×	×	
North Shelby SD				×	×	
Shelbyville	×	×		×		
Shelbina	×	×		×		
Leonard	×		×			
Hunnewell	×					
Clarence	×		×	×		
Bethel	×		×	×		
Shelby County	×	×				
****gnibnu¬	Ľ.	<u>"</u>	片	5	4	
wəV—N R—Revision O—Ongoing	0	Z	0	z	0	
Structures ***	A A	A A	A A	шZ	¥ ¥	
əni∐ əmiT	6-Me Ongoing	Ongoing	Ongoing	6 months 1 year	Ongoing	
Coordinating Organization	HMC, EMD	HMC, EMD	HMC	HMC, City Government, media	School	
Action Item and Strategy	Provide "What to Do During Natural Hazards" brochures at city and county offices.	Make Design Construction Awareness brochures available	Provide information on how to create a personal emergency plan	Informational brochures on earthquake safety made available to the public at city hall and on city website. Articles published in local newspaper.	Schools in the county conduct several drills throughout the school year	
**brszsH lsrutsN	АН	EQ, Τ	АН	EQ	Т, ЕQ, F	

**Natural Hazards: F Flooding, T Tornados and Severe Thunderstorms, www Winter Weather, EH Extreme Heat, EQ Earthquakes, DR Drought, DF Dam Failure, WF Wildfire, SH Sinkholes Land Subsidence, LS Landslide, LF Levee Failure, AH All Hazards

*** E—Existing N--New

**** E—Existing N--New

**** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable

HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC---Emergency Operations Center MODOT---Missouri Dept of Trans Shelby County Matural Hazards Mitigation Plan—Five Year Update

Section 4

Goal 1 Public Awareness—Using a variety of communications avenues to increase the citizens' awareness of and promote education about the natural hazards that they may face, their vulnerability to these hazards, and how to lessen the effect of future natural hazards.

Five Year Update Revision	Available on websites. Also distributed to nursing homes and davcares.	Available on websites,			
Shelby Co. R-IV SD		×		_	
North Shelby SD		×			
Shelbyville					
Shelbina	×	×			
Leonard					
Hunnewell					
Clarence	×	×			
Bethel					
Shelby County	×	×			
****gnibnu¬	Ħ	5			
M—New R—Revision OOngoing	0	0			
Structures ***	A A	A S			
Fime Line	Ongoing	6-12 Mo			
Coordinating Organization	HMC, media	HMC, EMD, Fire Dept., media			
Action Item and Strategy	Informational brochures available to public, newspaper articles	Provide "What to Do During Natural Hazards" brochures and information on city website and local newspapers			**Natiral Hazarde: E Flooding + Toursday and Co.
Matural Hazard**	АН	АН			*Natural Haz

EMD—Emergency Management Director EOC--Emergency Operations Center MODOT—Missouri Dept of Trans HMC—Hazard Mitigation Committee

Goal 1 Public Awareness—Using a variety of communications avenues to increase the citizens' awareness of and promote education about the natural hazards that they may face, their vulnerability to these hazards, and how to lessen the effect of future natural hazards.

Five Year Update Revision	Promoted on local websites and TV stations and for sale at local stores.	Have NOAA radios at all city facilities.			
Shelby Co. R-IV SD					
Vorth Shelby SD	l ×			1	
Shelbyville	×				
Shelbina	×	×			
Leonard	×				
Hunnewell	×	×			
Clarence	×				
Bethel		×			
Shelby County	×				
Funding****	5	<u>"</u>			
мем—Мем Revision OOngoing	Z	Z			
Structures ***	A A	NA			
Fime Line	Ongoing	1-2 yrs			
Coordinating Organization	HMC, media	HMC			
Action Item and Strategy Coordinating Coordination Coordination Clarence Structures *** A—New R—Revision Clarence Claren	Promote use of NOAA radios in schools, nursing homes, businesses, private homes, and large gatherings.	Investigate purchasing NOAA radios for several locations within city			
**brazard Hazard	АН	AH			

*** E—Existing N--New **** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable Director EOC---Emergency Operations Center MODOT—Missouri Dept of Trans

Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effects of future natural Goal 2 hazards.

Objective 1 Build and support local partnerships to lessen the effects of natural hazards.

Coordinating Coordinating Coordinating Organization Time Line Structures *** N—New R—Revision OOngoing R—Revision C-Ongoing R—Revision C-Ongoing Shelby County Bethel Clarence Hunnewell Clarence Clarence Hunnewell Shelby County Shelbyville Shelby SD Shelbina Shelby SD Shelbina Shelby County Shelby SD Shelby SD Shelby SD Shelby SD Shelby SD Shelby SD	, Utility Ongoing NA O F-S-G X X X X X X X Dower	school Ongoing NA O F-S-G X X X X	school Ongoing NA O LF X X X X X X X X X X X X X X X X X X	1-3 yrs E N LF X X X X X X Portable generators. Health Dept and Ambulance District have	ongoing NA O LF X	LEPC Ongoing NA N LF X X X X X X X	City 1-5 vrs
Coordinating Organization	HMC, Utility Company	HMC, school	HMC, school	HMC	Governments fire, police, utility depts.	HMC, LEPC	HMC, City Government.
Action Item and Strategy	Cooperate with utility company to trim trees from power line easements	Promote the outfitting of county school buses with two –way radios and/or cell phones	Encourage schools to conduct programs on earthquake, tornado and fire safety	Evaluate the need for back-up generators for after the event shelters and obtain generators as funds become available.	Maintain Mutual Aid Agreements and fundate on regular schedule	Incorporate the Hazard Mitigation Committee meetings with the LEPC Committee meetings	Review of storm water drainage System and upgrade as funds
**biszaH laiutaN	T, WW, T	ww	EQ, T, WF	АН	АН	АН	ш

**Natural Hazards: F Flooding, T Tomados and Severe Thunderstorms, WW Winter Weather, EH Extreme Heat, EQ Earthquakes, DR Drought, DF Dam Failure, WF Wildfire, SH Sinkholes Land Subsidence, LS Landslide, LF Levee Failure, AH All Hazards
*** E—Existing N—New *** E—Existing N—New *** E—Local Funding F-S-F Federal / State Grants N/A Not Applicable
HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC---Emergency Operations Center MODOT—Missouri Dept of Trans

Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effects of future natural Goal 2 hazards.

Five Year Update Revision					
Shelby Co. R-IV SD				-	-
Vorth Shelby SD					
Shelbyville	3				
Shelbina					\exists
eonard					\exists
Hunnewell					
Clarence					
Bethel					1
Shelby County					
Funding****	<u>"</u>				i d
weи—И М—Кevision OOngoing	0				
Structures ***	A A		1		
əniJ əmiT	1 yr				WW Winter Mosther El Entrance (1221 F. T. 1
Coordinating Organization	HMC				hunderstorms WW
Action Item and Strategy	Create and maintain a list of high risk individuals with respect to electric power needs.				**Natural Hazards: F Flooding, T Tornados and Severe Thunderstorms www.n.
**breseH leruteN	WW, T				Natural Hazard

Goal 2 Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effects of future natural hazards.

Objective 2 Encourage active participation and responsibility of elected officials and emergency personnel in mitigation planning and activities.

Five Year Update Revision	All members of Fire Departments are trained as weather spotters		County has EOC and two back- up EOCs, also each city has a location for EOC	Shelbina also has the backup EMD trained and certified.			
Shelby Co. R-IV SD							
North Shelby SD							
Shelbyville	×		×		×		
Shelbina	×	×	×	×	×		
reousid	×						
HewennuH							
Clarence	×		×		×		
Bethel							
Shelby County	×	×	×	×	×	×	
****gnibnu-T	F.S.G LF	5	F.S.G LF	F.S.G L.F	F.S.G LF	5	
M—New R—Revision OOngoing	œ.	0	0	0	0	0	
Structures ***	¥	ш	ш	A A	A A	Ą Z	
Fime Line	Ongoing	Ongoing	Ongoing	5 yrs	Ongoing	6 Мо	
Coordinating Organization	HMC, EMD	HMC, EOC,EMD	HMC, EOC	HMC, EMD, SEMA	Police, fire, EMD, HMC	НМС, ЕМD	
Action Item and Strategy	Conduct regularly scheduled training for weather spotters. Meet with all fire departments to set up training and contacts. Investigate expanding the program.	Obtain sufficient back-up generators to maintain communications for all emergency personnel as funds become available	Evaluate and update as needed the Emergency operations Center, communications systems	Training and certification of Emergency Management Director	Participate in regularly scheduled Table-top exercises and mock Emergency exercises.	Develop a sustainable process for monitoring countywide mitigation activities. Regular schedule of meetings.	
**brezeH leruteN	-	ЧΗ	АН	АН	АН	AH	

Subsidence, LS Landslide, LF Levee Failure, AH All Hazards *** E—Existing N—New **** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable
HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC.—Emergency Operations Center MODOT—Missourt Dept of Trans

Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effects of future natural Goal 2 hazards.

Objective 2 Encourage active participation and responsibility of elected officials and emergency personnel in mitigation planning and activities.

Five Year Update Revision					Purchased through a Homeland security grant	
Five Ye					Purchased thro	
Shelby Co. R-IV SD						
North Shelby SD						
Shelbyville			×		×	
Shelbina	×	×	×		×	
Leonard			×	×	×	
Hunnewell			×		×	
Clarence			×		×	
Bethel			×	×	×	
Shelby County			×		×	
Funding****	ъ. Ф.	5	4	"	F.S.G	
M—New R—Revision O—Ongoing	z	œ	0	0	0	
Structures ***	¥	¥ Z	A A	¥ X	A A	
Fime Line	1-5 yrs	6 months- 1 year	Ongoing	Ongoing	1-3 yrs	
Coordinating Organization		HMC, EMD, Fire Dept., US Cable	HMC, County 911	HMC	НМС	
Action Item and Strategy	Investigate obtaining additional siren to cover south side of city as funds become available.	Investigate Severe Weather Cable TV Interrupt. Partnership with local cable company to make severe weather announcements as needed.	Monthly testing of the warning siren. Participate in yearly State Severe Weather Awareness exercises	Develop a supplemental plan for snow removal in addition to the state and county roads	Investigate purchase of 2-way radios to keep city in touch with county emergency personnel as funds become available.	
**biezeH lsiujeN	F # 0	HA H R S	AH A A A A A A A A A A A A A A A A A A	WW sr D	AH to to be ere to to be	

**Natural Hazards: F Flooding, T Tornados and Severe Thunderstorms, www Winter Weather, EH Extreme Heat, EQ Earthquakes, DR Drought, DF Dam Failure, WF Wildfire, SH Sinkholes Land Subsidence, LS Landslide, LF Levee Failure, AH All Hazards
*** E—Existing N--New
**** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable
HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC.—Emergency Operations Center MODOT—Missouri Dept of Trans

Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effects of future natural Goal 2 hazards.

Objective 3 Balance watershed planning, natural resource management, and land use planning with natural hazard mitigation to protect life, property and the environment.

Five Year Update Revision				DNR also inspects on regular schedule			Currently doing analysis to upgrade the waste water system
Shelby Co. R-IV SD							03
North Shelby SD							
Shelbyville		×		×			
Shelbina	×	×		×	×	×	×
Leonard		×					
Hunnewell		×					
Clarence	×	×					
Bethel		×					
Shelby County	×	×	×			-	
Funding****	5	A A	NA A	F.	¥.	F-S-G LF	F-S-G LF
wəMM wewision MOngoing	0	0	0	0	0	0/R	œ
Structures ***	ш	Ą Z	A S	A A	A A	A A	A X
əniJ əmiT	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing 1-5 years	1 – 5 years
Coordinating Organization	HMC, Hwy Dept, Street Dept	HMC, University Outreach	HMC, University Outreach	HMC, Water Dept	HMC, Water Dept	HMC, Street Dept., Water Dept.	HMC, Waster Water Dept.
Action Item and Strategy	Designate a location for compost and debris as needed and funds become available	Encourage Drought resistant farming practices and/or yard watering practices	Encourage Landowners to inspect and maintain their dams and levees according to Dept. of Natural Resources standards	Schedule regular inspection and maintenance of dams at city lakes.	Issue city-wide water conservation practices by ordinance	Review storm water drainage system and upgrade as needed and funds become available.	Investigate having an engineering study conducted to prevent inflow and infiltration into waste water sanitation system. Rehabilitate or upgrade as funds become available.
**breseH leruteN	WW, T	EHD	DF, LF	DF	EHD	ш	LL.

**Natural Hazards: F Flooding, T Tomados and Severe Thunderstorms, WW Winter Weather, EH Extreme Heat, EQ Earthquakes, DR Drought, DF Dam Failure, WF Wildfire, SH Sinkholes Land Subsidence, LS Landslide, LF Levee Failure, AH All Hazards

*** E—Existing N--New **** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable
HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC.—Emergency Operations Center MODOT.—Missouri Dept of Trans

Goal 2 Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effects of future natural hazards.

Objective 3 Balance watershed planning, natural resource management, and land use planning with natural hazard mitigation to protect life, property and the environment.

Five Year Update Revision		Also need backup generator for lake pump house					
Shelby Co. R-IV SD						-	
North Shelby SD							
Shelbyville	×		×				
Shelbina	×	×					
Leonard				×			
Hunnewell	×		×				
Clarence							
Bethel	×		×		×		
Shelby County	×						
****gnibnu3	F.S.G	F-S-R	F-S-G	F-S-G	გ. გ.		
MNew RRevision OOngoing	0	œ	0	z	z		
Structures ***	A A	ш	ш	ш	¥ Y		
əniJ əmiT	Ongoing	2 – 5 years	1-5 yrs	3-5 yrs	1-3 yrs		
Coordinating Organization	Street Dept. Hwy Dept.	HMC, Water Dept., Waste Water Dept.	HMC, City Services Dept.	HMC, City Hall	HMC, City Government, water Dept.		
Action Item and Strategy	Maintain and clean culverts on a regular schedule.	Investigate possibility of obtaining back-up generator (s) for the Water Treatment and Waste Water Treatment Plants as funds become available.	Investigate possibility of conducting study on the storm water drainage system. Upgrade as funds become available.	Investigate the possibility of obtaining a sewer system for the city as funds become available.	Investigate possibility of obtaining a portable generator for the sewer lagoon as funds become available.		**Natiral Hararde: E Flooding TT Transde of O
**biszeH latutaN	Ŀ	F,T, WW	ĹĹ.	LL.	АН		*Natural Haz

*** E—Existing N---New **** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable Land Director EOC--Emergency Operations Center MODOT--Missouri Dept of Trans Subsidence, LS Landslide, LF Levee Failure, AH All Hazards *** E—E HMC—Hazard Mitigation Committee — EMD—Emergency Management Director

Goal 3. Investigate, implement, maintain, and enforce mitigation policies and programs that limit the impact of natural hazards: on the loss of life; on new and existing properties; on natural resources; on infrastructure; and on the local economy.

Objective 1 Incorporate mitigation procedures and planning into the community.

**Natural Hazards: F Flooding, T Tornados and Severe Thunderstorms, WW Winter Weather, EH Extreme Heat, EQ Earthquakes, DR Drought, DF Dam Failure, WF Wildfire, SH Sinkholes Land Subsidence, LS Landslide, LF Levee Failure, AH All Hazards
**** E—Existing N—New **** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable
HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC—Emergency Operations Center MODOT—Missouri Dept of Trans

Goal 3. Investigate, implement, maintain, and enforce mitigation policies and programs that limit the impact of natural hazards: on the loss of life; on new and existing properties; on natural resources; on infrastructure; and on the local economy.

Objective 1 Incorporate mitigation procedures and planning into the community.

Five Year Update Revision	Designated one of the shelters as a cooling center as needed						
Shelby Co. R-IV SD							
North Shelby SD						1	
Shelbyville	×						
Shelbina	×	×	×	×		×	
Leonard	×						
Hunnewell	×						
Clarence							
Bethel	×				×		
Shelby County			×				
Funding****	F-S-G	P	ഥ	ㅂ	ъ. 6-	F-S-G	
M—Mew R—Revision O—Ongoing	0	0	0	0	z	z	
Structures ***	ш	шZ	¥	A A	ш	z	
ənil əmiT	Ongoing	Ongoing	Ongoing	Ongoing	1-5 yrs	1-5 yrs	
Coordinating Organization	HMC, Red Cross	HMC, Electric Dept., City Government	Street Dept.	HMC, Water Dept.	НМС	HMC, City	
Action Item and Strategy	Establish cooling centers	Utilities are being place underground in the business districts and new subdivisions. In addition the city offers electric incentives for new and existing services that are placed underground.	Maintain adequate supply of salt and chips for city streets and county roads in icy weather.	Activate back-up water system to pump water from Salt River into Lake Shelbina (City water supply) as needed.	Investigate the possibility of creating and maintaining a city owned shelter as funds become available.	Investigate the possibility of building a new EOC for the city as funds become available.	
**brezeH leruteN	H	T, ww	WW	EHO	АН	AH	

Subsidence, LS Landslide, LF Levee Failure, AH All Hazards *** E—Existing N—New **** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC.—Emergency Operations Center MODOT.—Missouri Dept of Trans

Goal 3. Investigate, implement, maintain, and enforce mitigation policies and programs that limit the impact of natural hazards: on the loss of life; on new and existing properties; on natural resources; on infrastructure; and on the local economy.

Objective 2 Encourage private involvement in mitigation activities.

Five Year Update Revision		City has Emergency Operations Plan (EOP)				
Shelby Co. R-IV SD			×			
North Shelby SD			×			
Shelbyville						
Shelbina		×				
Leonard						
Hunnewell						
Clarence	×				+	
Bethel		×			-	
Shelby County	×					-
****gniban-	F-S-G	5	F-S-G			
И—Иеw R—Revision OOngoing	0	0	z			
Structures ***	m z	A A	Ш			
eniJ emiT	1-2 yrs	6 Mo	1-5 yrs			
Coordinating Organization	HMC	HMC, City Hall	Schools			
Action Item and Strategy	Distributed information on how to retrofit windows with safety glass in schools, daycares, and nursing homes	Develop a Disaster Management Plan for city. Post phone numbers of emergency aid agencies at the City Hall	Upgrade the tornado safe rooms at the schools as funds become available			
**biszaH latutaN	-	АН	AH, T			

Subsidence, LS Landslide, LF Levee Failure, AH All Hazards
*** E—Existing N--New
*** LF—Local Funding F-S-F Federal / State Grants N/A Not Applicable
HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC.—Emergency Operations Center MODOT—Missouri Dept of Trans Shelby County Natural Hazards Mitigation Plan-Five Year Update Section 4

Goal 3. Investigate, implement, maintain, and enforce mitigation policies and programs that limit the impact of natural hazards: on the loss of life; on new and existing properties; on natural resources; on infrastructure, and on the local economy.

Objective 3 Pass and/or adopt ordinances. codes and standards to enforce mitigation activities.

Shelby SD Shelby SD Shelby Co. R-IV SD Shelby				Fire Protection Districts			
Shelbina	×	×	×	×	×	×	×
Leonard				×	+~	1	+^
Hunnewell				×			
Clarence				×	×	×	
Bethel				×		1	
Shelby County	×	×	×	×	×		
****gnibnu-l	F.SG	4	Ľ.	7	5	5	<u> </u>
M	0	0	0	0	0	0	0
Structures ***	шZ	A A	шZ	A A	A A	₹ ¥	шг
Fime Line	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Coordinating Organization	HMC, Floodplain Mgr.	Highway Dept, HMC	HMC, Floodplain Manager	HMC, Fire Dept	HMC	HMC, City government	Enforcement codes, BOCA
Action Item and Strategy	Identify repetitive damage properties	Identify surface water drainage obstructions, bridge improvements, and bank stabilizations	Maintain and update Floodplain ordinance as needed. Shelbina will continue to comply and implement the NFIP requirements and to reduce the flood risks associated with the Flood Hazard Areas Shelbina joined the NFIP in 1998.	Burning Bans issued by Rural Fire Departments as needed	Update Emergency Operating Plan on a regular schedule, at least yearly	Emergency snow routes are designated by city ordinance.	Enforcement of current building codes, BOCA
Natural Hazard**	ů.	ш	iı.	WF	АН	ww	Ē

**Natural Hazards: F Flooding, T Tornados and Severe Thunderstorms, www Winter Weather, EH Extreme Heat, EQ Earthquakes, DR Drought, DF Dam Failure, WF Wildfire, SH Sinkholes Land Subsidence, LS Landslide, LF Levee Failure, AH All Hazards
*** E—Existing N—New
*** E—Existing N—Emergency Management Director EOC---Emergency Operations Center MODOT—Missouri Dept of Trans

Section 4 Shelby County Natural Hazards Mitigation Plan-Five Year Update

Goal 3. Investigate, implement, maintain, and enforce mitigation policies and programs that limit the impact of natural hazards: on the loss of life; on new and existing properties; on natural resources; on infrastructure; and on the local economy.

Five Year Update Revision				Received grant from pipeline for software.		
Shelby Co. R-IV SD					×	
North Shelby SD					×	
Shelbyville						
Shelbina						
Leonard						
Hunnewell		×	×			
Clarence	×					
Bethel						
Shelby County						
Funding****	P	"	Ľ.	F-S-G	<u>"</u>	
w=Mew R—Revision OOngoing	0	0	0	z	0	
Structures ***	шZ	шZ	шZ	A A	¥	
eniJ emiT	1-2 yrs	Ongoing	Ongoing	1-3 yrs.		
Coordinating Organization	HMC, city Utility Dept	HMC, City Hall	HMC, City Services Dept.	911 Center		
Action Item and Strategy	Provide training on building code enforcement	Part-time building inspector available as needed.	Enforcement of Sewer and storm water drainage ordinance.	Implement Reverse mass 911 call out system through 911 center	Fire alarm system is connected to 911 and Sheriff's office	
√atural Hazard**	EQ	Q	LL.	АН	WF	

**Natural Hazards: F Flooding. T Tornados and Severe Thunderstorms, WW Winter Weather, EH Extreme Heat, EQ Earthquakes, DR Drought, DF Dam Failure, WF Wildfire, SH Sinkholes Land Subsidence, LS Landslide, LF Levee Failure, AH All Hazards
***E—Existing N---New ***L—Local Funding F-S-F Federal / State Grants N/A Not Applicable
HMC—Hazard Mitigation Committee EMD—Emergency Management Director EOC---Emergency Operations Center MODOT—Missouri Dept of Trans

Ralls and Pike County Goals for 2016 Hazard Mitigation Plans

- 1. Protect the lives and livelihoods of all the citizens
- 2. Decrease the impact of natural hazards.
- 3. Ensure continued operation of government and emergency function in a disaster.

ATE	
UPD/	
AN	
N P	
\$TIO	
TIG.	
MO	
ZARI	
HA	
NTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE	
ICTI	
SISD	
-JUE	SH
ULTI	GN-IN SHEET
Z	Sign
UNT	t2-
√	NG 书
ELB	ETI
I	

	Cholles County Misses at 11.		
Project:	Streiby Courty, Missouri Multi-Jurisdictional Hazard Mitigation Plan Update	Meeting	February 13, 2018
***************************************		Date/Time:	1:30 p.m.
Facilitator:	Cinaly Huiz, Executive Director	Diace/Doom:	Shelby County Extension Office
And the second s	rigin i walii neyidilai councii of governments	i idee/ Nooilli.	106 E. 3rd Street, Shelbyville, MO 63469

		ر ع		1	0	N	1	XA.	7	2
Signature	De	\$10.21	Colly Lind	# Lai Mesas	T			Navehides	and the	6)
Phone #		K73-819-4312	573 822-5146	573.633.252	660-651-6174	513-406-3305	10	573-565-2303	573-565-2203	
Email	Shelby Co R-IV Sheek tmodder@cardinals.KIZ.maus	googon Ocentury thing 673-819-4312	Klolund@hotmail.com	Shelbyrile Q montchiainnet	Shelbing Fure@MORKTOWNIE, not	dkrisbaum & morec, 573-406-3305		beavercog@rallstechem 573.565-2363	mitecoge reilsteh.ch. 573-505-2203	i.
Department/Agency	Shelby Co R-IVShook	Shelby Co.	Village of Bethel	City of Shelbwille	of Fire	Member Missouri Runal Services Adv Electric Co-op	Mober	WTRCOG	MTROG	
Title	Superintendent	Bresiding S Com d JEMO	Trustee	City Clerk	Flag Chap	Member Services Adv	AREA ENGINER	Fiscal Office c	Divier	
Name	I'm Madder	Glenn Fagan	hathy Lund	Gina Misma	GENE HARLAND	Doug Krighaum	Brin HAGENON	Chandra Beaver	Lind, Hutte	>

JLTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE	
SHELBY COUNTY MULTI-JURISDICTIONAL HA	MEETING #2—SIGN-IN SHEET

Project:	Shelby County, Missouri Multi-jurisdictional Hazard Mitigation Plan Update	Meeting	February 13, 2018
**************************************		Date/Time:	1:30 p.m.
	The state of the s		
Escilitatore	Cindy Huitz, Executive Director	!	Shelly County Extension Office
י מכווונמנטוי	Mark Tween Denienal Commence	Place/Room:	Security Execution Office
remaind or call, this state count.	Tally I Wall I Neglollal Couling of Governments		106 E. 3ta Street, Shelboville, MO 63469

Name	Title	Department/Agency	Email	Phone #	Signature
Donails Kusmen	Sea	0 to 10 10 10 10	od 1000 Later	573-588-4104	M. II
0			513 598 4104	513 598 4104	1 Ven La Kdensmay M
whomas Braylle	Operations	Costy O Southone	economicales & Chy Ashelbine ear	of Shelpine. con	lough Buch
Wesser, Bourn Gaugh	Divertor	Economic Dev	director @ shelly como con (000415 9498	8646 SIHOND W	1 00
Lectionic Border	Deputer	Shelloy Co	MOS Jan Hoad COOK	573-3181	St. Tw Danie
Sherri Black Food	Voter Registration Shelby	Shelley Co	Shelby@Ses.wagay	573-633-	John Ringlind
			0		Company of the Compan

To Shelby County Hazard Mitigation Planning Committee

From Cindy Hultz, Executive Director

Mark Twain Regional Council of Governments

Tel / E-mail 573-565-2203 / hultzcog@rallstech.com

Date May 1, 2018

Subject Minutes from Shelby County Hazard Mitigation Planning Meeting #2 held on

April 30, 2018

This document is a record of attendance and a summary of the issues discussed during the above meeting, including: a brief review of the purpose of a Hazard Mitigation Plan, the public survey results, updating the mitigation strategy, Hazard Mitigation Assistance grants, plan maintenance and the next steps in this process.

Attendees

Name	Title	Department	Jurisdiction
Tim Maddex	Cura minta u da ud		
	Superintendent	Administration	Shelby Co. R-IV School
Glenn Eagan	EMD	Emergency Response	Shelby County
Kathy Lund	Trustee	Administration	Village of Bethel
Gina Mesmer	City Clerk	Administration	City of Shelbyville
Chandra Beaver	Fiscal Officer	Administration	Mark Twain Council of Governments
Cindy Hultz	Executive Director	Administration	Mark Twain Council of Governments
Lorraine Brenfle	Operations	Operations	City of Shelbina
Wendy Brumbaugh	Director	Economic Development	Shelby Co. Economic Development
Stephanie Bender	Deputy Clerk	Administration	Shelby County
Sherri Blackford	Voter Registration	Administration	Shelby County
Sherry Nelson	Human Dev. Specialist	Administration	University Extension
Mary Lu McConnell	911 Director	Emergency Response	Shelby County
Tony Stiefel	Manager	Administration	Shelby County Water District
Tom Shively	Commissioner	Administration	Shelby County
Kim Gaines	Superintendent	Administration	North Shelby School District
Larry Roberts	Commissioner	Administration	Shelby County
Dennie Caruthers	City Administrator	Administration	City of Clarence
Chad Wharton	SRCC Maintenance	Administration	Salt River Care Center
Chris Ratliff	Administrator	Administration	Salt River Care Center

Review Purpose/Participation Status

Cindy Hultz, Executive Director with the Mark Twain Regional Council of Governments provided a brief summary of the purpose of the Hazard Mitigation Plan and the Disaster Mitigation Act of 2000 that codified the requirement of local governments to adopt a hazard mitigation plan to maintain eligibility for FEMA Hazard Mitigation Assistance Grants. The nine-task planning process was summarized and participants were informed that at the conclusion of the meeting, the planning committee will have completed Tasks 1-5 as well as portions of Task 6.

A review of the requirements for jurisdictions to officially participate in the Multi-jurisdictional Hazard Mitigation Plan was provided. It was noted Leonard did not meet the requirements to participate in the Hazard Mitigation Plan.

Previous Actions

Handouts were provided to each jurisdiction listing all actions submitted in the previous Hazard Mitigation Plan. The action handouts included the updated action status that was provided for all previous actions by each jurisdiction after meeting #2.

An informational chart showing each jurisdictions completed and deleted actions was provided to the jurisdictions for review. For Continuing and New actions each jurisdiction will need to complete an action plan worksheet for each action

Mitigation Strategy

To determine any new actions that should be added to the mitigation strategy update, the following information was reviewed:

- Plan Goals
- Problem Statements for each hazard
- Previously Identified actions for each hazard
- FEMA's Mitigation Ideas booklet

Participants commented on the problem statements and provided solutions to add for each hazard.

Meeting participants were reminded that each jurisdiction must submit at least one action for participation in the plan. Communities participating in the National Flood Insurance Program must also have an action addressing continued compliance.

STAPLEE Worksheet

For each Continuing and New action to be included in the plan, the responsible jurisdiction must complete the STAPLEE Worksheet and record the results on the action plan worksheet. The STAPLEE worksheet provides a framework to determine the general effectiveness in accomplishing the goals of life safety and/or reduction or prevention of damage from a hazard event. This method analyzes the Social, Technical, Administrative, Political, Legal, Economic and Environmental aspects of a project and is commonly used by public administration officials and planners for making planning decisions.

Hazard Mitigation Assistance Grants

The Hazard Mitigation Plan is a requirement for jurisdictions to be eligible to apply for FEMA's Hazard Mitigation Assistance Grants. Jurisdictions were informed that the Missouri State Emergency Management Agency is the State agency responsible for administration of these grants. If jurisdictions are considering applying for hazard mitigation assistance funding, they were instructed to contact the State Hazard Mitigation Officer, Elizabeth Weyrauch, at 573-526-9375 to obtain additional details regarding the various grant programs, the application process, and current available funds.

THE HMPC was also given a sample list of state and federal grants that fund mitigation activities.

Plan Maintenance

The requirements for the plan to provide a formal plan maintenance process were discussed. This is required to ensure that the mitigation plan remains an active and relevant document. After discussion, the following plan maintenance process was agreed to by group consensus:

- The HMPC will meet annually to review the Hazard Mitigation Plan. At the Emergency Management Coordinator's discretion, the HMPC may also meet to review the plan after significant hazard events;
- Shelby County EMD will organize the meetings.
- Shelby County EMD will coordinate the update/re-submittal to SEMA and FEMA every 5 years;
- Individual Representatives on the HMPC will integrate mitigation strategy, to the extent practicable, during the process to update other jurisdictional plans such as Comprehensive Plans, Capital Improvement Plans, Infrastructure Plans, and School Emergency Plans;
- After the annual review, the Shelby County EMD will forward the Mitigation Strategy with status updates to mayors, city clerks, and school superintendents for consideration in other planning mechanisms/discussions; and
- The public will be involved in the plan maintenance process by publication of a Press Release indicating the team has met with a summary of mitigation action status updates and highlights of specific completed mitigation actions.

Next Steps

The meeting concluded with a discussion of the remaining steps to complete the planning process as follows:

- ASAP— Jurisdictions Adopt Plan
- May 2 May 16, 2016— Committee Comment
- May 17 May 31, 2018— Final Public Comment Period
- June 1, 2018— Submit Plan to SEMA
- After receiving SEMA Approval— Submit Plan to FEMA
- September 1, 2018— Anticipate FEMA's Approval

Cindy Hultz

From: ent:

Cindy Hultz <hultzcog@rallstech.com> Monday, April 09, 2018 7:59 PM

To:

Glenn Eagan; 'jmalcarne@marktwain.net'; City of Clarence; Charlotte Murray; 'jamiemel@marktwain.net'; 'wilcoxi@missouri.edu'; 'cityclerk@shelbina.com';

'cityclerk@cityofshelbina.com'; 'shelbyville@marktwain.net'; Dennis Klusmeyer; 'mayor@cityofshelbina.com'; 'Kim Gaines'; 'Deacon Windsor'; 'Tim Maddex';

'cbowen@cardinals.k12.mo.us' Cc: Tracy Smith; Chandra Beaver

Subject:

Shelby County Hazard Mitigation Plan Update Final Meeting

On behalf of Shelby County Commissioners you are invited to the final planning meeting to develop the update to the Shelby County Multi-Jurisdictional Hazard Mitigation Plan. This meeting will focus on updating the mitigation strategy. Mitigation actions, which make up the strategy, are specific activities that can be undertaken in advance to reduce the impacts of hazards.

During the meeting, we will discuss key issues from the risk assessment and participate in a facilitated discussion of the mitigation strategy including continuing mitigation actions identified in the previous plan as well as identification of any new mitigation actions that should be added to the mitigation strategy to ensure a comprehensive approach to hazard mitigation. In addition, action implementation details will be discussed for both continuing and new actions.

> Shelby County Multi-jurisdictional Hazard Mitigation Plan Update Meeting #3 **Updating the Mitigation Strategy** April 30, 2018

> > Meeting Time: 10:00 a.m.

Place: Shelby County University Extension Address: 106 East Third, Shelbyville, Missouri

As discussed in previous meetings, the Disaster Mitigation Act of 2000 requires counties, municipalities, school districts, and other jurisdictions to participate in an approved Hazard Mitigation Plan to be eligible for certain federal hazard mitigation funding programs. To qualify as a participant in the plan, authorized representatives for each jurisdiction must participate in development of the plan update. It is essential for the county, incorporated cities, and public school districts to send at least one individual to the planning meeting detailed above. If you will be unable to attend, please ensure that someone else from your jurisdiction is designated to attend.

Other stakeholders such as businesses, academic institutions, private non-profit entities and others in the planning area with an interest in hazard mitigation are encouraged to attend to provide input to the mitigation strategy update.

The Mark Twain Regional Council of Governments has taken the lead in developing this plan. The point of contact is Cindy Hultz, Executive Director. To successfully complete this project and ensure your organization is eligible for FEMA hazard mitigation assistance funding, we need your participation and input.

Please confirm your attendance or provide contact information for your designated alternate by responding to Cindy Hultz at 573-565-2203 or hultzcog@rallstech.com.

Thank you,

Cindy Hultz xecutive Director Mark Twain Regional Council of Governments 42494 Delaware Lane

Cindy Hultz

From:

Cindy Hultz <hultzcog@rallstech.com>

ent:

Monday, April 09, 2018 8:07 PM

To:

Wendy Brumbaugh; Irene Meyers; Mary Lou McConnell; Paula Gough; Sue Bridgman; 'sch2o@marktwain.net'; 'shelbypwsd@marktwain.net'; 'shelbinafire@marktwain.net'; 'clarencepolice@centurytel.net'; Dennis Perrigo; Jerry Fenton; 'mutleymu79@aol.com';

'srnhactivitydepartment@yahoo.com'; 'mhudson@morec.org'

Cc:

Glenn Eagan; Chandra Beaver; Tracy Smith

Subject:

Shelby County Hazard Mitigation Plan Update Final Meeting

On behalf of Shelby County you are invited to the final planning meeting to develop the update to the Shelby County Multi-Jurisdictional Hazard Mitigation Plan. Since your business/agency/entity is directly or indirectly connected to Shelby County mitigation activities, you are considered to be a stakeholder in the process. As a stakeholder in Mitigation Planning, you are invited to the upcoming planning meeting. This meeting will focus on updating the mitigation strategy. Mitigation actions, which make up the strategy, are specific activities that can be undertaken in advance to reduce the impacts of hazards.

During the meeting, we will discuss key issues from the risk assessment and participate in a facilitated discussion of the mitigation strategy. This discussion will cover continuing mitigation actions identified in the previous plan as well as identification of any new mitigation actions that should be added to the mitigation strategy to ensure a comprehensive approach to hazard mitigation. In addition, action implementation details will be discussed for both continuing and new actions.

Shelby County Multi-jurisdictional Hazard Mitigation Plan Update Meeting #3
Updating the Mitigation Strategy
April 30, 2018
Meeting Time: 10:00 a.m.

Place: Shelby County University Extension Address: 106 East Third, Shelbyville, Missouri

As discussed in previous meetings, the Disaster Mitigation Act of 2000 requires counties, municipalities, school districts, and other jurisdictions to participate in an approved Hazard Mitigation Plan to be eligible for certain federal hazard mitigation funding programs. To qualify as a participant in the plan, authorized representatives for each jurisdiction must participate in development of the plan update. It is essential for the county, incorporated cities, and public school districts to send at least one individual to the planning meeting detailed above. If you will be unable to attend, please ensure that someone else from your jurisdiction is designated to attend.

The Mark Twain Regional Council of Governments has taken the lead in developing this plan. The point of contact is Cindy Hultz, Executive Director. To successfully complete this project, we need your participation and input.

Please confirm your attendance or provide contact information for your designated alternate by responding to Cindy Hultz at 573-565-2203 or hultzcog@rallstech.com.

Thank you,

Cindy Hultz
Executive Director
lark Twain Regional Council of Governments

Cindy Hultz

Shelby County Multi-Jurisdictional Hazard Mitigation Plan Update Planning Meeting #3 April 30, 2018 10:00 a.m.

Agenda

Welcome/Introductions

Cindy Hultz, Executive Director Mark Twain Regional COG

Review Purpose/Requirements

Updating the Mitigation Strategy
Review Updated Plan Goals
Status of Previous Actions
Development of New Actions
Prioritization of Mitigation Actions

Hazard Mitigation Assistance Grants

Plan Maintenance

Next Steps

- Completed, with a description of the progress,
- Not Started/Continue in Plan Update, with a discussion of the reasons for lack of progress,
- In Progress/Continue in Plan Update, with a description of the progress made to date or
- Deleted, with a discussion of the reasons for deletion.

Based on the status updates, there were 26 completed actions, 152 deleted actions, and 31

Table 4.1 provides a summary of the action statuses for each jurisdiction:

Table 4.1. **Action Status Summary**

Jurisdiction	Completed Actions	Deleted Actions	Continuing Actions
Shelby County	5		Something Actions
•	5	28	5
Bethel	2		
	2	19	4
Clarence	3		·
		23	3
Hunnewell	1		
01 11		14	4
Shelbina	3	40	
OL - 11 - 10		40	7
Shelbyville	4	20	
Morth Chatta		22	4
North Shelby School	4	3	
South Shallow O		3	2
South Shelby School	4	3	-
		3	2

Table 4.2 provides a summary of the completed and deleted actions from the previous plan.

Table 4.2. Summary of Completed and Deleted Actions from the Previous Plan

Completed Actions	Completion Details (date, amount, funding source)
Bethel	
Promote the outfitting of county school buses with two-way radios and/or cell phones.	Cell phones on every school bus
Encourage schools to conduct programs on earthquake, tomado and fire safety.	Required by the state to hold drills
Clarence	
Promote the outfitting of county school buses with two-way radios and/or cell phones	Cell phones on every school bus
Encourage schools to conduct programs on earthquake, tomado and fire safety.	Required by the state to hold drills
Investigate purchase of 2-way radios to the	
touch with county emergency personnel as funds	Kadios were purchased
Hunnewell	
nvestigate purchase of 2-way radios to keep in F	
or 2 way radios to keep in	Radios were purchased

Cooperate with utility company to trim tre	Nac 6	
power line easements	es tron	
Incorporate the Hazard Mitigation Commitmeetings with the LEBC Commitment	ittee	not a mitigation activity
meetings with the LEPC Committee Meet Create and maintain a list of li	tings	This was determined to not be a mitigation activity.
with respect to all a list of high risk indi	viduale	This was did
yearly State Severe Weather Awaranase	cipate i	n This was determined to not be a mitigation activity. This was determined to be a daily or as necessary activity and not a mitigation activity
exercises exercises		not a mitigation activity
develop a supplemental plan for snow rem	noval in	This was determined to be a daily or as necessary activity and
addition to the state and county roads.	IOAGI III	not a militial representation of the second section of the section of the second section of the second section of the section of the second section of the sec
Investigate purchase of 2 way radio to keel touch with county emergence.	p in	This woo date activity
become available	funds	This was determined to not be a mitigation activity.
Encourage Drought resistant farming practical	ces	This was detailed
The state of the s		This was determined to be a daily or as necessary activity and
Maintain and clean culverts on a regular sch		This was determined to
IIIVESTICIATE DOccibility of		This was determined to be a daily or as necessary activity and not a mitigation activity
storm water drainage system. Upgrade as fi	n the	This was determined to path
become available become available	unds	This was determined to not be a mitigation activity.
Investigate possibility of the		
generator for the sewer lagoon as funds becausailable.	T	his was determined to not be a mitigation activity.
available.	ome	to not be a mitigation activity.
Update and maintain list of buildings that are designated as shelters distributed.		
and distribute list		his was determined to be a daily or as necessary activity and
Maintain transportation infrastructure	n	ot a mitigation activity
	111	his was determined to be a daily or as pages
Maintain snow plowing and removal equipmer	Inc	nis was determined to be a daily or as necessary activity and ta mitigation activity
Develop a Discovering and removal equipmer	-4 11.83	is was determined to be
Develop a Disaster Management Plan for city.	110	t a mitigation activity
Post phone numbers of emergency aid agenciat the City Hall	es '''	is was determined to not be a mitigation activity.
	03	This gallori activity.
Burning bans issued as needed	Thi	
	Pot	s was determined to be a daily or as necessary activity and
Provide "M/bet to D	7100	a mitigation activity
Provide "What to Do During Natural Hazards"	This	2 WOO data
brochures at city and county offices	1	s was determined to not be a mitigation activity.
Provide information on how to create a persona emergency plan	This	Was data-
Informational brookurs		was determined to not be a mitigation activity.
made available to the public at city hall and on c	This	Was determined:
website. Articles public at city hall and on c	ity	was determined to not be a mitigation activity.
Informational brochures available in local newspaper		The state of the s
newspaper articles	This	Was determined to not be
Cooperate with utility company to the	1	was determined to not be a mitigation activity.
power line easements	This	was determined to be a to it
Maintain Mutual Aid Agroomants	not a	was determined to be a daily or as necessary activity and
regular schedule	This v	was determined to be a daily or as necessary activity and mitigation activity
Incorporate the Hazard Mills	not a	mitigation activity and
meetings with the LEPC Committee Meetings Review of storm weter de-	This v	vas determined to not be a mitigation activity.
Review of storm water drainage system and upgrade as funds become are it is to be a story of the company of the		not be a mitigation activity.
upgrade as funds become available	This w	as determined to not be a mitigation activity.
- arrange included the state of		a mitigation activity.
spotters. Meet with all fire departments to set up	This w	as determined to be a daily or as necessary activity and
training and contracts. Investigate expanding the	not a n	nitigation activity
program	1	
Evaluate and update as needed the Emergency	71.	
operations Center, communications systems.	inis wa	as determined to be a daily or as
wonthly testing of the warning siren Participate	not a m	as determined to be a daily or as necessary activity and itigation activity as determined to be a daily or as necessary activity and itigation activity
/early State Severe Weather Awareness	his wa	s determined to be a delly or as
xercises	ot a m	itigation activity
objected in the same		
needed and funds become available	his wa	s determined to be a daily or as necessary activity and
T- Sidebig	ot a mi	tigation activity

	update on	This was determined to be a daily or as necessary activity not a mitigation activity
Incorporate the Hazard Mitigation Commeetings with the LEDC Committee		
meetings with the LEPC Committee Me	mittee	This was determined to be a daily or as necessary activity
Review of storm water drainage system upgrade as funds become	etings	not a mitigation activity
upgrade as funds become available	n and	I'lls was determined to be a diff
Cole dill maintain o list att .	4.14	not a mitigation activity
with respect to electric power needs	idividuals	This was determined to be a doily as
	P 1440 - 44	This was determined to be a daily or as necessary activity a
spotters. Meet with all fire departments training and contracts. Investigate	weather	This was determined to be a daily or as
training and contracts. Investigate expansion	nding the	This was determined to be a daily or as necessary activity and a mitigation activity
program Evaluate and	The state of	-
Evaluate and update as needed the Eme	ergency	This was at the
operations Center, communications system	ems.	This was determined to be a daily or as necessary activity an
Training and certification of Emergency Management Director	h	not a mitigation activity This was determined to be a daily or as necessary activity and the second
Work with local cable assets	lr.	his was determined to be a daily or as necessary activity and the mitigation activity
Work with local cable company to make s weather announcements as needed.		
Monthly testing of the warrier	n	of a mitigation activity an
yearly State Severe Weather American	cipate in T	of a mitigation activity this was determined to be a daily or as necessary activity and the mitigation activity this was determined to be a daily or as necessary activity and the mitigation activity
exercises exercises	ne	ot a mitigation activity
needed and funds become available	ris as Th	nis was determined to be a daily or as necessary activity and
- TOUGIQUE DIDITANT PORIOTANT S.	no	et a mitigation activity
and/or yard watering practices	nces 1	is was determined to be a daily are
1030E CILV-WINE Water con-	no	is was determined to be a daily or as necessary activity and t a mitigation activity
ordinance vater conservation practice	s by Th	is was determined to be a daily or so necessity
Review storm water drainage system and upgrade as needed and first	not	is was determined to be a daily or as necessary activity and a mitigation activity
	ilable	s was determined to not be a mitigation activity.
Investigate having an engineering study		a magadon activity.
conducted to prevent inflow and infiltration in waste water sanitation system.	nto Ini:	s was determined to not be a mitigation activity.
waste water sanitation system. Rehabilitate upgrade as funds become available.	1110	a magation activity.
available		
Maintain and clean culverte en	This	
Maintain and clean culverts on a regular sch	edule I nis	was determined to be a daily or as necessary activity and
Opudle and maintain list of the in	liot s	a mitigation activity
designated as shelters distribute list	not	was determined to be a daily or as necessary activity and a mitigation activity
	This	mitigation activity
generator for the Water Treatment and Waster Water Treatment Plants	e IIIIS	was determined to not be a mitigation activity.
Water Treatment Plants as funds become available.	-	Sallon activity,
Maintain and south		
Maintain and replace missing county road and street signs	dor This	tion det
	not a	was determined to be a daily or as necessary activity and
Maintain transporter	IIOL a	illitigation activity
Tall trailsportation infractructure	Thie	the date
Maintain transportation infrastructure	I HIS V	Vas determined to be a detail
Itilities are being plant to	not a	vas determined to be a daily or as necessary activity and
Itilities are being placed underground in the	not a i	vas determined to be a daily or as necessary activity and
Itilities are being placed underground in the usiness districts and new subdivisions. In	not a i	Vas determined to be a dell
Itilities are being placed underground in the usiness districts and new subdivisions. In ddition the city offers electric incentives for ne nd existing services that are already and existing services that are already.	not a i	vas determined to be a daily or as necessary activity and
Itilities are being placed underground in the usiness districts and new subdivisions. In ddition the city offers electric incentives for ne nd existing services that are placed nderground.	This w	vas determined to be a daily or as necessary activity and
Itilities are being placed underground in the usiness districts and new subdivisions. In different the city offers electric incentives for nead existing services that are placed aderground. Solution of the city offers electric incentives for nead existing services that are placed aderground.	This w	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and nitigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In different the city offers electric incentives for nead existing services that are placed aderground. Solution of the city offers electric incentives for nead existing services that are placed aderground.	This w	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and nitigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In different the city offers electric incentives for nead existing services that are placed aderground. Solution of the city offers electric incentives for nead existing services that are placed aderground.	This w	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and nitigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In didition the city offers electric incentives for nead existing services that are placed inderground. aintain snow plowing and removal equipment aintain adequate supply of salt and chips for cases and county roads in icy weather tivate backs to waters and the salt and county roads in icy weather	This wanot a mot a	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In didition the city offers electric incentives for nead existing services that are placed inderground. aintain snow plowing and removal equipment aintain adequate supply of salt and chips for cases and county roads in icy weather tivate backs to waters and the salt and county roads in icy weather	This wanot a mot a	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity.
Itilities are being placed underground in the usiness districts and new subdivisions. In addition the city offers electric incentives for new existing services that are placed inderground. The place of the place	This wanot a mot a	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In addition the city offers electric incentives for new existing services that are placed anderground. In a comparison of the city offers electric incentives for new existing services that are placed and existing services that are placed equipment aintain snow plowing and removal equipment aintain adequate supply of salt and chips for containing the county roads in icy weather tivate back-up water system to pump water and Salt River into Lake Shelbina (City water exigate the possibility of the city water estigate the possibility of the containing the contain	This wanot a m This wanot a m This wanot a m This wanot a m This wanot a mi	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and ditigation activity as determined to be a daily or as necessary activity and itigation activity as determined to be a daily or as necessary activity and itigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In addition the city offers electric incentives for new existing services that are placed anderground. The place of the place	This wanot a m This wanot a m This wanot a m This wanot a m This wanot a mi	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and ditigation activity as determined to be a daily or as necessary activity and itigation activity as determined to be a daily or as necessary activity and itigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In addition the city offers electric incentives for new existing services that are placed anderground. In a comparison of the city of the city as funds become available velop a Disaster Moreau available.	This wanot a miles	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and ditigation activity as determined to be a daily or as necessary activity and itigation activity as determined to be a daily or as necessary activity and ditigation activity s determined to be a daily or as necessary activity and ditigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In addition the city offers electric incentives for new existing services that are placed anderground. In a comparison of the city of the city as funds become available velop a Disaster Moreau available.	This wanot a miles	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and ditigation activity as determined to be a daily or as necessary activity and ditigation activity and determined to be a daily or as necessary activity and ditigation activity s determined to be a daily or as necessary activity and ditigation activity
tilities are being placed underground in the usiness districts and new subdivisions. In didition the city offers electric incentives for nead existing services that are placed anderground. aintain snow plowing and removal equipment aintain adequate supply of salt and chips for cates and county roads in icy weather tivate back-up water system to pump water m Salt River into Lake Shelbina (City water apply) as needed estigate the possibility of building a new EOC the city as funds become available velop a Disaster Management Plan for city. St phone numbers of emergency aid agencies the City Hall	This wanot a miles	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and ditigation activity as determined to be a daily or as necessary activity and itigation activity as determined to be a daily or as necessary activity and ditigation activity s determined to be a daily or as necessary activity and ditigation activity
Itilities are being placed underground in the usiness districts and new subdivisions. In addition the city offers electric incentives for new existing services that are placed anderground. The place of the place	This wanot a mit	vas determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and ditigation activity as determined to be a daily or as necessary activity and itigation activity as determined to be a daily or as necessary activity and itigation activity as determined to be a daily or as necessary activity and itigation activity

brochures at city and county offices		
Make Design Construction Awareness bavailable	rochures	This was determined in
Informational breat		This was determined to not be a mitigation activity.
Informational brochures on earthquake s	afety	This was dotorming to
made available to the public at city hall a website. Articles published in least	nd on city	This was determined to not be a mitigation activity.
website. Articles published in local news	paper	7
Cooperate with utility company to trim tre power line easements	es from	This was determined to
Encourage schools to an in		This was determined to be a daily or as necessary activity a not a mitigation activity
Encourage schools to conduct programs of earthquake, tomado and fire safety	on	This was determined to be a daily or as necessary activity an not a mitigation activity
Maintain Mutual Aid Assa		not a mitigation activity
Maintain Mutual Aid Agreements and updates	are ou	This was determined to be a daily or as necessary activity are
Incorporate the Hazard Million		not a mitigation activity
meetings with the LEPC Committee Meeting and certification of 5	tee	his was determined to be a daily or as necessary activity and a mitigation activity
Training and certification of Emergency	ngs n	not a mitigation activity
	- 11	his was determined to be a daily or as necessary activity an ot a mitigation activity
Develop a sustainable non-	n	ot a mitigation activity
countywide mitigation activities. Regular so	ing T	his was determined to and the
of meetings. Regular sc	hedule	his was determined to not be a mitigation activity.
Monthly testing of the warriers		·
yearly State Severe Weather A.	pate in Ti	his was determined to be a to the
exercises exercises	no	nis was determined to be a daily or as necessary activity and
Designate a location for some		
needed and funds become available	as Th	is was determined to be a daily or as necessary activity and
Encourage Drought society of	no	t a mitigation activity
Encourage Drought resistant farming practic and/or yard watering practices	es Th	is was determined to be
practices	not	is was determined to be a daily or as necessary activity and a mitigation activity
Maintain and clean culverts on a regular scho	odul- Thi	S Was determined to 1
Update and maintain list at a second scrip	IIIOI	s was determined to be a daily or as necessary activity and a mitigation activity
Update and maintain list of buildings that are designated as shelters distribute list	This	s was determined to be a daily or as necessary activity and a mitigation activity
Provide a standby crew for road clearing duri	not	a mitigation activity
winter months.	ng This	s was determined to be a daily or as necessary activity and a mitigation activity
Evaluate & upgrade as needed the current emergency response communications	not	a mitigation activity
emergency respect as needed the current	The	and activity
TOTAL MALINE LINE LINE LANGE AND ADDRESS OF THE PARTY AND ADDRESS OF TH	linis	Was determined to be
infrastructure as funds because	not a	was determined to be a daily or as necessary activity and
infrastructure as funds become available Maintain and replace mission		s was determined to be a daily or as necessary activity and a mitigation activity
infrastructure as funds become available Maintain and replace mission		s was determined to be a daily or as necessary activity and a mitigation activity
infrastructure as funds become available Maintain and replace missing county road and street signs	l/or This	was determined to be a daily or as necessary activity and was determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure	l/or This not a This	was determined to be a daily or as necessary activity and was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and was determined to be a daily
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction	f/or This not a This not a	was determined to be a daily or as necessary activity and was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records	f/or This not a This not a	was determined to be a daily or as necessary activity and was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records	f/or This not a This not a	was determined to be a daily or as necessary activity and was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available	I/or This not a This not a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment	This not a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment	This not a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for outputs.	This not a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for ostreets and county records.	This not a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for outputs.	This not a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for outputs.	This not a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing treets.	This was a second of the secon	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for ostreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing dentify repetitive damage properties	This way	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for office and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing dentify repetitive damage properties	This want a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity vas determined to be a daily or as necessary activity and mitigation activity as determined to not be a mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for outstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the county repetitive damage properties dentify repetitive damage properties dentify surface water drainage obstructions, ridge improvements, and head water trainage improvements.	This want a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for distreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing dentify repetitive damage properties dentify surface water drainage obstructions, ridge improvements, and bank stabilizations	This wanot a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing dentify repetitive damage properties dentify surface water drainage obstructions, ridge improvements, and bank stabilizations leaded. Shelbing will continue to the street of the safety and stabilizations are deded. Shelbing will continue to the street of the safety surface will continue as seeded.	This wand a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing dentify repetitive damage properties dentify surface water drainage obstructions, ridge improvements, and bank stabilizations laintain and update Floodplain ordinance as speeded. Shelbina will continue to comply and uplement the NEID requires	This wand a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the street of the safety glass in schools, daycares and nursing the safety surface water drainage obstructions, ridge improvements, and bank stabilizations and update Floodplain ordinance as seeded. Shelbina will continue to comply and applement the NFIP requirements and to reduce e flood risks associated with the safety of the safety and to reduce the safety of the safety associated with the safety and to reduce the safety of	This wand a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the street of the safety glass in schools, daycares and nursing the safety surface water drainage obstructions, ridge improvements, and bank stabilizations and update Floodplain ordinance as seeded. Shelbina will continue to comply and applement the NFIP requirements and to reduce a flood risks associated with the safety of the safet	This wand a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the first surface water drainage obstructions, ridge improvements, and bank stabilizations laintain and update Floodplain ordinance as seeded. Shelbina will continue to comply and inplement the NFIP requirements and to reduce a flood risks associated with the Flood Hazard teas Shelbina joined the NFIP in 1998	This want a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. The section of the
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the maintain and update foodplain ordinance as laintain and update Floodplain ordinance and update floodplain ordinance as laintain and update floodplain ordinance and update floodplain ordinance and u	This was a mot a m	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. The section of the
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the streets and county roads in its weather of the safety glass in schools, daycares and nursing the safety glass in schools, daycares and nursing the safety glass in schools, daycares and nursing the safety surface water drainage obstructions, ridge improvements, and bank stabilizations laintain and update Floodplain ordinance as seeded. Shelbina will continue to comply and applement the NFIP requirements and to reduce the flood risks associated with the Flood Hazard the safety of	This wand a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for obstreets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the streets and county roads in its weather of the safety glass in schools, daycares and nursing the safety glass in schools, daycares and nursing the safety glass in schools, daycares and nursing the safety surface water drainage obstructions, ridge improvements, and bank stabilizations laintain and update Floodplain ordinance as seeded. Shelbina will continue to comply and applement the NFIP requirements and to reduce the flood risks associated with the Flood Hazard the safety of	This wand a mot a	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity.
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for constributed information on how to retrofit window with safety glass in schools, daycares and nursing the streets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the streets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, d	This wanot a mit This wan not	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity as determined to be a daily or as necessary activity and mitigation activity
infrastructure as funds become available Maintain and replace missing county road and street signs Maintain transportation infrastructure Investigate the construction of secure storage facility for all county records as funds become available Maintain snow plowing and removal equipment Maintain snow plowing and removal equipment Maintain adequate supply of salt and chips for constributed information on how to retrofit window with safety glass in schools, daycares and nursing the streets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the streets and county roads in icy weather Distributed information on how to retrofit window with safety glass in schools, daycares and nursing the safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, daycares and chips for control safety glass in schools, d	This wanot a mit This wan not	was determined to be a daily or as necessary activity and a mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to be a daily or as necessary activity and mitigation activity was determined to not be a mitigation activity. The section of the se

2018 Updated Strategy

Action No: Description

Jurisdictions Selecting the Action: Responsible Agency/Party: Problem to be Mitigated:

Applicable Goal(s):

Hazards Addressed: **Estimated Cost:**

Potential Funding Sources:

Cost/Benefit Discussion: Prioritization Discussion:

Priority:

Timeline

for Completion:

Status of Action:

Report of Progress:

Action No: Description

Jurisdictions Selecting the Action: Responsible Agency/Party:

Jurisdictions Selecting the Action:

Responsible Agency/Party: Problem to be Mitigated:

Applicable Goal(s):

Hazards Addressed: **Estimated Cost:**

Potential Funding Sources: Cost/Benefit Discussion:

Prioritization Discussion: **Priority**

Timeline for Implementation/Completion

MPC1801

Promote NOAA Radio Use in schools, nursing homes,

businesses, private homes and large gatherings.

Shelby County Bethel County EMD City Clerk Clarence Hunnewell City Clerk City Clerk Shelbina Shelbwille City Clerk City Clerk North Shelby School

South Shelby School Superintendent Superintendent

Inability to quickly inform the public of impending disasters or severe weather warnings. Greater advance notice will allow residents and businesses more opportunity to take necessary precautions.

Goal 1:

Public Awareness-Using a variety communications avenue to increase the citizens awareness of and promote education about the natural hazards that may face, their vulnerability to these hazards, and how to lessen the effect of future natural hazards.

ST T SWW ET

\$0

No funding necessary; only human action required

This action did not require funding Average STAPLEE Score of 34

High

Implementation/

2018 to 2020

Continuing Annual Report

MPC1802

Investigate purchasing NOAA radios for several

Hunnewell

City Clerk

locations within the city.

Bethel City Clerk Shelbina

City Clerk

Early notification of an impending disaster or severe weather

warning.

Goal 1: Public Awareness-Using communications avenue to increase the citizens awareness of and promote education about the natural hazards that may face, their vulnerability to these hazards, and how to lessen

the effect of future natural hazards.

ST T SWW ET

1.200.

City general funds This was not discussed

Average STAPLEE Score of 29

Medium

2018 to 2020

Status of Action: Report of Progress:

Continuing Annually

Action No: Description

Jurisdictions Selecting the Action: Responsible Agency/Party: Jurisdictions Selecting the Action: Responsible Agency/Party: Jurisdictions Selecting the Action: Responsible Agency/Party: Problem to be Mitigated:

Applicable Goal(s):

Hazards Addressed: **Estimated Cost:**

Potential Funding Sources: Cost/Benefit Discussion: Prioritization Discussion:

Priority:

Timeline

for Implementation/

Completion: Status of Action: Report of Progress:

Action No: Description

Jurisdictions Selecting the Action: Responsible Agency/Party: Problem to be Mitigated:

Applicable Goal(s):

Hazards Addressed: Estimated Cost:

Potential Funding Sources: Cost/Benefit Discussion:

Prioritization Discussion:

Priority:

Timeline for

Completion: Status of Action: Report of Progress: Implementation/

Action No: Description MPC1803

Obtain sufficient back-up generators for shelters.

Shelby County Bethel County EMD City Clerk Clarence Hunnewell City Clerk City Clerk Shelbina Shelbwille City Clerk City Clerk

Shelters lack backup power sources, making them and the people they serve vulnerable to the uncontrollable.

1: Public Awareness-Using a variety communications avenue to increase the citizens awareness of and promote education about the natural hazards that may face, their vulnerability to these hazards, and how to lessen

the effect of future natural hazards.

RF LF DQ ST T SWW ET F A PH TX U

\$30,000.00

Region B RHSOC/ City and County General Fund

This was not discussed

Average STAPLEE Score of 30

High 2020

Continuing Annually

MPC1804

Obtain sufficient back-up generators to maintain communications for all emergency personnel as funds

become available.

Shelby County County EMD

Shelbina City Clerk

Emergency communications lack the ability to continue

operations if a disaster occurs

Goal 2 Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effect of future natural hazards.

RF LF DQ ST T SWW ET F A PH TX U

\$30,000

Emergency Preparedness Grants, RHSOC

This was not discussed

Average STAPLEE Score of 25

Medium 2018to 2020

Continuing Annually

MPC1805

Encourage landowners to inspect and maintain their dams and levees according to Dept. of Natural Resources standards. Schedule regular inspection and

Jurisdictions Selecting the Action:

Responsible Agency/Party: Problem to be Mitigated:

Applicable Goal(s):

Hazards Addressed:

Estimated Cost:

Potential Funding Sources:

Cost/Benefit Discussion: Prioritization Discussion:

Priority:

Timeline

for Implementation/

Completion: Status of Action: Report of Progress:

Action No: Description

Jurisdictions Selecting the Action:

Responsible Agency/Party: Jurisdictions Selecting the Action:

Responsible Agency/Party: Problem to be Mitigated:

Applicable Goal:

Hazards Addressed: **Estimated Cost:**

Potential Funding Sources: Cost/Benefit Discussion: Prioritization Discussion:

Priority:

Timeline for

Completion:

Status of Action: Report of Progress:

Action No: Description

Jurisdictions Selecting the Action: Responsible Agency/Party: Jurisdictions Selecting the Action:

Responsible Agency/Party: Problem to be Mitigated:

Applicable Goal:

maintenance of dams at city lakes.

Shelby County Shelbyville **EMD** Coordinator City Clerk

If conditions of the dams are not maintained, structural problems may occur and result in disastrous breeches during flood events.

Goal 3: Investigate, implement, maintain, and enforce mitigation policies and programs that limit that impact of natural hazards; on the loss of life; on new and existing properties; on natural resources; on infrastructure; and on the local economy.

DF

\$0

No funding necessary, only human action required.

This action did not require funding

STAPLEE Score of 29

Medium

No timeline established

Continuing Annually

MPC1806

Establish cooling centers and Shelter **Bethel** Hunnewell

City Clerk City Clerk Shelbina

City Clerk

Provide a cool building during extreme heat and a shelter in

the event of a disaster

Investigate, implement, maintain, and enforce Goal 3: mitigation policies and programs that limit that impact of natural hazards; on the loss of life, on new and existing properties; on natural resources; on infrastructure; and on

the local economy.

EHD, T, ST, \$3,000.00

City general funds This was not discussed STAPLEE Score of 25

Medium 2020

Implementation/

Continuing Annually

MPC 1807

Participate in regularly scheduled Table-Top exercises and mock emergency exercises- Ongoing, Shelby

County and areas wide exercises

Shelby County Clarence County EMD City Clerk Shelbyville Shelbina City Clerk City Clerk Lack adequate training on disaster preparedness.

1: Public Awareness-Using a variety communications avenue to increase the citizens awareness

of and promote education about the natural hazards that may face, their vulnerability to these hazards, and how to lessen the effect of future natural hazards.

Hazards Addressed: **Estimated Cost:**

AH \$0

Potential Funding Sources:

This action does not require any funding

Cost/Benefit Discussion: Prioritization Discussion:

This was not discussed STAPLEE Score of 29

Priority: Timeline

for

Medium

Completion: Status of Action: Ongoing

Report of Progress:

Continuing Annually

Action No: Description

MPC1808

Jurisdictions Selecting the Action:

Obtain warning sirens for South Side of City.

Responsible Agency/Party: Problem to be Mitigated:

Shelbina City Clerk

Applicable Goal:

Residents lack early warning of storms or tornadoes.

Investigate, implement, maintain, and enforce Goal 3: mitigation policies and programs that limit that impact of natural hazards; on the loss of life; on new and existing properties; on natural resources; on infrastructure; and on the local economy.

Hazards Addressed:

AH

Estimated Cost:

\$22,000.00

Potential Funding Sources:

for

Emergency Preparedness Grants

Cost/Benefit Discussion: Prioritization Discussion:

Significant benefit STAPLEE Score of 31

Priority:

High

Timeline

Implementation/

Implementation/

2019

Completion:

Status of Action: Report of Progress:

Beginning Annual

Action No: Description

MPC1809

Jurisdictions Selecting the Action: Responsible Agency/Party: Problem to be Mitigated:

Upgrade the tornado safe rooms at the school North Shelby SD South Shelby Co. Superintendent Superintendent

Students are lacking adequate protection from natural hazards.

Applicable Goal:

Goal 3: Investigate, implement, maintain, and enforce mitigation policies and programs that limit that impact of natural hazards; on the loss of life; on new and existing properties; on natural resources, on infrastructure; and on the local economy.

Hazards Addressed:

AH

Estimated Cost:

\$1,000,000.00

Potential Funding Sources: Cost/Benefit Discussion:

Emergency Preparedness Grants Significant benefit

Prioritization Discussion:

STAPLEE Score of 31

Priority:

High

Timeline

Implementation/

2019

Completion:

Status of Action: Report of Progress:

Beginning Annual



EMA Mitigation



Hazard Witigation Assistance

The Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance (HMA) programs present a critical opportunity to reduce the risk to individuals and property from natural hazards while simultaneously reducing reliance on Federal disaster funds.

A Common Goal

While the statutory origins of the programs differ, all share the common goal of reducing the risk of loss of life and property due to natural hazards.

Funding Disaster Recovery Efforts

The Hazard Mitigation Grant Program (HMGP) may provide funds to States, Territories, Indian Tribal governments, local overnments, and eligible private non-profits following a Presidential major disaster declaration.

The Unified Hazard Mitigation Assistance Grant Programs

The Hazard Mitigation Grant Program (HMGP) is authorized by



Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (the Stafford Act), Title 42, United States Code (U.S.C.) 5170c. The key

purpose of HMGP is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster. HMGP is available, when authorized under a Presidential major disaster declaration, in the areas of the State requested by the Governor. The amount of HMGP funding available to the Applicant is based upon the total Federal assistance to be provided by FEMA for disaster recovery under the Presidential major disaster declaration.

The Pre-Disaster Mitigation (PDM)



program is authorized by Section 203 of the Stafford Act, 42 U.S.C. 5133. The PDM program is designed to assist States, Territories, Indian Tribal governments, and local communities in

implementing a sustained pre-disaster natural hazard mitigation program to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding from future disasters.

The Flood Mitigation Assistance (FMA) program is authorized by Section



1366 of the National Flood Insurance Act of 1968, as amended (NFIA), 42 U.S.C. 4104c, with the goal of reducing or eliminating claims under the National Flood

Insurance Program (NFIP).

The Repetitive Flood Claims (RFC)



program is authorized by Section 1323 of the NFIA, 42 U.S.C. 4030, with the goal of reducing flood damages to individual properties for which one or more claim payments

for losses have been made under flood insurance coverage and that will result in the greatest savings to the National Flood Insurance Fund (NFIF) in the shortest period of time.

The Severe Repetitive Loss (SRL)



program is authorized by Section 1361A of the NFIA, 42 U.S.C. 4102a, with the goal of reducing flood damages to residential properties that have experienced severe

repetitive losses under flood insurance coverage and that will result in the greatest amount of savings to the NFIF in the shortest period of time.

Additional HMA resources, including the HMA Unified Guidance, may be accessed at www.fema.gov/government/grant/hma/index.shtm

Eligible Activities

The table below summarizes eligible activities that may be funded by HMA programs. Detailed descriptions of these activities can be found in the HMA Unified Guidance.

ELIGIBLE ACTIVITIES

Hå	Mitigation Activities	HMGP	PDM	FMA	RFC	SRL
1.	Mitigation Projects	200	5.00	N.	9.5	
	Property Acquisition and Structure Demolition or Relocation	v	V	V	r	V
	Structure Elevation	8/	v			
	Mitigation Reconstruction			*	*	-
	Dry Floodproofing of Historic Residential Structures	*	4	5"	4	V
	Dry Floodproofing of Non- Residential Structures	V	V	~	v	
	Minor Localized Flood Reduction Projects	20	V	1	¥.	V
	Structural Retrofitting of Existing Buildings	V	b.			
	Non-Structural Retrofitting of Existing Buildings and Facilities	80	1			
	Safe Room Construction	0.00	V			
	Infrastructure Retrofit	6.0	~			
	Soil Stabilization	V	V			
	Wildfire Mitigation	100	200			
	Post-Disaster Code Enforcement					
	5% Initiative Projects	0				
2.	Hazard Mitigation Planning	V	v	w		
	Management Costs		1			
- NAI-	Netation and tax to the same	-	₩*	4/	B	6

= Mitigation activity is eligible for program funding

Management Costs

For HMGP only: The Grantee may request up to 4.89 percent of the HMGP allocation for management costs. The Grantee is responsible for determining the amount, if any, of funds that will be passed through to the subgrantee(s) for their management costs.

Applicants for PDM, FMA, RFC, or SRL may apply for a maximum of 10 percent of the total funds requested in their grant application budget (Federal and non-Federal shares) for management costs to support the project and planning ibapplications included as part of their grant application.

Subapplicants for PDM, FMA, RFC, or SRL may apply for a maximum of 5 percent of the total funds requested in a subapplication for management costs.

National Flood Insurance Program (NFIP) Participation

There are a number of ways that HMA eligibility is related to the NFIP:



SUBAPPLICANT ELIGIBILITY: All

subapplicants for FMA, RFC, or SRL must currently be participating in the NFIP, and not withdrawn or suspended, to be eligible to apply for grant funds. Certain non-participating political subdivisions (i.e., regional flood control districts or county governments) may apply and act as subgrantee on behalf of the NFIP participating community in areas where the political subdivision provides zoning and building code enforcement or planning and community development professional services for that community.

PROJECT ELIGIBILITY: HMGP

and PDM mitigation project subapplications for projects sited within a Special Flood Hazard Area (SFHA) are eligible only if the jurisdiction in which the project is located is participating in the NFIP. There is no NFIP participation requirement for HMGP and PDM project subapplications located outside of the SFHA.

PROPERTY ELIGIBILITY:

Properties included in a project subapplication for FMA, RFC, and SRL funding must be NFIP-insured at the time of the application submittal. Flood insurance must be maintained at least through completion of the mitigation activity.

I AN IIDDATE	CAN OFDAIR
DUNTY MULTI-JURISDICTIONAL HAZARD MITTGATTON DI AN ILBRATE	
ICTIONAL HAZAR	
MULTI-JURISDI	SIGN-IN SHEET
HELBY COUNTY	TEETING #3-S

Shelby County University Extension Office 106 East Third Street, Shelbyville, Missouri April 30, 2018 10:00 a.m. Place/Room: Meeting Date/Time: Shelby County, Missouri Multi-jurisdictional Hazard Mitigation Plan Update Gindy Hultz, Executive Director Mark Twain Regional Council of Governments **Facilitator:** Project:

Name	Title	Department/Agency	Fmail	7	C
12thy Land	mstee	Bettel	Klolund Obstmail. 573		Signature for the form
3 having Nelson	Human Deschipment	University of Missouri	Universe to of Missouri Nelsons @ missourinedy 573-633 Extension - Shelby @ Nelsons @ missourinedy 2640	1	8 (Levery & 6.0
Gina Mesmer	city Clerk	City Shulbywilk	City Clark City Shelbyville Shelbyville @ marchaginnet	513-633-530	513-633-530 HMSme
Mary Lu McConnell all Dite Shellby Co	911 Die		MIM Shelby 411 emarktion	573-	633-1474 M. LM
Tany Stietel	Manager	164	20 @ mock fuein	573-633-23 47	The same
Têm SHIVERY	EAST COM,	County	hiely maptican.	1	N
Kim Gains	Swpt.	North Shelly Shool Det	North Shellby Shool Oct. Kingan Shellby, KIZ Mo. us		Jam Misso
Stephenie Bender	De Clark	Shelpy Couly	Shilly & SOS-mo. 900		mapaix
Sherri Blackford	1. K. C.	Shelby County		513-633-	Down Rhickon
Larry Roberts	Comalsioner	ShelbyCounty	Shelby County luray Roberts 42 How 660699-35-96		for Worth

ATE	1
IIPn	
PIAN	
TON	
IGAT	
M	
ARD	
HAZ	
NTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN LIPDATE	
CTI	
IRISE	IEET
חלים	GN-IN SHEET
MULI	GN-I
VIV	-Si
DOC	3 #3
HELBY (TING
SE	ME

April 30, 2018	10:00 a.m.	Shelby County University Extension Office 106 East Third Street Shelbadilla Misserial	במס במסר וווות סרו בכר, סוובות אווובי ואווצפחתו
Meeting	Date/Time:	Place/Room:	
Shelby County, Missouri Multi-jurisdictional Hazard Mitigation Plan Update Meeting	Civity Intita F. C. A. A. C. C.	Mark Twain Regional Council of Governments	
Project:	municipal designation and company of the contract of the contr	Facilitator:	

Name	Title	Department/Agency	Email	Phone #	Signature
6 Lenn Fragan	5 m D Com	Shally Com Commissiona	geogawalenting 573-819 -4312 Dlud.	573-819 "431a	Dland Eage
I'm MADDEX	Superinted	Shelley R. IV Schooling	Emaddereceardinals. K12. Mains	MH 835 (ELS)	Taken
brain Sneyle	Operations	Courst Shulbra	economicales & Cohot Sulling	M. 572-588	Outun Zing
Chandra Beaver		NTRCOG	Dear Procede rail blech, can 573-8	573-80	Kon what Koanel.
DEMITE CHROTHERY	CATY ADMINY City of	City of Pariner	Cityachinacatomitelist 3725	660-38f	Remix at the
Wendy Brumbaugh		Shelbyloury	director@shelbycountymo.com	660-415-5310 Mo, Con	Karle Hansh
Had Whater	Spec SPCC	SRCC		513-388-4175	
Ohis RAVICE	Administrator Comm	Kier Care	Srn Onarkhini.	573-588-	Min Billish
					Alm man and

Multi-Jurisdictional Local Hazard Mitigation Plan Shelby County

Updating the Mitigation Strategy April 30, 2018 Meeting 3:

Project Planner: Cindy Hultz, Executive Director Mark Twain Regional Council of Governments

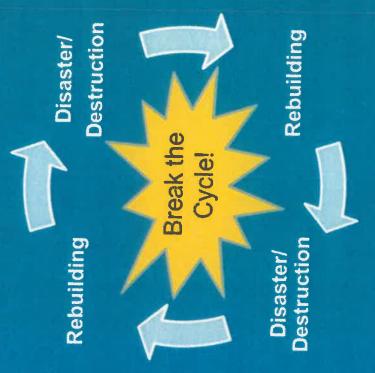


Meeting Purpose

- Review Purpose/Requirements
- Updating the Mitigation Strategy
- Review Updated Plan Goals
- Status of Previous Actions
- Development of New Actions
- Prioritization of Mitigation Actions
- Hazard Mitigation Assistance Grants
- Plan Maintenance
- Next Steps

Disaster Mitigation Act of 2000

- Requires local governments to adopt a natural hazard mitigation plan to maintain eligibility for FEMA Hazard Mitigation Assistance funds
- This Plan Update is for a Multi-jurisdictional Hazard Mitigation Plan covering the Unincorporated County, participating Incorporated Cities, and Public School Districts



9 Tasks to Complete the Plan Update

- Task 1: Determine the Planning Area and Resources
- Task 2: Build the Planning Team
- Task 3: Create an Outreach Strategy
- Task 4: Review Community Capabilities
- Task 5: Conduct a Risk Assessment
- Task 6: Develop a Mitigation Strategy
- Task 7: Review and Adopt the Plan
- Task 8: Keep the Plan Current
- Task 9: Create a Safe and Resilient Community

Participating Jurisdictions—Review Requirements

- Designate a representative to serve on the Hazard Mitigation Planning Committee, which will meet three times during the planning process;
- assessment that describes how various hazards impact your jurisdiction; Provide data for and assist in the development of the updated risk
 - Provide data to describe current capabilities;
- Develop/update mitigation actions (at least one) specific to your
- Provide comments on plan drafts as requested;
- planning process and provide opportunities for them to comment on the Inform the public, local officials, and other interested parties about the
- Formally adopt the mitigation plan.

Status of Participation Requirements

Jurisdictions	Meeting Attendance	Data Collection Guide	Status of Previous Actions
Shelby County	^	>	7
Shelbina	~	>	
Shelbyville	^	>	7
Clarence	^	~	7
Bethel	~	7	~
Hunnewell	7	7	- >
Leonard			
North Shelby	~	7	7
South Shelby	>	7	7



Mitigation Strategy

- you want to achieve. They are long-term, broad, Goals are general guidelines that explain what policy-type statements.
- Mitigation Actions are specific actions that help achieve goals.

Plan Goals—Updated at Meeting #2

Goal 1

citizens' awareness of and promote education about the natural hazards that they may face, their vulnerability to these hazards, and how to lessen the effect of future natural Public Awareness—Using a variety of communications avenues to increase the

Goal 2

Strengthen communication and coordination between local governments, emergency personnel, public agencies, and citizens to mitigate the effects of future natural hazards.

Goal 3

limit the impact of natural hazards: on the loss of life; on new and existing properties; Investigate, implement, maintain, and enforce mitigation policies and programs that on natural resources; on infrastructure; and on the local economy.

Mitigation Actions

- Losses from hazards can be reduced if communities take action before the next disaster
- Actions have long term and cumulative benefits
- Some may be low-cost initiatives readily adopted
- Others may be dependent on available funding or best implemented following a disaster
- Relevant to your Jurisdiction
- Focus on Mitigation-not a response plan
- Not all actions identified through this planning process will be eligible for FEMA grants

Updating/Developing Mitigation Actions

- ALL actions from previous plan (FEMA will not Previous Actions—status updates required for approve without this)
- New Actions—add new actions, as appropriate
- FEMA's Mitigation Ideas Booklet
- Review Problem Statements from Risk Assessment
- State Priorities for Hazard Mitigation Assistance Grants



Previous Actions See Handouts

			Continue	Continue Continue Status Not	s Not
Jurisdiction	Completed	Deleted	In-progress	In-progress Not Started Reported	rted
Shelby County	S	28			
Shelbina	m	40			
Shelbyville	4	22			
Clarence	m	23			
Bethel	7	19			
Hunnewell	1	14			
North Shelby	4	es es			
South Shelby	4	က			

Local Hazard Mitigation Plan Shelby County Multi-Jurisdictional

Problem Statements From Risk Assessment / Previous Actions

- Plan Hazards
- Dam Failure
- Drought
- Earthquakes
- Extreme Heat
- Fires
- Flooding
- Land Subsidence
- Levee Failure
- Thunderstorm/High Winds/Lightning/Hail
- Tornado
- Winter Weather/Snow/Ice/ Severe Cold



Any gaps between problems identified in risk assessment and actions addressed for your jurisdiction?

Dam Failure Problem Statements

control of dams do not properly inspect the dam to Jurisdictions and residents need to be informed of the proper way to inspect a dam and look for Jurisdictions within Shelby County that have ensure the safety of the dam from failing. initial problems.

Drought Problem Statements

businesses and residents have continual problems with conservation, not all citizens comply with water usage Shelby County residents are not informed on water warnings when issued, water us is greatly affected, water shortages.

comply with water shortage warnings and plans need to Water conservation needs to occur to insure all citizens be established for businesses and residents on how to survive a drought.

Earthquakes Problem Statements

- pipelines, water transportation, and the area will see a significant amount of refugees fleeing from Southern Missouri if a quake hits that area. Education is minimal for earthquakes do to the low likely hood of impact. Bethel, Shelbina Although Shelby County is not located in an area that will likely see catastrophic damage from an earthquake, the County will be impacted by the loss of communications, transportation, the disruption of roads, rail and and Shelbyville consist of a few older tall buildings that are not able to withstand an earthquake event. There is one Emergency Management Director for the County that knows where all the generators and emergency buildings are. Not all citizens utilize social media and texting.
- details for communications and transportation. Downtown building owners need to know plan in case damage is done to their building. Residents need to be made aware of where the generators and emergency buildings are located. Utilization of social media and texting needs to be encouraged. residents and stated what would happen in the event of an earthquake with An emergency plan for earthquakes needs to be made available to all

Extreme Heat Problem Statements

media and texting, elderly and young children are locations in the County need to be identified and Not everyone in Shelby County utilizes social most vulnerable to a heat wave. Cooling open to everyone for extended hours.

Fires Problem Statements

- bans, many residents lack education in fire safety education is not available for the levels of burn and not all residents utilize social media and Residents do not comply with burn bans, texting.
- associated with not complying with the burn bans, more education for fire safety and encourage Education needs to occur on the dangers utilization of social media and texting.

Flooding Problem Statements

Flooding or flash flooding affects the rural areas of Shelby County. Possible solutions are to increase social media or texting and work with officials to the education to residents, promote the use of identify flood prone areas.

Land Subsidence/Sinkholes Problem Statements

- Sinkholes can occur at any time and without disruption of transportation services and not educated on what to do if a sinkhole occurs. warning and vary by size. There can be a residents in the dangerous areas are not
- Education needs to occur on the danger areas of a sinkhole occurring and what to do if a sinkhole does occur.

Levee Failure Problem Statements

- Low-head agricultural levees are not regulated or inspected on a regular basis.
- Residents need to be informed on how to perform inspections on low-head agricultural levees.

Thunderstorm/High Winds/Lightning/Hail Problem Statements

texting or have access to a weather radio, smaller Thunderstorms can damage power lines with the Not everyone in the county utilizes social media, high winds or fallen debris such as tree limbs. communities do not have warning sirens, and rural areas do not have warning sirens.

Tornado Problem Statements

- and/or texting, the rural areas do not have warning sirens, throughout the county, not everyone utilizes social media smaller communities do not have warning sirens, lack of awareness for available shelters and more education Shelby County has inadequate tornado shelters needs to occur.
- tornado shelters, education on what to do in the event of a sirens. A strong emphasis could be made for everyone in Possible solutions could be awareness made of existing tornado and smaller communities could install warning the county to own a weather radio.

Winter Weather/Snow/Ice/Severe Cold Problem Statements

- accessible with roads that can become hazardous for residents in the event of a winter storm that is easily Shelby County does not have adequate shelters for can break from ice accumulation and not everyone motorists and emergency responders, power lines utilizes social media or texting.
- Education needs to occur to ensure all residents are aware of the shelters in the County, residents are educated on emergency supplies to have and the utilization of social media and texting increases.

Additional Resources

- FEMA's Mitigation Ideas Booklet
- library/assets/documents/30627 https://www.fema.gov/media-Can be downloaded at: ?id=6938



Mitigation Ideas



FEMA

Mitigation Action Plans

- Complete for Continuing and New actions
- Provides details for each action

ibeet								3							
Action Worksheef	Problem being Mingated:	Hazard(s) Addressed:	Action or Project		Applicable Gaal Statement:	Estimated Cost:	Plan for Implementation	Responsible	Action/Project Priority:	Timeline for Completion:	Potential Fund Sources:	Local Planting Mechanisms to be Used in Emplementation, if any:	Progress Renort	Acries Status	Report of Progress

Prioritizing Mitigation Actions

STAPLEE Worksheet (handout):

Social

Technical

MULTI-JURISDICTIONAL

Administrative

Political

Legal

Economical

Environmental

Acties Tide:	Jurisdiction	Jurisherion
Action ID:		
STAPLES Crimits	Deficient VES = 3 Name VES = 2 Protective VES = 2 Protective VES = 2 Protective VES = 2 No expenses	Scene
S. It it Socially acceptable?		
T. Is a Technolity feasible and potentially recential:		
A. Does the jurisdoom lave the administrative capacity to execute this action?		
P. Is at Polinearly acceptable?		
Li is then Lagal societies to		
E is a Economically beneficial		
E. W.D. the project have either a neutral or positive tempect on the autoral servicement? (score a 3 st positive tempect, 2 st heaver a tempect)		
Will bankers, sensolems he sarved or prosecued;		
Could a be unplemented quackly?		
STAPLE Som		
Allingston Effectiveness Crimina	Evaluation Rading	Stern
Will the implemented action result in lives saved?	Assets from 3-10 points based on the Moshood due fives would be served.	
Will the implemented action from a reduction of distance demander?	Autum from 5-10 pount based on the relative reduction of dangers	
Abhigation Effectiveness Score		

Total Score (STAPLEE Score + Mingerion Effectivates Score);

Clow (less than 25 points)

Completed by (name title phose of,

Mitigation Actions

- Each jurisdiction is required to have at least one mitigation action.
- Mitigation Action Plan and STAPLEE Worksheet must be completed for each mitigation action for each jurisdiction
- Any Questions?



Plan Maintenance

- FEMA Regulations require complete plan update every 5 years.
- FEMA requires a formal plan maintenance process to ensure that the mitigation plan remains an active and relevant document
- Who, how, and when will plan be monitored, evaluated, and updated?
- How will public be involved in plan maintenance **process?**
- How will mitigation strategy be incorporated into other planning mechanisms?

Plan Implementation and Maintenance-**HMPC Consensus Needed**

- Who, how, and when will plan be monitored, evaluated, and updated?
- Annual Review?, After hazard events?
- Who will organize?, Who will participate?
- Update Status of Mitigation Actions?
- How will public be involved in plan maintenance **process?**
- Press Release on annual reviews?
- Other ideas?

Plan Implementation and Maintenance-**HMPC Consensus Needed**

- How will mitigation strategy be incorporated into other planning mechanisms?
- Review Mitigation Plan during planning process to update other plans?
- Comprehensive Plans
- Capital Improvement Plans
- School Infrastructure Plans
- School Emergency Plans

Missouri State Emergency Management Agency Hazard Mitigation Assistance Grants:

- Hazard Mitigation Grant Program-HMGP
- Pre-Disaster Mitigation Grants-PDM
- Flood Mitigation Assistance Grants-FMA

Contact

Elizabeth Weyrauch

State Hazard Mitigation Officer

573-526-9375

Other Funding Sources

- USDA
- Rural Development Grants
- Emergency Watershed Protection Program
- U.S. Dept of Commerce
- Public Works and Economic Dev. Facilities Assistance
- U.S. Dept of Housing and Urban Development
- Community Development Block Grants
- U.S. Army Corps of Engineers
- Studies
- Projects

Comment Periods-Full Plan Draft

- Committee Comment Period
- 2 week period May 2 May 16, 2018
- Notify others in your jurisdiction
- Available online at www.marktwaincog.com
- Final Public Comment Period
- 2 week period May 17 May 31, 2018
- Available online at www.marktwaincog.com
- Hard Copy available at Shelby County Courthouse and Mark Twain Regional Council of Governments
- Press release week of May 7th

Homework & Next Steps

- ASAP- Jurisdictions Adopt Plan
- May 2 May 16, 2018- Committee Comment
- May 17 May 31, 2018- Final Public Comment Period
- June 1, 2018- Submit Plan to SEMA
- After receiving SEMA Approval- Submit Plan to FEMA
- September 1, 2018- Anticipate FEMA's Approval

Submit In-kind worksheets

Cindy Hultz

From: Sent: Cindy Hultz <hultzcog@rallstech.com> Wednesday, May 02, 2018 1:50 PM 'shelbinaweekly@gmail.com'

To: Subject:

Press Release

Attachments:

Final Press Release.pdf

Hello-

Attached you will find a press release for next week's paper if at all possible- if it is too late for next week's paper please let me know.

Please respond to this email as confirmation you received the press release.

Thanks,

Cindy Hultz Executive Director

Mark Twain Regional Council of Governments 42494 Delaware Lane Perry, MO 63462 573-565-2203

Shelby County, Missouri PRESS RELEASE

For Immediate Release

Contact:

Cindy Hultz 573-565-2203

Shelby County Planning Committee Seeks Public Input

Shelby County, MO — The public is encouraged to review and comment on the Shelby County Multi-jurisdictional Hazard Mitigation Plan Update before it is finalized. The plan includes an updated strategy to reduce damage and losses caused by hazard events. The final draft of the plan will be available online and in hard-copy at select public locations in Shelby County from May 16 -31, 2018. The purpose is to provide information to the public on the Multi-jurisdictional Hazard Mitigation Plan Update as well as gain public input.

Each year, thousands of American families are affected by disasters, and billions of dollars are spent on disaster recovery. Some disasters are predictable, and often, losses and damages can be reduced or eliminated. For these reasons, the Federal Disaster Mitigation Act of 2000 requires communities to develop an approved local hazard mitigation plan. Without such a plan, communities are not eligible for certain federal funding.

Representatives from county departments, the incorporated cities, public school districts, and other mitigation planning stakeholders worked together to develop this plan update. The planning committee addressed hazards ranging from extreme heat and severe winter storms to tornadoes and flooding—and considered the impacts of these events on local communities. Based on the results of an updated risk assessment of the hazards, committee members updated the strategies for their jurisdictions to reduce damages caused by the various hazards.

The planning committee would like input from the public on the updated strategy for Shelby County. Public comments will be considered by the Hazard Mitigation Planning Committee and incorporated into the plan, as appropriate.

From May 16 -31, 2018 the final draft plan will be available for your review at the following locations:

Online at: www.marktwaincog.com

In hard-copy during normal operating hours at: Shelby County Courthouse

The final plan must be approved by the governing body of each participating jurisdiction, the Missouri State Emergency Management Agency, and FEMA before becoming official. The Mark Twain Regional Council of Governments has taken the lead in developing this plan. The point of contact is Cindy Hultz, Executive Director. For more information on this project, contact Cindy Hultz at 573-565-2203.

Committee Seeks Public Shelby County Planning

The public is encouraged to review and comment on the Shelby County Multi-jurisdictional Hazard Mitigation Plan Update before it is finalized. The plan includes an updated strategy to reduce Shelby County from May 16-31, 2018. The purpose damage and losses caused by hazard events. The final draft of the plan will be available select public locations in is to provide information to dictional Hazard Mittigation online and in hard-copy at the public on the Multi-juris-Plan Update as well as gain public input.

Each year, thousands of American families are affected by disasters, and billions ter recovery. Some disasters of dollars are spent on disasare predictable, and often, losses and damages can be reduced or eliminated. For Disaster Mitigation Act of 2000 requires communities to develop an approved local hazard mitigation plan. Without such a plan, communities are not eligible for these reasons, the Federal certain federal funding.

from county departments, the incorporated cities, public school districts, and other mitigation planning stakeholders worked together to develop this plan update. planning committee Representatives

addressed hazards ranging from extreme heat and sedoes and flooding-and convere winter storms to tornasidered the impacts of these ties. Based on the results of an updated risk assessment of the hazards, committee gies for their jurisdictions to events on local communimembers updated the stratereduce damages caused by

the various hazards.

comments will be considered corporated into the plan, as The planning committee would like input from the public on the updated strategy for Shelby County. Public by the Hazard Mitigation Planning Committee and inappropriate.

From May 16 -31, 2018 the final draft plan will be

available for your review at the following locations:

Online at: www.marktwaincog.com

In hard-copy during normal operating hours at: Shelby County Courthouse

The final plan must be approved by the governing body of each participating jurisdiction, the Missouri State Management Emergency

Agency, and FEMA before Iwain Regional Council of Governments has taken the becoming official. The Mark For more information on this project, contact Cindy Hultz lead in developing this plan. The point of contact is Cindy Hultz, Executive Director. at 573-565-2203

LOCATOR

BUSINESS

Shelby County Implement • D.C.F. Electric Hwy 15 S • Shelbina • 573-588-2040 Hydraulic, Sprayer, Tillage Parts and Cell Phones & Accessories 20-50-75% OFF all In-stock Hay,



BRAYDON'S LAWN SERVICE

Spa Pedicures • Gel Polish • Manicures

122 W. Walnut • Shelbina • 573.588.7691 Tuesday - Saturday • Call for an appointment

Amanda Friesz, Owner/Stylist · Shayne Biby Amanda's Hair Design

Mulching & Fertilizing, Rock Delivery & Stump Grinding.

Mowing, Trimming, Shrub Trimming & Removal,

Commercial or Residential

FREE ESTIMATES & INSURED . CALL: 660-651-3401

Floral, Gifts, Home Decor, Women's Clothing and Nore Simply Creative Tuxedo Rental & Bridal Registry Available

112 N. Jackson • Shelbyville • (673) 633-2740 • Kelli Douglas, Owner • Tues.-Frt. 9-5 & Sat. 9-12



Indoor & Outdoor Signs . Banners

& Auto Suppl

Collins Collision

Porter & Pat Collins,

1470 Hwy 36 Clarence, MO • 660.699.2023

Four R-D Farm Repair

Y THOMAS BROWN ROOFING 573,822,3476

Tonia Shaw Remodeling Siding • Doors • Windows • Decks

Custom Painting for Interior & Exterior • Small Construction & Concrete Jobs

Sue Baby Creations - Needle & Wood Work FREE ESTIMATES - 573.501.1220

GRAIN BIN SUPPLY COMPANY, LLC "The Grain Bin People"

351 Fairground Road • Shelbina • 573-588-4444 • fourrd@marktwain.net

· Twine/Net Wrap · Large Seletion of Bolts · Repair/Welding

• Farm Equipment Sales & Service • Hydralic Hoses

Let us keep you working....not worrying!

Lewistown • Edina • Ewing • Palmyra • Shelbina

3) Phone: 573.565.2203 | Fax: 573.565.2205

Search

council of governments

Programs

Public Notices and Bids

Shelby County Hazard Mitigation Plans

You will need to obtain a tool such as Adobe Reader to download the file below, it's a free download.

2018 Shelby County HMP Section 0

2018 Shelby County HMP Section 1

2018 Shelby County HMP Section 2

2018 Shelby County HMP Section 3

2018 Shelby County HMP Section 4

2018 Shelby County HMP Section 5

Phone: 573-565-2203 | Fax. 573-565-2205 | 12494 Delamare Lane | Perry, MO 63462 Copyright Mark Twain Regional Counci of Governments © 2016. All Pights Reserved.

Designer of Extrespy Group LLC

May 2, 2018